FUTURO FORESTAL
IMPACT FORESTRY

WALDMENSCHEN AND FORESTAL FILO DEL TALLO TECHNICAL REPORT 2024



Prepared by: Juan González and Technical Team

February 2025

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1. Introduction

1.1. General information

The project belongs to the companies Waldmenschen S.A. and Forestal Filo del Tallo S.A. The most relevant information about these companies is detailed in the tables below.

Table 1. GENERAL INFORMATION OF WALDMENSCHEN S.A.

Company name	Waldmenschen, S.A.
Registration date	March 21, 2007
File	560221
Sheet	560221
Document	1102628
Organization type	Sociedad Anónima (Corporation)
Status	Valid
Address	Parker Drive #923A, Clayton, Panama
Legal Representative	Andreas Eke
Nationality	German
ID Number	E-8-69322
Phone	(507) 317-1431
e-mail	aeke@futuroforestal.com
Website	http://www.futuroforestal.com

Source. Futuro Forestal, 2024.

Table 2. GENERAL INFORMATION OF FORESTAL FILO DEL TALLO S.A.

Company name	Forestal Filo del Tallo, S.A.
Registration date	November 25, 2022
File	155730295
Sheet	155730295
Organization type	Sociedad Anónima (Corporation)
Status	Valid
Address	Parker Drive #923A, Clayton, Panama
Legal Representative	Andreas Eke
Nationality	German
ID Number	E-8-69322
Phone	(507) 317-1431
e-mail	aeke@futuroforestal.com
Website	http://www.futuroforestal.com

Source. Futuro Forestal, 2024.

Similarly, the general information of the company managing the reforestation project is presented, which is responsible for overseeing all the scheduled silvicultural management activities in the plantations, thus ensuring the execution of the tasks.

Table 3. GENERAL INFORMATION OF FUTURO FORESTAL S.A.

Company name	Futuro Forestal, S.A.
Sheet	295406
Roll	44372
Image	48
Organization type	Sociedad Anónima (Corporation)
Status	Valid
Address	Parker Drive #923A, Clayton, Panama
Legal Representative	Andreas Eke
Nationality	German
ID Number	E-8-69322
Phone	(507) 317-1431
e-mail	aeke@futuroforestal.com
Website	http://www.futuroforestal.com

Source. Futuro Forestal, 2024.

1.2. Report Objectives

This document aims to provide a detailed overview of all reforestation and maintenance activities carried out during 2024. It also includes information on exchanges between nearby communities and the Waldmenschen and Forestal Filo del Tallo teams, as well as the challenges and obstacles faced in achieving reforestation and maintenance goals for 2024. It consists of data related to planting years, mortality rates, impacts from pests and diseases, silvicultural activities for plantation management, maps, growth sampling, road construction and improvements for forest access, and upgrades to living infrastructure (dry latrines, beds, kitchens, storage facilities, water storage and filtration systems, solar systems), among others.

1.3. Report Summary

This report details the silvicultural activities carried out during the 2024 operational period, including the maintenance of reforested projects from 2015 to 2023 and the establishment of new projects in 2024.

In 2024, a total of 23.41 hectares were reforested. Of these, 21.69 hectares were established in the Filo del Tallo Unit, including 9.09 hectares designated as Freiburg plots, part of a long-term silvicultural management research project. The remaining 3 hectares were replanted in unoccupied spaces, including areas previously burned and species replacement zones. Additionally, out of the 67.32 hectares affected by wildfires in the Lastenia and Claritas units, some species were able to regenerate at the beginning of the rainy season and were given appropriate management. However, 33.52 hectares had to be replanted to restore plots and spaces where certain species did not survive.

In the Claritas Unit, the 2024 Recovery Plan was initiated for areas where species were affected by pests and waterlogged conditions, impacting their growth, covering a total of 14.75 hectares. Additionally, 32.33 hectares were cleared for shade control, bringing the total recovered area to 47.08 hectares.

Across all farms in the different forest units, maintenance activities were carried out on reforested areas totaling 1,247.38 hectares.

In 2024, access roads on public routes during the rainy season posed challenges for entering farms in forest units such as Colón, Lastenia, and Claritas. These difficulties primarily affected vehicle access, especially trucks. As a result, the fleet was adjusted to pick-up trucks for personnel transportation. The Ministry of Public Works is responsible for maintaining these roads, however, timely responses regarding materials and required maintenance schedules have not been received. Consequently, local communities, together with various companies, collaborate to mitigate damage along affected road sections.

It is important to highlight that twenty-seven (27) Waldmenschen farms, including Nicanor 1, Nicanor 2, Nicanor 3, Nicanor 4, Clarita 4630, Clarita 3319, Tello 1, Las 15, Raúl Castro, Darío Castro, Joaquín Hernández, Raúl Espinoza, Espavé, Teófilo, Clarita 2, Límite, and La Esperanza (a

group of 7 farms), were successfully included in the FSC (Forest Stewardship Council) certification for the period 2025 to 2030.



Figure 1. Photo of planting activity of Rosewood.

2. Overall Project Description

2.1. Location

Operational units in the Darién province

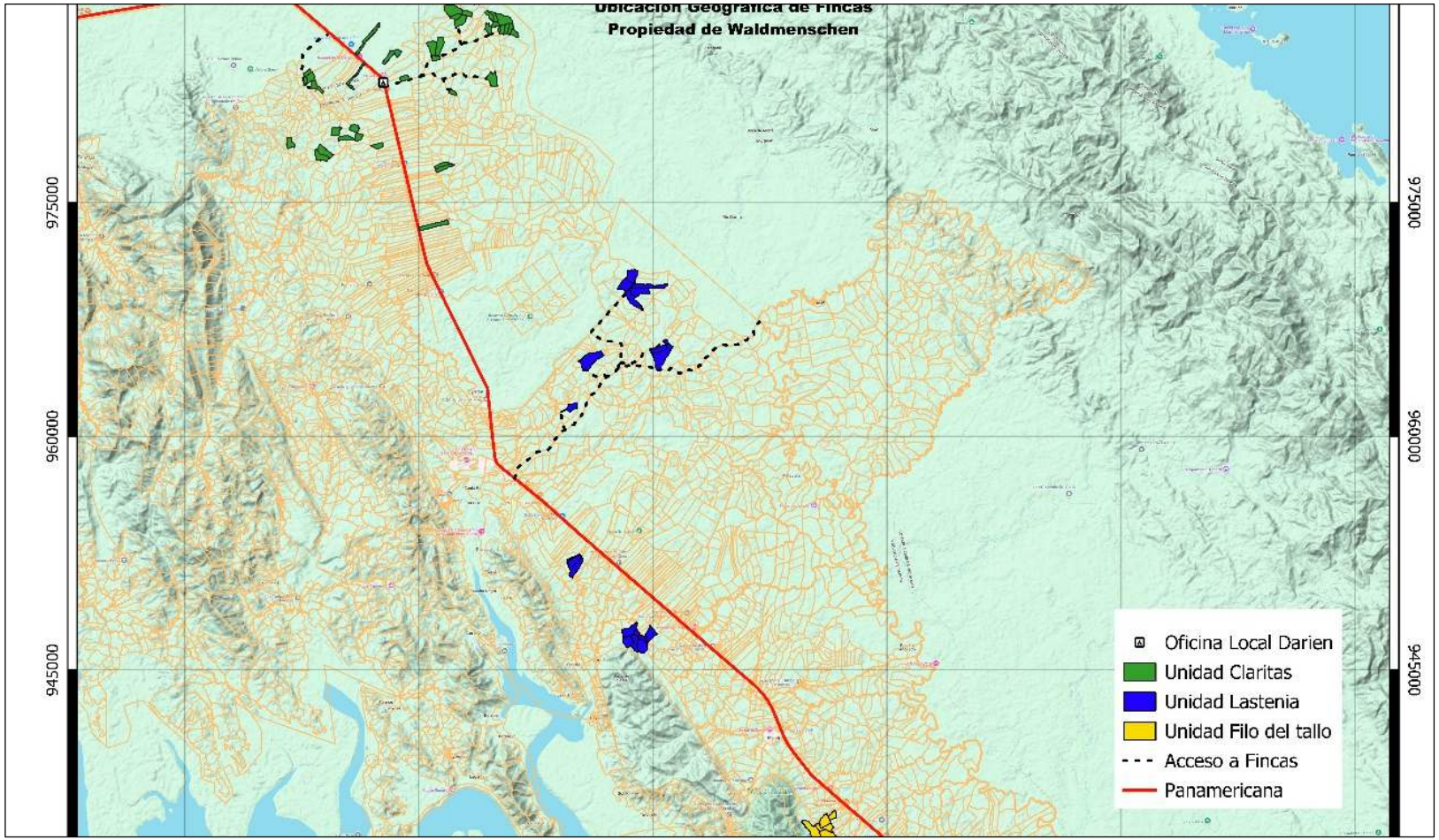


Figure 2. Map of the location of the operational units in the Darién province.

Farms on the Colón province

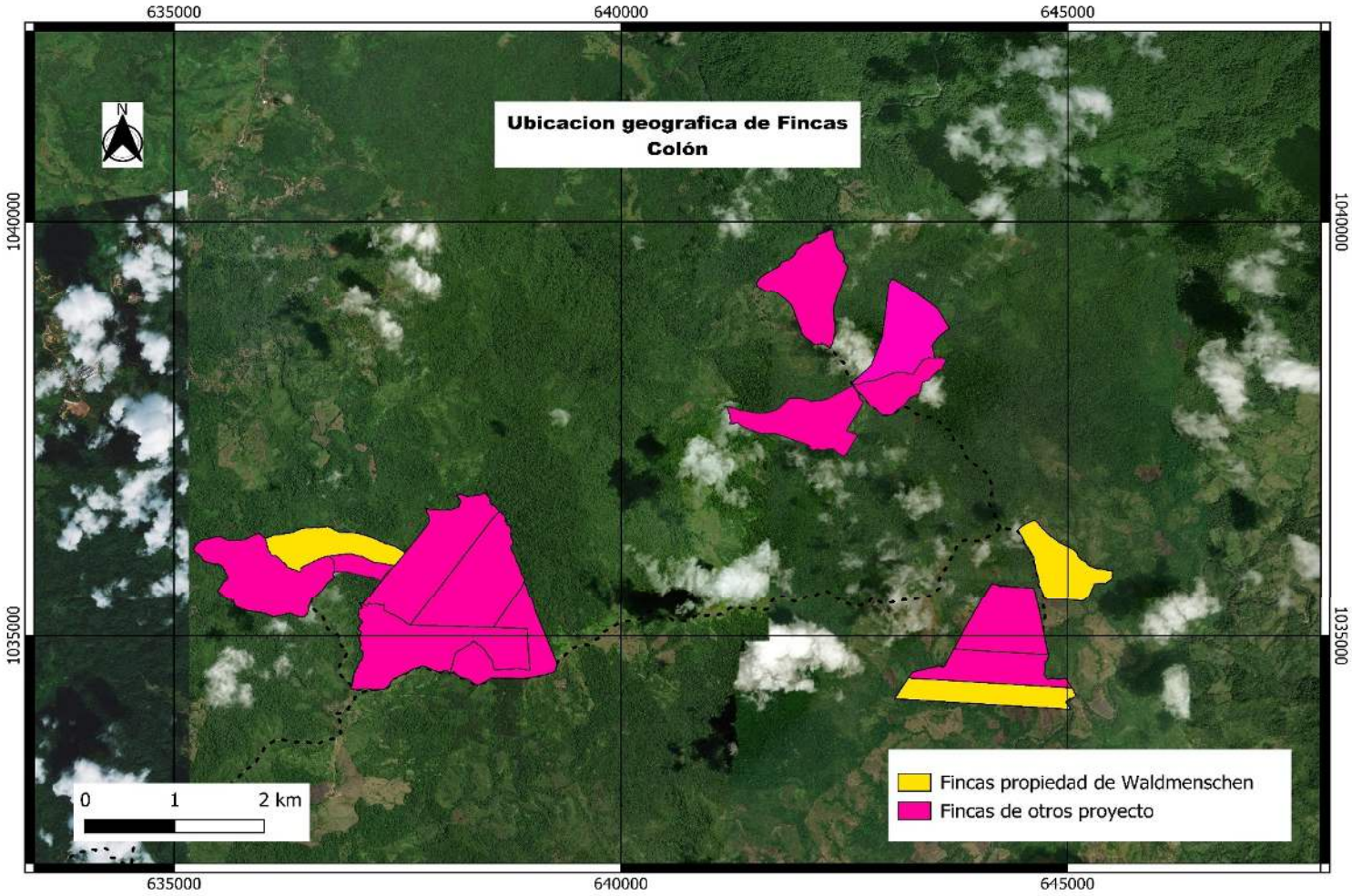


Figure 3. Map of the Geographic Location of the Farms in the Colón province.

2.2. Area

Table 4. REFORESTED AREAS OF THE FARMS PROPERTY OF WALDMENSCHEN AND FORESTAL FILO DEL TALLO.

Farm	Farm No.	Planting year	Total area planted	Total area
Reina	2015	2013	12.00	25.40
		2015	2.70	
		2017	6.00	
		2022	1.06	
Subtotal			**21.76**	**25.40**
CLARITAS				
Darío Castro	1866	2021	31.61	42.63
Raúl Castro	3479	2021	14.40	26.96
Genarino Peralta	2627	2022	9.82	21.60
Gindy Trujillo	886	2022	16.04	17.94
Joaquín Hernández	30387827	2022	15.87	25.00
Sandra Fernández (Espavé)	960	2022	29.23	50.57
		2023	1.49	
Ubaldino Consuegra	4869	2022	6.91	22.61
Agustín Banda	3119			0.37
Agustín Banda	2796			39.64
Agustín Banda	4152			37.37
Clarita 1	30123319	2021	31.49	43.00
		2024	3.64	
Clarita 1	30124630	2021	27.87	40.00
		2024	5.95	
Clarita 2	218060	2021	13.33	17.30
		2023	0.09	
Clarita 3	235668	2021	8.70	42.23
Límite	30358872	2021	10.60	16.44
		2022	3.80	
La Ponderosa	280254	2020	8.41	26.72
		2021	12.42	
La Ponderosa	218957	2020	2.63	8.93
		2021	4.21	
La Ponderosa	235655	2021	10.66	13.17
La Ponderosa	Possessory rights in the process of purchase	2021	1.83	2.48
Raúl Espinoza	217884	2022	24.39	36.94

		2023	0.68	
Curry (Las 15)	218047	2022	9.03	14.83
		2024	1.89	
Gerónimo Castro	30361092	2022	9.06	10.42
Tello 1	3905	2022	30.58	38.43
Teófilo Herrera	6087	2022	33.96	43.53
Tello 3	3123	2022	5.43	19.29
		2024	8.22	
Dalys García (La Esperanza)	30359853	2022	13.54	16.27
Cati García (La Esperanza)	30359842	2022	8.86	16.48
		2023	1.08	
Maite García (La Esperanza)	30358742	2022	11.15	16.44
Miguel García (La Esperanza)	1962	2022	32.85	52.83
		2023	1.57	
Edilberta García (La Esperanza)	30359110	2022	11.74	16.49
		2023	0.21	
Maite García (La Esperanza)	30358613	2022	12.09	16.38
Bélgica García (La Esperanza)	30359029	2022	8.67	16.59
		2023	2.57	
		2024	3.60	
Tello 2	313219	2023	12.90	18.83
Clamades Villareal	30394427	2023	49.83	49.83
David Fernández	190400	2022	11.79	23.85
David Fernández	190401	2022	1.90	2.29
David Fernández	190371	2022	0.91	2.48
		2024	1.18	
Uri	6276	2023	12.26	16.81
Elia Castillo	30418636	2023	15.82	25.00
Subtotal			**608.75**	**956.75**
COLÓN				
La Conexión	6704	2019	5.07	48.99
Gatún 1	DP Record ADJ-3-98-2019	2019	27.24	48.98
Gatún 2	4516	2023	40.00	49.42
Subtotal			**72.31**	**147.39**
LASTENIA				
Lastenia #1	1284	2022	23.14	49.6331

Lastenia #1	2453	2022	3.57	49.4848
Lastenia #2	6159	2022	21.91	46.3466
		2023	6.95	
Lastenia #3	342926	2022	19.15	48.8143
Lastenia #4	30163457	2022	14.14	27.277
Lastenia #5	2719	2022	54.42	94.4471
		2023	0.50	
Marcelino Guerra	30336549	2023	4.67	7.18
Marcelino Guerra	920	2023	2.76	3.3456
José Gabriel García Ureña	444101	2023	23.56	46.5085
Luis De Gracia	316283	-	-	96.893
Carlos Solís	30150308	-	-	30.60
Avendaño (Altos del Cristo)	1289	2022	9.04	37.52
		2023	17.94	
Avendaño (Altos del Cristo)	2162	2022	0.47	10.801
		2023	6.45	
Avendaño (Altos del Cristo)	1663	2022	2.81	37.7475
		2023	27.02	
Subtotal			**238.50**	**586.60**
NICANOR				
Nicanor #1	1182	2022	16.32	37.1034
		2023	2.47	
Nicanor #2	5553	2022	10.35	35.1341
		2023	10.91	
Nicanor #3	1519	2022	10.00	47.63
		2023	20.95	
Nicanor #4	1781	2022	5.60	48.117
		2023	18.02	
Margarito Banda	1336	2024	20.40	37.1533
Margarito Banda	1339	2023	13.63	28.896
		2024	6.00	
Subtotal			**134.65**	**234.03**
FILO DEL TALLO				
Agustín Freddy González	3754	2023	14.80	19.19
Freddy Agustín González y hermanos	1668	2023	22.21	40.22
		2024	4.87	
Agustín Fredy González	1427	2023	30.10	46.92
Hermenegildo Castro	2001	2023	54.67	99.54
Hermenegildo Castro	1069	2023	29.22	70.99

		2024	15.20	
Subtotal			**171.41**	**276.86**
Total			**1247.38**	**2227.03**

*Despite the newly planted areas in Filo del Tallo, adjacent areas to the Freiburg plots were used, sites with available space for planting, burned areas, and as species recovery.

This includes:

- Clarita 1, Farm 30124630, 0.33 ha, planted with the species Guayabo de charco (*Terminalia oblonga*)
- Curry (Las 15), Farm 218047, 0.95 ha in recovery areas. Available and unused spaces were used for planting.
- Margarito Banda, Farm 1336, 0.08 ha planted as infill during the replanting of the burned area.
- Hermenegildo Castro, Farm 2001, 1.64 ha planted as infill around the reforestation area and the Freiburg project.

3. Activities developed in the reforestation

Table 5. ACTIVITIES DEVELOPED IN THE REFORESTATION OF THE FARMS.

Description of planting, maintenance and management tasks in the Waldmenschen and Forestal Filo del Tallo projects carried out in 2024.	
Weed control	It is the elimination of vegetation that competes for light and nutrients with the planted trees.
Pest and disease control	Permanent control of pests and diseases, and of leafcutter ants.
Ring cleaning	It is the elimination of vegetation with a machete, one meter wide around the tree.
Border cleaning	It is carried out to keep the boundaries of the farms clean.
Inter-row cleaning	Elimination of vegetation in the planting row, this cleaning is alternated with ring cleaning, to reduce costs.
Removing vines and lianas	Eliminate vegetation that is entangled in the trees.
Fern control with machete	Ferns pose strong and very costly competition for the planted trees.
Apex management	Mainly in *Terminalia amazonia*, which tends to develop multiple apices, causing competition with the main apex.
Clearing	To cut the branch of shrubs that make high shade. The clearing is done to give more light to the tree.
Tree liberation	Elimination of competition from natural regeneration to valuable trees.
Lime application	Application of lime compounds to regulate pH, only done when pH is below 5, applied to the soil around the seedlings.
Fertilization	Add fertilizers.
Mechanization	Weed cleaning activity.
Replanting	To determine the replanting percentage, field technicians conduct a review of the plantations between November and December to get a preliminary count of plant detachment on the farms. At the end of the summer, the plantations are reviewed again to obtain a more accurate figure (mortality), which determines the replanting. The activity is then carried out as soon as the rains begin.
Sprout removal	Elimination of regrowth at the base of the tree.
Teak pruning	Elimination of low branches.
Pruning elevation	Elimination of branches above 7 meters in height.
Teak suckers pruning	Suckers are new branches on the commercial trunk. They should be removed when they are still tender to maintain good wood quality.
Crown raising or lower pruning	It is the removal of low branches in young trees to induce them to reach commercial height.

Marking	It is done during establishment to create strips that always run against the slope to prevent erosion.
Thinning marking	Selection and marking of trees to be removed at early ages
Manual hole digging	In this activity, the soil is dug with the intention of removing it so that the seedling finds loose and aerated soil, helping it to adapt better.
Establishment clearing	It is done to clear the area of weeds where the digging will take place, making it easier for the diggers to perform the task.
Thinning	Removal of trees to clear spaces for plantation development.
Soil conservation	These are tasks performed to reduce water erosion. It involves constructing physical barriers to halt water runoff during rainfall.
Firebreak rounds	Cleaning of borders and firebreak roads, removal of combustible material such as leaves and sticks in an 8-meter width.
Perimeter fence maintenance	Repairing fences to prevent livestock from entering the farms.
Phytosanitary control	Ongoing control of pests, diseases, and leafcutter ants.
Monitoring	Measurement of tree diameter and height growth.
Subsoiling	Deep soil removal to improve soil structure.
Harrowing	Soil fragmentation after subsoiling.
Planimetry	Division of hectares into small squares to facilitate planting.
Sectorization	Identifying areas that meet the conditions for each species.
Trainings	Pruning of Rosewood, Bullywood; Planting activity; Control of *Hypsipyla grandella;* Regeneration management; Fire control and first aid; and in Microsoft Excel.
FSC training (Forest Stewardship Council)	These are provided to company collaborators, covering various explanatory topics related to Good Forest Management certification. Topics range from: What is FSC certification? Personal protective equipment; Use and handling of agrochemicals; First aid; Protection of water sources; Activities in forest nurseries; among others.

4. Description of planting preparations

The methodology of Planimetry, Orthophoto, and Sectorization described below are not subject to change over time; they represent the ideal formula established to achieve good results in the establishment of plantations.

Planimetry

To prepare the farms for establishment, a perimeter survey is conducted using GPS. Once this information is obtained, we use a Geographic Information System (QGIS) tool to create small grids of 3,600 m², a process known as planimetry. This work is carried out by external personnel. These points are then identified in the field with a half-inch PVC tube.

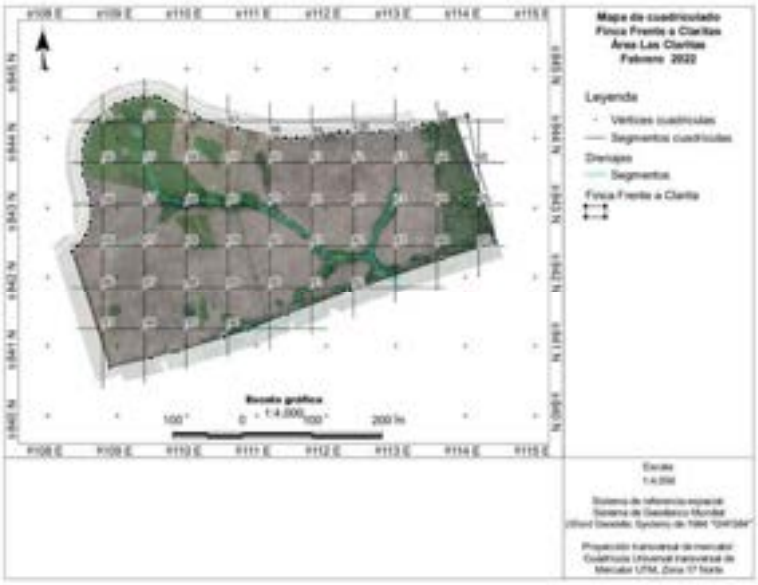


Figure 4. Planimetry of the Curry (Las 15) farm N° 8045.

Ortophotos

These are aerial images taken using a drone, with the goal of identifying the conditions and state of the farm, as well as the different areas such as streams, forest cover protection areas, infrastructure, or others. This helps to delimit areas based on their condition. This image shows the five farms that belong to the Filo del Tallo operational unit.



Figure 5. Farm ortophoto (Farms of the Filo del Tallo unit).

Farm sectorization

The sectorization of a farm involves proposing and identifying areas that meet the soil characteristics required by each species to be planted. This is done using GPS and drones.

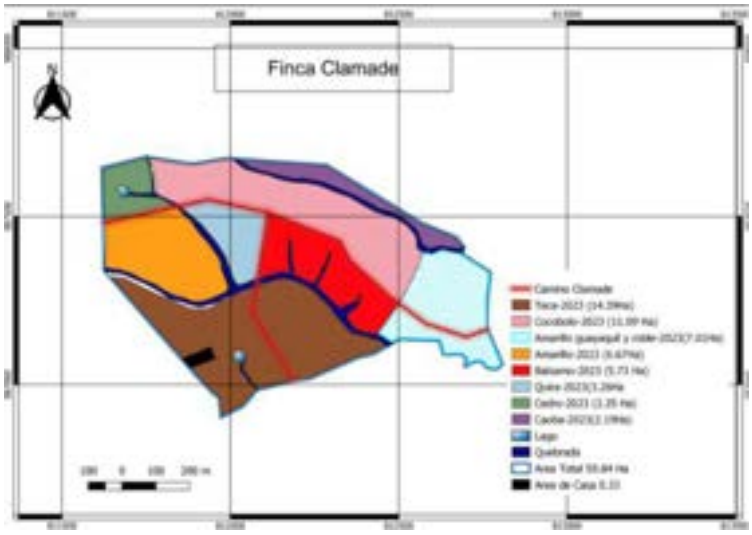


Figure 6. Sectorization of farms (Farm No. 4427 Clamades).

5. Reforestation development status

5.1. Farm No. 2015 La Reina

Description of development

La Reina farm shows significant development in its teak plantations and has excellent natural regeneration, which was recorded using GPS and is under proper management. Activities have focused on the care of plantations, weed and pest control, vine cutting, maintenance ring clearing, clearing, fertilization, and the establishment and maintenance of firebreaks.

It is important to note that initially, the species selected for the reforestation project in the Waldmenschen farms included a total of five species. However, to enhance biodiversity in the plantation, it was enriched with new species in open areas resulting from previous thinning and by managing natural regeneration in the area.

New species introduced include Santos Mahogany (*Myroxylon balsamum*), Mahogany (*Swietenia macrophylla*), and Tonka Bean (*Dipteryx oleifera*).

Species of natural regeneration: Rosy Trumpet Tree (*Tabebuia rosea*), Spanish Cedar (*Cedrela odorata*), and Ron Ron (sp) (*Astronium graveolens*).

Pest attacks, diseases, or fire occurrences

This year, there were no fire outbreaks on the farm during the 2024 period.

Regarding pests, we did experience periods of attacks from both leafcutter ants and *Hypsipyla grandella*, but these were not significant attacks as they only affected certain individuals.

Hypsipyla grandella, as we know, only attacks species belonging to the Meliaceae family (*Cedrela odorata* and *Swietenia macrophylla*), which are commonly attacked by the larvae. This pest targets the tender shoot or apex of the tree. It is managed by manually removing the affected areas using pruning shears, making a crosscut, eliminating the pest, and cutting at the first regrowth.

Arriera atta establish their nests within the plantation or in neighboring farms. The ants cut and carry fragments of tender leaves with watery content to cultivate the fungus. In the farms, we find ant nests at various points. For control, we manually apply Mirex, create an

action plan to prevent the formation of new nests, and implement permanent patrols to manage or eradicate the existing ones.

Table 6. PEST ATTACK CASES IN LA REINA FARM.

Farm No.	Date of event	Aprox. affected area (m^2 or has)	Indicate event: (fire, pest, disease)	Opinion of the qualified forestry professional on the state of the plantation.
2015	February-November	10.00	Attack of *Hypsipyla grandella*	Specifically in the plots where Cedar trees were planted. Once the attack was identified, pruning of the affected area was carried out.
2015	February-October	15.00	Attack of leafcutter ants	In different areas of the designated farms, causing damage to the seedlings' foliar system.

Summary of reforestation

Table 7. Categorization of reforested area.

Farm No. 2015 - Reina									
Planted species		**Initial dist. (m)**	**Tree/ha**	**Planting year**					**Reforested area/ species (ha)**
Common name	**Scientific name**			**2013**	**2015**	**2016**	**2017**	**2022**	
Tonka Bean	*Dipteryx oleifera*	Disperse	Disperse					0.06	0.06
Santos Mahogany	*Myroxylon balsamum*	Disperse	Disperse					0.09	0.09
Mahogany	*Swietenia macrophylla*	Disperse	Disperse					0.11	0.11
Spanish Cedar	*Cedrela odorata*	Disperse	Disperse				1.00	0.24	1.24
Rosewood	*Dalbergia retusa*	4x4	625		2.70	2.00			4.70
Guayacán Morado (sp)	*Tabebuia impetiginosa*	Disperse	Disperse					0.32	0.32
Fustictree	*Maclura tinctorea*	Disperse	Disperse				1.00		1.00
Rosy Trumpet Tree	*Tabebuia rosea*	Disperse	Disperse				2.00	0.24	2.24
Teak	*Tectona grandis*	3x3	1111	12.00					12.00
Total, reforested				**12.00**	**2.70**	**2.00**	**4.00**	**1.06**	**21.76**
Protection area									3.64
Total Area									**25.40**

Map of the farm

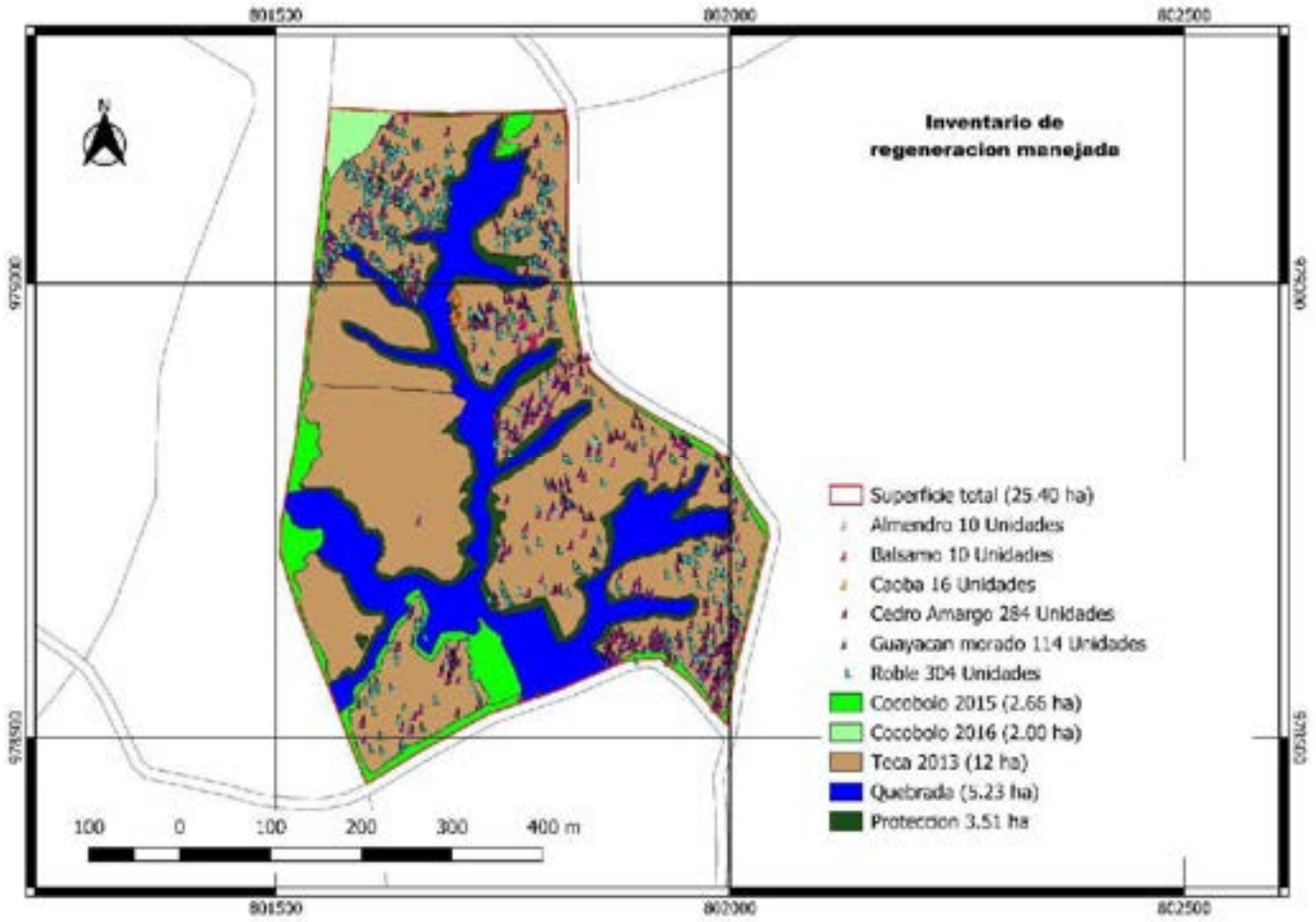


Figure 9. Map of La Reina Farm (No. 2015).

Monitoring and growth data

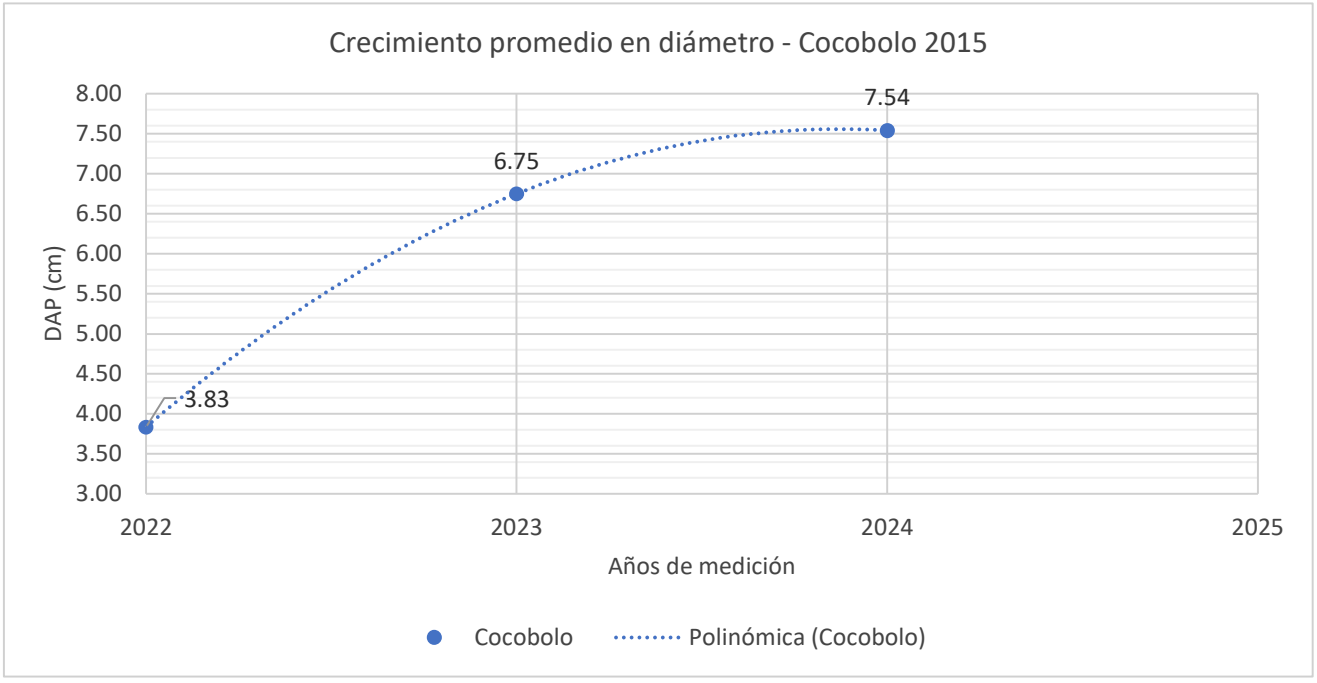
Average growth of natives, planting years 2015 and 2016.

Dalbergia retusa 2015

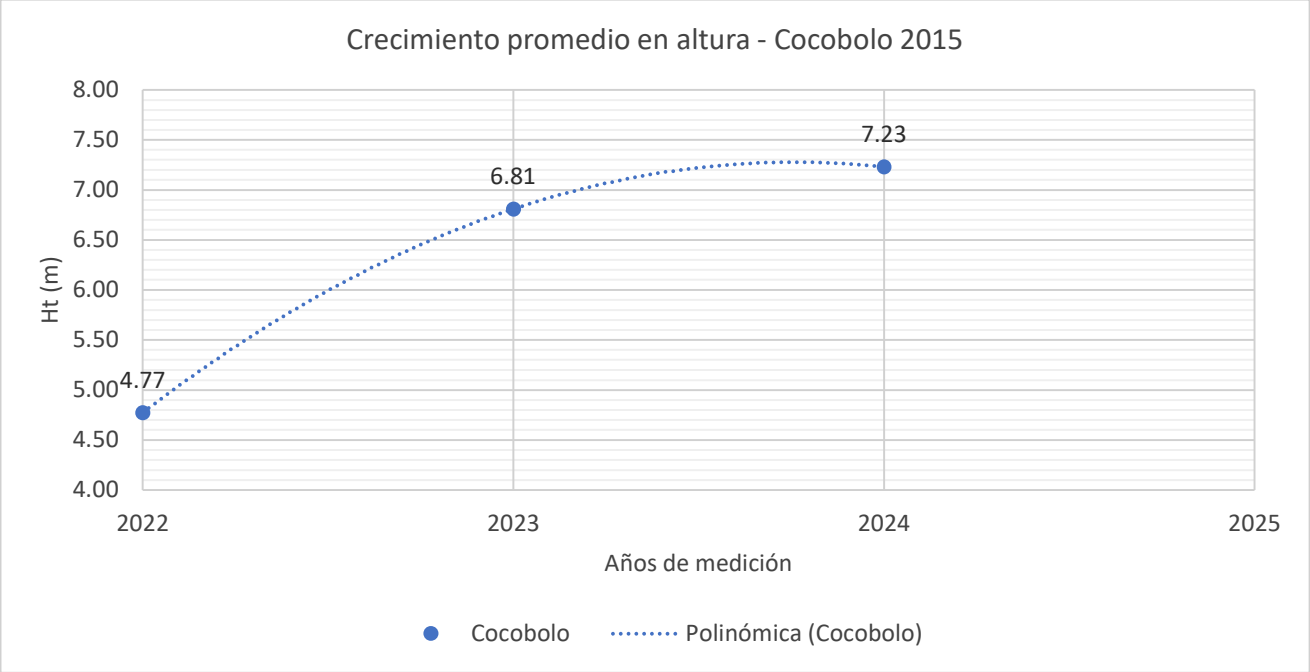
Based on the results obtained from the 2024 monitoring and the inclusion of another plot, the Rosewood trees show adequate growth. Their development has been steady at a moderate pace, which may be influenced by various environmental or natural factors specific to the species.

Table 8. *Growth data.*

Darién			Growth Data: Reina			2015	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2015	apr-22	6.7	3.83	4.77	0.58	0.72
Rosewood	*Dalbergia retusa*	2015	mar-23	7.8	6.75	6.81	0.84	0.85
Rosewood	*Dalbergia retusa*	2015	may-24	8.6	7.54	7.23	0.88	0.64



Graph 1. Average diameter growth of Rosewood, planted in 2015.



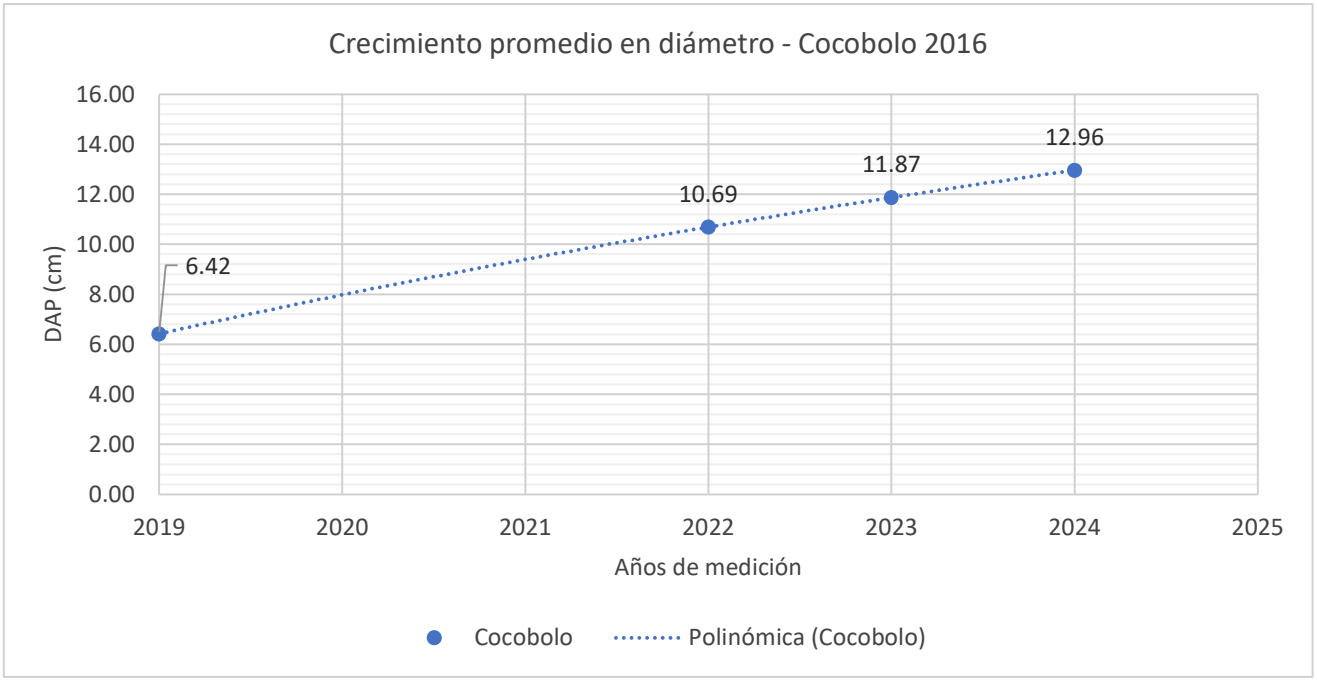
Graph 2. Average growth in total height of Rosewood, planted in 2015.

Dalbergia retusa 2016

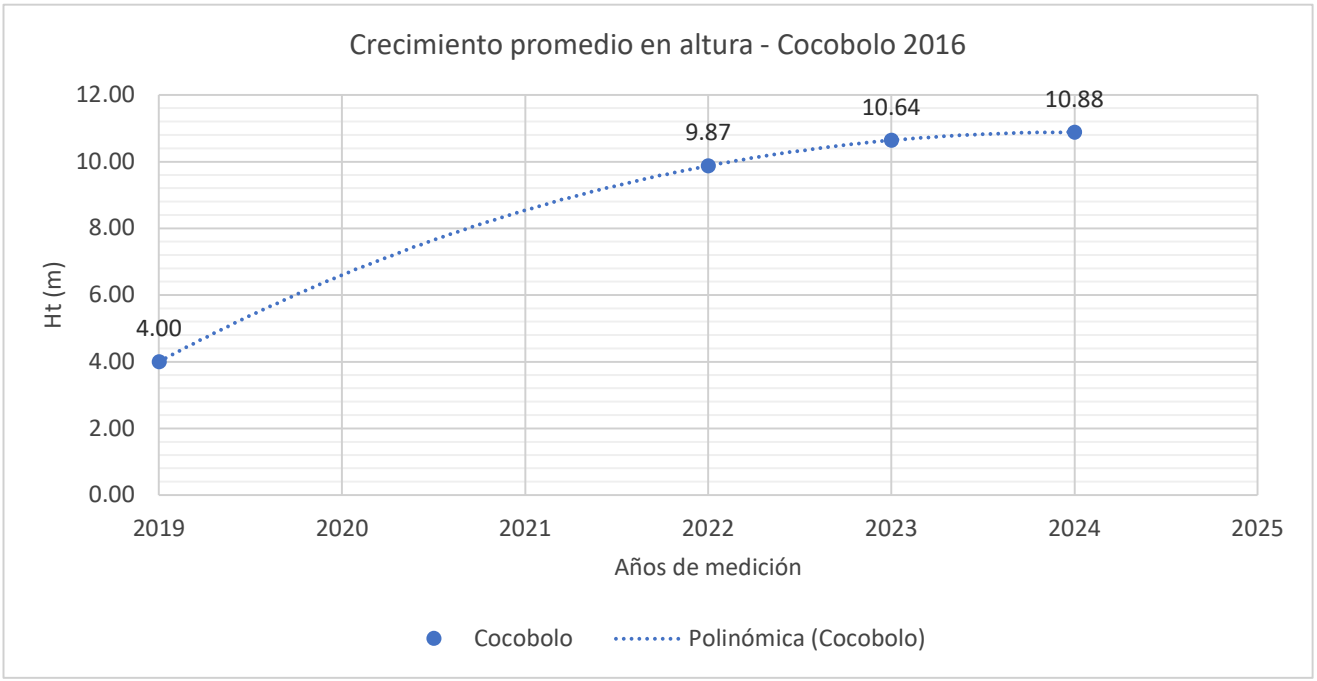
The 2016 Rosewood plantation has shown good growth, significantly faster and more vigorous, with relatively high annual growth rates.

Table 9. *Growth data*

Darién		Growth Data: Reina				2016	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2016	2019	3	6.42	4.00	2.14	1.33
Rosewood	*Dalbergia retusa*	2016	apr-22	5.7	10.69	9.87	1.89	1.74
Rosewood	*Dalbergia retusa*	2016	apr-23	6.7	11.87	10.64	1.70	1.52
Rosewood	*Dalbergia retusa*	2016	may-24	7.6	12.96	10.88	1.74	1.46



Graph 3. Average diameter growth of Rosewood, planted in 2016.



Graph 4. Average growth in total height of Rosewood, planted in 2016.

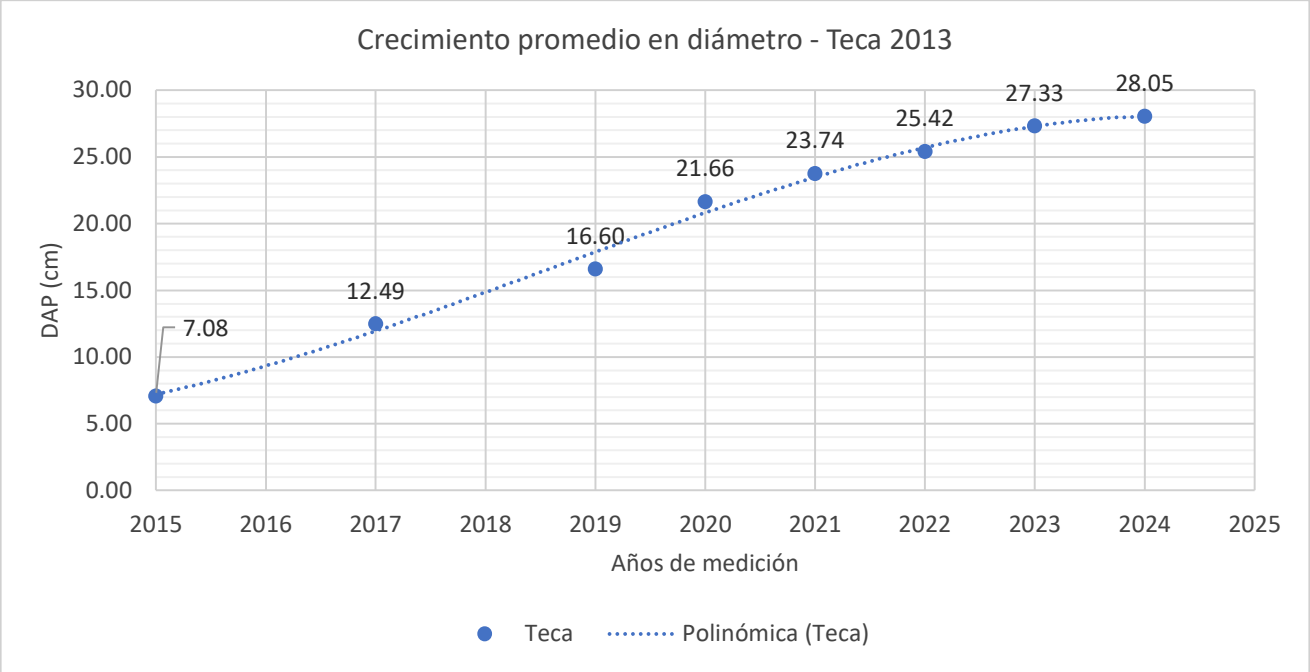
Average growth of Teak, planting year 2013

Based on the results of diameter and height growth, the teak trees on this farm show good development. As observed, the mean annual increment (MAI) in diameter falls within a good range, as does the height growth.

Table 10. *Growth data.*

Darién **Growth: Reina** **2013** **Teak**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2013	2015	2.1	7.08	5.90	3.37	2.81
Teak	*Tectona grandis*	2013	2017	3.7	12.49	10.54	3.38	2.85
Teak	*Tectona grandis*	2013	2019	5.4	16.60	16.40	3.07	3.04
Teak	*Tectona grandis*	2013	2020	6.4	21.66	18.00	3.38	2.81
Teak	*Tectona grandis*	2013	may-21	7.6	23.74	19.81	3.13	2.61
Teak	*Tectona grandis*	2013	abr-22	8.7	25.42	20.22	2.93	2.33
Teak	*Tectona grandis*	2013	mar-23	9.8	27.33	21.24	2.73	2.12
Teak	*Tectona grandis*	2013	may-24	10.6	28.05	21.84	2.65	2.06



Graph 4. Average diameter growth of Teak 2013.



Graph 5. Average growth in total height of Teak 2013.

Table 11. Executed AOP 2024

FINCA REINA																											
DESCRIPCION		Enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Etiquetas de fila	Codigo Actividad	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Plantado Manual	E26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Mantenimiento de cercas	I 4	-	-	-	-	-	27	-	-	15	6	-	-	-	-	15	1	-	-	-	2	15	-	-	-	45	36
Imprevistos	I 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Control de maleza - rodajas de establecimiento	E7	-	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Control fitosanitario manual - Arrieras	M13	-	-	-	-	-	1	-	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	5
Control de maleza manual - rodajas de mantenimiento	M7	-	-	-	-	-	-	-	-	-	-	-	2	-	6	-	-	-	6	-	4	-	-	-	-	-	18
CPC- Incendios- mantener rondas corta fuego	M46	25	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	10
Mantenimiento de caminos internos	I 2	24	5	10	-	-	-	-	-	5	-	-	-	-	-	-	3	5	5	-	-	-	-	5	-	49	13
Conservación de suelo	M45	29	17	-	-	-	-	-	-	-	-	10	-	-	-	15	-	15	2	15	-	15	-	10	-	109	19
Control de maleza manual-chapia	M6	-	-	-	29	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47
Control de maleza-limpieza de franja	M38	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Raleo	M20	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
CPC Incendios- Vigilancia de incendios	M50	5	-	5	-	5	2	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	7

Poda Alta	M43	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Fertilización foliar	M15	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Poda de formación	M18	-	-	-	-	-	-	-	17	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37
Inventario Activo Forestal (Regeneración)	M53	-	-	-	-	-	-	-	4	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
Marcación para Raleo	M19	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Control de maleza manual - Corte Bejuco	M8	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	9	-	7	-	-	-	-	-	-	26
Control de maleza - químico-Bomba Mochila	M1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Marcación Estaquillado	E34	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Capacitación	E33	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Fertilización granular	M16	-	-	-	-	-	-	-	-	-	-	-	10	-	8	-	3	-	-	-	-	-	-	-	-	-	-	21
Replantado	E29	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	9
Riego en Campo	M36	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-	3
Sendero	GC1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	3	-	-	-	-	-	-	8
Levantamiento con GPS	M30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Deschuponado	M41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Total general																												
		83	**32.00**	**15**	**47.00**	**5**	**54.00**	**-**	**49.00**	**20**	**53.00**	**10**	**34.00**	**-**	**26.00**	**30**	**14.00**	**20**	**26.00**	**15**	**16.00**	**30**	**-**	**15**	**-**	**243**	**351.00**

5.2. Claritas Unit

Description of development

In general, growth rates are within expected ranges, and the plantation is developing well. In 2024, multiple silvicultural activities were carried out, including pruning of Rosewood (at all ages), Bullywood (pruning and apex inspection), and Teak (formation pruning and branch thinning). Fertilization was applied to the entire 2023 plantation using drensh (liquid fertilizer) and granular fertilizer. A total of 14.75 hectares of affected areas were restored, where species suffered from pest attacks (*Hypsipyla grandella* in Cedar) and high soil moisture. Replanting was done with other native species, such as Rosy Trumpet Tree and Guayabo de Charco. The clearing activity (32.33 ha) within the recovery plan has been essential for the development and growth of native species across all farms, particularly in Raúl Castro, Elia Castillo, Espavé, and Contenedores. All farms within the forestry unit have received the necessary maintenance for weed and pest control.

Pest attacks, diseases, or fire occurrences

The Cedar plots in Clarita 1 and Tello 1 farms were significantly affected by the *Hypsipyla grandella* meliaceae shoot borer. As a result, the affected areas were replaced with Teak, and in Tello 1, a resprouting process was carried out along with the planning of a species change for 2025. Manual and chemical controls were applied in both plots; however, the frequency and severity of the attacks were higher compared to other farms.

During the rainy season, three (03) wind events occurred, with Teak and Tonka Bean plots being the most prone to bending. However, there were no losses in hectares or quality deterioration of the trunks.

Regarding forest fires, ten (10) hectares in Tello 3 and one (01) hectare in Los Contenedores farm were affected. These fires originated in neighboring farms, where proper technical precautions were not taken, such as establishing firebreaks or notifying before conducting burns. A total of 19 fire incidents were detected, each receiving a quick response from the team.

Planting Mortality 2023

Table 12. Cuadro de mortalidad Clarita 2023.

Farm name	Farm number	Species	Scientific name	Amount Living	Amount Dead	Total amount	Mortality %
Clamade	30394427	Tonka Bean	*Dipteryx oleifera*	16	12	28	43%
		Bullywood	*Terminalia amazonia*	246	4	250	2%
		Mahogany	*Swietenia macrophylla*	111	1	112	1%
		Spanish Cedar	*Cedrela odorata*	131	10	141	7%
		Rosewood	*Dalbergia retusa*	755	57	812	7%
		Rosewood and Bullywood	*Dalbergia retusa - Terminalia amazonia*	209	43	252	17%
		Guayacán morado (sp)	*Tabebuia impetiginosa*	83	1	84	1%
		Rosy Trumpet Tree	*Tabebuia rosea*	148	20	168	12%
Elia Castillo	30418636	Tonka Bean	*Dipteryx oleifera*	210	70	280	25%
		Mahogany	*Swietenia macrophylla*	138	2	140	1%
		Spanish Cedar	*Cedrela odorata*	27	1	28	4%
		Rosewood	*Dalbergia retusa*	459	45	504	9%
		Ron Ron (sp)	*Astronium graveolens*	104	5	109	5%
La Esperanza	30359029	Rosewood and Spanish Elm	*Dalbergia retusa - Cordia alliodora*	388	4	392	1%
Tello N°2	313219	Tonka Bean	*Dipteryx oleifera*	58	26	84	31%
		Bullywood	*Terminalia amazonia*	149	19	168	11%
		Mahogany	*Swietenia macrophylla*	96	16	112	14%
		Rosewood	*Dalbergia retusa*	217	35	252	14%
		Guayaquil (sp)	*Centrolobium yavizanum*	17	11	28	38%
		Guayacán morado (sp)	*Tabebuia impetiginosa*	48	8	56	14%
Uri	6276	Mahogany	*Swietenia macrophylla*	110	2	112	2%
		Spanish Cedar	*Cedrela odorata*	26	2	28	7%
		Tonka Bean	*Dipteryx oleifera*	66	18	84	21%
		Rosewood and Bullywood	*Dalbergia retusa - Terminalia amazonia*	23	5	28	16%
		Guayacán morado (sp)	*Tabebuia impetiginosa*	188	8	196	4%
		Rosy Trumpet Tree	*Tabebuia rosea*	16	12	28	43%
Total, average				**4039**	**437**	**4476**	**10%**

All dead trees from various forest species were replaced. A total of 4,476 trees were replanted, with a recorded mortality rate of 10 % (437 trees). Mortality was especially high in species such as *Tabebuia rosea* (Rosy Trumpet Tree), *Dipteryx oleifera* (Tonka Bean), and *Terminalia amazonia* (Bullywood), which showed low resilience to water stress. In contrast, Rosewood exhibited low mortality rates.

5.2.1. Farm No. 280254 La Ponderosa

Summary of reforestation

Table 13. Categorization of reforested area.

Farm 280254 - La Ponderosa						
Planted species		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/ species (ha)**
Common name	**Scientific name**			**2020**	**2021**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.02		0.02
Mahogany	*Swietenia macrophylla*	3x4	833		0.87	0.87
Spanish Cedar	*Cedrela odorata*	3x4	833	1.05		1.05
Rosewood	*Dalbergia retusa*	3x4	833		5.05	5.05
Rosewood, Spanish Cedar and Mahogany	*Dalbergia retusa, Cedrela odorata and Swietenia macrophylla*	3x4	833	4.80		4.80
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	2.25		2.25
Ron Ron (sp)	*Astronium graveolens*	3x4	833	0.29		0.29
Teak	*Tectona grandis*	4x5	500		6.50	6.50
Total, reforested				**8.41**	**12.42**	**20.83**
Protection area						1.82
Stream area						3.61
Firebreak						0.46
Total Area						**26.72**

Mapa of the farm

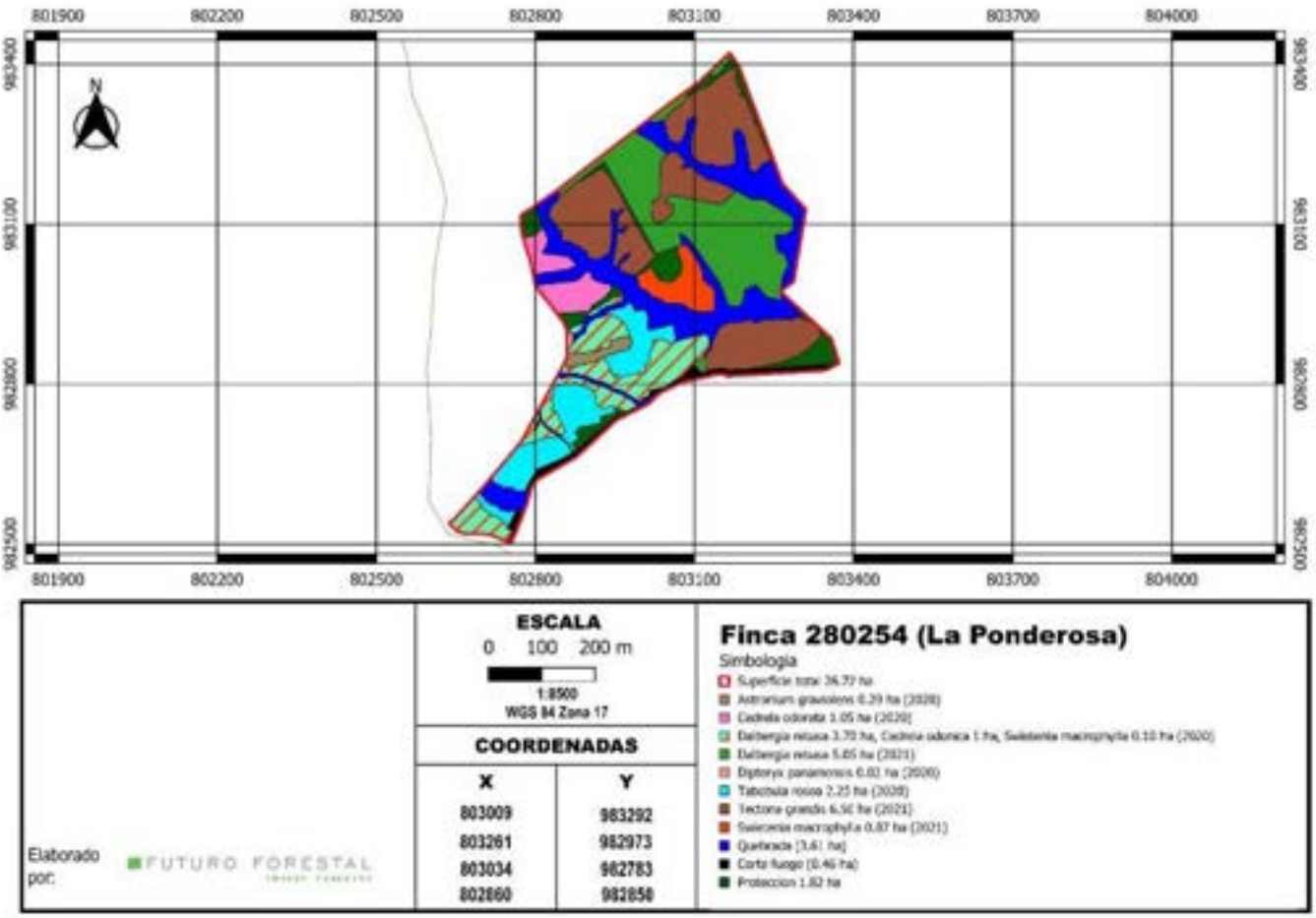


FIGURE 10. MAP OF LA PONDEROSA FARM (NO. 280254).

In 2024, manual and chemical weed control was carried out across the entire farm using strip or row methods. Additionally, formation pruning was performed on all species, including Rosewood and Teak. For species such as Cedar and Rosy Trumpet Tree, apex control was conducted to define future commercial trunks.

These efforts were complemented by pest control measures targeting *Hypsipyla grandella* and termites across all plots and the farm perimeter.

5.2.2. Farm No. 235655 La Ponderosa

Summary of reforestation

Table 14. *Categorization of reforested area.*

Farm No. 235655 - La Ponderosa					
Planted species		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/ species (ha)**
Common name	**Scientific name**			2021	
Spanish Cedar	*Cedrela odorata*	3x4	833	0.63	0.63
Rosewood	*Dalbergia retusa*	3x4	833	5.38	5.38
Guayacán Morado (sp)	*Tabebuia impetiginosa*	4x5	833	1.38	1.38
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.76	1.76
Ron Ron (sp)	*Astronium graveolens*	3x4	833	1.51	1.51
Total reforested				**10.66**	**10.66**
Protection area					0.27
Stream area					0.70
Infrastructure-Campsite-Firebreaks					1.54
Total Area					**13.17**

Map of the farm

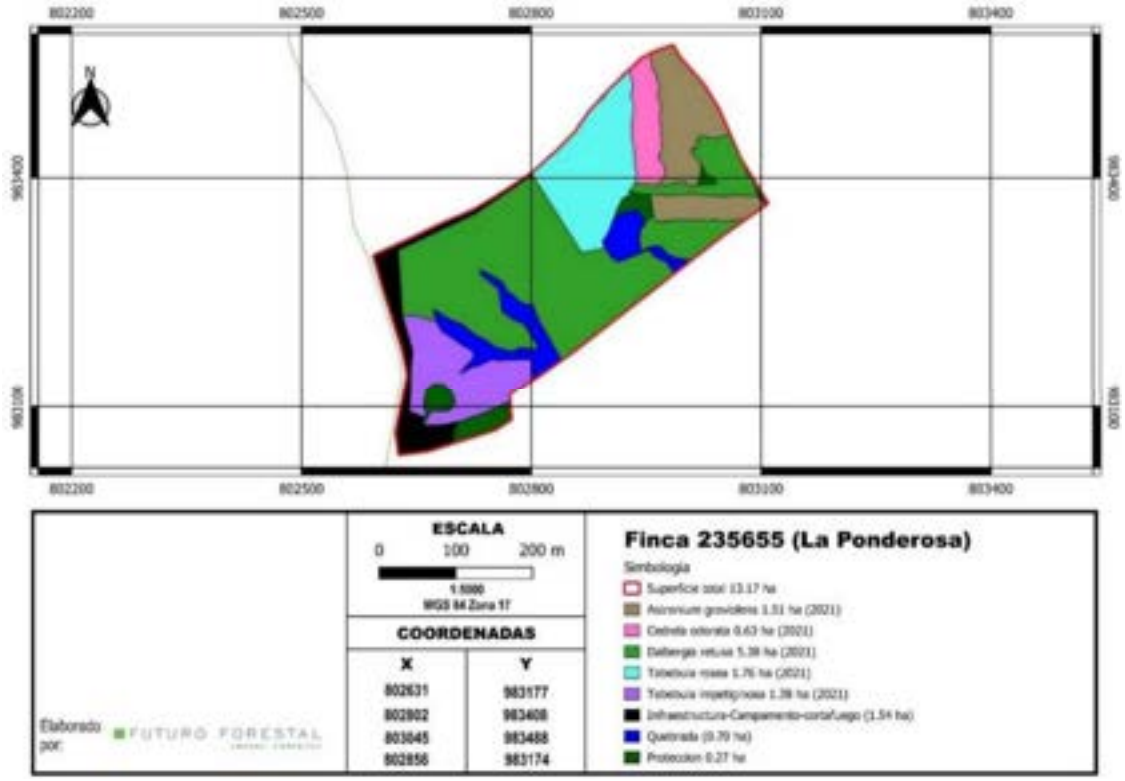


FIGURE 11. MAP OF LA PONDEROSA FARM (NO. 235655).

Specifically, in the Rosewood plot (Dr21), multiple weed control measures were implemented using agricultural tractors for mechanical clearing, manual brush cutters (lawnmowers), and chemical control with backpack sprayers. These actions were necessary due to the presence of *Brachiaria brizantha*, an African grass that competes with native tree plantations for light, water, and nutrients.

Table 15. Executed AOP 2024

FINCA 235655 LA PONDEROSA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0	-	0.00	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Control de maleza - mecanico - Guira	M9	0	-	0.00	2.00	0	8.00	0	-	0	-	0	23.00	0	-	0	-	0	10.00	0	-	0	-	0	-	0	-	-	43
Control de maleza - químico-Bomba Mochila	M1	0	-	0.00	-	0	-	0	-	0	-	0	10.00	0	11.00	0	-	0	-	0	-	0	-	0	-	0	-	-	21
Control de maleza manual - Corte Bejuco	M8	0	-	2.50	-	0	-	0	-	0	-	0	3.00	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	3	4
Control de maleza manual - rodajas de mantenimiento	M7	0	-	0.00	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Control de Maleza-Limpieza en Franja	M38	0	-	0.00	-	**0**	4.00	**0**	-	**0**	-	**0**	18.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	6.00	**-**	**28**
Control de Maleza-Química en Franja	M39	0	-	0.00	-	0	-	0	-	0	-	0	13.00	0	-	0	-	0	-	0	17.00	0	-	0	-	0	-	-	30
Control fitosanitario manual - Arrieras	M13	0	-	0.52	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	1	1
Control fitosanitario manual - Hypsipyla grandella	M14	0	-	0.00	3.00		1.00		5.00		-		3.00		4.00		1.00		1.00		1.00		-		1.00				20
Control fitosanitario-Químico-Hongos	M12	0	-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	5.00	3			5
CPC Incendios - mantener rondas corta fuego	M46	0	-	0.00	4.00		-		-		-		-		-		-		-		-		-		-				4

Enderezado de plantas	M25		-	0.00	-		-		-		-		-		5.00		-		-		-		-		-		5
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		-		10.00		-		-		-		10
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		12.00		9.00		-		8.00		-		5.00		-		34
Mantenimiento de cercas	I4		-	0.00	-		1.00		-		-		-		-		-		-		-		-		1.00		2
Operador de Motosierra	I19		-	0.00	-		-		-		-		1.00		1.00		-		-		-		-		-		2
Poda de formación	M18		-	0.00	-		11.00		1.00		4.00		-		-		-		-		-		2.00		-		18
Rodaja Orgánica	M33		-	0.00	-		22.00		-		-		-		-		-		-		-		-		6.00		28
Grand Total			-	3.02	9.00	-	47.00	-	6.00	-	4.00	-	84.00	-	32.00	-	1.00	-	30.00	-	18.00	-	7.00	-	19.00		257

5.2.3. Farm No. 218957 La Ponderosa

Summary of reforestation

Table 16. Categorization of reforested area.

Farm No. 218957 - La Ponderosa						
Planted species		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/ species (ha)**
Common name	**Scientific name**			2020	2021	
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.05		0.05
Spanish Cedar	*Cedrela odorata*	3x4	833		3.75	3.75
Rosewood, Spanish Cedar and Mahogany	*Dalbergia retusa, Cedrela odorata* y *Swietenia macrophylla*	3x4	833	1.33		1.33
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.25	0.46	1.71
Total, reforested				**2.63**	**4.21**	**6.84**
Protection area						0.79
Stream area						1.30
Total Area						**8.93**

Map of the farm

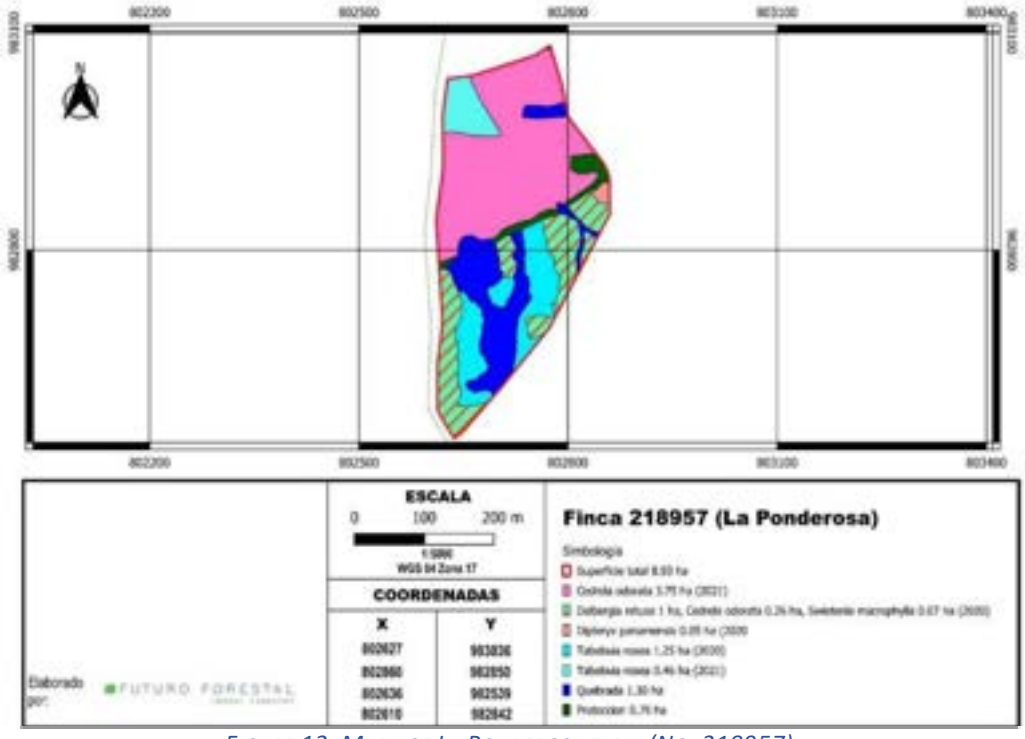


FIGURE 12. MAPA OF LA PONDEROSA FARM (NO. 218957).

Table 17. Executed AOP 2024

FINCA 218957 LA PONDEROSA																										
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	16.00	0	-	0	-	0	12.00	0	-	0	-	0	-	0	-	0	-	0	-	-	28
Control de maleza - químico- Bomba Mochila	M1		-	0.00	-	0.32	-	0	-	0	-	0	8.00	0.32	-	0	-	0	-	0.32	-	0	-	0	-	1	8
Control de Maleza- Limpieza en Franja	M38		-	0.00	-	0	8.00	0	-	0	-	0	12.00	0	-	0	14.00	0	11.00	0	-	0	-	0	7.00	-	52
Control de Maleza- Química en Franja	M39		-	0.00	-	0	-	0	7.00	0	-	0	6.00	0	-	0	-	0	-	0	11.00	0	-	0	-	-	24
Control fitosanitario manual - Arrieras	M13		-	0.98	-	0.1	-	0	-	0.1	-	0	1.00	0.1	-	0.1	-	0.1	-	0	-	0	-	0	1.00	1	2

Control fitosanitario manual - Hypsipyla grandella	M14		-	1.10	4.00	**0.1**	2.00	**0.1**	3.00	**0.1**	-	**0**	5.00	**0.1**	5.00	**0.1**	3.00	**0.1**	5.00	**0.1**	6.00	**0**	7.00	**0**	6.00	**2**	**46**
Control fitosanitario-Químico-Hongos	M12		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	-	2
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	6.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	-	7
Despeje	M26		-	0.00	-		-		-		-		-		-		-		-		-		-		2.00		2
Fertilización granular	M16		-	0.00	-	0.52	-	0.1	-	0.2	-	0	-	0.52	-	0.2	-	0.2	5.00	0.42	-	0	-	0	-	4	5
4427 Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		3.00		-		-		-		-		-		3
Mantenimiento de cercas	I4		-	0.00	-		2.00		-		-		-		-		-		-		-		-		-		2
Poda de formación	M18		-	34.00	-		9.00		3.00		-		-		-		-		-		-		-		-		12

Rodaja Orgánica	M3		-	0.00	-		1.00		-		-		-		-		-		-		-		-		-		1
Grand Total			-	36.08	10.00	1.04	38.00	0.20	13.00	0.40	-	-	44.00	1.04	8.00	0.40	17.00	0.40	21.00	0.84	18.00	-	7.00	-	18.00		194

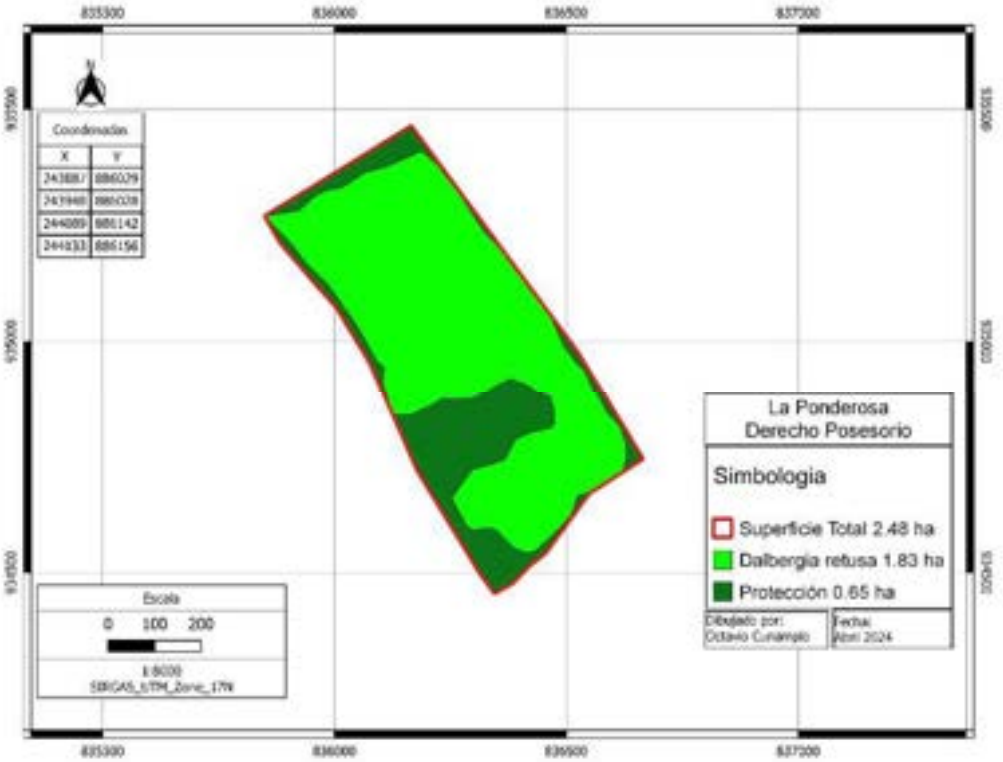
5.2.4. Farm No. 218957 La Ponderosa

Summary of reforestation

Table 18. Reforested area by species.

La Ponderosa Farm					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2021**	
Rosewood	*Dalbergia retusa*	3x4	833	1.83	1.83
Total, reforested				**1.83**	**1.83**
Protection area					0.65
Total Area					**2.48**

Map of the farm



Monitoring and data growth

Average growth of natives planted in 2020

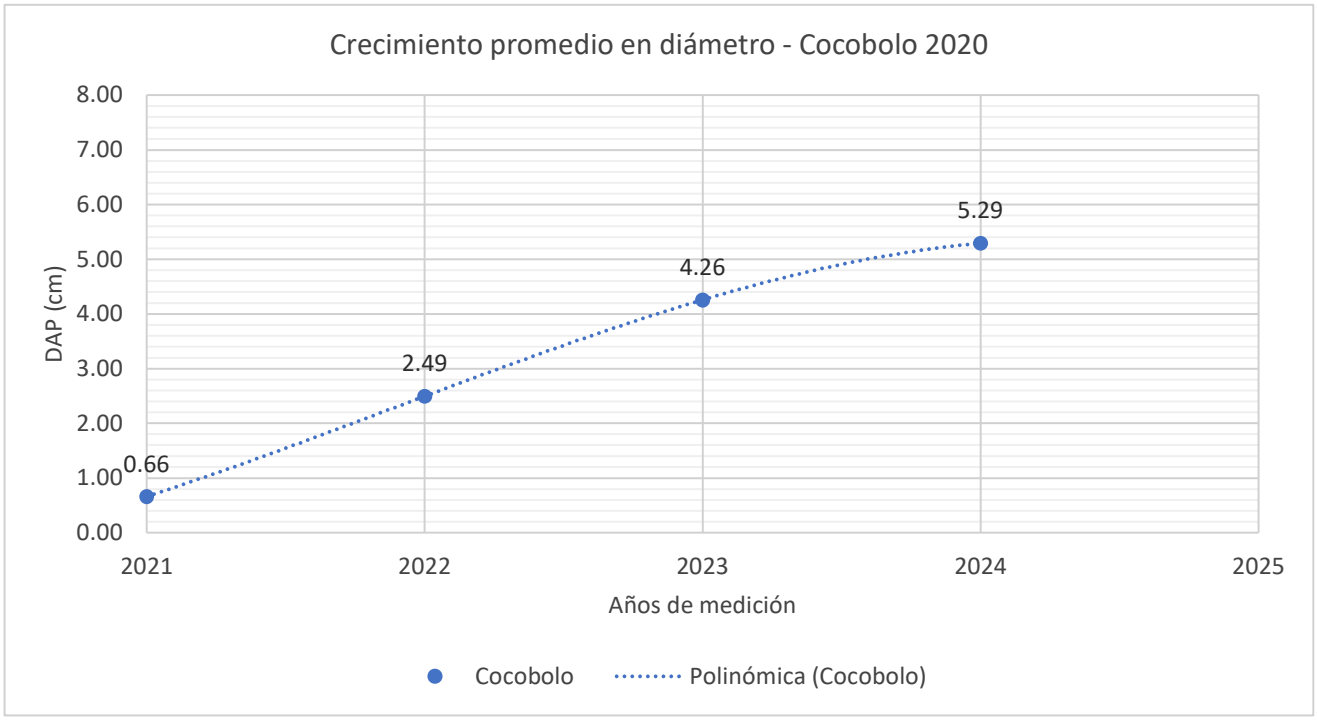
Based on the monitoring data results, we can highlight that *Dalbergia retusa* exhibits consistent growth, with higher increments in the early years, indicating a good initial establishment of the plantation. Meanwhile, *Tabebuia rosea* has maintained steady and uniform growth, whereas *Astronium graveolens* shows slower but stable growth compared to the other species.

Dalbergia retusa

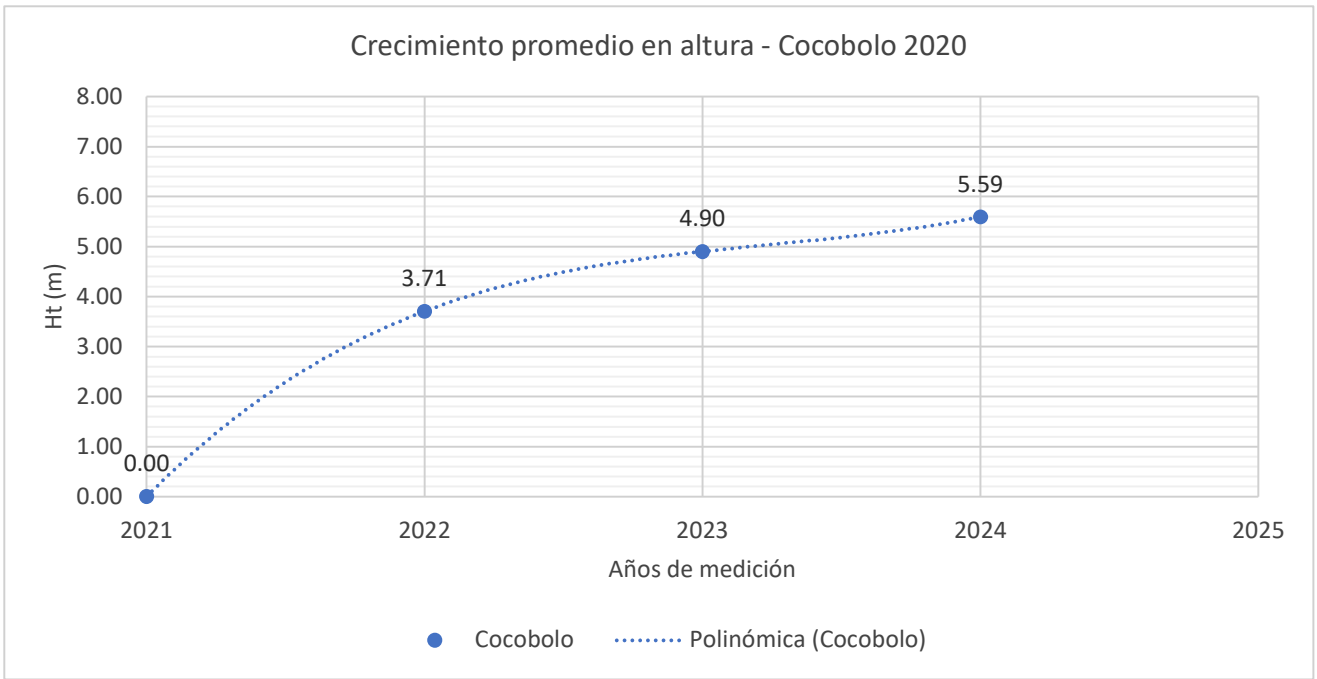
Table 19. *Growth data.*

Darién **Growth Data: La Ponderosa** **2020**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2020	apr-21	0.7	0.66	NA	0.99	NA
Rosewood	*Dalbergia retusa*	2020	apr-22	1.7	2.49	3.71	1.50	2.22
Rosewood	*Dalbergia retusa*	2020	apr-23	2.7	4.26	4.90	1.42	1.63
Rosewood	*Dalbergia retusa*	2020	mar-24	3.8	5.29	5.59	1.41	1.49



Graph 6. Average diameter growth of Rosewood 2020.



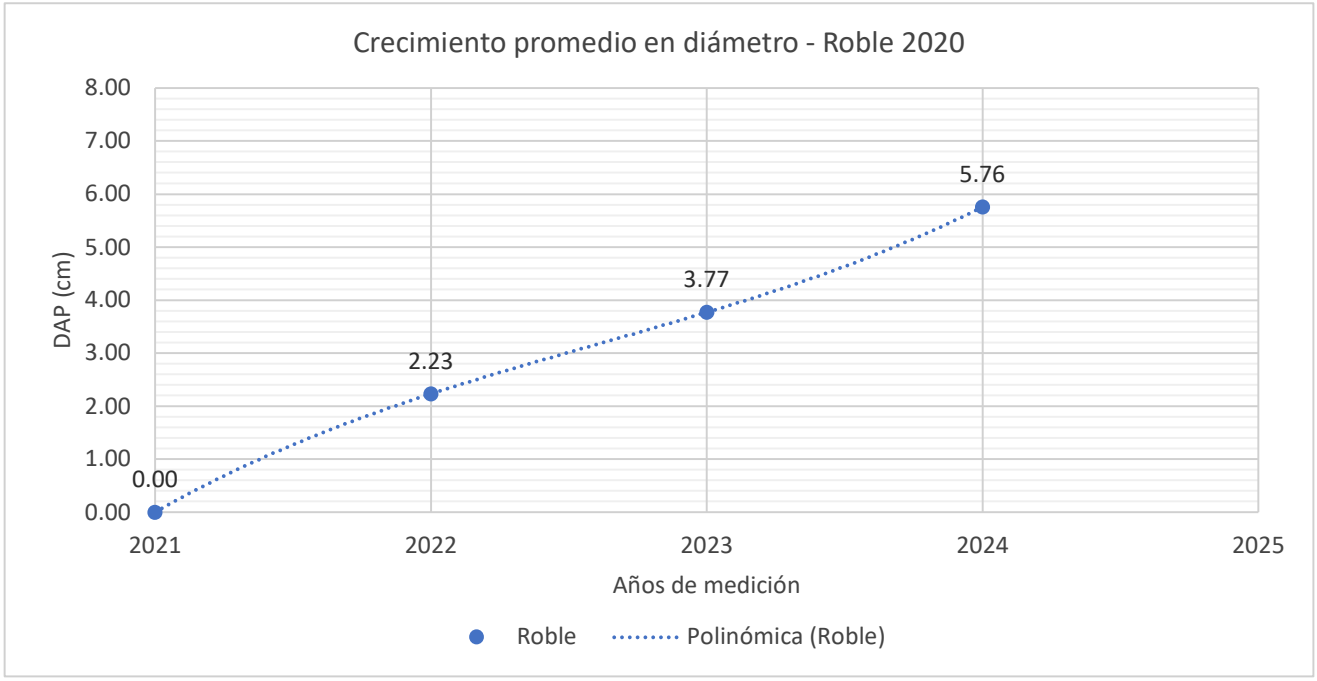
Graph 7. Average growth in total height of Rosewood 2020.

Tabebuia rosea

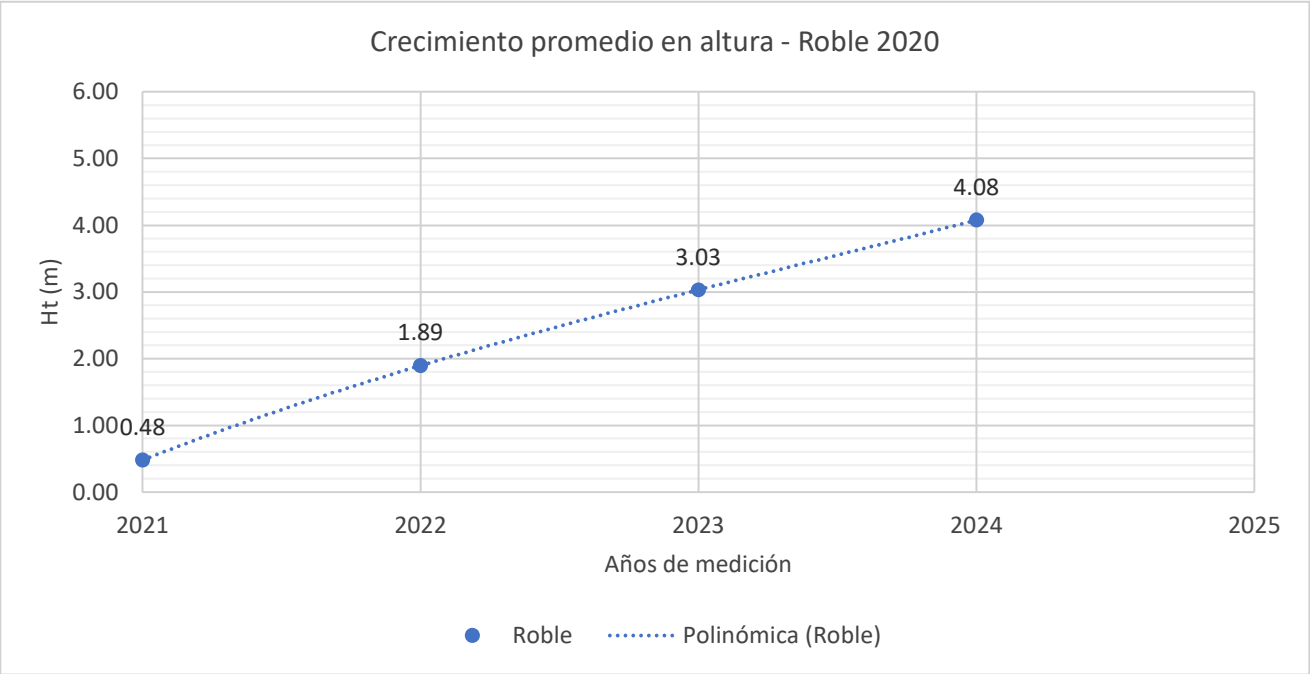
Table 20. *Growth data.*

Darién	Growth Data: La Ponderosa	2020

Common name	Scientific name	Year planted	Date of Measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Roble	*Tabebuia rosea*	2020	apr-21	0.7	NA	0.48	NA	0.72
Roble	*Tabebuia rosea*	2020	apr-22	1.7	2.23	1.89	1.34	1.14
Roble	*Tabebuia rosea*	2020	apr-23	2.7	3.77	3.03	1.26	1.01
Roble	*Tabebuia rosea*	2020	mar-24	3.8	5.76	4.08	1.53	1.09



Graph 8. Average diameter growth of Rosy Trumpet Tree.

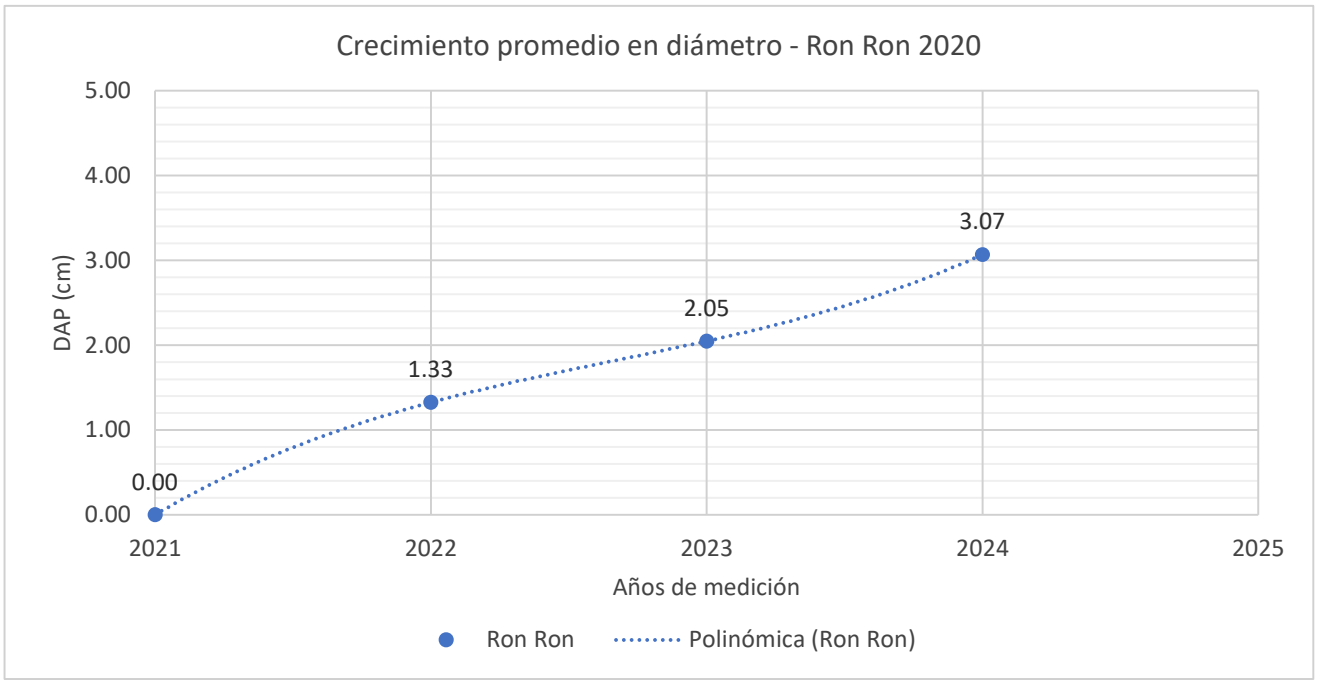


Graph 9. Average growth in total height of Rosy Trumpet Tree 2020.

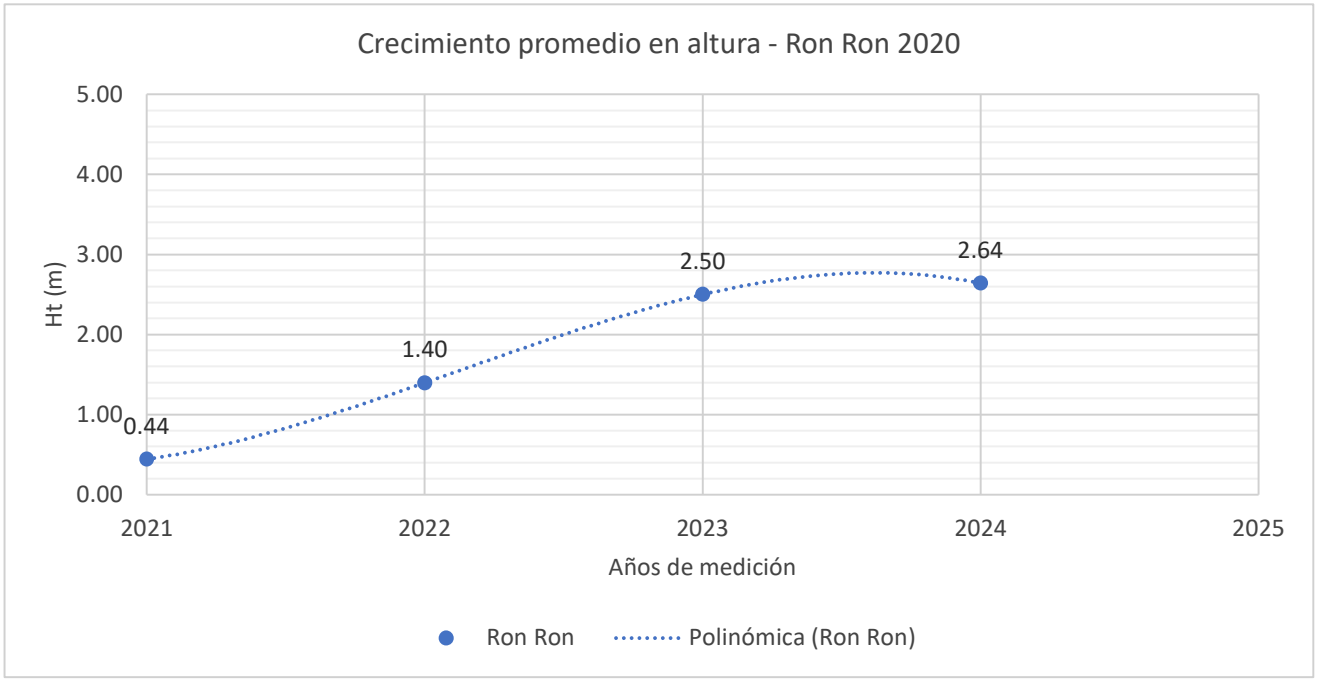
Astronium graveolens

Table 21. *Growth data.*

Darién		Growth Data: La Ponderosa				2020		
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Ron Ron (sp)	*Astronium graveolens*	2020	apr-21	0.7	NA	0.44	NA	0.66
Ron Ron (sp)	*Astronium graveolens*	2020	apr-22	1.7	1.33	1.40	0.80	0.84
Ron Ron (sp)	*Astronium graveolens*	2020	apr-23	2.7	2.05	2.50	0.68	0.83
Ron Ron (sp)	*Astronium graveolens*	2020	mar-24	3.8	3.07	2.64	0.82	0.70



Graph 10. Average diameter growth of Ron Ron 2020.



Graph 11. Average growth in total height of Ron Ron 2020.

Average growth of natives planted in 2021

The 2024 monitoring results show that among the native species planted in 2021, *Dalbergia retusa* exhibited steady development, reflecting a moderate growth rate. *Cedrela odorata* demonstrated stable growth, although its mean annual height increment was lower than that of *Dalbergia retusa*. Lastly, *Dipteryx oleifera* showed slower average growth, indicating that its initial development is gradual and requires more time to optimize its performance and overall growth.

Cedrela odorata

Table 22. *Growth data.*

Darién		Growth Data: La Ponderosa				2021	Spanish Cedar	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Spanish Cedar	*Cedrela odorata*	2021	apr-23	1.7	2.03	1.14	1.02	0.57
Spanish Cedar	*Cedrela odorata*	2021	mar-24	2.8	2.58	1.96	0.94	0.71

Dalbergia retusa

Table 23. *Growth data.*

Darién		Growth Data: La Ponderosa				2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	1.85	2.40	0.92	1.20
Rosewood	*Dalbergia retusa*	2021	mar-24	2.8	3.31	3.36	1.20	1.22

Dipteryx oleifera

Table 24. *Growth data.*

Darién		Growth Data: La Ponderosa				2021	Tonka Bean	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Tonka Bean	*Dipteryx oleifera*	2021	apr-23	1.7	1.80	0.81	0.90	0.40
Tonka Bean	*Dipteryx oleifera*	2021	apr-23	2.7	2.09	2.36	0.79	0.89

Average growth of Teak planted in 2021

Tectona grandis shows good average growth in both diameter and total height, reflecting its strong development and early productivity.

Tectona grandis

Table 25. *Growth data.*

Darién	Growth data: La Ponderosa					2021	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2021	apr-23	1.7	4.22	4.09	2.53	2.45
Teak	*Tectona grandis*	2021	mar-24	2.8	9.62	7.60	3.50	2.76

5.2.5. Farm No. 30123319 Claritas 1

Summary of reforestation

Table 26. Reforested area by species.

Farm No. 30123319 - Claritas 1						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2020**	**2024**	
Rosewood	*Dalbergia retusa*	3x4	833	14.80		14.80
Spanish Cedar	*Cedrela odorata*	3x4	833	0.96		0.96
Santos Mahogany	*Myroxylon balsamum*	3x5	834	0.54		0.54
Ron Ron (sp)	*Astronium graveolens*	3x4	833	6.13		6.13
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	3.11		3.11
Teak	*Tectona grandis*	3x4	833	5.95	3.22	9.17
Genip Tree	*Genipa americana*	3x4	833		0.07	0.07
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833		0.35	0.35
Total reforested				**31.49**	**3.64**	**35.13**
Protection área						2.66
Enrichment						4.12
Stream area						0.80
Artificial lake						0.13
Infrastructure						0.16
Total Area						**43.00**

Mapa of the farm

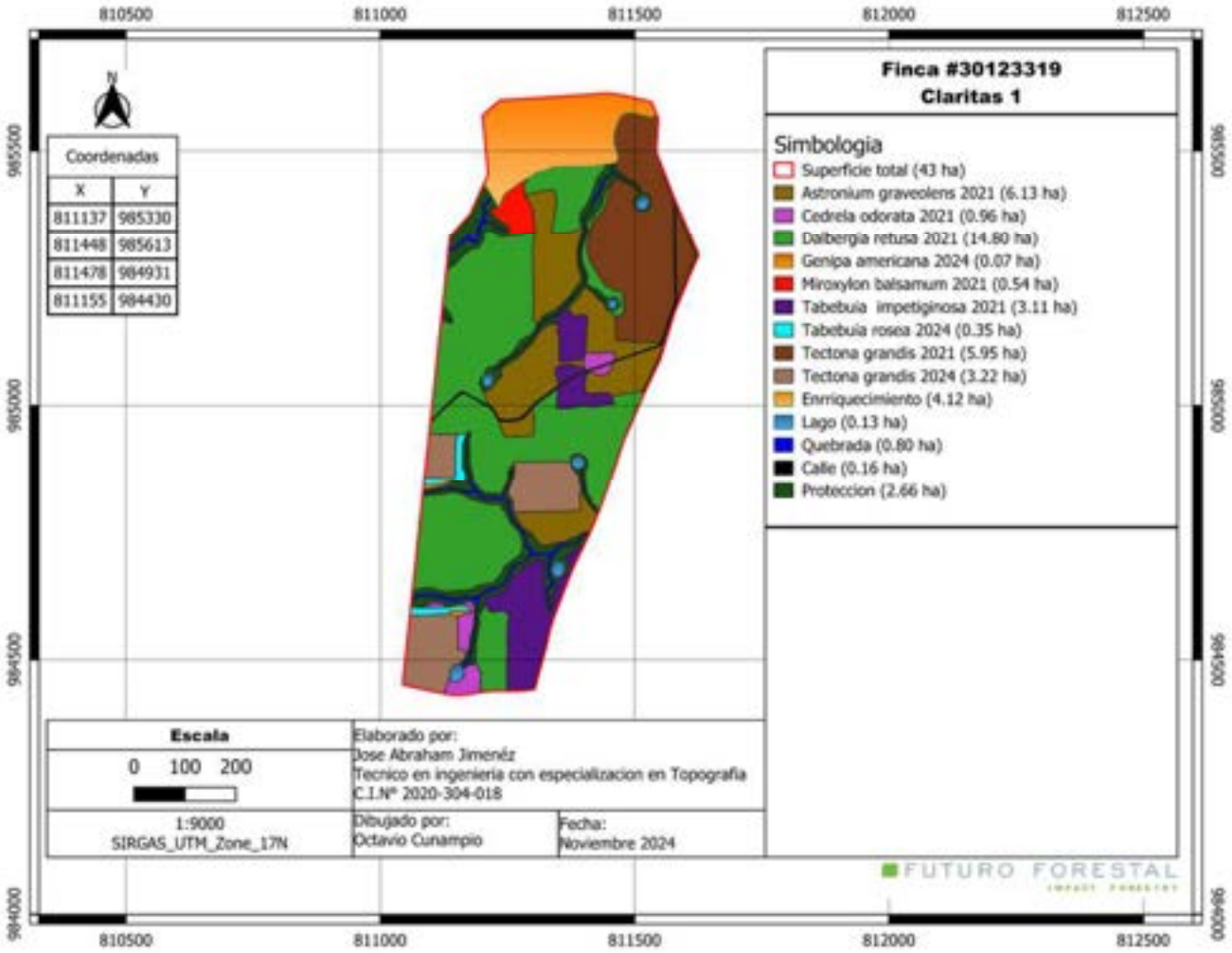


FIGURE 13. MAP OF CLARITAS FARM (NO. 30123319).

Due to the constant attack of *Hypsipyla grandella* on the 2021 Cedar plantation (95 % affected), which impacted the height and diameter growth of the trees, a decision was made to replace this lot with Teak. This choice was based on its fast growth, site adaptation, and low incidence of diseases. In the lower areas of the Cedar lot, Rosy Trumpet Tree and Genip Tree were planted instead, given their suitability for humid conditions.

A total of 3.64 hectares of affected Cedar were restored by replacing the species, as designated in the 2024 map with Teak, Rosy Trumpet Tree, and Genip Tree *(see Figure No. 13).*

Table 27. Executed AOP 2024

FINCA 3319 CLARITAS																												
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Control de maleza - manual-chapia			-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	10.00	0	-	0	-	0	-	-	10
Control de maleza - mecanico - Guira			-	0.00	17.00	0	2.00	0	5.00	0	2.00	0	-	0	2.00	0	19.00	0	8.00	0	12.00	0	16.00	0	3.00	-	86
Control de maleza - químico-Bomba Mochila			-	0.00	-	0	-	0	16.00	0	2.00	0	24.00	0	3.00	0	5.00	0	-	0	5.00	0	-	0	-	-	55
Control de maleza manual - Corte Bejuco			-	0.00	39.00	0	1.00	0	7.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	3.00	-	50
Control de maleza manual - rodajas de mantenimiento			-	0.00	-	0	-	0	-	0	-	0	11.00	0	-	0	-	0	12.00	0	16.00	0	-	0	-	-	39
Control de maleza manual-chapia			-	0.00	-	**0**	-	**0**	-	**0**	6.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**-**	**6**
Control de Maleza-Limpieza en Franja			16.00	0.00	-	0	27.00	0	-	0	9.00	0	10.00	0	-	0	-	0	19.00	0	-	0	7.00	0	6.00	-	94
Control de Maleza-Química en Franja			-	0.00	-	0	-	0	18.00	0	12.00	0	1.00	0	11.00	0	15.00	0	7.00	0	4.00	0	-	0	-	-	68
Control fitosanitario manual - Arrieras			-	0.00	-		-		-		1.00		-		-		-		-		-		1.00		1.00		3
Control fitosanitario manual - Hypsipyla grandella			3.00	0.00	-	0	3.00	0	-	0	-	0	-	0	4.00	0	-	0	-	0	4.00	0	3.00	0	-	-	17
CPC Incendios - mantener rondas corta fuego			1.00	0.00	13.00		-		-		-		-		-		-		-		-		4.00		-		18
CPC Incendios-Barrer Calles			-	0.00	-		-		2.00		-		-		-		-		-		-		-		-		2
CPC Incendios-Vigilancia de incendios			-	0.00	-		-		9.00		-		-		-		-		-		-		-		-		9

Deschuponado			-	0.00	-		-		-		3.00		-		-		-		-		-		5.00		-		8
Deshije			-	0.00	-		-		-		-		-		1.00		3.00		-		-		-		-		4
Despeje			-	0.00	-		-		-		-		-		-		-		-		-		-		6.00		6
Enderezado de plantas			-	0.00	-		-		-		-		9.00		8.00		99.00		-		-		-		-		116
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		10.00		27.00		-		-		-		37
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		26.00		8.00		17.00		13.00		4.00		26.00		-		-		94
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		1.00		-		-		-		2.00		3.00		-		6
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		1.00		-		-		-		-		-		1
Plantado Manual	E26		-	0.00	-		-		-		-		-		-		-		3.00		-		-		-		3
Poda Alta	M43		-	0.00	1.00		-		-		-		-		-		-		-		-		-		-		1
Poda de formación	M18		4.00	50.00	6.00		5.00		25.00		5.00		1.00		-		-		-		6.00		-		2.00		54
Replantado	E29		-	0.00	-		-		-		-		-		-		16.00		13.00		-		-		-		29
Rodaja Orgánica	M33		-	0.00	-		3.00		6.00		-		-		-		-		-		-		12.00		19.00		40
Grand Total			24.00	50.00	76.00	-	41.00	-	88.00	-	66.00	-	65.00	-	47.00	-	180.00	-	103.00	-	75.00	-	51.00	-	40.00		856

5.2.6. Farm No. 30124630 Claritas 1

Summary of reforestation

Table 28. Categorization of reforested area.

Farm No. 30124630 - Claritas 1						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2020**	**2024**	
Spanish Cedar	*Cedrela odorata*	3x4	833	4.16		4.16
Rosewood	*Dalbergia retusa*	3x4	833	12.82		12.82
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	0.47		0.47
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.42		0.42
Guayabo de Charco (sp)	*Terminalia oblonga*	4x4	625	0.30	2.09	2.39
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833		0.55	0.55
Genip Tree	*Genipa americana*	3x4	833		0.05	0.05
Teak	*Tectona grandis*	3x4	833	9.70	3.26	12.96
Total reforested				**27.87**	**5.95**	**33.82**
Protection area						4.06
Stream area						0.73
Artificial lake						0.19
Infrastructure						1.20
Total Area						**40.00**

Map of the farm

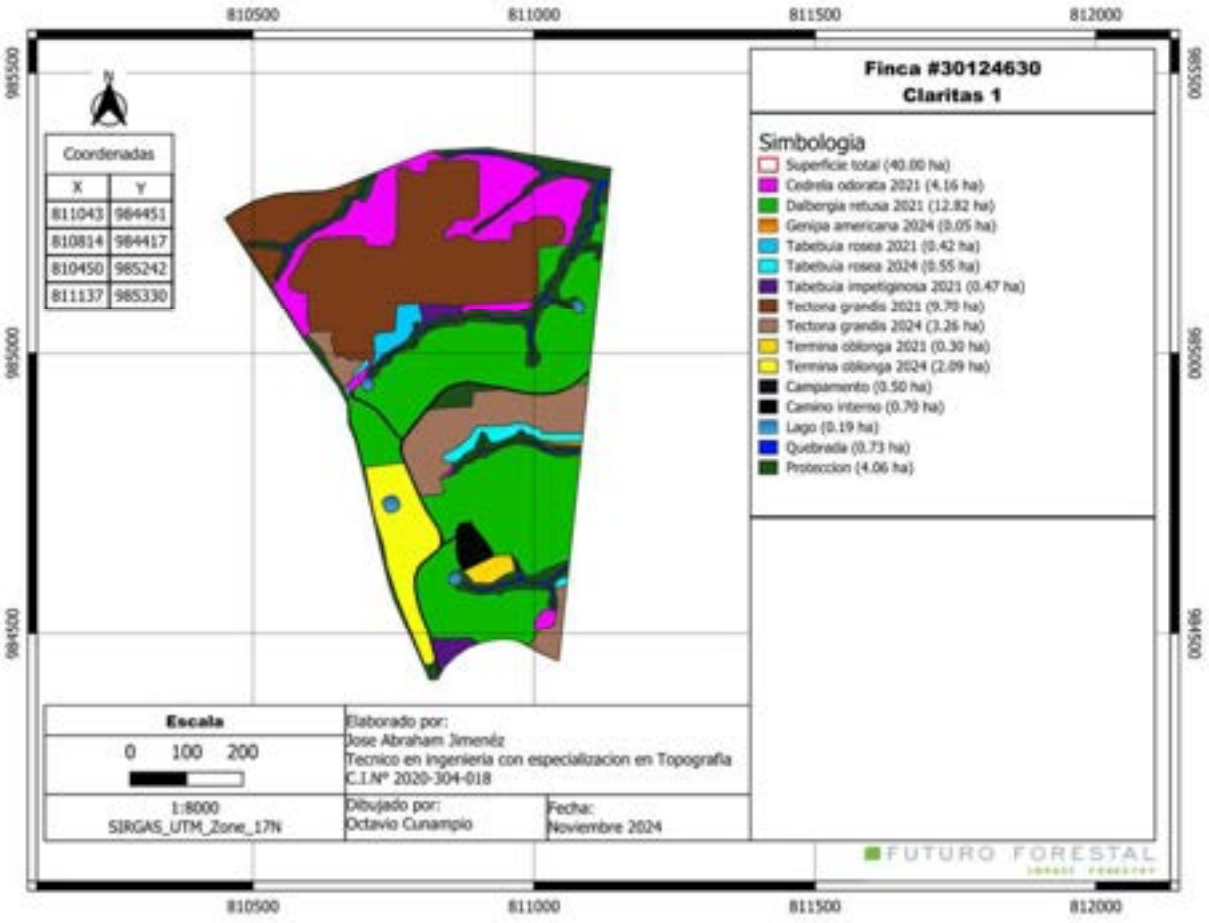


FIGURE 14. MAP OF CLARITAS 1 FARM (NO. 30124630).

Due to the constant attack of *Hypsipyla grandella* on the 2021 Cedar plantation (95 % affected), which impacted the height and diameter growth of the trees, a decision was made to replace this lot with Teak. This choice was based on its fast growth, site adaptation, and low incidence of diseases. In the lower areas of the Cedar lot, Rosy Trumpet Tree and Genip Tree were planted instead, given their suitability for humid conditions.

A total of 5.95 hectares were restored by replacing the species, as designated in the 2024 map with *Terminalia oblonga* (Guayabo de Charco), *Tectona grandis* (Teak), *Tabebuia rosea* (Rosy Trumpet Tree), and *Genipa americana* (Genip Tree) *(see Figure No. 14).*

Monitoring and growth data

The monitoring results show that the species exhibit good growth, particularly *Dalbergia retusa*, which has the highest annual increment in both diameter and total height. The other species have shown steady development but at a slower pace, as seen with *Cedrela odorata*. The average diameter of *Cedrela odorata* has been affected by the constant attack of the *Hypsipyla grandella* pest, which hinders the species' growth and development. This is reflected in the 2024 monitoring results, where no diameter data is recorded, and the total height averages are very low. The results for *Tectona grandis* indicate stable growth during its early establishment years.

Astronium graveolens

Table 29. *Growth data.*

Darién	Growth data: Claritas 1					2021	Ron Ron	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Ron Ron (sp)	*Astronium graveolens*	2021	apr-23	1.7	NA	1.05	NA	0.53
Ron Ron (sp)	*Astronium graveolens*	2021	may-24	2.6	2.00	2.40	0.77	0.93

Cedrela odorata

Table 30. *Growth data.*

Darién	Growth data: Claritas 1					2021	Spanish Cedar	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Spanish Cedar	*Cedrela odorata*	2021	apr-23	1.7	NA	0.71	NA	0.36
Spanish Cedar	*Cedrela odorata*	2021	jun-24	2.5	NA	0.90	NA	0.36

Dalbergia retusa

Table 31. *Growth data.*

Darién	Growth data: Claritas 1					2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	2.71	3.41	1.35	1.71
Rosewood	*Dalbergia retusa*	2021	may-24	2.6	4.78	4.09	1.85	1.58

Tabebuia impetiginosa

Table 32. *Growth data.*

Darién	Growth data: Claritas 1					2021	Guayacán morado	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Guayacán morado (sp)	*Tabebuia impetiginosa*	2021	apr-23	1.7	2.71	3.41	1.35	1.71
Guayacán morado (sp)	*Tabebuia impetiginosa*	2021	may-24	2.6	4.78	4.09	1.85	1.58

Tectona grandis

Table 33. *Growth data.*

Darién	Growth data: Claritas 1					2021	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2021	apr-23	1.7	3.46	3.30	2.08	1.98
Teak	*Tectona grandis*	2021	abr-24	2.7	5.88	6.97	2.21	2.61

Table 34. Executed AOP 2024

FINCA 30324630 CLARITAS																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra			-	0.00	-	0	1.00	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	4.00	0	6.00	-	12
Control de maleza - mecanico - Guira			-	0.00	12.00	0	6.00	0	9.00	0	-	0	1.00	0	15.00	0	10.00	0	2.00	0	19.00	0	27.00	0	3.00	-	104
Control de maleza - químico-Bomba Mochila			-	0.00	-	0	-	0	24.00	0	-	0	-	0	3.00	0	12.00	0	-	0	-	0	-	0	-	-	39
Control de maleza manual - Corte Bejuco			4.00	0.00	15.00	0	-	0	4.00	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	-	25
Control de maleza manual - rodajas de mantenimiento			-	0.00	-	0	-	0	-	0	-	0	19.00	0	5.00	0	-	0	2.00	0	17.00	0	-	0	-	-	43
Control de Maleza-Limpieza en Franja			-	0.00	-	**0**	-	**0**	6.00	**0**	-	**0**	5.00	**0**	-	**0**	7.00	**0**	24.00	**0**	-	**0**	20.00	**0**	-	**-**	**62**
Control de Maleza-Química en Franja			-	0.00	-	0	-	0	1.00	0	12.00	0	-	0	-	0	8.00	0	3.00	0	6.00	0	-	0	-	-	30
Control fitosanitario manual - Arrieras			-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	-	2
Control fitosanitario manual - Hypsipyla grandella			9.00	0.00	7.00		6.00		8.00		-		-		7.00		4.00		6.00		11.00		1.00		-		59
Control fitosanitario-Químico-Hongos			-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	4.00	-	4
CPC Incendios - mantener rondas corta fuego			2.00	0.00	13.00		-		1.00		-		-		-		-		-		-		1.00		-		17
CPC Incendios-Barrer Calles			-	0.00	-		-		4.00		-		-		-		-		-		-		-		-		4
Deschuponado			-	0.00	-		-		10.00		4.00		-		-		-		-		-		-		-		14
Deshije			-	0.00	-		-		-		-		2.00		1.00		-		-		-		-		-		3
Despeje			-	0.00	-		-		-		-		-		-		-		-		-		-		2.00		2
Enderezado de plantas			-	0.00	-		-		-		-		4.00		36.00		21.00		-		-		-		1.00		62
Fertilización foliar			-	0.00	-		-		-		-		-		-		1.00		-		-		-		-		1
Limpieza y mantenimiento de infraestructura	I7		-	0.00	-		-		-		-		-		-		-		-		-		1.00		-		1
Manejo de Rebrote cocobolo	M40		-	0.00	5.00		-		-		25.00		9.00		12.00		18.00		1.00		4.00		28.00		-		102

Mantenimiento de caminos Externo	I23		-	0.00	-		-		-		-		-		-		-		-		-		7.00		-		7
Mantenimiento de cercas	I4		-	0.00	-		-		1.00		-		1.00		-		1.00		-		-		1.00		-		4
Operador de Motosierra	I19		-	0.00	-		1.00		-		-		-		2.00		-		-		-		4.00		6.00		13
Poda Alta	M43		-	0.00	-		2.00		-		-		-		-		-		-		-		-		-		2
Poda de formación	M18		2.00	82.00	9.00		15.00		31.00		-		-		-		4.00		-		8.00		3.00		3.00		**75**
Replantado	E29		-	0.00	-		-		-		-		-		18.00		21.00		6.00		-		-		-		**45**
Rodaja Orgánica	M33		-	0.00	-		-		11.00		-		-		-		-		-		-		33.00		1.00		45
Trochado -balizado	E2		-	0.00	-		-		-		-		10.00		-		-		-		-		-		-		10
Grand Total			17.00	82.00	61.00	-	31.00	-	110.00	-	41.00	-	51.00	-	100.00	-	107.00	-	44.00	-	65.00	-	132.00	-	28.00		787

5.2.7. Farm No. 218060 Claritas 2

Summary of reforestation

Table 35. Categorization of reforested area.

Farm No. 218060 - Claritas 2						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2021**	**2023**	
Rosewood	*Dalbergia retusa*	3x4	833	7.42		7.42
Spanish Cedar	*Cedrela odorata*	3x4	833	2.57		2.57
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.49		1.49
Quira (sp)	*Platymiscium pinnatum*	3x5	667	0.61		0.61
Ron Ron (sp)	*Astronium graveolens*	3x4	833	0.81		0.81
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	0.43		0.43
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833		0.09	0.09
Total reforested				**13.42**	**0.09**	**13.42**
Protection area						2.68
Artificial lake						0.11
Stream area						0.35
Firebreaks						0.83
Total Area						**17.30**

Map of the farm

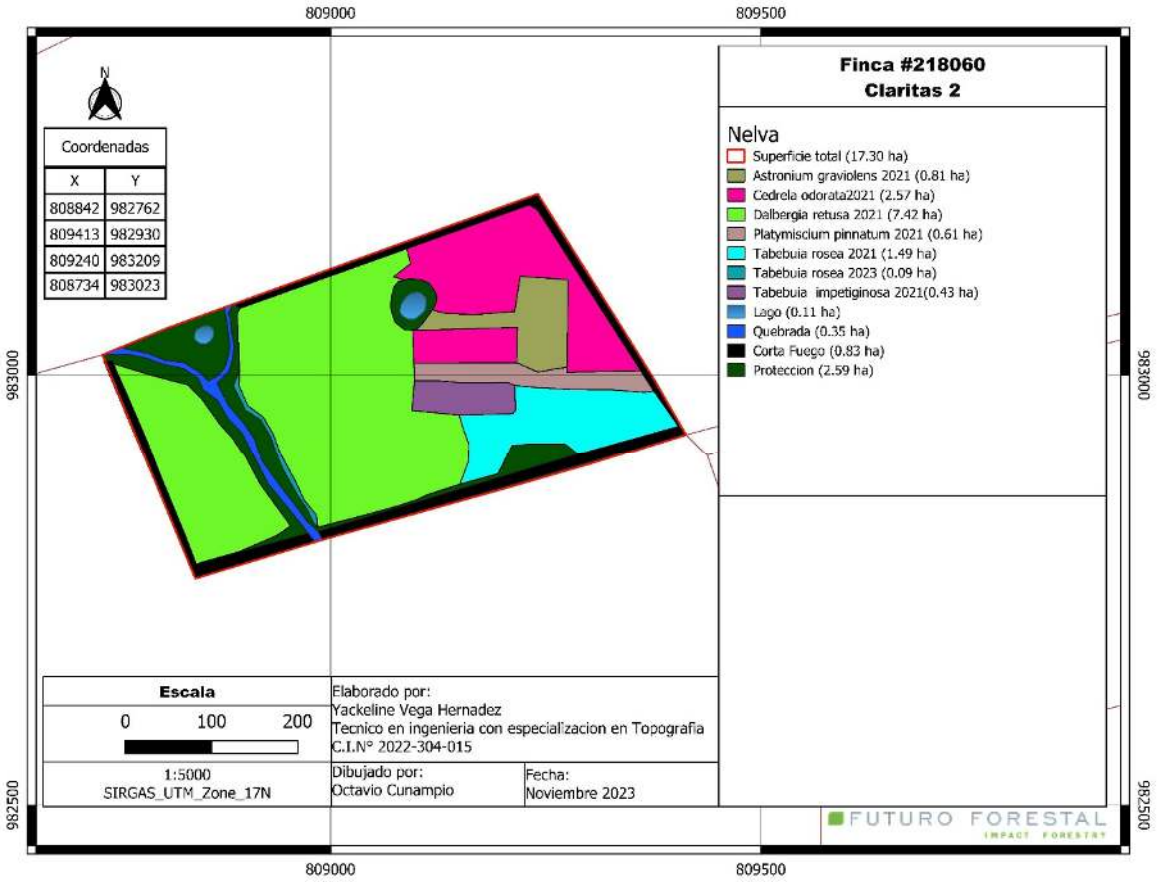


FIGURE 15. MAP OF CLARITAS 2 FARM (NO. 218060).

FINCA 218060 CLARITAS																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	4.00	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	0	-	0	-	-	6
Control de maleza - mecanico - Guira	M9		-	8.60	-	0	-	0	4.00	0	-	0	-	1.5	-	0.5	-	0	-	0	-	0	-	0	-	11	4
Control de maleza manual - Corte Bejuco	M8		-	4.00	-	0.5	-	0.5	3.00	0.5	-	0	-	0.5	7.00	0.5	-	0.5	-	0.5	-	0	-	0	-	8	10
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	3	24.00	0	-	0	7.00	0	-	3	-	0	-	3	-	0	-	0	-	0	-	9	31
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	-	0	10.00	0	-	0	-	0	41.00	0	-	0	-	0	-	0	-	0	-	-	51
Control de Maleza-Química en Franja	M39		-	0.00	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	16.00	**0**	-	**0**	21.00	**0**	-	**0**	-	**0**	-	-	**37**
Control fitosanitario manual - Hypsipyla grandella	M14		3.00	6.00	-	0	3.00	0	4.00	0	-	0	3.00	0	5.00	0	3.00	0	4.00	0	8.00	0	4.00	0	1.00	6	38
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	-	2
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	18.00		-		-		-		-		-		-		-		-		-		-		18
Deshije	M17		-	0.00	-	3.5	-	0.5	2.00	0.5	-	0	2.00	5	-	1	-	3.5	-	0.5	-	0	-	0	-	33	4
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		16.00		-		13.00		12.00		-		12.00		-		53
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		-		-		-		-		3.00		-		-		3
Operador de Motosierra	I19		-	0.00	4.00		-		-		-		-		-		-		2.00		-		-		-		6
Poda de formación	M18		-	0.00	-		-		1.00		-		-		-		-		-		-		-		-		1
Rodaja Orgánica	M33		-	0.00	-		-		-		-		-		-		-		-		-		1.00		-		1

Grand Total			3.00	18.60	26.00	7.00	27.00	1.00	24.00	1.00	7.00	-	21.00	10.00	69.00	2.00	16.00	7.00	41.00	1.00	11.00	-	19.00	-	1.00		265

Monitoring and growth data

Based on the 2024 monitoring results, *Dalbergia retusa* and *Tabebuia rosea* exhibit the best development, showing the highest average growth rates compared to the other species.

Cedrela odorata

Table 36. *Growth data.*

Darién	Growth data: Claritas 2					2021	Spanish Cedar	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Spanish Cedar	*Cedrela odorata*	2021	apr-23	1.7	NA	0.52	NA	0.26
Spanish Cedar	*Cedrela odorata*	2021	mar-24	2.8	1.63	1.51	0.59	0.55

Dalbergia retusa

Table 37. *Growth data.*

Darién	Growth data: Claritas 2					2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	1.55	2.43	0.78	1.22
Rosewood	*Dalbergia retusa*	2021	jun-24	2.5	2.83	3.34	1.13	1.34

Platymiscium pinnatum

Table 38. *Growth data.*

Darién	Growth data: Claritas 2					2021	Quira	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Quira (sp)	*Platymiscium pinnatum*	2021	apr-23	1.7	1.10	1.00	0.55	0.50
Quira (sp)	*Platymiscium pinnatum*	2021	mar-24	2.8	1.65	2.38	0.60	0.87

Tabebuia impetiginosa

Table 39. *Growth data.*

Darién		Growth data: Claritas 2				2021	Guayacán Morado	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Guayacán morado (sp)	*Tabebuia impetiginosa*	2021	apr-23	1.7	NA	0.35	NA	0.17
Guayacán morado (sp)	*Tabebuia impetiginosa*	2021	jun-24	2.5	1.66	2.19	0.66	0.88

Tabebuia rosea

Table 40. *Growth data*

Darién		Growth data: Claritas 2				2021	Rosy Trumpet Tree	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosy Trumpet Tree	*Tabebuia rosea*	2021	apr-23	1.7	1.74	1.65	0.87	0.82
Rosy Trumpet Tree	*Tabebuia rosea*	2021	jun-24	2.5	2.96	2.49	1.18	1.00

Executed AOP 2024

FINCA 2356568 CLARITAS																					
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec		
Ayudante Operador de Motosierra	I20		-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-		
Control de maleza - mecanico - Guira	M9		-	0.00	4.00	0	5.00	0	8.00	0	-	0	-	0	-	0	-	0	-		
Control de maleza - químico rodaja	M4		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	10.00	0	-		
Control de maleza manual - Corte Bejuco	M8		-	4.00	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-		
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	7.00	0	-		
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	13.00	**0**	-		
Control fitosanitario manual - Arrieras	M13		-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-		
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	16.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-		
CPC Incendios-Establecer rondas contrafuegos	M49		-	0.00	2.00		-		-		-		-		-		-		-		
Enderezado de plantas	M25		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-		
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		4.00		-		-		-		-		
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		-		-		-		-		-		
Mantenimiento de cercas	I4		-	0.00	3.00		-		-		3.00		-		-		-		-		
Operador de Motosierra	I19		-	0.00	1.00		-		-		-		-		-		-		-		
Poda de formación	M18		-	0.00	5.00		-		-		-		-		-		-		-		
Rodaja Orgánica	M33		-	0.00	-		1.00		17.00		-		-		-		-		-		
Grand Total			-	4.00	33.00	-	6.00	-	25.00	-	7.00	-	-	-	-	-	32.00	-	-		

5.2.7. Farm No. 235668 Claritas 3

Summary of reforestation

Table 41. Categorization of reforested area.

Farm No. 235668 - Claritas 3					
Species planted		Initial dist. (m)	Tree/ha	Planting year	Reforested area/species (ha)
Nombre común	Nombre científico			2020	
Rosewood	*Dalbergia retusa*	3x4	833	8.70	8.70
Total, reforested				**8.70**	**8.700**
Area to be planted					31.539
Stream area					1.500
Artificial lake					0.500
Total Area					**42.230**

Map of the farm

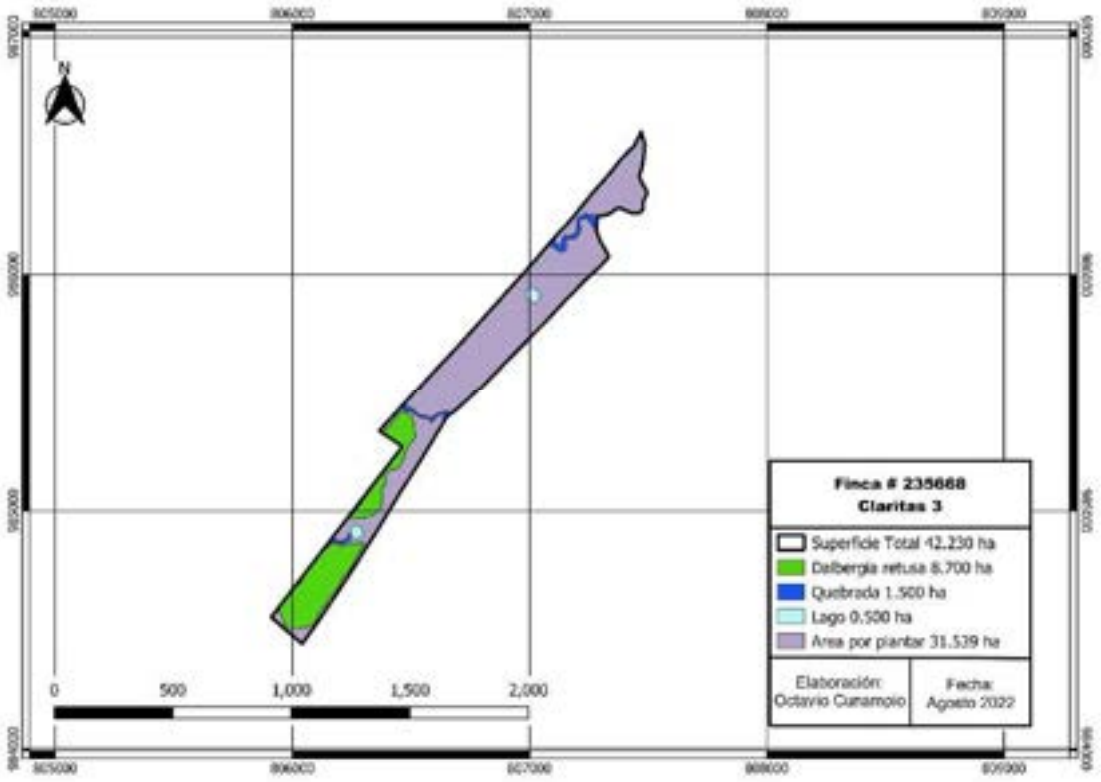


FIGURE 16. MAP OF CLARITAS 3 FARM (NO. 235668).

Monitoring and growth data

The development of *Dalbergia retusa* on this farm has been slower in terms of diameter but has maintained steady growth, which should continue to be evaluated in future monitoring.

Dalbergia retusa

Table 42. Growth data

Darién		Growth data: Claritas 3				2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	NA	0.41	NA	0.24
Rosewood	*Dalbergia retusa*	2021	mar-24	2.8	1.40	2.63	0.51	0.96

5.2.8. Farm No. 1866 Darío Castro

Summary of reforestation

Table 43. Categorization of reforested area.

Farm No. 1866 - Darío Castro					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2021**	
Rosewood	*Dalbergia retusa*	3x4	833	6.61	6.61
Spanish Cedar	*Cedrela odorata*	3x4	833	2.73	2.73
Guayabo de Charco (sp)	*Terminalia oblonga*	3x4	833	1.90	1.90
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	3.30	3.30
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	3.09	3.09
Ron Ron (sp)	*Astronium graveolens*	3x4	833	3.99	3.99
Teak	*Tectona grandis*	4x5	500	9.99	9.99
Total reforested				**31.61**	**31.61**
Protection area					4.92
Stream area					4.80
Artificial lake					0.20
Infrastructure					1.10
Superficie Total					**42.63**

Map of the farm

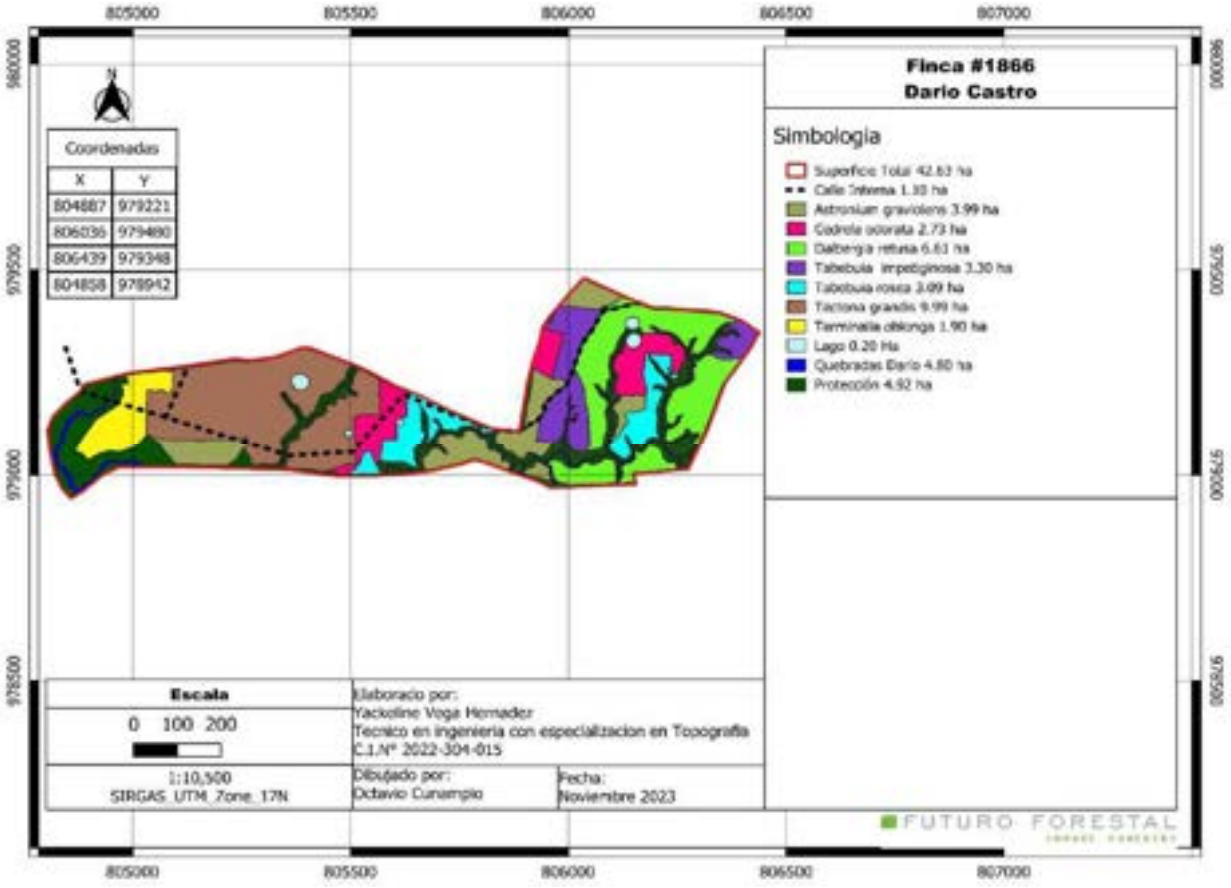


FIGURE 17. MAP OF DARÍO CASTRO FARM (NO. 1866).

Executed AOP 2024

FINCA 1866 CASTRO																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	1.00	0	-	0	1.00	0	-	0	8.00	0	20.00	0	-	0	4.00	0	-	0	-	0	3.00	-	37
Control de maleza - químico-Bomba Mochila	M1		-	0.00	-	31.9	-	0	-	0	-	0	-	31.9	-	0	18.00	31.9	-	0	-	0	-	0	-	96	18
Control de maleza manual - Corte Bejuco	M8		-	10.00	-	3	4.00	3	-	3	-	0	-	3	-	3	-	3	-	3	-	0	-	0	-	31	4
Control de Maleza-Limpieza en Franja	M38		-	0.00	22.00	0	19.00	0	-	0	-	0	10.00	0	73.00	0	15.00	0	-	0	70.00	0	-	0	-	-	209
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	-	0	6.00	0	27.00	0	-	0	5.00	0	-	0	-	-	38
Control fitosanitario manual - Arrieras	M13		2.00	3.00	-	**1**	-	**1**	1.00	**1**	-	**0**	2.00	**1**	-	**1**	-	**1**	-	**1**	-	**0**	-	**0**	-	**10**	**5**
Control fitosanitario manual - Hypsipyla grandella	M14		-	6.00	4.00	0	2.00	0	8.00	0	7.00	0	10.00	0	4.00	0	-	0	-	0	14.00	0	5.00	0	9.00	6	63
Control fitosanitario-Químico-Hongos	M12		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	0	-	0	-	0	-	-	2
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	32.00		-		2.00		-		-		-		-		-		-		-		-		34
CPC Incendios-Barrer Calles	M48		-	0.00	-	35.9	-	4	6.00	4	-	0	-	35.9	-	4	-	35.9	-	4	-	0	-	0	-	143	6
Deshije	M17		-	0.00	-		-		-		-		-		-		-		-		-		-		15.00		15
Despeje	M26		-	0.00	-		7.00		3.00		6.00		-		2.00		21.00		4.00		-		8.00		-		51
Enderezado de plantas	M25		3.00	0.00	-		-		-		-		11.00		2.00		3.00		-		12.00		7.00		-		38
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-		8.00		-		1.00		6.00		-		15
Mantenimiento de caminos Externo	I23		2.00	0.00	-		-		-		-		-		-		-		-		-		-		-		2
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		-		-		3.00		-		-		-		-		-		3
Mantenimiento de cercas	I4		-	0.00	-		5.00		-		-		-		3.00		1.00		-		-		2.00		-		11
Operador de Motosierra	I19		-	0.00	1.00		-		2.00		-		8.00		20.00		-		4.00		-		-		3.00		38

Poda Alta	M43		-	0.00	-		1.00		-		-		-		-		-		-		-		-		1
Poda de formación	M18		-	0.00	15.00		18.00		21.00		1.00		-		-		4.00		3.00		-		2.00		-		64
Rodaja Orgánica	M33		-	0.00	-		23.00		-		-		-		-		-		-		-		-		-		23
Grand Total			7.00	19.00	75.00	71.80	79.00	8.00	44.00	8.00	14.00	-	49.00	71.80	133.00	8.00	99.00	71.80	15.00	8.00	102.00	-	30.00	-	30.00		677

Monitoring and growth data

Compared to other farms with *Cedrela odorata* plantations, this farm has shown good development and high annual growth rates for the species. This trend is also observed in the native species *Tabebuia rosea*, *Terminalia oblonga*, and *Dalbergia retusa*, with the latter exhibiting the highest annual height growth rate among the native species on this farm. It is important to note that *Tectona grandis* stands out as the species with the best growth. These results indicate favorable site conditions as well as effective silvicultural management of the species.

Astronium graveolens

Table 44. *Growth data*

Darién		Growth data: Darío Castro				2021	Ron Ron	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Ron Ron (sp)	*Astronium graveolens*	2021	apr-23	1.7	1.26	2.04	0.74	1.2
Ron Ron (sp)	*Astronium graveolens*	2021	may-24	2.6	2.89	2.98	1.12	1.15

Cedrela odorata

Table 45. *Growth data*

Darién		Growth data: Darío Castro				2021	Spanish Cedar	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Spanish Cedar	*Cedrela odorata*	2021	apr-23	1.7	2.81	2.02	1.40	1.01
Spanish Cedar	*Cedrela odorata*	2021	may-24	2.6	3.65	2.97	1.41	1.15

Dalbergia retusa

Table 46. *Growth data*

Darién		Growth data: Darío Castro				2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	1.92	2.98	1.13	1.75
Rosewood	*Dalbergia retusa*	2021	may-24	2.6	3.37	4.02	1.30	1.56

Tabebuia impetiginosa

Table 47. *Growth data*

Darién	Growth data: Darío Castro					2021	Guayacán Morado	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Guayacán Morado (sp)	*Tabebuia impetiginosa*	2021	apr-23	1.7	NA	0.39	NA	0.19
Guayacán Morado (sp)	*Tabebuia impetiginosa*	2021	may-24	2.6	1.84	2.72	0.71	1.05

Tabebuia rosea

Table 48. *Growth data*

Darién	Growth data: Darío Castro					2021	Rosy Trumpet Tree	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosy Trumpet Tree	*Tabebuia rosea*	2021	apr-23	1.7	2.60	2.32	1.30	1.16
Rosy Trumpet Tree	*Tabebuia rosea*	2021	may-24	2.6	5.38	3.87	2.08	1.50

Terminalia oblonga

Table 49. *Growth data*

Darién	Growth data: Darío Castro					2021	Guayabo de Charco	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Guayabo de Charco (sp)	*Terminalia oblonga*	2021	apr-23	1.7	2.01	2.39	1.18	1.41
Guayabo de Charco (sp)	*Terminalia oblonga*	2021	apr-24	2.7	4.86	4.13	1.82	1.55

Tectona grandis

Table 50. *Growth data*

Darién	Growth data: Darío Castro					2021	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2021	apr-23	1.7	3.26	3.22	1.92	1.89
Teak	*Tectona grandis*	2021	may-24	2.6	9.19	8.19	3.56	3.17

Table 51. Executed AOP 2024

FINCA DARIO CASTRO																												
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20		-	0.00	1.00	0	-	0	1.00	0	-	0	8.00	0	20.00	0	-	0	4.00	0	-	0	-	0	3.00	-	37
Control de maleza - químico- Bomba Mochila	M1		-	0.00	-	31.9	-	0	-	0	-	0	-	31.9	-	0	18.00	31.9	-	0	-	0	-	0	-	96	18
Control de maleza manual - Corte Bejuco	M8		-	10.00	-	3	4.00	3	-	3	-	0	-	3	-	3	-	3	-	3	-	0	-	0	-	31	4
Control de Maleza- Limpieza en Franja	M38		-	0.00	22.00	0	19.00	0	-	0	-	0	10.00	0	73.00	0	15.00	0	-	0	70.00	0	-	0	-	-	209
Control de Maleza- Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	-	0	6.00	0	27.00	0	-	0	5.00	0	-	0	-	-	38
Control fitosanitario manual - Arrieras	M13		2.00	3.00	-	**1**	-	**1**	1.00	**1**	-	**0**	2.00	**1**	-	**1**	-	**1**	-	**1**	-	**0**	-	**0**	-	**10**	**5**
Control fitosanitario manual - Hypsipyla grandella	M14		-	6.00	4.00	0	2.00	0	8.00	0	7.00	0	10.00	0	4.00	0	-	0	-	0	14.00	0	5.00	0	9.00	6	63
Control fitosanitario- Químico- Hongos	M12		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	0	-	0	-	0	-	-	2
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	32.00		-		2.00		-		-		-		-		-		-		-		-		34

CPC Incendios-Barrer Calles	M48		-	0.00	-	35.9	-	4	6.00	4	-	0	-	35.9	-	4	-	35.9	-	4	-	0	-	0	-	143	6
Deshije	M17		-	0.00	-		-		-		-		-		-		-		-		-		-		15.00		15
Despeje	M26		-	0.00	-		7.00		3.00		6.00		-		2.00		21.00		4.00		-		8.00		-		51
Enderezado de plantas	M25		3.00	0.00	-		-		-		-		11.00		2.00		3.00		-		12.00		7.00		-		38
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-		8.00		-		1.00		6.00		-		15
Mantenimiento de caminos Externo	I23		2.00	0.00	-		-		-		-		-		-		-		-		-		-		-		2
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		-		-		3.00		-		-		-		-		-		3
Mantenimiento de cercas	I4		-	0.00	-		5.00		-		-		-		3.00		1.00		-		-		2.00		-		11
Operador de Motosierra	I19		-	0.00	1.00		-		2.00		-		8.00		20.00		-		4.00		-		-		3.00		38
Poda Alta	M43		-	0.00	-		1.00		-		-		-		-		-		-		-		-		-		1
Poda de formación	M18		-	0.00	15.00		18.00		21.00		1.00		-		-		4.00		3.00		-		2.00		-		64
Rodaja Orgánica	M33		-	0.00	-		23.00		-		-		-		-		-		-		-		-		-		23
Grand Total			7.00	19	75.00	71.8	79.00	8	44.00	8	14.00	0	49.00	71.8	133.00	8	99.00	71.8	15.00	8	102.00	0	30.00	0	30.00	285	677

5.2.9. Farm No. 3479 Raúl Castro

Summary of reforestation

Table 52. Categorization of reforested area.

Farm No. 3479 - Raúl Castro					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2021**	
Rosewood	*Dalbergia retusa*	3x4	833	14.40	14.40
Total, reforested				**14.40**	**14.40**
Protection area					9.26
Stream area					3.30
Total Area					**26.96**

Map of the farms

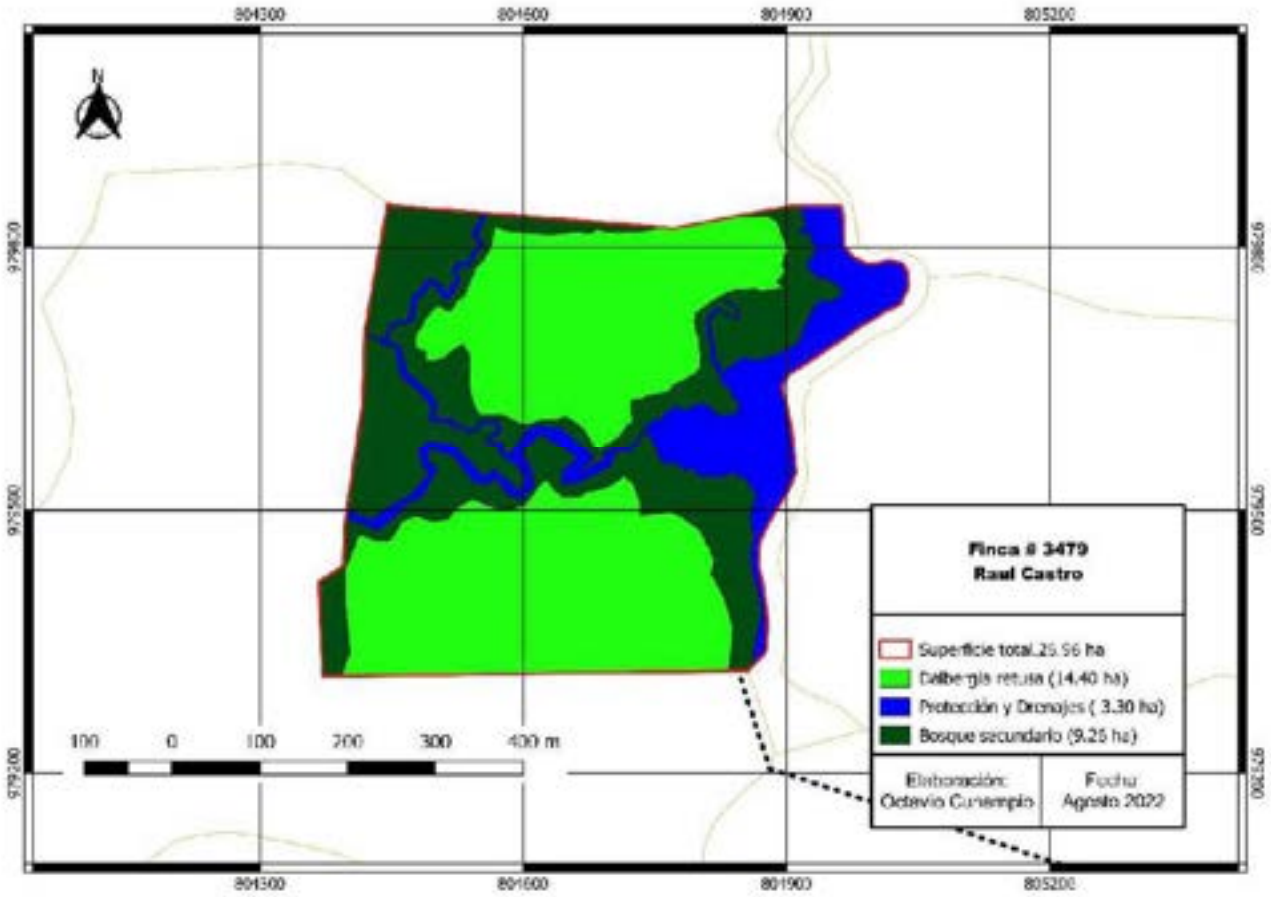


Figure 18. Map of Raúl Castro farm (No. 3479).

Monitoring and growth data

Dalbergia retusa

Table 53. *Growth data*

Darién		Growth data: Raúl Castro				2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	NA	0.52	NA	0.31
Rosewood	*Dalbergia retusa*	2021	may-24	2.7	1.80	2.50	0.68	0.94

The growth in this farm has been low. In 2024, several silvicultural treatments were implemented to recover from growth stagnation, including:

1. Cleaning in rows.
2. Strip fumigation with glyphosate.
3. Clearing with chainsaws, specifically removing *Guazuma ulmifolia* (West Indian Elm), which was blocking sunlight necessary for Rosewood growth.
4. Application of liquid fertilizer (DRENSH), phosphorus-based, at a rate of 100 cc per plant to stimulate root development and absorption.
5. Granular fertilization, applied at 3 oz per plant, 15 days after the DRENSH application.
6. Replacement of spaces with natural regeneration of *Tabebuia rosea* and *Cedrela odorata*, and replanting with 2,240 Cocobolo seedlings.
7. Formative pruning and sprout control in Cocobolo.

Table 54. Executed AOP 2024

FINCA RAUL CASTRO																													
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	-	0	22.00	0	5.00	0	-	0	-	0	-	0	-	-	27
Control de maleza manual - Corte Bejuco	M8		-	10.00	-	0	-	0	-	0	-	0	9.00	0	-	0	-	0	-	0	-	0	-	0	-	10	9
Control de maleza manual-chapia	M6		-	0.00	-	0	-	0	4.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	4
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	-	0	-	0	-	0	44.00	0	-	0	-	0	19.00	0	21.00	0	-	0	-	-	84
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	26.00	0	-	0	-	0	-	0	23.00	0	-	0	-	-	49
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	7.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	-	7
CPC Incendios-Establecer rondas contrafuegos	M49		-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Fertilización foliar	M15		-	0.00	-	0	-	0	-	0	-	0	-	0	13.00	0	1.00	0	-	0	-	0	-	0	-	-	14
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		26.00		5.00		-		-		-		31

Manejo de Rebrote cocobolo	M40		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	22.00	0	22.00	0	-	0	21.00	0	-	10	65
Mantenimiento de cercas	I4		-	0.00	-		-		2.00		-		-		-		-		-		-		-		-		2
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		22.00		5.00		-		-		-		-		27
Poda de formación	M18		-	0.00	-		-		-		-		-		-		-		11.00		-		-		-		11
Replantado	E29		-	0.00	-		-		-		-		-		-		-		34.00		-		-		-		34
Rodaja Orgánica	M33		-	0.00	-		-		-		-		-		-		-		-		-		29.00		-		29
Despeje	M26		-	60.00	-		-		-		-		-		-		-		-		-		2.00		-		2
Grand Total	#N/D	0	-	70.00	8.00	0	-	0	6.00	0	-	0	79.00	0	57.00	0	59.00	0	91.00	0	44.00	0	52.00	0	-	20	396

5.2.10. Farm No. 30358872 Límite

Summary of reforestation

Table 55. Categorization of reforested area.

Farm No. 30358872 - Límite						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2021**	**2022**	
Santos Mahogany	*Myroxylon balsamum*	3x4	833		0.50	0.50
Mahogany	*Swietenia macrophylla*	3x4	833		0.30	0.30
Spanish Cedar	*Cedrela odorata*	3x4	833	4.00		4.00
Rosewood	*Dalbergia retusa*	3x4	833	6.60	3.00	8.34
Total, reforested				**10.60**	**3.80**	**14.40**
Stream area						1.00
Protection area						1.04
Total Area						**16.44**

Mapa de la finca



FIGURE 19. MAPA OF LIMITE FARM (NO. 30358872).

Monitoreo y datos de crecimiento
Monitoring and growth data

Based on the results from the 2024 monitoring for this farm, *Dalbergia retusa* shows optimal development at a steady pace according to the age of the plantation.

However, the species *Cedrela odorata* has been affected due to the constant attack from the pest *Hypsipyla grandella*, which halts the growth and development of the species. This is reflected in the 2024 monitoring results, as there are no diameter data and a very low average total height.

Dalbergia retusa

Table 56. *Growth data*

Darién		Growth data: Límite				2021	Rosewood	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2021	apr-23	1.7	1.88	2.15	0.94	1.08
Rosewood	*Dalbergia retusa*	2021	may-24	2.6	3.75	3.36	1.45	1.30

Cedrela odorata

Table 57. *Growth data*

Darién		Growth data: Límite				2021	Spanish Cedar	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Spanish Cedar	*Cedrela odorata*	2021	apr-23	1.7	2.00	1.44	1.00	0.72
Spanish Cedar	*Cedrela odorata*	2021	may-24	2.6	NA	0.74	NA	0.29

Table 58. Executed AOP 2024

FINCA 30358872 LIMITE																																	
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	11.00	0	-	0	-	0	-	-	11
Control de maleza manual - Corte Bejuco	M8		-	10.60	-	0.1	-	0.1	-	0.1	1.00	0	-	0.1	-	0.1	-	0.1	-	0.1	-	0	1.00	0	-	11	2
Control de Maleza-Limpieza en Franja	M38		19.00	0.00	-	0	-	0	-	0	-	0	16.00	0	43.00	0	-	0	-	0	21.00	0	-	0	-	-	99
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	7.00	0	12.00	0	-	0	9.00	0	5.00	0	-	0	-	-	33
Control fitosanitario manual - Arrieras	M13		-	2.75	-	0.1	-	0.1	-	0.1	1.00	0	-	0.1	-	0.1	-	0.1	-	0.1	-	0	-	0	-	3	1
Control fitosanitario manual - Hypsipyla grandella	M14		-	8.25	5.00	**0.25**	-	**0.25**	-	**0.25**	-	**0**	7.00	**0.25**	2.00	**0.25**	-	**0.25**	-	**0.25**	-	**0**	1.00	**0**	1.00	**10**	**16**
CPC Incendios - mantener rondas corta fuego	M46		4.00	0.00	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	6
Despeje	M26		-	4.00	-	0	10.00	0	-	0	-	0	-	4	-	0	-	0	-	0	-	0	2.00	0	-	8	12
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		9.00		-		2.00		4.00		14.00		4.00		-		33
Mantenimiento de caminos internos	I2		-	0.00	-	0.45	-	0.45	-	0.45	2.00	0	-	4.45	-	0.45	-	0.45	-	0.45	-	0	-	0	-	33	2
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		-		-		10.00		-		-		-		10
Plantado Manual	E26		-	0.00	-		-		-		-		-		-		-		4.00		-		-		-		4
Poda de formación	M18		-	0.00	-		27.00		15.00		2.00		12.00		-		2.00		2.00		-		-		-		60
Rodaja Orgánica	M33		-	0.00	9.00		-		-		-		-		-		-		-		-		-		-		9
Grand Total			23.00	25.60	16.00	0.90	37.00	0.90	15.00	0.90	6.00	-	51.00	8.90	57.00	0.90	4.00	0.90	40.00	0.90	40.00	-	8.00	-	1.00		298

5.2.11. Farm No. 2627 Genarino Peralta

Summary of reforestation

Table 59. Categorization of reforested area.

Farm No. 2627 - Genarino Peralta					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood	*Dalbergia retusa*	3x4	833	4.15	4.15
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.68	3.68
Teak	*Tectona grandis*	4x5	500	1.99	1.99
Bamboo				0.32	0.32
Total, reforested				**10.14**	**10.14**
Area to be planted					7.34
Protection area					2.52
Stream area					0.76
Artificial lake					0.07
Firebreaks					0.77
Total Area					**21.60**

Recovery Plan: For the *Tectona grandis* lot Tg22 of 1.99 ha, a resprouting treatment was applied, which involves cutting the tree (deformed, diseased, and underdeveloped individuals) at a height of 2 to 4 inches from the ground at a 45 ° angle to induce the growth of sprouts emerging from the roots. Later, the best shoot in terms of position and vigor is selected, resulting in healthier and higher quality trees in shape. Additionally, 520 Malaysian clones were replanted to recover spaces lost due to mortality.

Map of the farm



Monitoring and growth data

Natives

In this first monitoring of these plots, we can observe that we still do not have average diameter data; however, the growth rates in height indicate that the species will maintain a constant development and can be observed in the following monitoring processes.

Table 60. *Growth data*

Darién	Growth data: Genarino Peralta	2022						
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	NA	2.15	NA	1.08
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	NA	0.86	NA	0.43

Teak

Table 61. *Growth data*

Darién	Growth data: Genarino Peralta	2022					Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2.0	NA	2.14	NA	1.07

Table 62. POA Executed AOP 2024

FINCA 2627 PERALTA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	6.00	0	-	0	-	-	6
Control de maleza - químico-Bomba Mochila	M1		-	0.00	-	0	6.00	0	-	0	-	0	4.00	0	-	0	-	0	-	0	-	0	-	0	-	-	10
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	13.00	0	1.00	0	-	0	1.00	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	-	16
Control de maleza manual-chapia	M6		-	0.00	-	0	11.00	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	6.00	0	-	-	18
Control de Maleza-Limpieza en Franja	M38		5.00	0.00	-	**0**	-	**0**	44.00	**0**	3.00	**0**	-	**0**	-	**0**	1.00	**0**	44.00	**0**	2.00	**0**	-	**0**	20.00	-	119
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	7.00	0	-	0	17.00	0	-	0	-	0	10.00	0	-	0	12.00	0	-	-	46
Control fitosanitario manual - Arrieras	M13		-	1.93	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	2	2
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	22.00		-		-		-		-		-		-		-		-		1.00		-		23
CPC Incendios-Barrer Calles	M48		-	0.00	-	0	-	0	5.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	2	5
Deshije	M17		-	0.00	-		-		-		-		4.00		-		-		-		-		-		-		4
Fertilización foliar	M15		-	0.00	-		-		-		-		-		-		6.00		-		-		-		-		6
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		-		16.00		-		-		-		16
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-		-		19.00		-		-		7.00		26
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		-		-		-		1.00		-		-		-		1

Operador de Motosierra	I19		-	0.00	-		-		1.00		-		-		-		-		-		-		-		-		1
Poda de formación	M18		-	45.00	-		14.00		-		-		-		-		-		-		-		-		-		14
Poda Manual Selección Apice.	M55		-	0.00	-		-		-		-		-		-		-		2.00		-		-		-		2
Replantado	E29		-	0.00	-		-		-		-		-		-		6.00		-		-		-		-		6
Rodaja Orgánica	M33		-	0.00	12.00		-		-		-		-		-		-		-		-		-		5.00		17
Grand Total			5.00	46.93	47.00	-	32.00	-	58.00	-	4.00	-	25.00	-	1.00	-	13.00	-	92.00	-	9.00	-	19.00	-	34.00		339

5.2.12. Finca No. 4869 Ubaldino Consuegra

Summary of reforestation

Table 63. Categorization of reforested area.

Farm No. 4869 - Ubaldino Consuegra					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood	*Dalbergia retusa*	3x4	833	0.29	0.29
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	6.62	6.62
Total, reforested				**6.91**	**6.91**
Area to be planted					9.36
Protection area					5.26
Stream area					0.44
Artificial lake					0.04
Firebreaks					0.60
Total Area					**22.61**

Map of the farm



Figure 21. Map of Ubaldino Consuegra farm (No. 4869).

Table 64. Executed AOP 2024

FINCA 4869 CONSUEGRA																													
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	1.00	-	1
Control de maleza - mecanico - Guira	M9		-	0.00	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	0	13.00	0	-	0	-	0	4.00	0	-	0	-	0	-	0	-	0	-	0	-	-	17
Control de Maleza-Limpieza en Franja	M38		3.00	0.00	3.00	0	15.00	0	2.00	0	-	0	6.00	0	5.00	0	11.00	0	14.00	0	-	0	-	0	-	-	59
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	4.00	0	-	0	-	0	-	0	-	0	10.00	0	-	0	8.00	0	-	-	22
Control fitosanitario manual - Arrieras	M13		-	1.90	-	**0**	1.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	2.00	**2**	**3**
CPC Incendios - mantener rondas corta fuego	M46		2.00	0.00	17.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	19
CPC Incendios-Barrer Calles	M48		-	0.00	-	0	-	0	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2
Despeje	M26		-	0.00	-		-		-		-		-		-		-		-		1.00		8.00		-		9
Fertilización foliar	M15		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	12.00	0	-	0	-	0	-	0	-	2	12
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		-		9.00		-		-		-		9
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-		-		13.00		-		-		5.00		18
Mantenimiento de cercas	I4		3.00	0.00	-		-		-		-		-		-		-		-		-		-		-		3
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		-		-		-		-		-		1.00		1
Poda de formación	M18		-	0.00	9.00		6.00		-		-		-		-		-		-		-		-		-		15
Poda Manual Selección Apice.	M55		-	0.00	-		-		-		-		-		-		-		3.00		-		-		-		3
Rodaja Orgánica	M33		-	0.00	3.00		-		-		-		-		-		-		-		-		-		-		3
Grand Total			8.00	1.90	34.00	-	35.00	-	8.00	-	-	-	10.00	-	5.00	-	23.00	-	49.00	-	1.00	-	16.00	-	9.00		198

5.2.13. Farm No. 886 Gindi Trujillo

Summary of reforestation

Table 65. Categorization of reforested area.

Farm No. 886 - Gindi Trujillo					
Species planted		Initial dist. (m)	Tree/ha	Planting year	Reforested area/species (ha)
Common name	Scientific name			2022	
Bullywood and Tonka Bean	*Terminalia amazonia* and *Dipteryx oleifera*	3x4	833	2.65	2.65
Mahogany	*Swietenia macrophylla*	3x4	833	0.88	0.88
Spanish Cedar	*Cedrela odorata*	3x4	833	2.75	2.75
Rosewood Mix	*Dalbergia retusa mix*	3x4	833	2.57	2.57
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	2.62	2.62
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.45	0.45
Teak	*Tectona grandis*	4x5	500	4.12	4.12
Total, reforested				**16.04**	**16.04**
Protection area					1.9
Total Area					**17.94**

Map of the farm

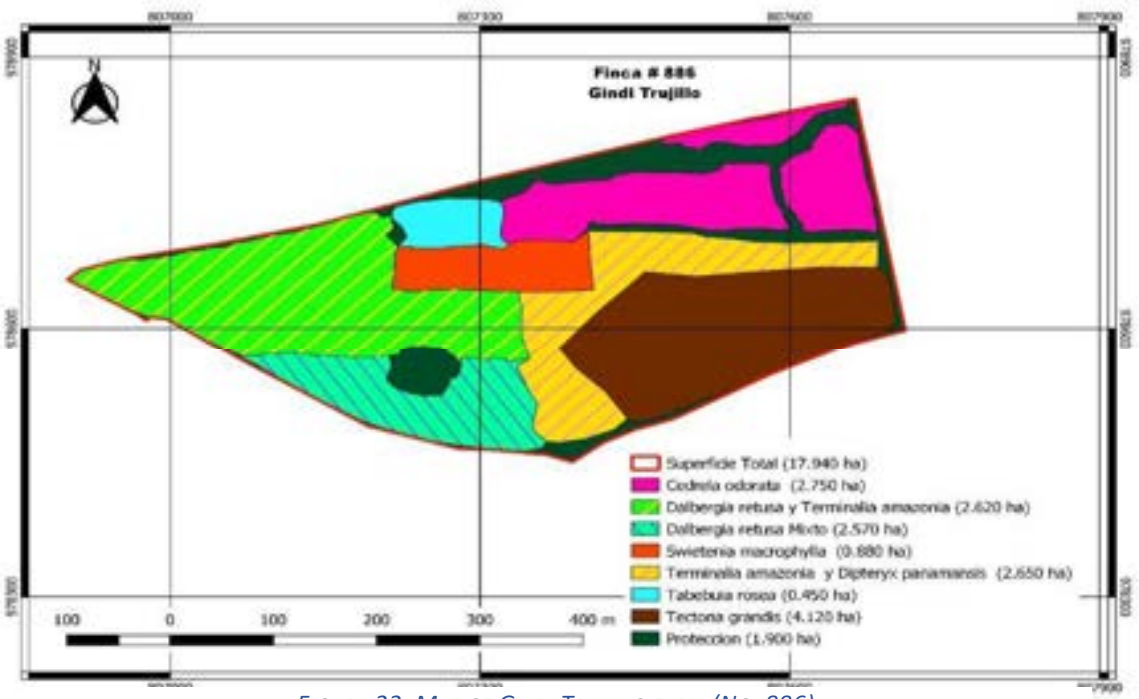


FIGURA 22. MAP OF GINDI TRUJILLO FARM (NO. 886).

Monitoring and growth data

The monitored species show intermediate development. The growth rates of *Dipteryx oleifera* and *Cedrela odorata* are below projections and require more maintenance to support growth. With the following monitoring sessions, we will be able to observe average diameters based on the ideal growth of the monitored species. The species *Tectona grandis* showed good results in annual growth rates. In this farm, there are small plots that require a recovery plan to fill areas that have not developed well.

Table 66. *Growth data*

Darién			Growth data: Gindi Trujillo			2022		
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	0.56	NA	0.28
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2.0	NA	0.63	NA	0.32
Mahogany	*Swietenia macrophylla*	2022	jun-24	2.0	NA	1.11	NA	0.56
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	NA	1.12	NA	0.56

Teak

Table 67. *Growth data*

Darién			Growth data: Gindi Trujillo			2022	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2.0	5.42	5.01	2.71	2.51

Table 68. POA Ejecutado 2024

FINCA 886 GINDI																													
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	1.00	0	-	0	-	0	2.00	0	-	0	-	0	5.00	0	-	0	-	0	-	0	3.00	-	11
Control de maleza - mecanico - Guira	M9		-	0.00	2.00	0	18.00	0	-	0	-	0	-	0	-	0	5.00	0	-	0	7.00	0	-	0	-	-	32
Control de maleza - químico rodaja	M4		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	-	1
Control de maleza - químico-Bomba Mochila	M1		-	0.00	-	0	6.00	0	-	0	11.00	0	-	0	-	0	-	0	9.00	0	-	0	9.00	0	-	-	35
Control de maleza manual - Corte Bejuco	M8		1.00	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	3.00	0	-	0	-	-	4
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	**0**	1.00	**0**	-	**0**	-	**0**	-	**0**	2.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	-	**3**
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	1.00	0	49.00	0	33.00	0	-	0	-	0	47.00	0	-	0	12.00	0	-	0	-	-	142
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	10.00	0	-	0	-	0	12.00	0	9.00	0	-	0	16.00	0	-	-	47
Control fitosanitario manual - Arrieras	M13		-	0.00	1.00		1.00		-		1.00		-		-		-		-		-		-		2.00		5
Control fitosanitario manual - Hypsipyla grandella	M14		12.00	0.00	1.00	0	5.00	0	3.00	0	7.00	0	3.00	0	8.00	0	11.00	0	10.00	0	6.00	0	7.00	0	8.00	-	81
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	10.00		-		-		-		-		-		-		-		-		4.00		-		14
Deshije	M17		-	0.00	-		-		-		2.00		5.00		4.00		-		-		-		-		-		11
Enderezado de plantas	M25		-	0.00	-		-		-		-		-		3.00		-		-		6.00		4.00		-		13
Fertilización foliar	M15		-	0.00	-		-		-		-		6.00		4.00		-		-		-		-		-		10

Fertilización granular	M16		-	0.00	-		-		-		7.00		-		27.00		-		-		-		-		-		34
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		7.00		5.00		-		-		11.00		-		-		23
Mantenimiento de cercas	I4		-	0.00	-		-		5.00		-		3.00		3.00		-		3.00		-		-		-		14
Operador de Motosierra	I19		-	0.00	1.00		-		-		-		-		-		3.00		-		-		-		3.00		7
Poda de formación	M18		8.00	0.00	16.00		2.00		-		5.00		-		2.00		-		-		5.00		-		4.00		42
Poda Manual Selección Apice.	M55		-	0.00	-		-		-		-		-		-		-		-		-		6.00		-		6
Rodaja Orgánica	M33		-	0.00	1.00		30.00		-		-		-		-		-		-		-		-		-		31
Grand Total			21.00	-	33.00	-	64.00	-	57.00	-	78.00	-	24.00	-	58.00	-	83.00	-	31.00	-	50.00	-	47.00	-	20.00		566

5.2.14. Farm No. 217884 Raúl Espinoza

Summary of reforestation

Table 69. Categorization of reforested area.

Farm No. 217884 - Raúl Espinoza						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Mahogany	*Swietenia macrophylla*	3x4	833	2.77		2.77
Cativo (sp)	*Prioria copaifera*	3x4	833	0.92		0.92
Spanish Cedar	*Cedrela odorata*	3x5	667	1.00		1.00
Rosewood	*Dalbergia retusa*	3x4	833	7.55		7.55
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.12		3.12
Wild Cashew	*Anacardium excelsum*	3x4	833	0.78		0.78
Rosy Trumpet Tree	*Tabebuia rosea*	3x5	667		0.68	0.68
Rosy Trumpet Tree and Spanish Cedar	*Tabebuia rosea y Cedrela odorata*	3x4	833	3.43		3.43
Teca	*Tectona grandis*	4x5	500	4.82		4.82
Total, reforested				**24.39**	**0.68**	**25.07**
Protection area						8.39
Stubble						0.30
Stream area						2.00
Artificial lake						0.50
Infrastructure						0.68
Superficie Total						**36.94**

Map of the farm

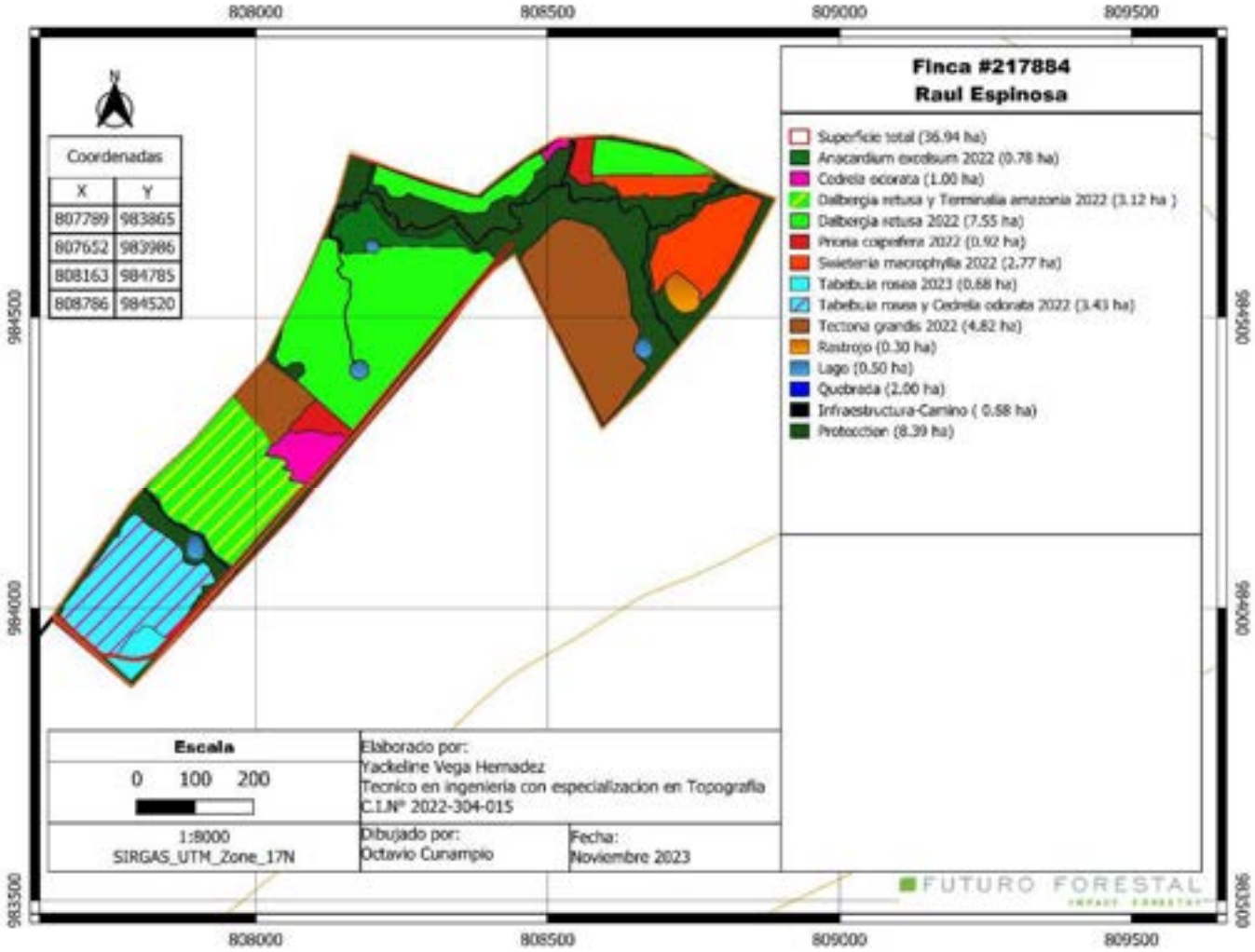


FIGURE 23. MAPA OF RAÚL ESPINOZA FARM (NO. 217884).

Monitoring and growth data

The following table details the monitoring results for the species *Tectona grandis*, showing good averages in diameter and height.

Teak

Table 70. *Growth data*

Darién	Growth data: Raúl Espinoza	2022	Teak

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	4.69	4.56	2.35	2.28

POA Ejecutado 2024

FINCA 217884 ESPINOZA																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra			-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	8.00	0	-	0	-	0	2.00	-	11
Control de maleza - mecanico - Guira			-	0.00	-	0	-	0	35.00	0	-	0	-	0	2.00	0	12.00	0	-	0	-	0	18.00	0	-	-	67
Control de maleza - químico-Bomba Mochila			-	0.00	-	0	11.00	0	-	0	-	0	-	0	-	0	14.00	0	-	0	-	0	-	0	-	-	25
Control de maleza manual - Corte Bejuco			-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	8.00	0	-	-	9
Control de Maleza-Limpieza en Franja			-	0.00	-	0	1.00	0	-	0	1.00	0	-	0	-	0	7.00	0	-	0	-	0	24.00	0	-	-	33
Control de Maleza-Química en Franja			-	0.00	-	**0**	-	**0**	-	**0**	22.00	**0**	-	**0**	-	0	32.00	0	-	0	-	0	22.00	0	-	**-**	**76**
Control fitosanitario manual - Arrieras			-	0.00	-	0	1.00	0	1.00	0	2.00	0	2.00	0	-	0	-	0	-	0	-	0	1.00	0	-	-	7
Control fitosanitario manual - Hypsipyla grandella			5.00	0.00	3.00	0	4.00	0	3.00	0	6.00	0	6.00	0	4.00	0	8.00	0	13.00	0	13.00	0	14.00	0	7.00	-	86
Control fitosanitario-Químico-Hongos			-	0.00	-		-		6.00		-		-		-	0	-	0	-	0	-	0	-	0	4.00		10
Control fitosanitario-Químico-Hypsipyla grandella			-	0.00	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	2.00	0	2.00	0	1.00	0	-	-	6
CPC Incendios - mantener rondas corta fuego			-	0.00	29.00		-		-		-		-		-	0	-	0	-	0	-	0	4.00	0	-		33
Deschuponado			-	0.00	-		-		-		5.00		-		-	0	-	0	-	0	-	0	-	0	-		5
Deshije			-	0.00	-		-		-		-		3.00		-	0	-	0	-	0	-	0	-	0	-		3
Despeje			-	0.00	-		5.00		-		-		-		-	0	5.00	0	-	0	1.00	0	-	0	8.00		19
Enderezado de plantas			-	0.00	-		-		-		-		-		1.00	0	-	0	-	0	-	0	6.00	0	-		7

Fertilización foliar			-	0.00	-		-		-		1.00		-		-	0	17.00	0	-	0	-	0	-	0	-		18
Fertilización granular			-	0.00	-		-		-		4.00		-		-	0	29.00	0	-	0	-	0	9.00	0	-		42
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		20.00		21.00	0	14.00	0	-	0	19.00	0	-	0	-		74
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		2.00		-	0	-	0	-	0	2.00	0	-	0	-		4
Operador de Motosierra	I19		-	0.00	1.00		-		-		-		-		-	0	-	0	3.00	0	-	0	-	0	2.00		6
Poda de formación	M18		4.00	20.00	33.00		-		13.00		2.00		-		-	0	1.00	0	-	0	4.00	0	1.00	0	1.00		59
Rodaja Orgánica	M33		-	0.00	-		21.00		37.00		-		-		-	0	-	0	-	0	-	0	24.00	0	-		82
FALSE	#N/D		-	0.00	-		-		-		-		-		-	0	-	0	-	0	-	0	-	0	-		-
Grand Total			9.00	20.00	67.00	-	43.00	-	95.00	-	44.00	-	33.00	-	28.00	-	140.00	-	26.00	-	41.00	-	132.00	-	24.00		682

5.2.15. Farm No. 960 Sandra Fernández (Espavé)

Summary of reforestation

Table 71. Categorization of reforested area.

Farm No. 960 - Sandra Fernández						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	5.85	0.82	6.67
Bullywood and Amarillo Guayaquil (sp)	*Terminalia Amazonia and Centrolobium yavizanum*	3x4	833	0.37		0.37
Santos Mahogany	*Myroxylon balsamum*	3x4	833	0.93		0.93
Mahogaby	*Swietenia macrophylla*	3x4	833	0.55		0.55
Spanish Cedar	*Cedrela odorata*	3x4	833	4.40		4.40
Rosewood	*Dalbergia retusa*	3x4	833	15.56		15.56
Quira (sp)	*Platymiscium pinnatum*	3x4	833	1.15		1.15
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.42		0.42
Ron Ron (sp)	*Astronium graveolens*	3x5	667		0.67	0.67
Total, reforested				**29.23**	**1.49**	**30.72**
Protection area						15.55
Stream area						3.70
Internal road						0.60
Superficie Total						**50.57**

A large part of the farm shows good development; however, there is an area that requires the implementation of the recovery plan, which consists of: It is important to note that this plan involved identifying areas or plots where species showed below-average growth, understanding the cause, and making the necessary amendments (silvicultural treatments) to bring them to a uniform development. In this context, clearing work was carried out, which involves falling trees that block light from reaching the plantation. A total of 6.93 hectares were cleared: 2 ha in Dp22, 2 ha in Dr22, 2 ha in Co22, and 0.93 ha in Mb22. These saplings were treated with DRENSH fertilizer to stimulate root growth, and 15 days later, 3 oz. of granular fertilizer were applied. We have obtained good results in all species, but

significantly in *Dipteryx oleifera* (Dp22), which increased from 0.50 m to 1.30 m in average height.

Map of the farm

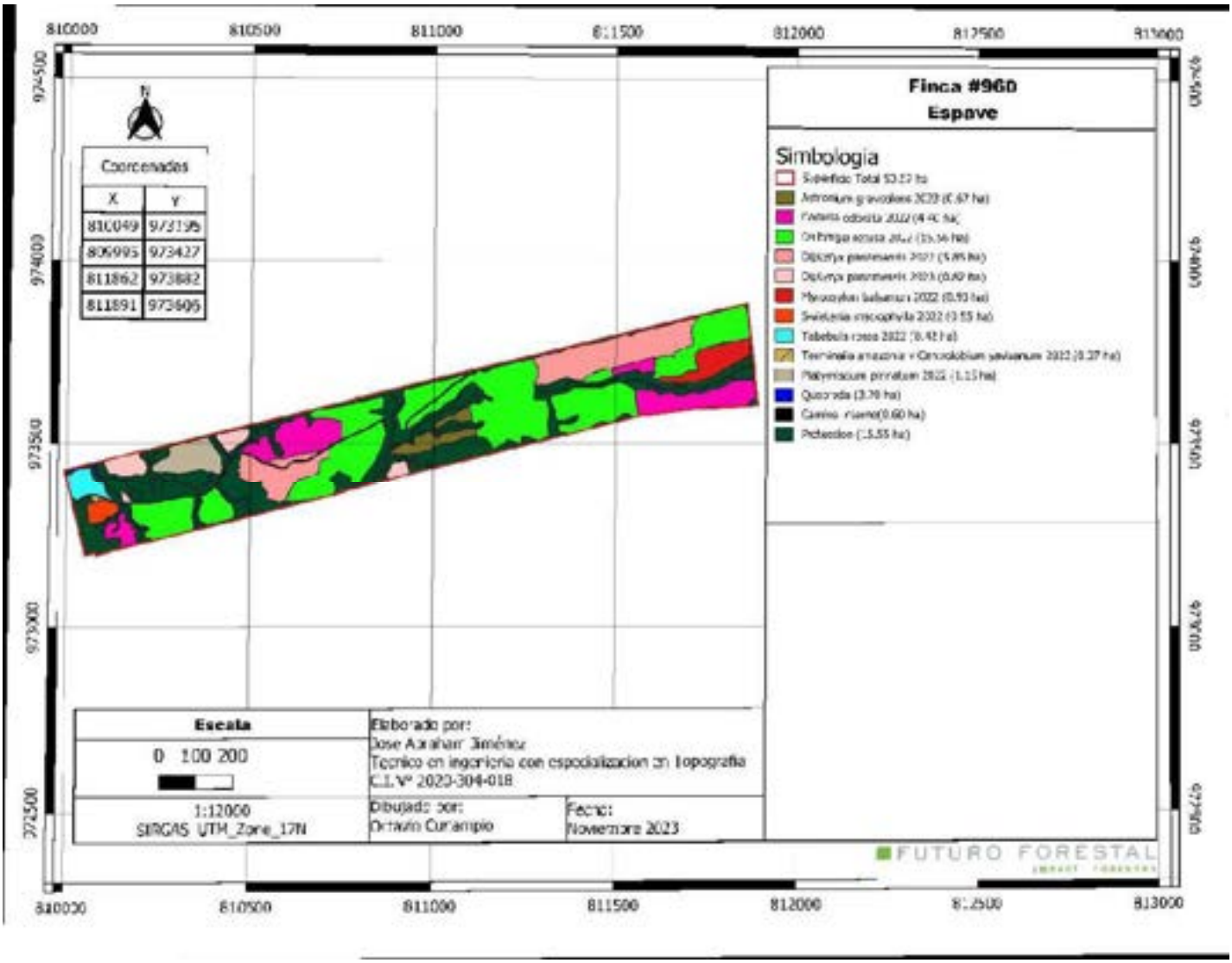


FIGURE 24. MAP OF ESPAVÉ FARM (NO. 960).

Monitoring and growth data

Among the species monitored on this farm during 2024, we can conclude that *Dalbergia retusa* and *Platymiscium pinnatum* show the best growth results, with high average annual increments in both height and diameter.

Table 72. *Growth data*

Darién			Growth data: Espavé					
						2022		
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	2.50	3.13	1.25	1.57
Spanish Cesar	*Cedrela odorata*	2022	jun-24	2.0	NA	1.46	NA	0.73
Santos Mahogany	*Myroxylon balsamum*	2022	jun-24	2.0	NA	0.29	NA	0.15
Quira (sp)	*Platymiscium pinnatum*	2022	jun-24	2.0	2.20	2.95	1.10	1.48

Executed AOP 2024

FINCA ESPAVE																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		*Agosto*		*Septiembre*		Octubre		Noviembre		Diciembre		Totales	
Row Labels			**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20	0.00	-	0.00	1.00	0	-	0	17.00	0	13.00	0	19.00	0	-	0	-	0	-	0	-	0	-	0	-	-	50
Control de maleza - mecanico - Guira	M9	0.00	-	0.00	3.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	3
Control de maleza - químico- Bomba Mochila	M1	0.00	-	0.00	-	0	-	0	-	0	3.00	0	-	0	-	0	-	0	-	1.6	-	0	-	0	-	2	3
Control de maleza manual - Corte Bejuco	M8	7.75	-	10.25	3.00	5.25	-	5.25	-	5.25	-	0	-	5.25	-	5.25	-	5.25	-	5.25	-	0	-	0	-	55	3
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0	-	0	-	0	-	0	50.00	0	-	0	-	0	-	41.6	-	0	-	0	-	42	50
Control de maleza manual-chapia	M6	0.00	-	0.00	-	**28.5**	-	**0**	6.00	**0**	2.00	**0**	-	**28.5**	-	0	-	28.5	-	0	-	0	-	0	-	**86**	**8**
Control de Maleza- Limpieza en Franja	M38	0.00	-	0.00	27.00	0	60.00	0	7.00	0	46.00	0	-	0	-	0	3.00	0	92.00	0	-	0	-	0	16.00	-	251
Control de Maleza- Química en Franja	M39	0.00	-	0.00	-	0	-	0	-	0	41.00	0	-	0	-	0	-	0	20.00	0	9.00	0	-	0	-	-	70
Control fitosanitario manual - Arrieras	M13	2.80	2.00	4.00	-		1.00		2.00		1.00		-		1.00	1.6	-	1.6	-	1.6	-	0	-	0	1.00		8

Control fitosanitario manual - Hypsipyla grandella	M14	0.00	-	0.00	3.00	33.75	2.00	5.25	6.00	5.25	8.00	0	4.00	33.75	13.00	0	17.00	0	4.00	0	16.00	0	15.00	0	7.00	183	95
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-		-		4.00		-		-		-	0	-	0	2.00	0	-	0	-	0	-		6
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.00	-	0.00	-		1.00		-		-		-		-	0	2.00	0	2.00	0	4.00	0	-	0	-		9
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	54.00		-		-		-		-		-	0	-	0	-	0	-	0	-	0	-		54
Despeje	M26	0.00	-	0.00	-		11.00		-		17.00		-		10.00	0	4.00	0	-	0	41.00	0	10.00	0	21.00		114
Enderezado de plantas	M25	0.00	-	0.00	-		-		6.00		10.00		10.00		-	0	-	0	-	0	9.00	0	2.00	0	-		37
Fertilización foliar	M15	0.00	-	0.00	-		-		-		-		29.00		-	0	-	0	-	0	-	0	-	0	-		29
Fertilización granular	M16	0.00	-	0.00	-		-		-		-		-		58.00	0	-	0	-	0	-	0	-	0	-		58
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-		-		-		-		-		29.00	0	1.00	0	-	0	-	0	31.00	0	-		61
Mantenimiento de caminos internos	I2	0.00	-	0.00	-		2.00		-		-		-		-	0	-	0	-	0	-	0	-	0	-		2
Mantenimiento de cercas	I4	0.00	-	0.00	-		-		-		1.00		-		-	0	-	0	1.00	0	-	0	-	0	-		2
Operador de Motosierra	I19	0.00	-	0.00	1.00		-		16.00		13.00		21.00		-	0	-	0	-	0	-	0	-	0	-		51
Poda de formación	M18	100.00	-	100.00	-		24.00		6.00		3.00		-		3.00	0	1.00	20	3.00	0	-	0	1.00	0	2.00		43
Rodaja Orgánica	M33	0.00	-	0.00	-		25.00		-		-		-		-	0	-	0	-	0	-	0	16.00	0	15.00		56
Grand Total		**110.55**	2.00	114.25	92.00	**67.5**	126.00	**10.5**	70.00	**10.5**	158.00	**0**	133.00	**67.5**	114.00	6.85	28.00	55.35	124.00	50.05	79.00	0	75.00	0	62.00	**367**	1,063

5.2.16. Farm No. 30387827 Joaquín Hernández

Summary of reforestation

Table 73. Categorization of reforested area.

Farm No. 30387827 - Joaquín Hernandez					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.98	3.98
Teak	*Tectona grandis*	4x5	500	11.89	11.89
Total reforested				**15.87**	**15.87**
Protection area					9.13
Total Area					**25.00**

Map of the farm

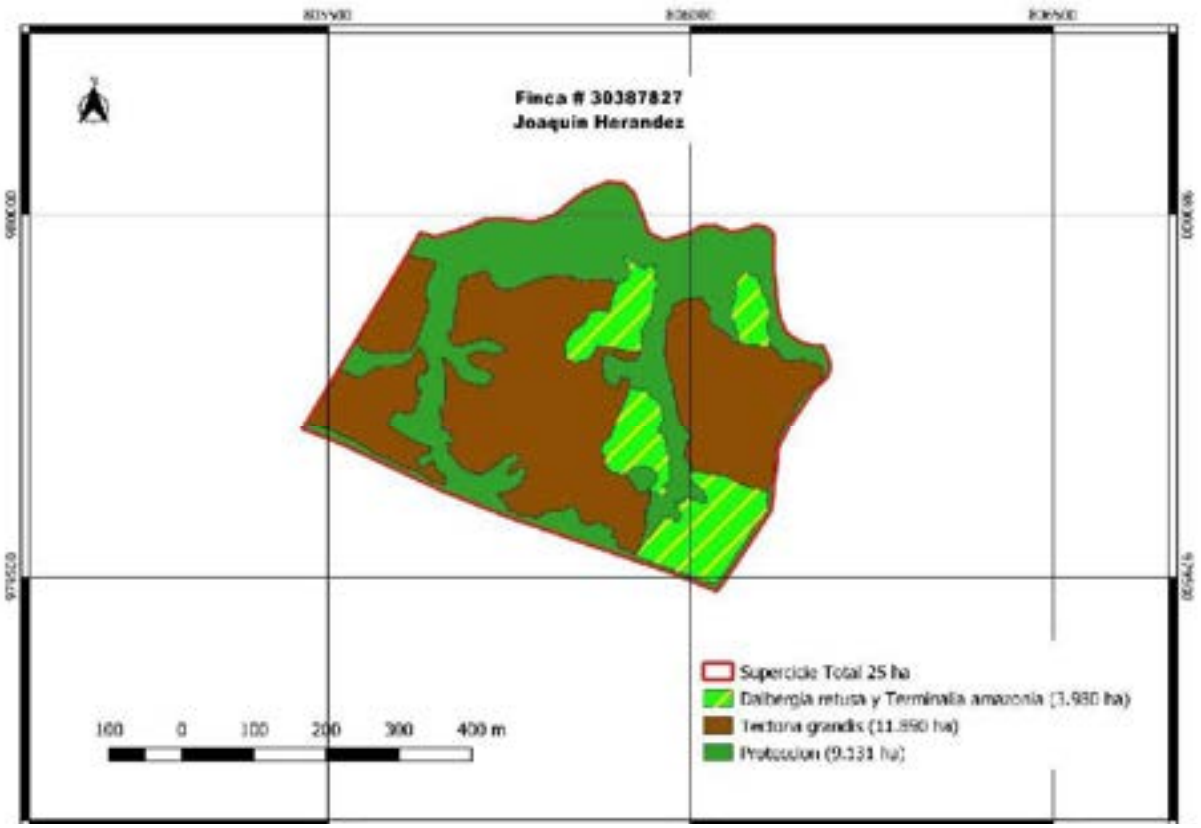


FIGURE 25. MAP OF JOAQUÍN HERNANDEZ FARM (NO. 30387827).

Monitoring and growth data

The results of *Tectona grandis* monitored on this farm show intermediate growth based on its establishment age and annual increments.

Teak

Table 74. *Growth data*

Darién	Growth data: Joaquín Hernández	2022	Teak

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	3.19	3.12	1.60	1.56

Table 1. Executed AOP 2024

FINCA REINA																												
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	2.00	0	-	-	2
Control de maleza - mecanico - Guira	M9	0.00	-	0.00	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2
Control de maleza - químico- Bomba Mochila	M1	0.00	-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	20.00	0	-	0	-	0	-	0	-	-	20
Control de maleza manual- chapia	M6	0.00	-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	8.00	0	-	0	-	0	-	0	-	-	8
Control de Maleza- Limpieza en Franja	M38	0.00	-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	41.00	0	-	0	11.00	0	-	0	-	-	52
Control de Maleza- Química en Franja	M39	0.00	-	0.00	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	9.00	**0**	-	**0**	-	**0**	-	**0**	-	**-**	**9**
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	10.00	0	-	0	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	12
CPC Incendios- Barrer Calles	M48	0.00	-	0.00	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Despeje	M26	0.00	-	0.00	-		-		-		-		-		-		5.00		10.00		6.00		1.00		-		22
Enderezado de plantas	M25	0.00	1.00	0.00	-	0	-	0	-	0	-	0	5.00	0	2.00	0	10.00	0	-	0	9.00	0	77.00	0	-	-	104

Limpieza de oficina	I21	0.00	1.00	0.00	-		-		-		-		-		-		-		-		-		-		-	1
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-		-		-		-		-		-		-		-		-		1.00		-	1
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-		-		-		-		-		-		-		-		-		6.00		-	6
Mantenimiento de cercas	I4	0.00	1.00	0.00	-		-		-		-		2.00		-		1.00		-		-		7.00		-	11
Operador de Motosierra	I19	0.00	-	0.00	-		-		-		-		-		-		-		-		-		2.00		-	2
Poda de formación	M18	0.00	1.00	0.00	4.00		12.00		-		-		-		-		-		7.00		9.00		-		-	33
Rodaja Orgánica	M33	0.00	-	0.00	-		5.00		-		-		-		-		-		-		-		-		-	5
Grand Total		0.00	4.00	0.00	16.00	0	17.00	0	3.00	0	-	0	7.00	0	2.00	0	94.00	0	17.00	0	35.00	0	96.00	0	-	-	291

5.2.17. Farm No. 218047 Curry

Summary of reforestation

Table 2. Categorization of reforested area.

Farm No. 218047 - Curry (Las 15)						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			2022	2024	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	4.63		4.63
Rosewood and Spanish Elm	*Dalbergia retusa and Cordia alliodora*	3x4	833	1.04		1.04
Teak	*Tectona grandis*	4x5	500	3.36		3.36
Teak	*Tectona grandis*	4x5	500		0.70	0.70
Rosy Trumpet Tree	*Tabebuia rosea*	3X4	833		1.11	1.11
Rosewood	*Dalbergia retusa*	3x4	833		0.08	0.08
Total, reforested				**9.03**	**1.89**	**10.92**
Protection area						3.31
Stream						0.50
Artificial lake						0.10
Total Area						**14.83**

The Curry farm shows average growth, with some species having low growth rates. A Recovery Plan was developed.

In 2024, we recovered 1.89 ha on this farm as follows:

- *Tabebuia impetiginosa* was replaced with *Tabebuia rosea*, expanding the reforested area from 0.95 ha to 1.11 ha (in lot Tr24). Currently, we have excellent field results in terms of survival (99 %) and growth.
- Additionally, we planted 0.70 ha of *Tectona grandis* (2024 clone) and 0.08 ha of pure *Dalbergia retusa*. *(See Figure 26)*

Map of the farm

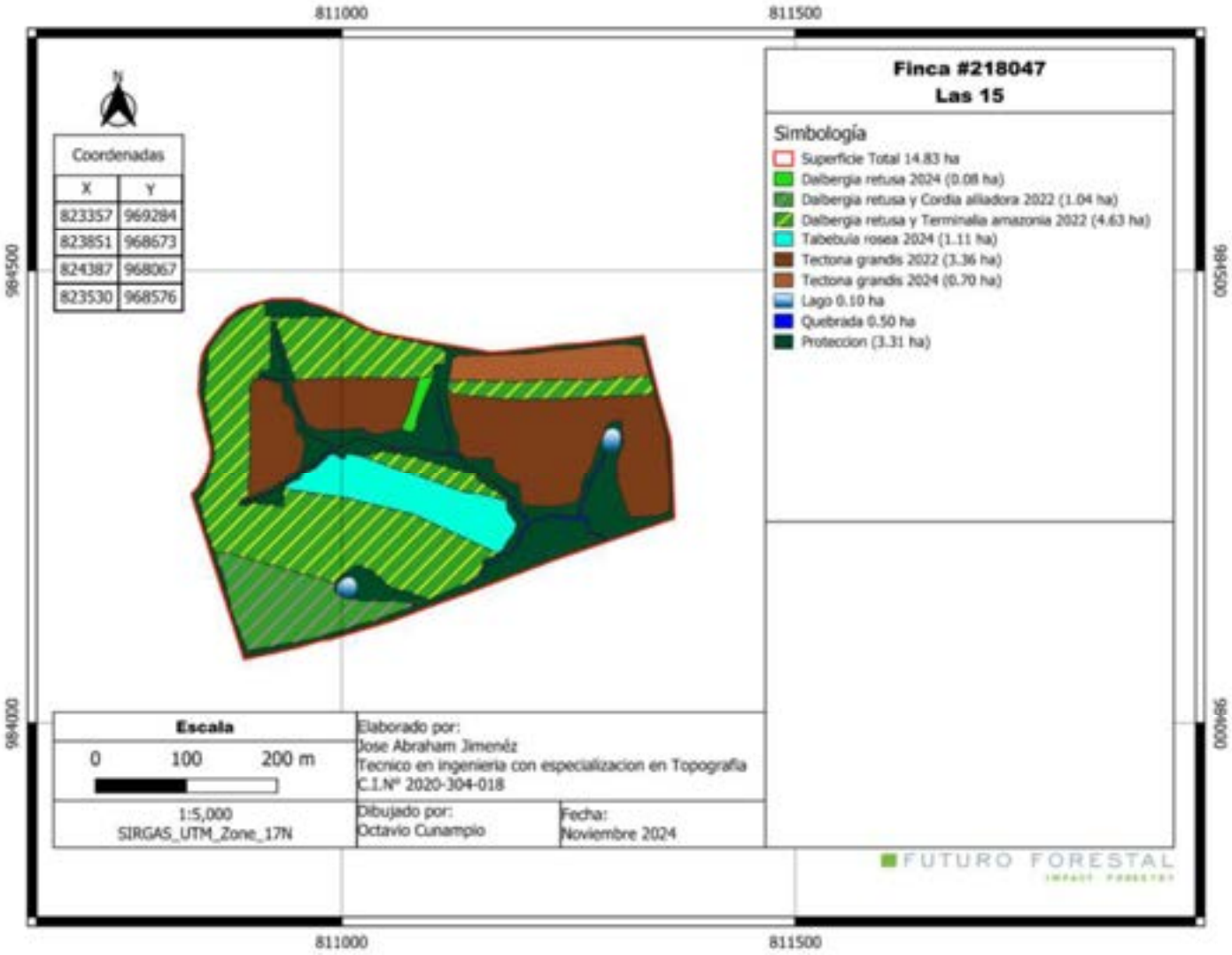


FIGURE 26. MAP OF CURRY FARM (NO. 218047).

Monitoring and growth data

The species *Tectona grandis* showed good average growth with high annual increment rates.

Teak

Table 3. *Growth data*

Darién		Growth data: Curry				2022	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teca	*Tectona grandis*	2022	jun-24	2.0	4.50	4.40	2.25	2.20

Table 4. Executed AOP 2024

DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	6.00	0	-	0	-	0	-	0	-	-	6
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	16.00	0	-	0	-	0	-	0	-	0	-	0	3.00	0	9.00	0	9.00	0	1.00	-	38
Control de maleza - químico-Bomba Mochila	M1		-	55.80	-	0	-	2.6	-	0	6.00	0	2.00	0	5.00	0	8.00	2.6	18.00	0	-	0	-	0	-	61	39
Control de maleza manual - Corte Bejuco	M8		-	1.00	-	0.5	2.00	0.5	2.00	0.5	4.00	0	-	0.5	-	0.5	-	0.5	-	0.5	-	0	-	0	-	5	8
Control de maleza manual - rodajas de mantenimiento	M7		-	39.50	-	0	-	2.3	-	0	-	0	-	0	-	0	2.00	0	1.00	2.3	19.00	0	3.00	0	-	44	25
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	**0**	-	**0**	-	**0**	4.00	**0**	3.00	**0**	34.00	**0**	-	**0**	-	**0**	-	**0**	24.00	**0**	13.00	**-**	**78**
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	8.00	0	1.00	0	-	0	2.00	0	4.00	0	-	0	-	0	-	-	15
Control fitosanitario manual - Arrieras	M13		-	2.49	-	0.13	1.00	0.13	-	0.13	-	0	-	0.13	-	0.13	-	0.13	-	0.13	-	0	1.00	0	-	3	2
CPC Incendios - mantener rondas corta fuego	M46		4.00	0.00	-		2.00		-		-		-		-		-		-		-		-		21.00		27
CPC Incendios-Barrer Calles	M48		-	0.00	-	0.63	-	5.53	4.00	0.63	-	0	-	0.63	-	0.63	-	3.23	-	2.93	-	0	-	0	-	113	4
CPC Incendios-Establecer rondas contrafuegos	M49		-	0.00	-		-		1.00		-		-		-		-		-		-		-		-		1
Deschuponado	M41		-	0.00	-		-		-		3.00		-		-		-		-		-		-		-		3
Enderezado de plantas	M25		-	0.00	-		-		-		-		-		-		21.00		-		-		2.00		-		23
Fertilización foliar	M15		-	0.00	-		-		-		-		-		7.00		-		-		-		-		-		7
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		9.00		11.00		-		-		-		20
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		6.00		-		-		-		10.00		-		16
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		-		-		1.00		-		-		-		-		1
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		-		5.00		-		-		-		-		5
Poda de formación	M18		9.00	50.00	4.00		-		4.00		-		-		-		1.00		2.00		-		3.00		-		23
Replantado	E29		-	0.00	-		-		-		-		-		-		21.00		-		-		-		-		21

Rodaja Orgánica	M33		-	0.00	-		5.00		-		-		-		-		-		-		-		18.00		12.00		35
Grand Total			13.00	148.79	4.00	1.26	26.00	11.06	11.00	1.26	25.00	-	6.00	1.26	52.00	1.26	76.00	6.46	39.00	5.86	28.00	-	70.00	-	47.00		397

5.2.18. Farm No. 30361092 Gerónima Castro (Corazón Nativo)

Summary of reforestation

Farm No. 30361092 – Gerónima Castro (Corazón Nativo)					
Species planted		Initial dist. (m)	Tree/ha	Planting year 2022	Reforested area/species (ha)
Common name	Scientific name				
Breadnut	*Brosimum alicastrum*	3x4	833	0.33	0.33
Mahogany	*Swietenia macrophylla*	3x4	833	0.66	0.66
Spanish Cedar	*Cedrela odorata*	3x4	833	0.59	0.59
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	5.95	5.95
Rosewood and West Indian Elm	*Dalbergia retusa and Guazuma ulmifolia*	3x4	833	1.53	1.53
Total, reforested				**9.06**	**9.06**
Protection area					1.36
Total Area					**10.42**

Table 5. Categorization of reforested area.

Map of the farm

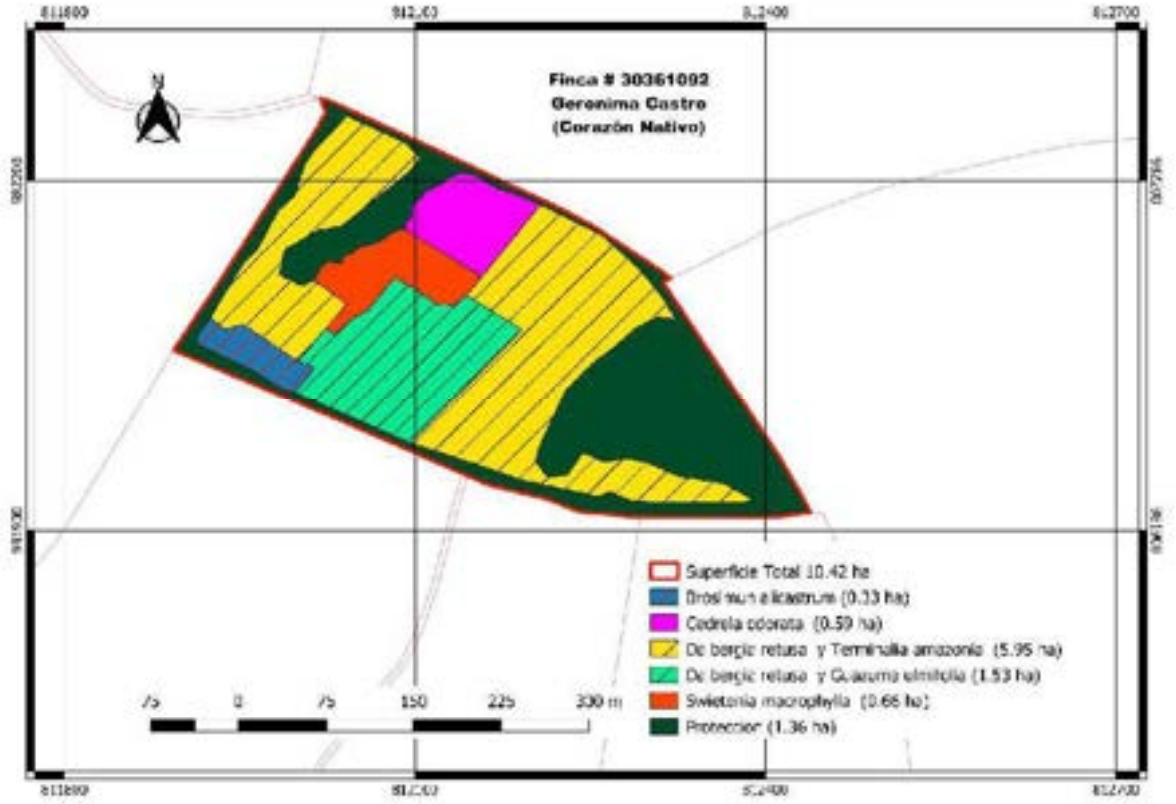


Figure 27. Map of Gerónima Castro farm (No. 30361092).

Monitoring and growth data

The species *Dalbergia retusa* shows good initial growth based on the results of the first monitoring of this farm.

Natives

Table 6. *Growth data*

Darién **Growth data: Gerónima Castro (Corazón Nativo)** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	2.42	1.85	1.21	0.93
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	NA	0.67	NA	0.34

Table 7. Executed AOP 2024

FINCA 30361092 CASTRO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	-	0	-	0	-	0	-	0	4.00	0	-	0	-	0	6.00	0	-	0	-	-	10
Control de maleza manual - Corte Bejuco	M8		-	1.56	-	0.56	-	0.56	-	0.56	-	0	-	0.56	1.00	0.56	-	0.56	-	0.56	-	0	-	0	-	5	1
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	5	2.00	0	-	0	-	0	-	5	-	0	-	5	-	0	-	0	-	0	-	15	2
Control de Maleza-Limpieza en Franja	M38		-	0.00	14.00	0	2.00	0	-	0	-	0	-	0	21.00	0	-	0	-	0	12.00	0	-	0	-	-	49
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	-	0	14.00	0	-	0	-	0	9.00	0	-	0	-	-	23
Control fitosanitario manual - Arrieras	M13		-	2.35	-	**0.35**	-	**0.35**	-	**0.35**	-	**0**	2.00	**0.35**	-	0.35	-	0.35	-	0.35	-	0	-	0	-	**5**	**2**
Control fitosanitario manual - Hypsipyla grandella	M14		-	1.40	-	0	1.00	0	-	0	-	0	6.00	0	5.00	0	-	0	1.00	0	2.00	0	2.00	0	2.00	1	19
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	3.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	3
Despeje	M26		-	0.00	5.00		4.00		-		-		-		13.00	0	-	0	-	0	6.00	0	-	0	-		28
Fertilización foliar	M15		-	0.00	-	5.91	-	0.91	-	0.91	-	0	-	5.91	-	0	6.00	0	-	0	-	0	-	0	-	27	6
Fertilización granular	M16		-	0.00	-		-		-		-		-		-	0	-	0	22.00	0	-	0	-	0	-		22
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-	0	-	0	-	0	11.00	0	-	0	7.00		18
Mantenimiento de caminos Externo	I23		-	0.00	1.00		-		-		-		-		-	0	-	0	-	0	-	0	-	0	-		1
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		-		1.00	0	-	0	-	0	-	0	-	0	-		1

Poda de formación	M18		-	0.00	-		13.00		-		-		-		4.00	0	-	0	-	0	-	0	-	0	-		17
Rodaja Orgánica	M33		-	0.00	-		5.00		-		-		-		-	0	-	0	-	0	-	0	-	0	-		5
Grand Total			-	5.31	23.00	11.82	27.00	1.82	-	1.82	-	-	8.00	11.82	63.00	0.91	6.00	5.91	23.00	0.91	46.00	-	2.00	-	9.00		207

5.2.19. Farm No. 3905 Tello 1

Summary of reforestation

Table 8. Categorization of reforested area.

Farm No. 3905 - Tello 1					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	2.64	2.64
Tonka Bean and Bullywood	*Dipteryx oleifera and Terminalia amazonia*	3x4	833	5.69	5.69
Spanish Cedar	*Cedrela odorata*	3x4	833	3.42	3.42
Rosewood	*Dalbergia retusa*	3x4	833	4.39	4.39
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.42	3.42
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.94	1.94
Teak	*Tectona grandis*	5x4	500	7.24	7.24
Mix	*Mix*	3x4	833	1.84	1.84
Total, reforested				**30.58**	**30.58**
Protection area					2.65
Stream area					3.20
Infrastructure					2.00
Total Area					**38.43**

This farm has on average good growth and development. However, the cedar plantation was 90 % affected by *Hypsipyla grandella*, despite timely inspections for manual control of the larvae, which feed on tender regrowth, usually apical buds. In 2025, a resprouting treatment will be applied to encourage regrowth, and mortality gaps will be replaced with *Centrolobium yavizanum* (Amarillo Guayaquil), which has shown good growth results.

The other species exhibit good growth and development throughout the farm.

Map of the farm

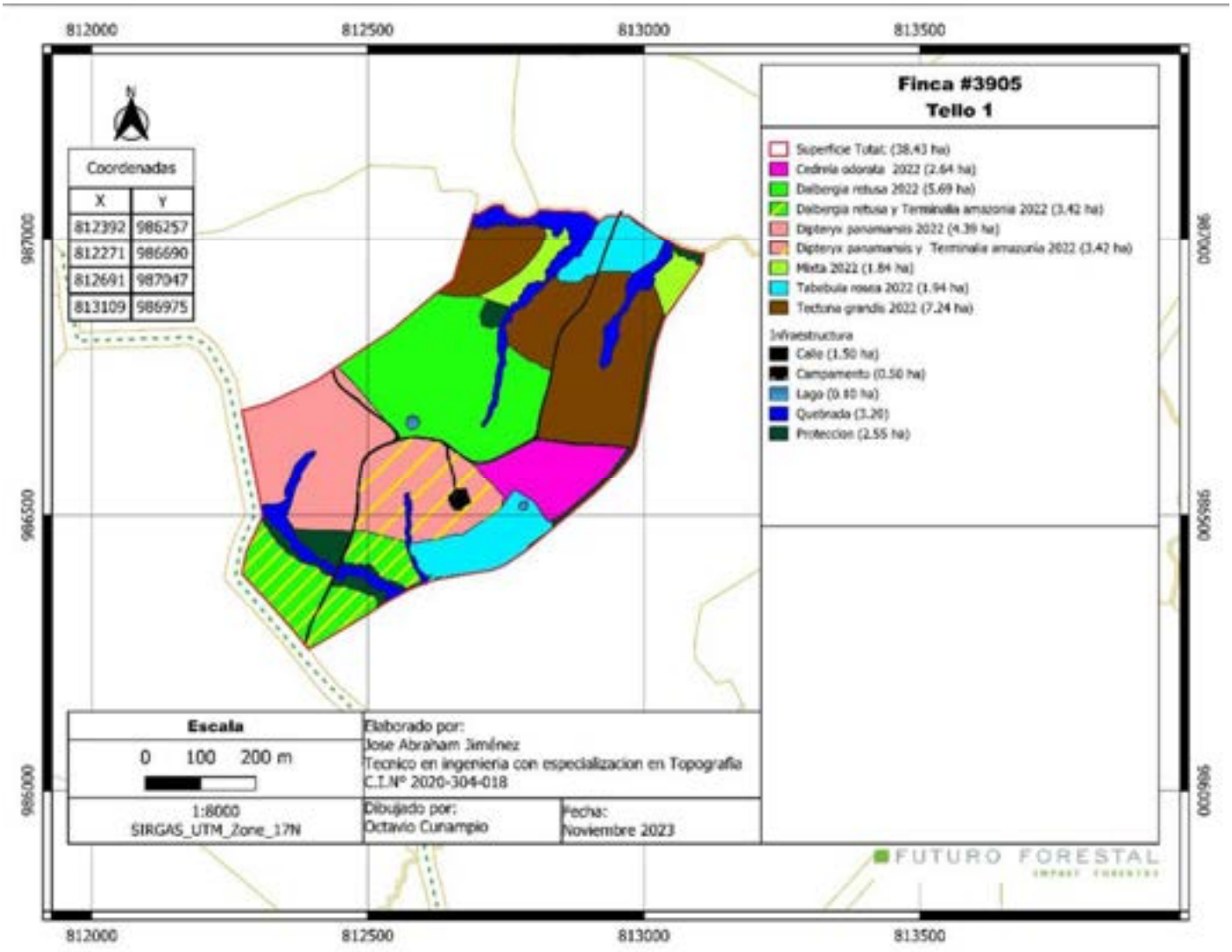


FIGURE 28. MAP OF TELLO 1 FARM (NO. 3905).

Monitoring and data growth

The species *Tectona grandis* showed good average growth with high annual increment rates. Among the monitored native species, *Dalbergia retusa* stands out with the highest annual height increment. As a high-value species, this is a strong indicator of its good adaptation to the planting site.

Natives

Table 9. *Growth data*

Darién **Growth data: Tello 1** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	1.28	NA	0.64
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2.0	NA	1.43	NA	0.72
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	NA	3.39	NA	1.70
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	NA	2.41	NA	1.21

Teak

Table 10. *Growth data*

Darién **Growth data: Tello 1** **2022** **Teak**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	6.68	6.00	3.34	3.00

Table 11. Executed AOP 2024

FINCA 3905 TELLO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	4.00	0	-	0	-	0	-	0	2.00	0	1.00	0	-	-	7
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	-	0	4.00	0	-	0	10.00	0	30.00	0	-	0	-	0	-	0	-	0	-	-	44
Control de maleza - químico rodaja	M4		-	0.00	-	0	-	0	-	0	-	0	11.00	0	-	0	-	0	-	0	-	0	3.00	0	-	-	14
Control de maleza - químico-Bomba Mochila	M1		-	50.00	-	0	-	0	14.00	9.5	8.00	0	5.00	0	-	0	24.00	9.5	-	0	1.00	0	4.00	0	-	69	56
Control de maleza manual - Corte Bejuco	M8		-	23.50	-	0	-	3.42	-	0	-	0	15.00	0	-	0	-	0	-	0	-	0	-	0	-	27	15
Control de maleza manual - rodajas de mantenimiento	M7		-	29.00	-	**0**	-	**9**	-	**0**	-	**0**	4.00	**0**	-	**0**	-	**10**	4.00	**0**	11.00	**0**	-	**0**	-	**48**	**19**
Control de maleza manual-chapia	M6		-	32.00	-	0	-	0	-	0	-	0	-	0	-	8.5	-	0	1.00	0	-	0	-	0	-	41	1
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	3.00	0	28.00	0	14.00	0	-	0	-	0	-	0	28.00	0	5.00	0	-	0	2.00	-	80
Control de Maleza-Química en Franja	M39		-	0.00	-		-		7.00		9.00		5.00		24.00		-		-		33.00		4.00		-		82
Control fitosanitario manual - Arrieras	M13		-	15.16	-	0	-	12.42	-	9.5	-	0	2.00	0	-	8.5	-	19.5	-	0	-	0	-	0	-	184	2
Control fitosanitario manual - Hypsipyla grandella	M14		1.00	0.00	2.00		-		4.00		4.00		3.00		2.00		4.00		2.00		2.00		-		-		24
Control fitosanitario-Químico-Hongos	M12		-	0.00	-		-		2.00		-		-		-		-		-		-		-		12.00		14
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	0.00	-		-		-		1.00		-		1.00		-		-		-		-		-		2

CPC Incendios - mantener rondas corta fuego	M46		4.00	0.00	-		-		-		-		-		-		-		-		-		-		-		4
CPC Incendios- Establecer rondas contrafuegos	#N/D		-	0.00	-		-		-		-		-		-		-		-		4.00		-		-		4
Deschuponado	M41		-	0.00	-		-		-		4.00		-		-		-		-		-		-		-		4
Enderezado de plantas	M25		-	0.00	-		-		5.00		10.00		20.00		124.00		103.00		6.00		8.00		31.00		7.00		314
Fertilización foliar	M15		-	0.00	-		-		-		-		-		10.00		-		-		-		-		-		10
Fertilización granular	M16		-	0.00	-		-		-		-		-		32.00		-		3.00		-		-		-		35
Limpieza y mantenimiento de infraestructura	I7		-	0.00	-		-		-		-		1.00		-		2.00		-		-		-		-		3
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		6.00		19.00		13.00		11.00		-		3.00		1.00		-		53
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		1.00		-		-		-		-		-		-		-		1
Mantenimiento de cercas	I4		-	0.00	-		-		1.00		2.00		-		-		-		-		4.00		-		-		7
Operador de Motosierra	I19		-	0.00	-		-		-		-		4.00		-		-		-		2.00		1.00		-		7
Poda de formación	M18		8.00	0.00	-		1.00		7.00		1.00		-		5.00		3.00		3.00		-		-		9.00		37
Poda Manual Selección Apice.	#N/D		-	0.00	-		-		-		-		-		-		-		-		-		4.00		-		4
Replantado	E29		-	0.00	-		-		-		-		-		5.00		10.00		8.00		-		-		-		23
Rodaja Orgánica	M33		18.00	0.00	-		20.00		1.00		21.00		-		-		-		-		-		10.00		2.00		72
Tramite Trabajadores		0	-	149.66	-	0	-	24.84	4.00	19	5.00	0	-	0	-	17	-	39	-	0	-	0	6.00	0	5.00	369	20
Trochado			-		-		-		-		-		-		7.00		-		-		-		-		-		7

Grand Total			31.00	299.32	2.00	-	24.00	49.68	77.00	38.00	86.00	-	103.00	-	253.00	34.00	157.00	78.00	55.00	-	75.00	-	65.00	-	37.00		965

5.2.20. Farm No. 313219 Tello 2

Summary of reforestation

Table 12. Categorization of reforested Zrea.

Farm No. 313219 - Tello 2								
Species planted						**Initial dist. (m)**	**Tree/ha**	**Planting year 2023**	**Reforested area/species (ha)**
Common name	**Scientific name**								
Tonka Bean	*Dipteryx oleifera*					3x4	833	1.74	1.74
Amarillo Guayaquil (sp)	*Centrolobium yavizanum*					3x4	833	1.00	1.00
Mahogany	*Swietenia macrophylla*					3x4	833	1.70	1.70
Spanish Cedar	*Cedrela odorata*					3x4	833	0.42	0.42
Rosewood	*Dalbergia retusa*	3x4	833	1.76	1.76				
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.01	3.01				
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	3.27	3.27				
Total, reforested				**12.90**	**12.90**				
Protection area					4.42				
Stream area					1.51				
Total Area					**18.83**				

Map of the farms

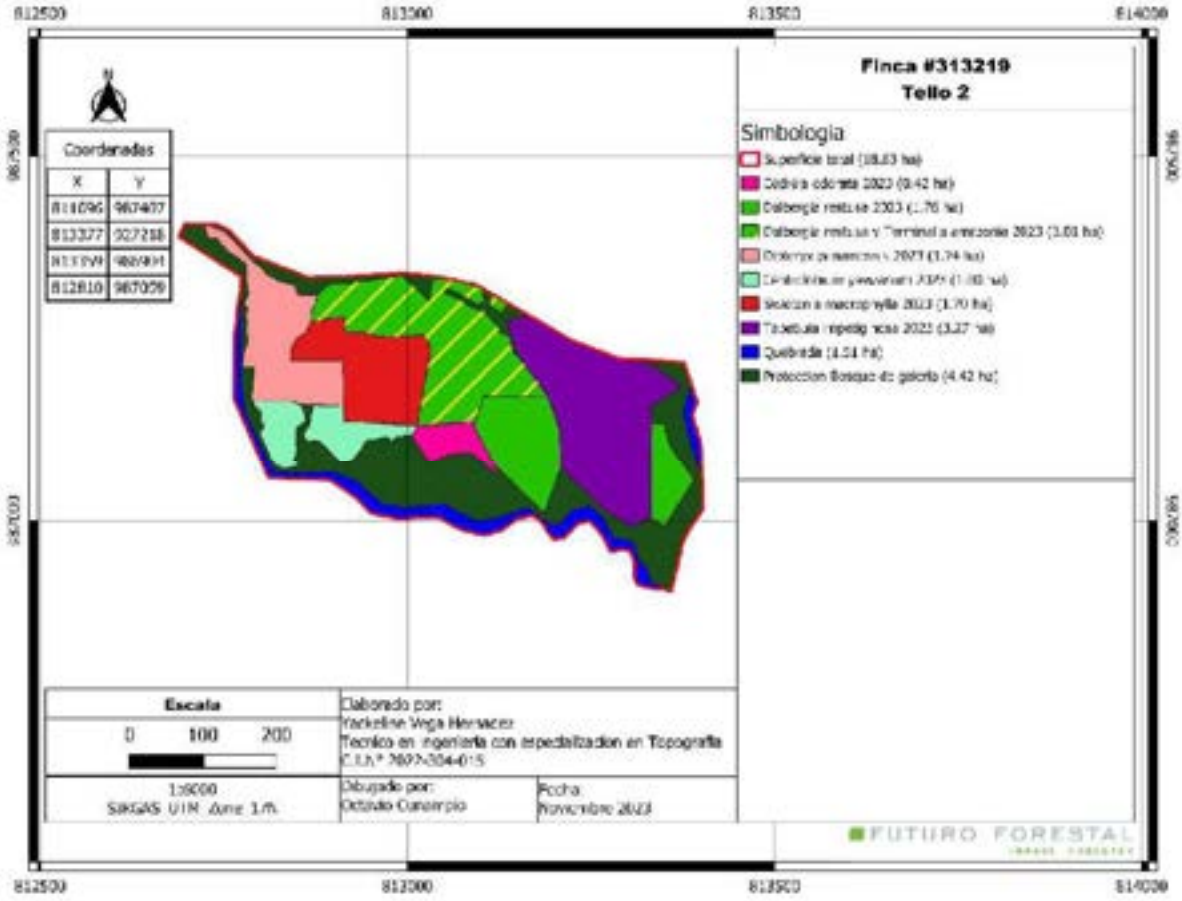


FIGURE 29. MAPA OF TELLO 2 FARM (NO. 313219).

Table 1. Executed AOP 2024

FINCA 313219 TELLO																												
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira			-	0.00	-	0	-	0	-	0	-	0	-	0	9.00	0	-	0	8.00	0	-	0	-	0	-	-	17
Control de maleza - químico-Bomba Mochila			-	0.00	-	0	-	0	-	0	20.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	20
Control de maleza manual - Corte Bejuco			-	0.00	-	0	2.00	0	1.00	0	-	0	2.00	0	1.00	0	6.00	0	-	0	-	0	-	0	-	-	12
Control de maleza manual - rodajas de mantenimiento			-	0.00	-	0	-	0	-	0	-	0	-	0	8.00	0	-	0	-	0	3.00	0	-	0	-	-	11
Control de maleza manual-chapia			-	0.00	4.00	0	-	0	-	0	15.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	19
Control de Maleza-Limpieza en Franja			-	0.00	-	**0**	-	**0**	35.00	**0**	-	**0**	1.00	**0**	17.00	**0**	-	**0**	18.00	**0**	-	**0**	-	**0**	14.00	**-**	**85**
Control de Maleza-Química en Franja			-	0.00	-	0	-	0	-	0	2.00	0	-	0	22.00	0	-	0	7.00	0	12.00	0	-	0	-	-	43
Control fitosanitario manual - Arrieras			-	0.00	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	-	1
Control fitosanitario manual - Hypsipyla grandella			4.00	0.00	-		-		-		2.00		4.00		2.00		6.00		5.00		4.00		2.00		2.00		31
Control fitosanitario-Químico-Hypsipyla grandella			-	0.00	-	0	1.00	0	-	0	1.00	0	1.00	0	2.00	0	-	0	2.00	0	-	0	-	0	-	-	7
CPC Incendios-Establecer rondas contrafuegos			6.00	0.00	2.00		-		1.00		-		-		-		-		-		-		-		-		9
Despeje			-	0.00	-		-		-		-		-		2.00		-		6.00		8.00		3.00		-		19
Enderezado de plantas			-	0.00	-		-		-		1.00		-		-		-		-		2.00		-		-		3
Fertilización foliar			2.00	0.00	-		-		-		-		9.00		-		-		-		-		-		-		11
Fertilización granular			-	0.00	-		-		-		-		-		14.00		-		-		-		-		-		14

Manejo de Rebrote cocobolo			-	0.00	-		-		-		4.00		-		8.00		-		10.00		-		-		4.00		26
Mantenimiento de cercas			-	0.00	1.00		-		2.00		-		-		-		-		-		2.00		-		-		5
Poda de formación	M18		-	20.00	2.00		3.00		-		-		3.00		-		-		-		3.00		-		-		11
Replantado	E29		-	0.00	-		-		-		-		-		10.00		-		-		-		-		-		10
Rodaja Orgánica	M33		32.00	0.00	-		1.00		33.00		-		-		-		-		-		-		-		3.00		69
Grand Total			44.00	20.00	9.00	-	7.00	-	72.00	-	45.00	-	20.00	-	96.00	-	12.00	-	56.00	-	34.00	-	5.00	-	23.00		423

5.2.21. Farm No. 3123 Tello 3

Summary of reforestation

Table 2. Categorization of reforested area.

Farm No. 3123 - Tello 3						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2024**	
Caobilla (sp)	*Tapirira guianensis*	3x4	833		1.08	1.08
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	1.00	3.59	4.59
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.58	0.74	2.32
Teak	*Tectona grandis*	5x4	500	2.85	2.81	5.66
Total, reforested				**5.43**	**8.22**	**13.65**
Protection area						4.14
Stream area						1.00
Artificial lake						0.50
Total Area						**19.29**

The farm had demonstrated extraordinary growth. Unfortunately, on April 15, 2024, 10 hectares of the farm, including both plantation and protected areas, were affected by a fire originating from a neighboring farm. All Waldmenschen employees from the Claritas unit participated in controlling and extinguishing the fire, which was brought under control in 2 hours and 30 minutes.

Species like Teak (2.81 ha) and Rosewood associated with Bullywood (3.59 ha) had the ability to resprout and are now receiving the management treatment for the 2024 planting season. In the case of the Rosy Trumpet Tree, 0.74 hectares had to be replanted, and 1.08 hectares of Mahogany were replaced with Caobilla, as the affected trees did not resprout.

Thus, a total of 8.22 hectares are under special management as if they were newly established plantations in 2024.

Map of the farm

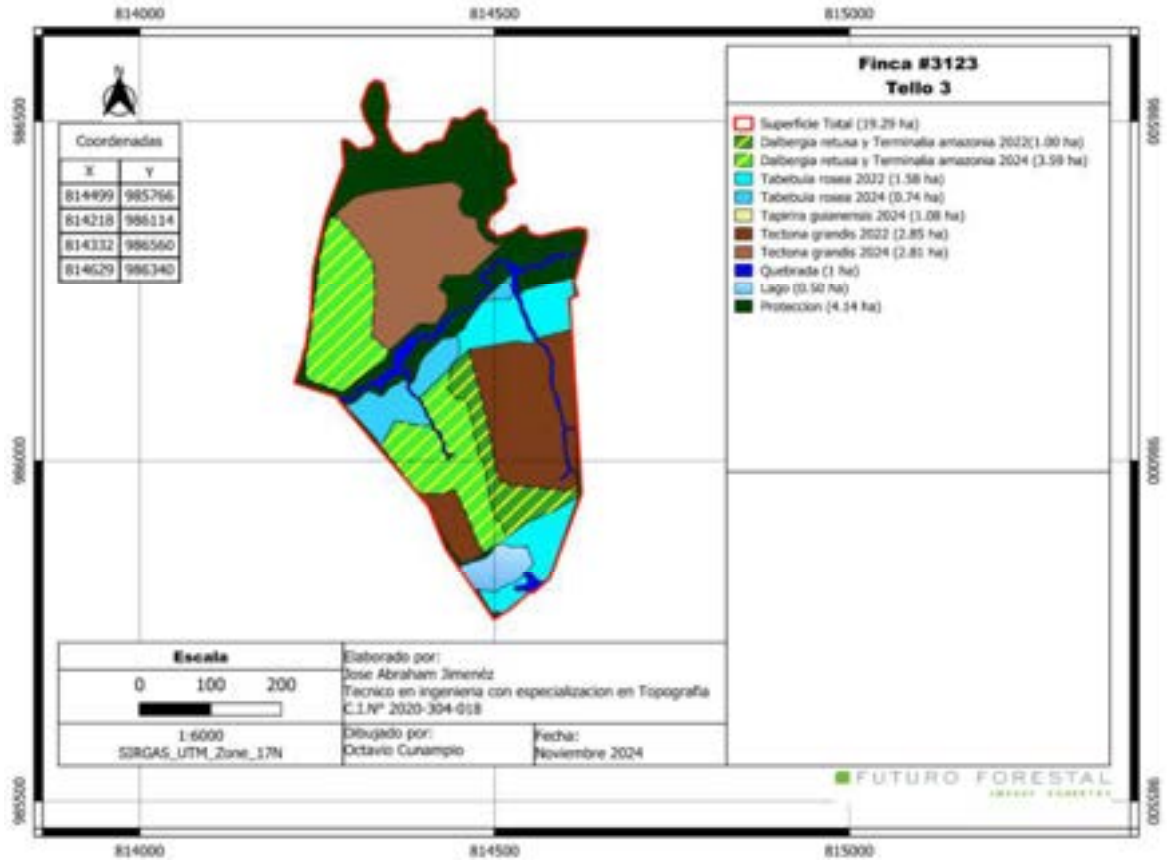


FIGURE 30. MAP OF TELLO 3 FARM (NO. 3123).

Monitoring and growth data

The monitoring results for this *Tectona grandis* are very good based on its establishment age, demonstrating optimal development for the species.

Table 3. *Growth data*

Darién		Growth data: Tello 3				2022		Teak
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2.0	8.50	6.61	4.25	3.31

INCA TELLO 3																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels	**Actividad**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20	0.00	-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	8.00	0	-	0	-	0	2.00	-	11
Control de maleza - mecanico - Guira	M9	0.00	-	0.00	-	0	-	0	35.00	0	-	0	-	0	2.00	0	12.00	0	-	0	-	0	18.00	0	-	-	67
Control de maleza - químico- Bomba Mochila	M1	0.00	-	0.00	-	9	11.00	0	-	0	-	0	-	9	-	0	14.00	9	-	0	-	0	-	0	-	27	25
Control de maleza manual - Corte Bejuco	M8	4.40	-	8.00	-	0.4	-	0.4	-	0.4	-	0	-	0.4	-	0.4	1.00	0.4	-	0.4	-	0	8.00	0	-	15	9
Control de Maleza- Limpieza en Franja	M38	0.00	-	0.00	-	0	1.00	0	-	0	1.00	0	-	0	-	0	7.00	0	-	0	-	0	24.00	0	-	-	33
Control de Maleza- Química en Franja	M39	0.00	-	0.00	-	**0**	-	**0**	-	**0**	22.00	**0**	-	**0**	-	0	32.00	0	-	0	-	0	22.00	0	-	**-**	**76**
Control fitosanitario manual - Arrieras	M13	1.95	-	3.30	-	0.6	1.00	0.6	1.00	0.6	2.00	0	2.00	0.6	-	0.6	-	0.6	-	0.6	-	0	1.00	0	-	9	7
Control fitosanitario manual - Hypsipyla grandella	M14	2.30	5.00	2.30	3.00	2.3	4.00	2.3	3.00	2.3	6.00	0	6.00	2.3	4.00	2.3	8.00	2.3	13.00	2.3	13.00	0	14.00	0	7.00	21	86
Control fitosanitario -Químico- Hongos	M12	0.00	-	0.00	-		-		6.00		-		-		-	0	-	0	-	0	-	0	-	0	4.00		10
Control fitosanitario -Químico- Hypsipyla grandella	M11	0.40	-	0.40	-	12.3	-	3.3	-	3.3	1.00	0	-	12.3	-	0	-	0	2.00	0	2.00	0	1.00	0	-	72	6

CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	29.00		-		-		-		-		-	0	-	0	-	0	-	0	4.00	0	-		33
Deschuponado	M41	0.00	-	0.00	-		-		-		5.00		-		-	0	-	0	-	0	-	0	-	0	-		5
Deshije	M17	0.00	-	0.00	-		-		-		-		3.00		-	0	-	0	-	0	-	0	-	0	-		3
Despeje	M26	0.00	-	0.00	-		5.00		-		-		-		-	0	5.00	0	-	0	1.00	0	-	0	8.00		19
Enderezado de plantas	M25	0.00	-	0.00	-		-		-		-		-		1.00	0	-	0	-	0	-	0	6.00	0	-		7
Fertilización foliar	M15	0.00	-	0.00	-		-		-		1.00		-		-	0	17.00	0	-	0	-	0	-	0	-		18
Fertilización granular	M16	0.00	-	0.00	-		-		-		4.00		-		-	0	29.00	0	-	0	-	0	9.00	0	-		42
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-		-		-		-		20.00		21.00	0	14.00	0	-	0	19.00	0	-	0	-		74
Mantenimiento de cercas	I4	0.00	-	0.00	-		-		-		-		2.00		-	0	-	0	-	0	2.00	0	-	0	-		4
Operador de Motosierra	I19	0.00	-	0.00	1.00		-		-		-		-		-	0	-	0	3.00	0	-	0	-	0	2.00		6
Poda de formación	M18	20.00	4.00	20.00	33.00		-		13.00		2.00		-		-	0	1.00	0	-	0	4.00	0	1.00	0	1.00		59
Rodaja Orgánica	M33	0.00	-	0.00	-		21.00		37.00		-		-		-	0	-	0	-	0	-	0	24.00	0	-		82
FALSE			-	0.00	-		-		-		1.00		-		-	0	-	0	-	0	-	0	-	0	-		1
Grand Total		**29.05**	9.00	34.00	67.00	**24.6**	43.00	**6.6**	95.00	**6.6**	45.00	**0**	33.00	**24.6**	28.00	3.3	140.00	12.3	26.00	3.3	41.00	0	132.00	0	24.00	**145**	683

5.2.22. Farm No. 30418636 Elia Castillo

Summary of reforestation

Table 4. Categorization of reforested area.

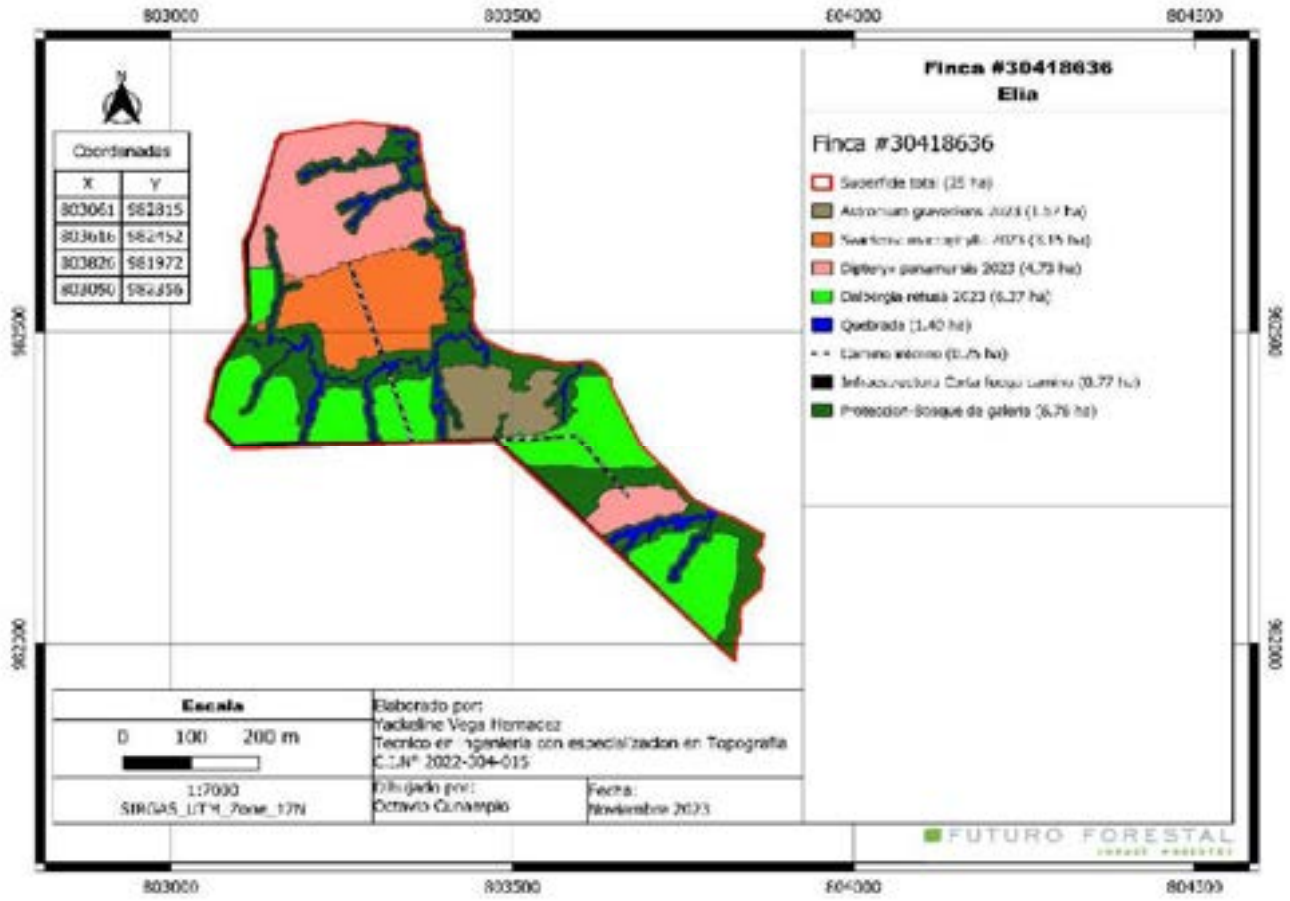
Farm No. 30418636 - Elia Castillo					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	4.73	4.64
Mahogany	*Swietenia macrophylla*	3x4	833	3.15	3.24
Rosewood	*Dalbergia retusa*	3x4	833	6.37	6.42
Ron Ron (sp)	*Astronium graveolens*	3x4	833	1.57	1.52
Total, reforested				**15.82**	**15.82**
Protection area					6.76
Stream area					1.40
Infrastructure					0.25
Firebreaks					0.77
Total Area					**25.00**

In this plantation, clearing was carried out using chainsaws, removing or cutting down all non-commercial tree species that were blocking sunlight from reaching the plantation. The cleared areas included Tonka Bean (Dp23) with 2 hectares, Rosewood (Dr23) with 2 hectares, and Mahogany (Sm23) with 1 hectare.

The entire plantation was treated with DRENSH fertilizer (a liquid fertilizer based on seaweed) to promote root growth. Fifteen days later, 3 oz of granular fertilizer was applied for maintenance. Currently, the plantation shows good development and growth.

Map of the farm

FIGURE 31. MAP OF ELIA CASTILLO FARM (NO. 30418636).



5.2.23. Farm No. 6276 Uri

Summary of reforestation

Table 5. Categorization of reforested area.

Farm No. 6276 - Uri					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	2.08	2.08
Mahogany	*Swietenia macrophylla*	3x4	833	0.95	0.95
Spanish Cedar	*Cedrela odorata*	3x4	833	1.72	1.72
Rosewood and Bullywood	*Dalbergia retusa y Terminalia amazonia*	3x4	833	3.67	3.67
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	2.68	2.68
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.16	1.16
Total, reforested				**12.26**	**12.26**
Protection area					2.62
Stream area					1.60
Infrastructure					0.18
Firebreaks					0.15
Total Area					**16.81**

Fertilization Plan 2024

For this particular year, the entire plantation was treated with DRENSH, a liquid fertilizer applied to the roots to stimulate root growth, resulting in healthier plants with greater growth. Fifteen days later, 3 oz of granular fertilizer was applied.

Field observations showed increased vigor in the seedlings and greater development of apical growth buds in Cedar and Mahogany. Therefore, it is recommended to apply this treatment to these species to promote faster growth and improve pest management of *H. grandella*.

Map of the farm

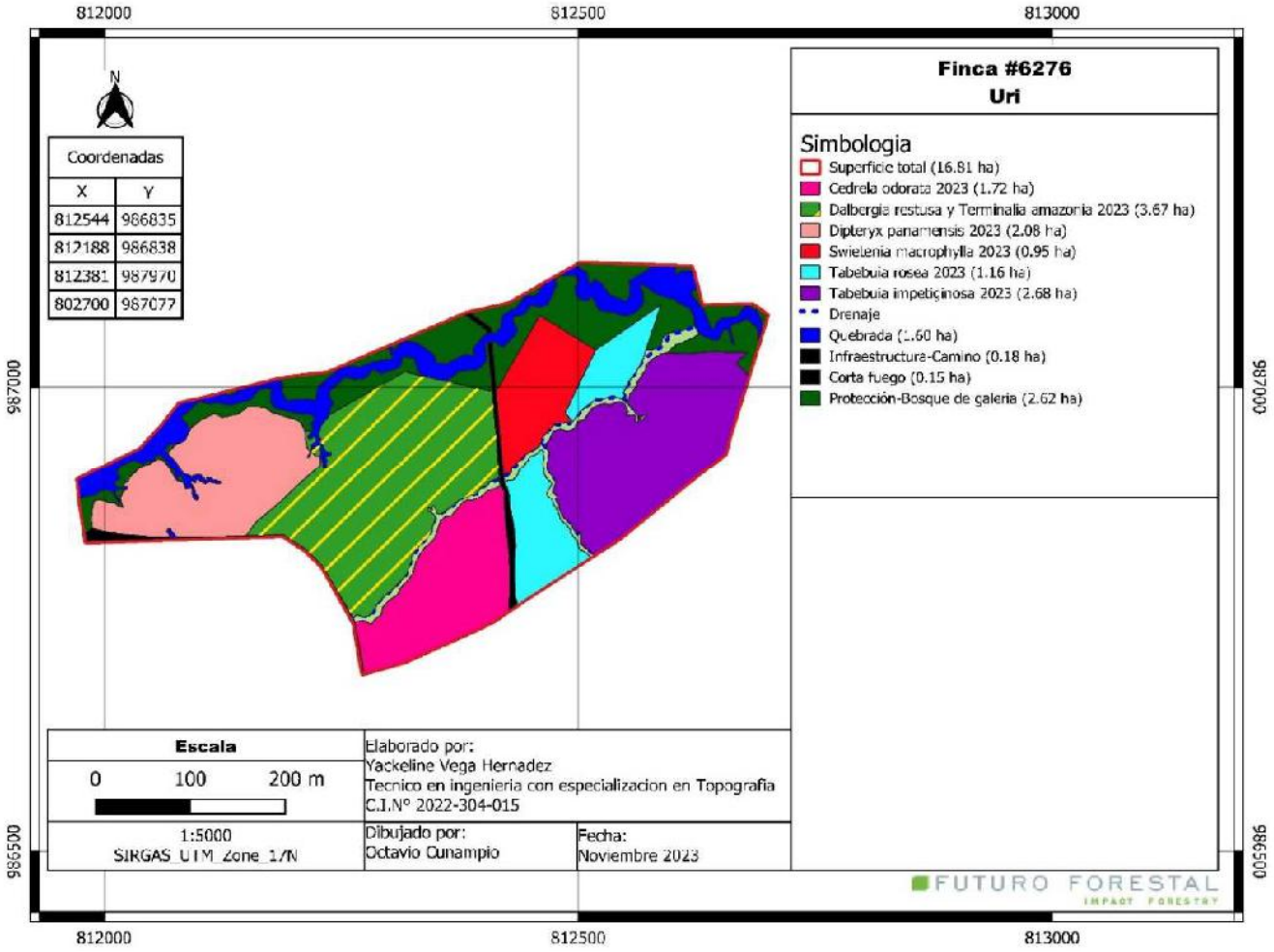


FIGURE 32. MAP OF URI FARM (NO. 6276).

Table 1. Executed AOP 2024

FINCA 6276 URI																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	1.00	0	-	0	4.00	0	2.00	0	-	0	-	0	-	-	7
Control de maleza - mecanico - Guira	M9		-	0.00	-	0	-	0	16.00	1.3	7.00	0	4.00	0	-	0	-	0	-	0	-	0	-	0	-	1	27
Control de maleza - químico rodaja	M4		-	0.00	-	0	-	0	-	0	-	0	4.00	0	2.00	0	-	0	-	0	-	0	2.00	0	-	-	8
Control de maleza manual - Corte Bejuco	M8		-	1.50	-	0.25	1.00	0.25	-	0.25	-	0	1.00	0.25	-	0.25	3.00	0.25	-	0.25	4.00	0	-	0	2.00	3	11
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	4	-	0	-	0	-	0	29.00	4	2.00	0	1.00	4	-	0	7.00	0	-	0	-	12	39
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	**0**	2.00	**0**	-	**0**	7.00	**0**	4.00	**0**	-	**0**	29.00	**0**	-	**0**	11.00	**0**	2.00	**0**	-	**-**	**55**
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	9.00	0	10.00	0	-	0	8.00	0	11.00	0	-	0	1.00	0	-	-	39
Control fitosanitario manual - Arrieras	M13		-	5.73	-	0.41	-	0.41	-	0.41	-	0	1.00	0.41	2.00	0.41	-	0.41	-	0.41	-	0	-	0	-	9	3
Control fitosanitario manual - Hypsipyla grandella	M14		2.00	2.00	3.00		-		4.00		4.00		9.00		4.00		10.00		6.00		13.00		8.00		2.00		65
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	3.00	-	4.66	2.00	0.66	2.00	1.96	2.00	0	2.00	4.66	4.00	0.66	-	4.66	3.00	0.66	8.00	0	2.00	0	5.00	25	30
CPC Incendios-Establecer rondas contrafuegos	M49		2.00	0.00	-		-		-		-		-		-		-		-		-		-		-		2
Despeje	M26		-	0.00	-		-		-		-		-		-		3.00		-		2.00		2.00		2.00		9
Enderezado de plantas	M25		-	0.00	-		-		3.00		2.00		-		-		5.00		-		6.00		-		-		16

Fertilización foliar	M15		-	0.00	-		-		-		-		6.00		-		-		-		-		-		-			6
Fertilización granular	M16		-	0.00	-		-		-		-		14.00		6.00		-		4.00		-		-		-			24
Imprevistos	E35		1.00	0.00	-		-		-		-		-		-		-		-		-		-		-			1
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		3.00		2.00		-		-		-		4.00		-		-			9
Mantenimiento de cercas	I4		4.00	0.00	1.00		-		-		-		-		-		-		-		-		-		-			5
Monitoreo	M44		-	0.00	-		-		-		1.00		-		-		-		-		-		-		-			1
Operador de Motosierra	I19		-	0.00	-		-		-		-		1.00		-		4.00		1.00		-		-		-			6
Poda de formación	M18		-	0.00	5.00		5.00		5.00		-		2.00		1.00		-		5.00		-		-		1.00			24

5.2.24. rm No. 30394427 Clamades

Summary of reforestation

Table 2. Categorization of reforested area.

Farm No. 30394427 - Clamades					
Species planted		Initial dist. (m)	Tree/ha	Planting year	Reforested area/species (ha)
Common name	Scientific name			2023	
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.68	1.68
Bullywood	*Terminalia amazonia*	3x4	833	6.58	6.58
Santos Mahogany	*Myroxylon balsamum*	3x4	833	0.63	0.63
Mahogany	*Swietenia macrophylla*	3x4	833	3.81	3.81
Spanish Cedar	*Cedrela odorata*	3x4	833	1.73	1.73
Rosewood	*Dalbergia retusa*	3x4	833	15.55	15.55
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.53	3.53
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	1.00	1.00
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	5.39	5.39
Teak	*Tectona grandis*	5x4	500	9.93	9.93
Total, reforested				**49.83**	**49.83**
Protection area					2.16
Stream area					3.50
Infrastructure					2.11
Total Area					**57.60**

Fertilization Plan 2024

For this particular year, the entire plantation was treated with DRENSH, a liquid fertilizer applied to the roots to stimulate root growth, resulting in healthier and faster-growing plants. Fifteen days later, 3 oz of granular fertilizer was applied.

Field observations showed increased seedling vigor and greater development of apical growth buds in Cedar and Mahogany. Therefore, it is recommended to apply this treatment to these species to promote rapid growth and improve the management of *H. grandella*.

Map of the farm

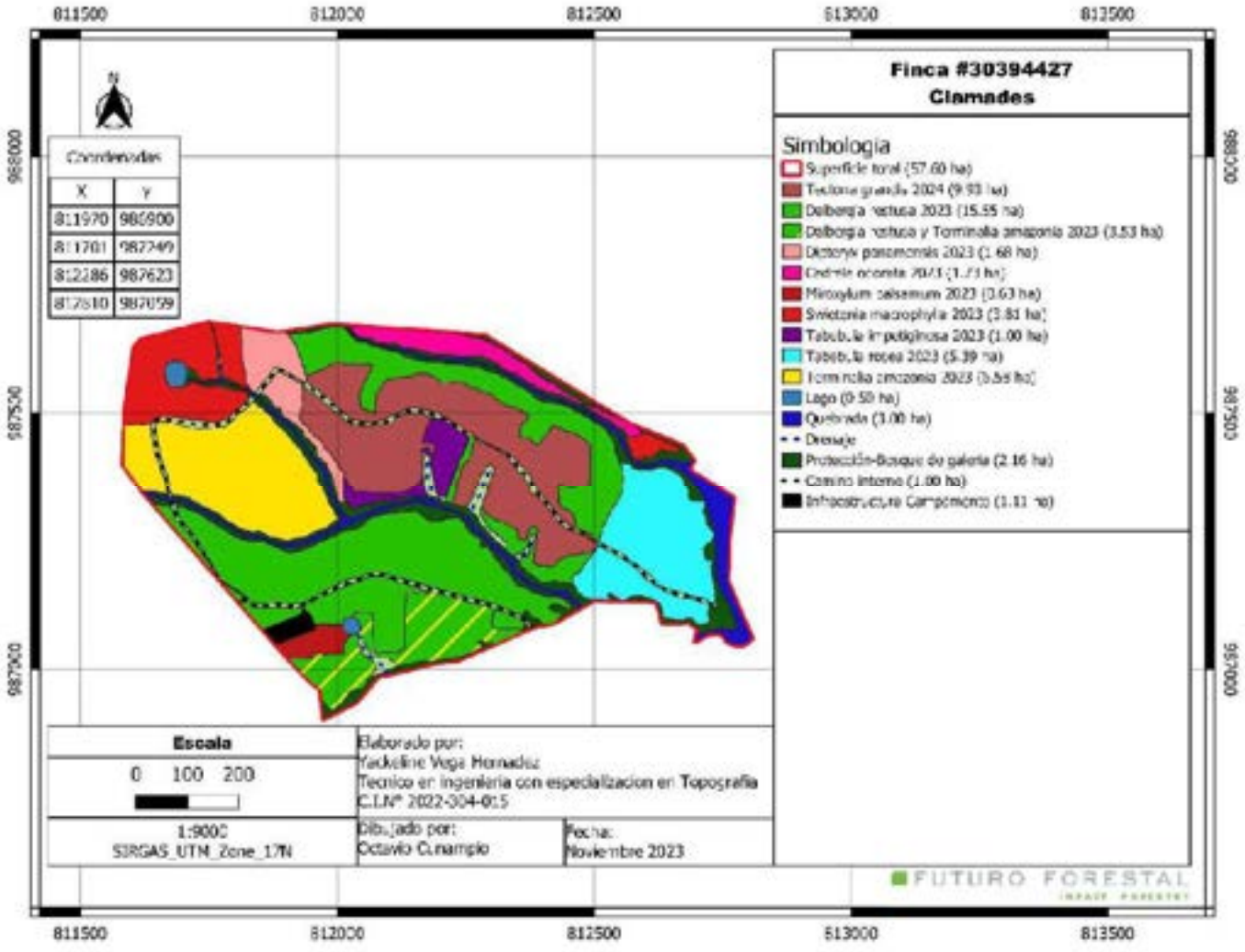


FIGURE 33. MAPA OF CLAMADES FARM (NO. 30394427).

Table 3. Executed AOP 2024

FINCA 30394427 CLAMADES																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	1.00	0	-	0	-	0	-	0	2.00	0	-	0	4.00	0	-	0	-	0	-	0	-	-	7
Capacitación	#N/D		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	3.00	0	-	-	3
Construcción de Caseta	I8		-	0.00	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Control de maleza - mecanico - Guira	#N/D		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	20.00	0	-	0	-	0	26.00	-	46
Control de maleza - químico-Bomba Mochila	M1		-	0.00	-	1.6	-	0	-	0	-	0	23.00	1.6	-	0	-	1.6	20.00	0	-	0	-	0	-	5	43
Control de maleza manual - Corte Bejuco	M8		-	12.50	2.00	**0.5**	5.00	**0.5**	13.00	**0.5**	4.00	**0**	4.00	**0.5**	5.00	**0.5**	-	**0.5**	-	**0.5**	-	**0**	4.00	**0**	-	**16**	**37**
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	4	-	0	-	0	-	0	87.00	4	2.00	0	-	4	-	0	3.00	0	-	0	-	12	92
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	-	0	-	0	96.00	0	35.00	0	-	0	18.00	0	99.00	0	21.00	0	55.00	0	2.00	-	326
Control de Maleza-Química en Franja	M39		-	0.00	-		-		-		19.00		31.00		-		-		50.00		-		19.00		-		119
Control fitosanitario manual - Arrieras	M13		-	6.85	-	6.1	-	0.5	-	0.5	-	0	1.00	6.1	1.00	0.5	1.00	6.1	-	0.5	1.00	0	-	0	8.00	33	12
Control fitosanitario manual - Hypsipyla grandella	M14		-	7.00	5.00		3.00		2.00		4.00		8.00		9.00		2.00		19.00		12.00		20.00		10.00		94
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	2.00	1.00		2.00		2.00		6.00		5.00		7.00		2.00		4.00		8.00		2.00		5.00		44
CPC Incendios-Establecer rondas contrafuegos	M49		2.00	0.00	8.00		-		5.00		-		-		-		-		-		-		-		-		15
Despeje	M26		-	0.00	-		-		-		-		2.00		23.00		1.00		-		10.00		5.00		9.00		50

Enderezado de plantas	M25		2.00	0.00	-		-		-		-		5.00		20.00		10.00		-		3.00		3.00		-		43
Fertilización foliar	M15		-	0.00	-		-		-		2.00		19.00		-		-		-		-		-		-		21
Fertilización granular	M16		-	0.00	-		-		-		-		-		45.00		-		10.00		-		7.00		-		62
Limpieza y mantenimiento de infraestructura	I7		-	0.00	-		-		-		-		1.00		-		6.00		2.00		-		4.00		-		13
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		27.00		10.00		-		53.00		5.00		-		-		95
Mantenimiento de cercas	I4		3.00	0.00	-		-		-		-		3.00		-		-		-		-		-		6.00		12
Operador de Motosierra	I19		-	0.00	1.00		-		-		-		2.00		-		4.00		2.00		-		-		-		9
Poda de formación	M18		-	0.00	18.00		16.00		19.00		-		4.00		2.00		-		-		4.00		-		2.00		65
Replantado	#N/D		-	0.00	-		-		-		-		-		28.00		-		12.00		-		-		-		40
Rodaja Orgánica	M33		97.00	0.00	-		100.00		47.00		-		-		-		-		-		-		6.00		22.00		**272**
Tramite Trabajadores	M54		-	0.00	-		-		5.00		3.00		-		-		-		-		-		6.00		8.00		**22**
Grand Total			104.00	28.35	37.00	12.20	126.00	1.00	93.00	1.00	134.00	-	259.00	12.20	152.00	1.00	48.00	12.20	291.00	1.00	67.00	-	134.00	-	98.00		**1,543**

5.2.25. Farm No. 6087 Teófilo Herrera

Summary of reforestation

Table 4. Categorization of reforested area.

Farm No. 6087 - Teófilo Herrera					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	5.4	5.4
Mahogany	*Swietenia macrophylla*	3x4	833	0.97	0.97
Spanish Cedar	*Cedrela odorata*	3x4	833	1.35	1.35
Rosewood	*Dalbergia retusa*	3x4	833	0.30	0.30
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	12.93	12.93
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	1.43	1.43
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	3.78	3.78
Teak	*Tectona grandis*	5x4	500	7.80	7.80
Total, reforested				**33.96**	**33.96**
Protection area					7.77
Stream area					1.80
Total Area					**43.53**

In 2024, we experienced three (03) strong wind events that bent 80 % of the trees in the Teak plantation (Tg22). However, there were no financial losses or damages, as the farm staff straightened the trees to prevent loss of trunk quality, which could negatively impact the wood's value in the future (sales penalties for curved pieces).

We recovered 1.10 ha in the Rosewood – Bullywood lot (*Dalbergia retusa* and *Terminalia amazonia*) by replanting 932 seedlings.

Map of the farm

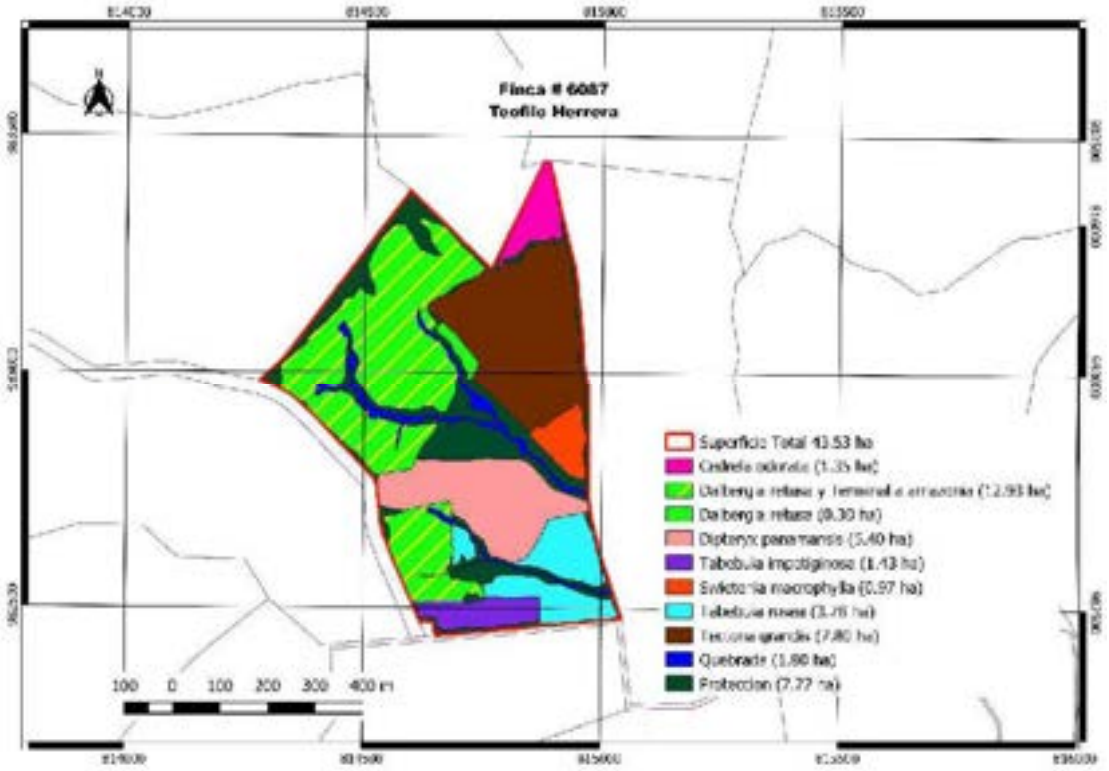


FIGURE 34. MAP OF TEÓFILO HERRERA FARM (NO. 6087).

Monitoring and growth data

With this first monitoring, good results were obtained for the species *Tectona grandis*, showing high annual growth increments. Among the native species, *Tabebuia rosea* recorded the highest average and annual increase in total height. Ideal results are expected in the following monitoring cycles, reflecting the continuous growth of the planted species.

Natives

Table 5. *Growth data*

Darién			Growth data: Teófilo Herrera			2022		
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	0.64	NA	0.32
Rosy Trumpet Tree	*Tabebuia rosea*	2022	jun-24	2.0	NA	1.23	NA	0.62
Mahogany	*Swietenia macrophylla*	2022	jun-24	2.0	NA	0.61	NA	0.31

Teak

Table 6. *Growth data*

Darién			Growth data: Teófilo Herrera			2022	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2.0	5.38	4.84	2.69	2.42

Table 7. Executed AOP 2024

FINCA 6087																													
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales			
Row Labels				Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	
Ayudante Operador de Motosierra	I20		3.00	0.00	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	4.00	0	-	0	-	0	2.00	-	10		
Control de maleza - mecanico - Guira	M9		-	0.00	5.00	0	-	0	-	0	-	0	4.00	0	14.00	0	-	0	-	0	16.00	0	-	0	-	-	39		
Control de maleza - mecánico-Tractor	M10		2.00	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2		
Control de maleza - químico-Bomba Mochila	M1		-	0.00	-	0	-	0	-	0	19.00	0	-	0	50.00	0	21.00	0	-	13.6	4.00	0	2.00	0	-	14	96		
Control de maleza manual - Corte Bejuco	M8		-	8.50	4.00	1	-	1	-	1	-	0	-	1	1.00	1	-	1	-	1	-	0	-	0	-	16	5		
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	4.00	**0**	2.00	**0**	-	**0**	-	**0**	20.00	**0**	23.00	**0**	-	**0**	5.00	**10**	13.00	**0**	-	**0**	-	**10**	**67**		
Control de maleza manual-chapia	M6		-	0.00	15.00	10	-	0	15.00	0	-	0	-	10	-	0	-	10	-	0	13.00	0	-	0	-	30	43		
Control de Maleza-Limpieza en Franja	M38		-	0.00	20.00	0	-	0	-	0	-	0	44.00	0	21.00	0	-	0	1.00	0	67.00	0	-	0	-	-	153		
Control de Maleza-Química en Franja	M39		-	0.00	-		-		-		-		-		11.00		-		-		20.00		8.00		-		39		
Control fitosanitario manual - Arrieras	M13		-	4.42	1.00	11	-	1	-	1	3.00	0	2.00	11	-	1	-	11	-	24.6	-	0	-	0	2.00	69	8		
Control fitosanitario manual - Hypsipyla grandella	M14		-	2.00	3.00		1.00		3.00		2.00		2.00		2.00		2.00		4.00		2.00		2.00		2.00		25		

Control fitosanitario-Químico-Hongos	M12	-	0.00	-		-		-		-		-		-		2.00		-		3.00		-		12.00		17
CPC Incendios - mantener rondas corta fuego	M46	1.00	0.00	14.00		-		4.00		-		-		-		-		-		-		-		-		19
CPC Incendios-Barrer Calles	M48	-	0.00	-		-		5.00		-		-		-		-		-		-		-		-		5
CPC Incendios-Vigilancia de incendios	M50	-	0.00	-		-		3.00		-		-		-		-		-		-		-		-		3
Deschuponado	M41	-	0.00	-		-		-		7.00		-		-		-		-		-		-		-		7
Deshije	M17	-	0.00	-		-		-		4.00		-		-		-		-		-		-		-		4
Despeje	M26	-	0.00	-		-		-		-		-		6.00		-		-		2.00		-		5.00		13
Encalado	M27	-	0.00	-		-		-		-		-		-		-		-		2.00		-		-		2
Enderezado de plantas	M25	-	0.00	-		-		-		-		64.00		45.00		47.00		-		13.00		-		-		169
Fertilización foliar	M15	-	0.00	-		-		-		-		-		14.00		-		-		-		-		-		14
Fertilización granular	M16	-	0.00	-		-		-		6.00		-		-		24.00		4.00		6.00		-		-		40
Manejo de Rebrote cocobolo	M40	-	0.00	-		-		-		-		-		27.00		-		-		15.00		-		-		42
Mantenimiento de cercas	I4	-	0.00	5.00		-		5.00		-		-		2.00		-		-		-		-		-		**12**
Operador de Motosierra	I19	3.00	0.00	-		-		-		-		1.00		-		-		4.00		-		-		2.00		**10**
Poda de formación	M18	-	0.00	16.00		32.00		8.00		12.00		-		4.00		4.00		6.00		-		-		-		**82**
Replantado	E29	-	0.00	-		-		-		-		-		-		-		6.00		-		-		-		**6**
Rodaja Orgánica	M33	-	0.00	18.00		6.00		-		-		-		-		-		-		-		-		17.00		**41**
Grand Total		9.00	14.92	105.00	22.00	41.00	2.00	43.00	2.00	53.00	-	138.00	22.00	220.00	2.00	100.00	22.00	34.00	49.20	176.00	-	12.00	-	42.00		**973**

5.2.26. Farm No. 30359853 Dalys García (La Esperanza)

Summary of reforestation

Table 8. Categorization of reforested area.

Farm No. 30359853 - Dalys García					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	6.93	6.93
Mahogany	*Swietenia macrophylla*	3x5	667	1.15	1.15
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	5.46	5.46
Total, reforested				**13.54**	**13.54**
Protection area					2.24
Stream area					0.23
Artificial lake					0.10
Infrastructure					0.16
Total Area					**16.27**

Map of the farm

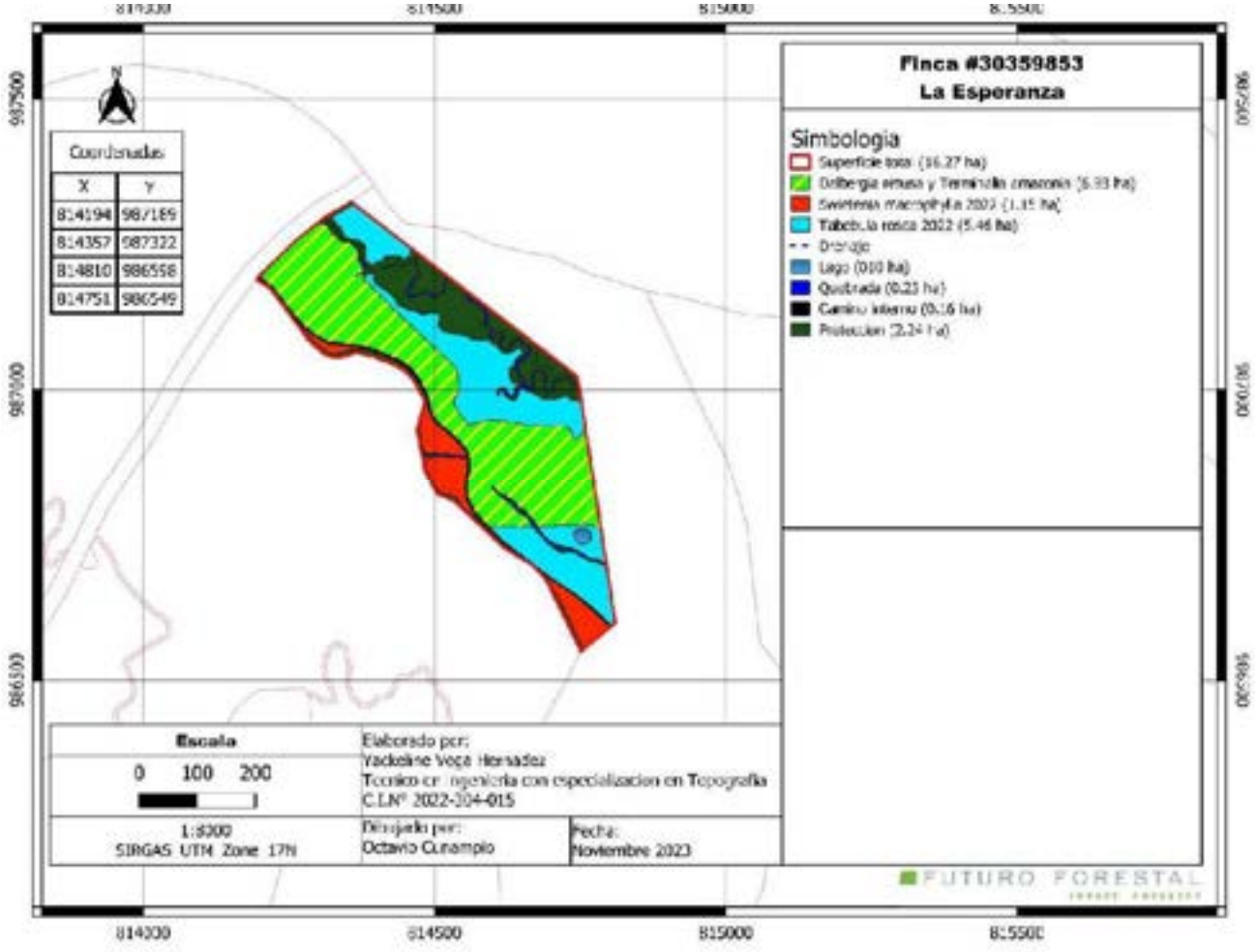


Figure 35. Map of La Esperanza farm (No. 30359853).

Table 9. Executed AOP 2024

FINCA 30359853																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9		13.00	14.50	-	0	-	0	3.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	15	16
Control de maleza manual - Corte Bejuco	M8		-	10.34	-	0	1.00	0	1.00	0	1.00	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	10	4
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	16.00	0	-	0	29.00	0	2.00	0	-	0	31.00	0	-	0	8.00	0	24.00	0	-	-	110
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	10.00	0	17.00	0	-	0	12.00	0	-	0	1.00	0	-	0	-	-	40
Control fitosanitario manual - Arrieras	M13		2.00	3.00	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	3	3
Control fitosanitario manual - Hypsipyla grandella	M14		-	0.00	3.00	**0**	1.00	**0**	2.00	**0**	4.00	**0**	-	**0**	3.00	**0**	4.00	**0**	2.00	**0**	3.00	**0**	4.00	**0**	-	-	26
Control fitosanitario-Químico-Hongos	M12		-	0.00	-	0	-	0	5.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	5
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	0.00	-	0	-	0	-	0	2.00	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	-	3
CPC Incendios - mantener rondas corta fuego	M46		2.00	0.00	3.00		-		-		-		-		-		-		-		-		5.00		-		10
CPC Incendios-Barrer Calles	M48		-	0.00	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	28	1
CPC Incendios-Vigilancia de incendios	M50		-	0.00	-		-		5.00		-		-		-		-		-		-		-		-		5
Deshije	M17		-	0.00	-		-		-		-		-		-		2.00		-		-		-		-		2
Despeje	M26		-	0.00	-		8.00		-		-		-		-		-		-		6.00		-		-		14

Enderezado de plantas	M25		-	0.00	-		-		-		-		-		1.00		1.00		-		-		-		-		2
Fertilización foliar	M15		-	0.00	-		-		-		-		-		1.00		10.00		-		-		-		-		11
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		9.00		-		-		-		-		9
Limpieza y mantenimiento de infraestructura	I7		-	0.00	-		-		-		-		-		-		-		-		-		1.00		-		1
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		7.00		3.00		4.00		10.00		5.00		8.00		-		37
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		-		-		-		-		-		-		5.00		-		5
Mantenimiento de cercas	I4		1.00	0.00	-		3.00		-		-		-		2.00		2.00		-		-		-		-		8
Plantado Manual	E26		-	0.00	-		-		-		-		-		-		-		1.00		-		-		-		1
Poda de formación	M18		6.00	0.00	-		-		9.00		7.00		4.00		4.00		2.00		1.00		-		-		-		33
Rodaja Orgánica	M33		5.00	0.00	-		5.00		5.00		-		-		-		-		-		-		-		-		15
Grand Total			29.00	27.84	6.00	-	34.00	-	31.00	-	54.00	-	31.00	-	14.00	-	77.00	-	14.00	-	23.00	-	48.00	-	-		361

5.2.27. Farm No. 30358742 Maite García (La Esperanza)

Summary of reforestation

Table 10. Categorization of reforested area.

Farm 30358742 - Maite García					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Mahogany	*Swietenia macrophylla*	3x4	833	0.83	0.83
Cativo (sp)	*Prioria copaifera*	3x4	833	0.38	0.38
Rosewood	*Dalbergia retusa*	3x4	833	1.84	1.84
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	1.98	1.98
Rosewood and Spanish Elm	*Dalbergia retusa* and *Cordia alliodora*	3x4	833	2.12	2.12
Teak	*Tectona grandis*	4x5	500	4.00	4.00
Total, reforested				**11.15**	**11.15**
Protection area					4.86
Stream area					0.26
Internal road					0.17
Total Area					**16.44**

Map of the farm

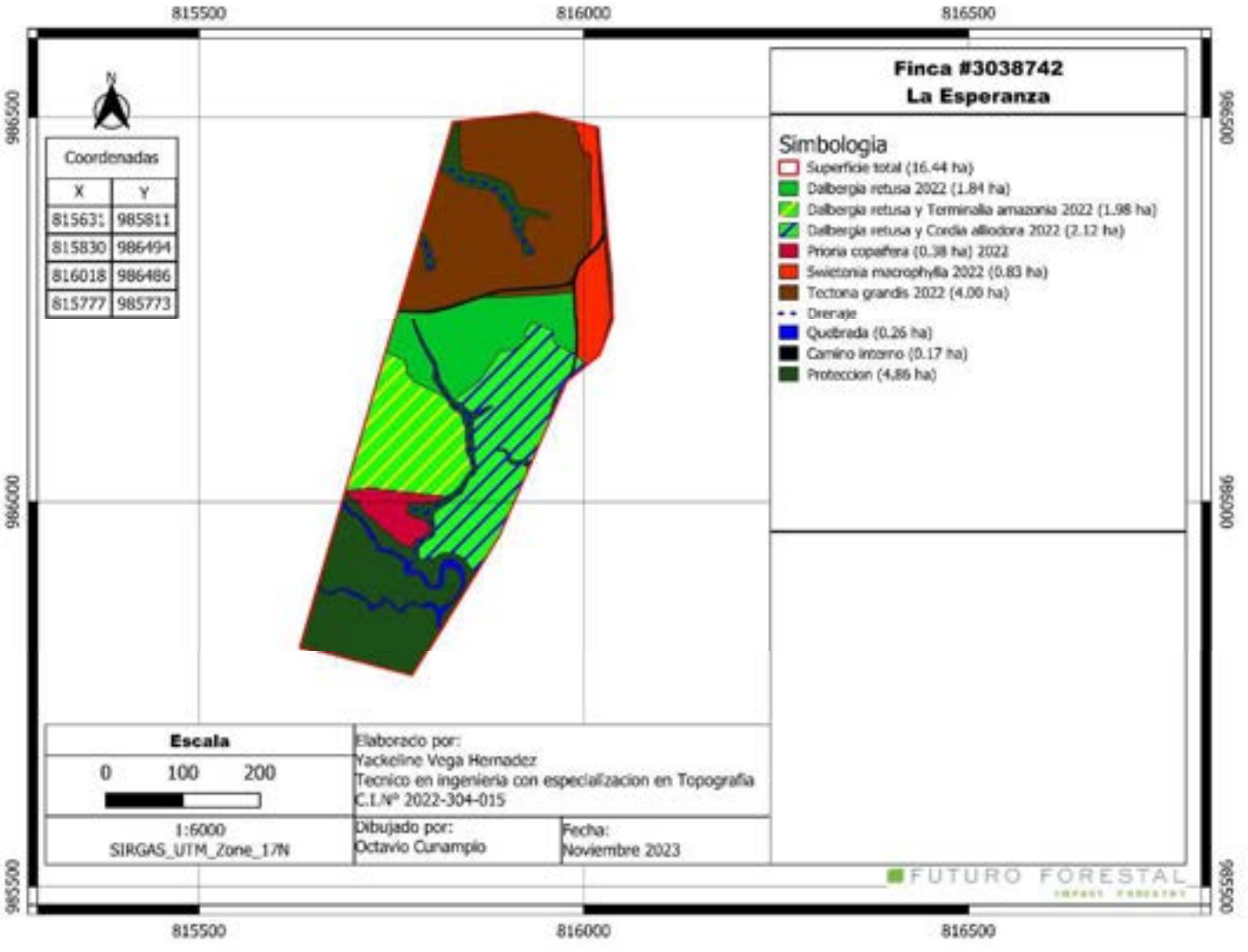


FIGURE 36. MAPA OF LA ESPERANZA FARM (NO. 30358742).

FINCA 30358742 GARCIA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9	-	4	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Control de maleza - químico-Bomba Mochila	M1	-	-	-	-	29	-	-	-	-	-	-	-	29	15	-	2	-	-	-	-	29	-	-	-	87	17
Control de maleza manual-chapia	M6	-	-	22	-	-	-	-	-	-	-	21	-	-	-	-	-	-	-	21	-	-	20	-	-	65	20
Control de Maleza-Limpieza en Franja	M38	-	23	-	-	-	-	-	17	-	-	-	7	-	34	-	-	-	25	-	-	-	21	-	-	-	127
Control de Maleza-Química en Franja	M39	-	-	-	-	-	-	-	4	-	-	-	3	-	5	-	-	-	10	-	-	-	-	-	-	-	22
Control fitosanitario manual - Arrieras	M13	1	-	1	-	1	1	1	-	1	-	1	1	1	-	1	-	1	-	1	-	1	-	1	-	**16**	**2**
Control fitosanitario manual - Hypsipyla grandella	M14	-	-	-	1	-	1	-	-	-	2	-	1	-	1	-	3	-	1	-	3	-	2	-	1	-	16
Control fitosanitario-Químico-Hypsipyla grandella	M11	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	4
CPC Incendios - mantener rondas corta fuego	M46	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1
CPC Incendios-Barrer Calles	M48	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168	3

Despeje	M26	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		4
Enderezado de plantas	M25	-	-	-	-	-	-	-	-	-	-	-	6	-	16	-	38	-	-	-	-	-	-	-	-		60
Fertilización foliar	M15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-		9
Fertilización granular	M16	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-		25
Manejo de Rebrote cocobolo	M40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	3		11
Mantenimiento de caminos internos	I2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-		4
Poda Alta	M43	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		4
Poda de formación	M18	35	2	-	-	-	8	-	3	-	-	8	6	3	-	-	-	-	4	-	-	8	-	3	-		23
Grand Total		36	29	24	6	30	14	-	31	18	4	30	24	33	72	1	52	1	65	23	12	38	47	4	4	335	360

5.2.28. Farm No. 30358613 Maite García (La Esperanza)

Summary of reforestation

Table 11. Categorization of reforested area.

Farm No. 30358613 - Maite García					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Mahogany	*Swietenia macrophylla*	3x4	833	0.18	0.18
Cativo (sp)	*Prioria copaifera*	3x4	833	1.32	1.32
Cativo (sp) and Wild Cashew	*Prioria copaifera and Anacardium excelsum*	3x4	833	0.40	0.40
Cativo (sp) and Rosy Trumpet Tree	*Prioria copaifera and Tabebuia rosea*	3x4	833	2.52	2.52
Spanish Cedar	*Cedrela odorata*	3x4	833	0.40	0.40
Rosewood and Bullywood	*Dalbergia retusa y Terminalia amazonia*	3x4	833	1.91	1.91
Wild Cashew	*Anacardium excelsum*	3x4	833	2.32	2.32
Guayacán Morado (sp)	*Tabebuia Impetiginosa*	3x4	833	2.24	2.24
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.80	0.80
Total, reforested				**12.09**	**12.09**
Protection area					3.31
Stream area					0.41
Artificial lake					0.13
Infrastructure					0.27
Internal road					0.17
Total Area					**16.38**

Map of the farm

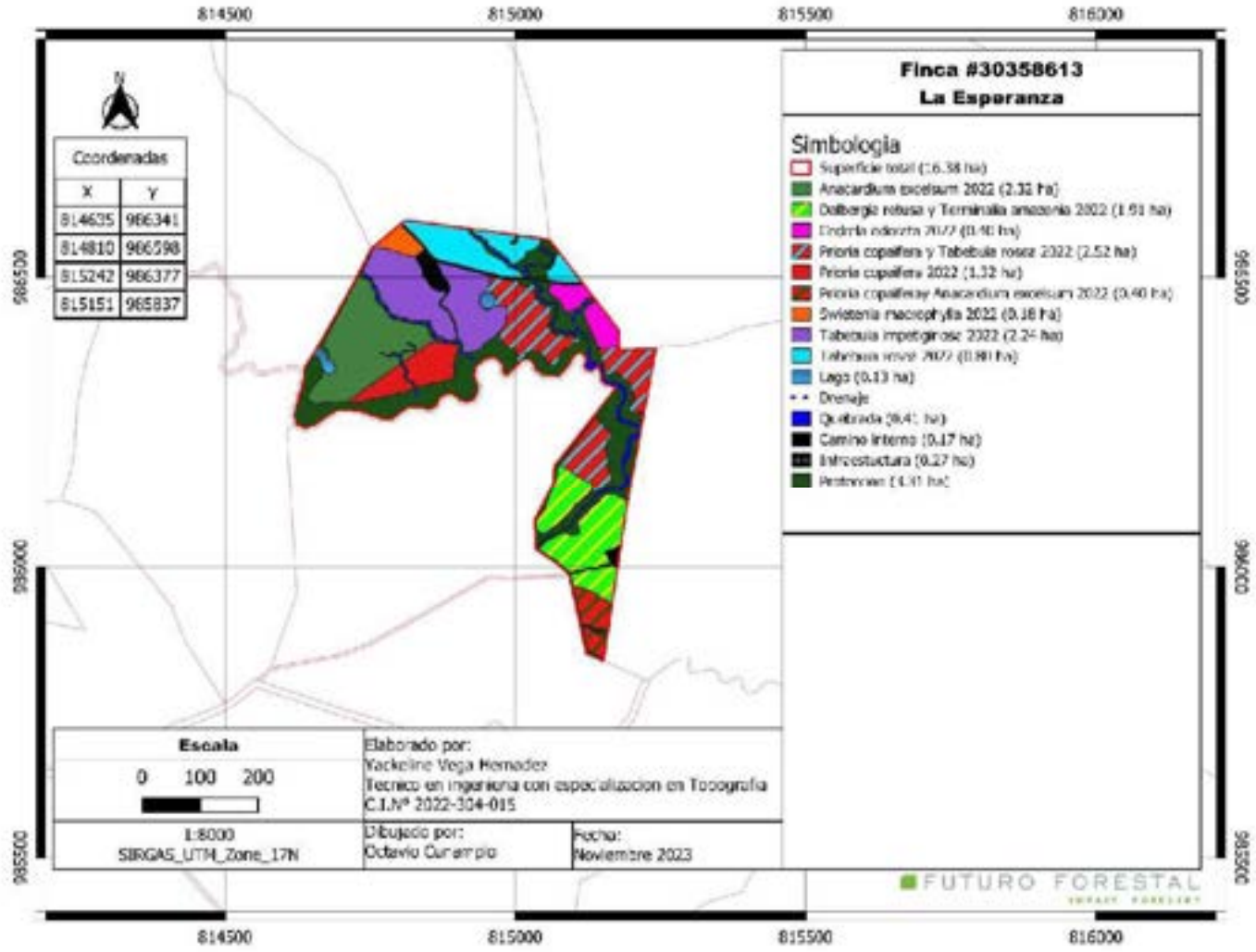


FIGURE 37. MAP OF LA ESPERANZA FARM (NO. 30358613).

Table 12. Executed AOP 2024

FINCA 30358613 ESPERANZA																													
DESCRIPCION			enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	6.00	0	1.00	0	-	-	8
Conservación de suelos	M45		-	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	-	1
Construcción de deposito	I10		-	0.00	-	0	-	0	-	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	-	1
Control de maleza - mecanico - Guira	M9		2.00	0.00	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2
Control de maleza manual - Corte Bejuco	M8		1.00	9.49	-	0.99	-	0.99	1.00	0.99	-	0	1.00	0.99	-	0.99	-	0.99	-	0.99	-	0	-	0	3.00	16	6
Control de Maleza-Limpieza en Franja	M38		15.00	0.00	-	**0**	-	**0**	-	**0**	8.00	**0**	17.00	**0**	-	**0**	26.00	**0**	-	**0**	-	**0**	10.00	**0**	13.00	**-**	**89**
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	5.00	0	6.00	0	-	0	3.00	0	6.00	0	-	0	-	0	-	-	20
Control fitosanitario manual - Arrieras	M13		-	3.50	-	0.3	-	0.3	-	0.3	1.00	0	-	0.3	-	0.3	-	0.3	-	0.3	-	0	-	0	-	6	1
Control fitosanitario manual - Hypsipyla grandella	M14		-	0.30	2.00		1.00		2.00		4.00		2.00		6.00		-		2.00		1.00		2.00		-		22
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	0.00	-	1.29	-	1.29	-	1.29	-	0	1.00	1.29	-	1.29	-	1.29	-	1.29	-	0	-	0	-	22	1
CPC Incendios - mantener rondas corta fuego	M46		2.00	0.00	10.00		-		3.00		-		-		-		-		-		-		2.00		-		17
CPC Incendios-Barrer Calles	M48		-	0.00	-		-		1.00		-		-		-		-		-		-		-		-		1
Despeje	M26		-	0.00	-		2.00		-		-		-		-		-		-		-		1.00		-		3
Enderezado de plantas	M25		-	0.00	-		-		-		-		-		2.00		3.00		-		-		1.00		-		6
Fertilización foliar	M15		-	0.00	-		-		-		-		-		-		14.00		-		-		-		-		14
Fertilización granular	M16		-	0.00	-		-		-		-		-		-		11.00		-		-		-		-		11
Limpieza y mantenimiento de infraestructura	I7		-	0.00	-		1.00		3.00		3.00		-		-		-		-		-		6.00		-		13

Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		-		-		-		7.00		1.00		-		8
Mantenimiento de caminos internos	I2		-	0.00	-		-		-		-		-		-		-		2.00		-		-		-		2
Mantenimiento de cercas	I4		-	0.00	-		-		-		-		1.00		-		-		-		-		-		-		1
Operador de Motosierra	I19		-	0.00	-		-		-		-		-		-		1.00		-		6.00		1.00		-		8
Plantado Manual	E26		-	0.00	-		-		-		-		-		-		-		2.00		-		-		-		2
Poda de formación	M18		2.00	0.00	-		4.00		4.00		-		3.00		1.00		3.00		2.00		-		-		-		19
Rodaja Orgánica	M33		2.00	0.00	-		6.00		-		-		-		-		-		-		-		-		-		8
Tramite Trabajadores	M54		-	0.00	-		-		5.00		6.00		-		-		-		-		-		10.00		19.00		40
Traslado hasta lugar de trabajo	M34		-	0.00	-		-		-		-		-		-		-		-		-		1.00		-		1
Grand Total			24.00	13.29	12.00	2.58	14.00	2.58	19.00	2.58	27.00	-	32.00	2.58	9.00	2.58	62.00	2.58	14.00	2.58	20.00	-	37.00	-	35.00		305

5.2.29. Farm No. 30359110 Edilberta García (La Esperanza)

Summary of reforestation

Table 13. Categorization of reforested area.

Farm 30359110 - Edilberta García						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Cativo (sp) and Wild Cashew	*Prioria copaifera and Anacardium excelsum*	3x4	833	1.18		1.18
Spanish Cedar	*Cedrela odorata*	3x4	833	0.40		0.40
Rosewood	*Dalbergia retusa*	3x4	833	0.38		0.38
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	3.71	0.21	3.92
Rosy Trumpet Tree and Cativo (sp)	*Tabebuia rosea and Prioria copaifera*	3x4	833	6.07		6.07
Total, reforested				**11.74**	**0.21**	**11.95**
Protection area						4.01
Stream area						0.36
Infrastructure						0.04
Internal road						0.13
Total Area						**16.49**

Mapa of the farm

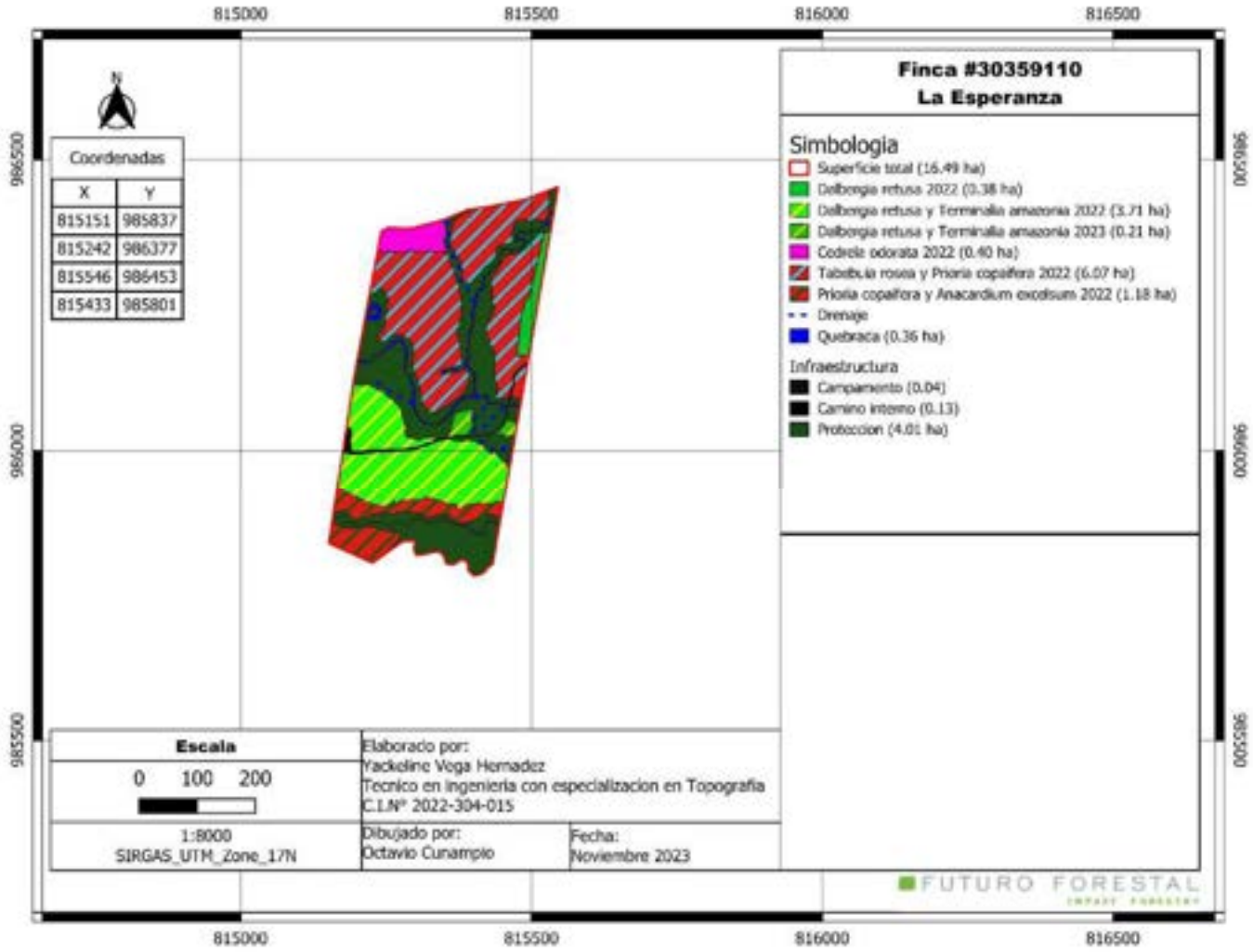


FIGURE 38. MAP OF LA ESPERANZA FARM (NO. 30359110).

Table 14. Executed AOP 2024

FINCA 30359110 ESPERANZA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Control de maleza manual - Corte Bejuco	M8	9	-	13	-	5	-	5	2	5	-	-	-	5	-	5	-	5	-	5	1	-	-	-	-	54	3
Control de maleza manual - rodajas de mantenimiento	M7	-	-	-	-	8	-	-	-	-	-	-	-	8	-	-	1	8	-	-	-	-	-	-	-	24	1
Control de Maleza-Limpieza en Franja	M38	-	14	-	-	-	-	-	-	-	3	-	34	-	5	-	2	-	25	-	-	-	45	-	-	-	128
Control de Maleza-Química en Franja	M39	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	6	-	7	-	-	-	-	-	-	-	24
Control fitosanitario manual - Hypsipyla grandella	M14	0	-	1	1	-	-	-	-	-	3	-	-	-	2	-	2	-	1	-	1	-	1	-	-	**1**	**11**
Control fitosanitario-Químico-Hypsipyla grandella	M11	0	-	0	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Despeje	M26	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Enderezado de plantas	M25	-	-	-	-		-		-		-		1		3		2		-		-		-		-		6
Fertilización foliar	M15	-	-	-	-	13	-	5	-	5	-	-	-	13	-	5	9	13	-	5	-	-	-	-	-	79	9
Fertilización granular	M16	15	-	8	-		-		-		-		-		-		12		5		-		-		-		17
Manejo de Rebrote cocobolo	M40	-	-	-	-		-		-		-		-		-		-		1		9		-		-		10
Mantenimiento de caminos internos	I2	-	-	-	-		-		-		-		-		-		-		7		-		2		-		9
Mantenimiento de cercas	I4	-	-	-	-		1		-		-		-		-		-		-		-		-		-		1
Plantado Manual	E26	-	-	-	-		-		-		-		-		-		-		8		-		-		-		8
Poda de formación	M18	11	-	-	-		8		5		-		4		3		1		-		-		-		-		21
Rodaja Orgánica	M33	-	-	-	2		9		-		-		-		-		-		-		-		-		-		11
Grand Total		**35**	**18**	**22**	**3**	**25**	**20**	**9**	**7**	**9**	**7**	**-**	**50**	**25**	**13**	**9**	**35**	**25**	**54**	**9**	**11**	**-**	**48**	**-**	**-**	**158**	**266**

5.2.30. Farm No. 30359029 Bélgica García (La Esperanza)

Summary of reforestation

Table 15. Categorization of reforested area.

Farm No. 30359029 - Bélgica García							
Species planted		Initial dist. (m)	Tree/ha	Planting year			Reforested area/species (ha)
Common name	Scientific name			2022	2023	2024	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	4.31			4.31
Rosewood and Spanish Elm	*Dalbergia retusa* and *Cordia alliodora*	3x4	833	3.16	2.57	3.60	9.33
Rosewood	*Dalbergia retusa*	3x4	833	0.75			0.75
Spanish Elm	*Cordia alliodora*	3x4	833	0.45			0.45
Total, reforested				**8.67**	**2.57**	**3.60**	**14.84**
Protection area							1.45
Stream area							0.18
Internal road							0.12
Total Area							**16.59**

Post-fire plantation recovery management

The Rosewood – Spanish Elm lot, planted in 2023, was affected by a forest fire originating from a neighboring farm, impacting 3.6 hectares. The regrowth of Rosewood was managed, and in areas where Spanish Elm did not survive (25 %), it was replaced with Rosewood.

An organic mulch was applied to young plants to support their survival during the summer of 2025. Additionally, DRENSH fertilization and 3 oz of granular fertilizer per plant were applied to stimulate growth and unify the plantation.

Map of the farm

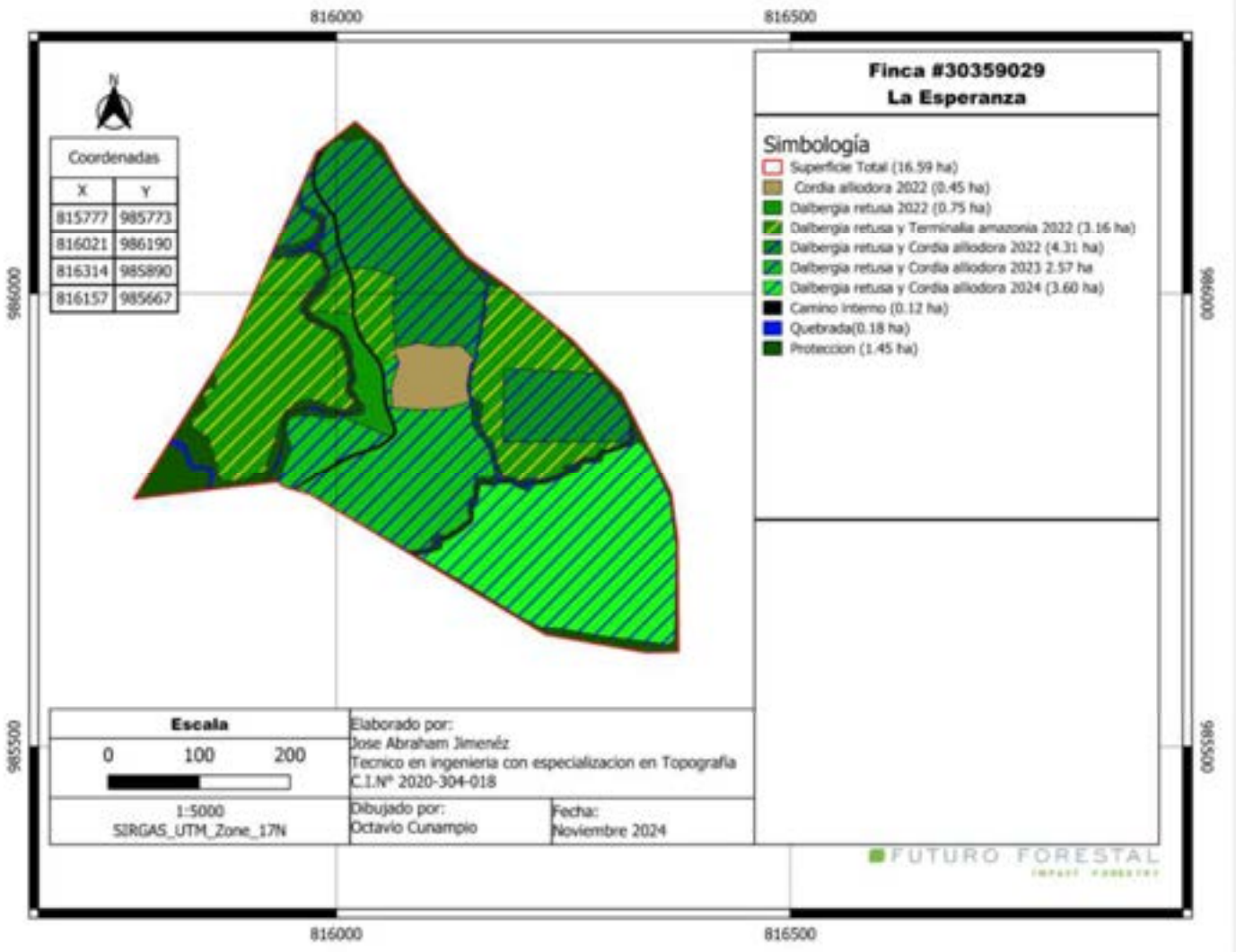


FIGURE 39. MAP OF LA ESPERANZA FARM (NO. 30359029).

Table 16. Executed AOP 2024

FINCA 30359029																																			
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - mecanico - Guira	M9		4.00	0.00	-	0	-	0	-	0	15.00	0	7.00	0	-	0	-	0	-	0	-	0	-	0	-	-	26
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	0	-	0	-	0	10.00	0	10.00	0	-	0	-	0	-	0	-	0	-	0	-	-	20
Control de Maleza-Limpieza en Franja	M38		59.00	0.00	-	0	-	0	15.00	0	-	0	13.00	0	-	0	-	0	60.00	0	-	0	-	0	9.00	-	156
Control de Maleza-Química en Franja	M39		-	0.00	-	0	-	0	-	0	-	0	23.00	0	-	0	5.00	0	-	0	8.00	0	-	0	-	-	36
Control fitosanitario manual - Arrieras	M13		-	3.80	-	0	2.00	0	-	0	1.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	4	3
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	17.00	**0**	-	**0**	5.00	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	10.00	**0**	-	**-**	**32**
CPC Incendios-Barrer Calles	M48		-	0.00	-	0	-	0	3.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	3
CPC Incendios-Vigilancia de incendios	M50		-	0.00	2.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	2
Deshije	M17		-	0.00	-		-		-		-		5.00		-		-		1.00		-		-		-		6
Despeje	M26		-	0.00	14.00	0	30.00	0	-	0	-	0	14.00	0	12.00	0	24.00	0	-	0	-	0	-	0	-	4	94
Enderezado de plantas	M25		-	0.00	-		-		-		-		-		-		-		3.00		-		-		-		3
Fertilización foliar	M15		-	0.00	-		-		-		-		2.00		-		8.00		-		-		-		-		10

Fertilización granular	M16		-	0.00	-		-		-		-		-		-		-		21.00		-		-		-		21
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		2.00		-		-		-		-		22.00		2.00		2.00		28
Mantenimiento de cercas	I4		-	0.00	2.00		-		-		-		2.00		-		-		-		-		-		-		4
Poda de formación	M18		2.00	0.00	-		13.00		-		5.00		24.00		-		-		8.00		-		9.00		-		61
Replantado	E29		-	0.00	-		-		-		-		-		11.00		-		-		-		-		-		11
Rodaja Orgánica	M33		-	0.00	8.00		5.00		1.00		-		-		-		-		-		-		17.00		-		31
Grand Total			65.00	3.80	43.00	-	50.00	-	24.00	-	33.00	-	100.00	-	23.00	-	37.00	-	93.00	-	30.00	-	38.00	-	11.00		547

5.2.31. Farm No. 1962 Miguel García (La Esperanza)

Summary of reforestation

Table 17. Categorization of reforested area.

Farm No. 1962 - Miguel García						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	6.09	1.05	7.14
Mahogany	*Swietenia macrophylla*	3x4	833	1.66		1.66
Spanish Cedar	*Cedrela odorata*	3x4	833	2.12		2.12
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	0.70		0.70
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.20	0.52	1.72
Teak	*Tectona grandis*	4x5	500	21.08		21.08
Total, reforested				**32.85**	**1.57**	**34.42**
Protection area						17.21
Stream area						0.52
Artificial lake						0.20
Internal road						0.48
Total Area						**52.83**

The most relevant event for this farm in 2024 was the straightening of the *Tectona grandis* plantation after three (03) unforeseen incidents of strong winds accompanied by rain. These winds bent 70 % of the trees, which were straightened within 72 hours to prevent losses in trunk quality.

Map of the farm

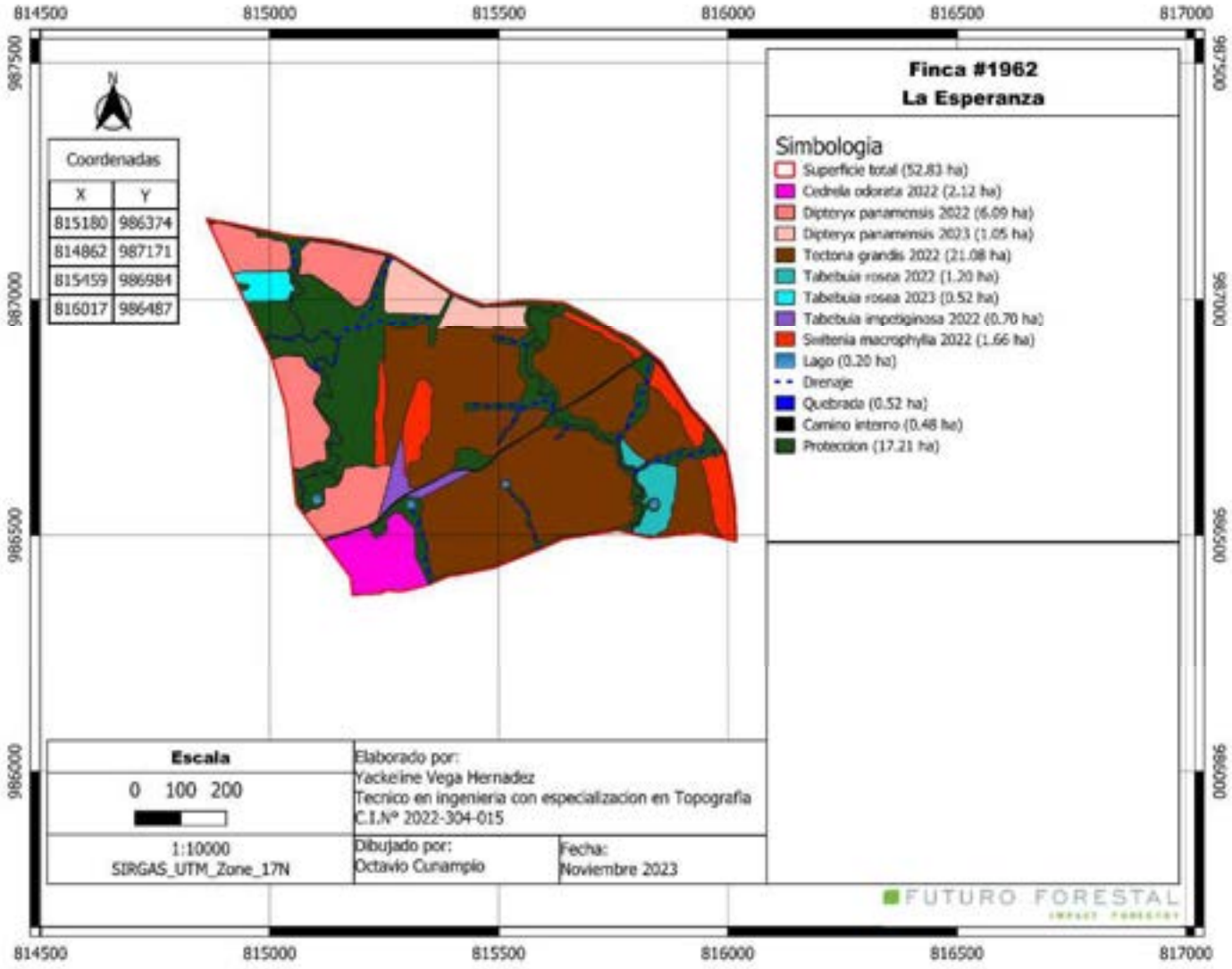


FIGURE 40. MAPA OF LA ESPERANZA FARM (NO. 1962).

Table 18. Executed AOP 2024

FINCA 1962 ESPERANZA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Etiquetas de fila		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	-	-	-	1	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Control de maleza - mecanico - Guira	M9	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Control de maleza - químico-Bomba Mochila	M1	-	-	-	-	67	4	-	18	-	-	57	48	10	25	-	3	57	-	-	17	10	-	57	-	259	115
Control de maleza manual - Corte Bejuco	M8	3	-	9	-	9	-	9	1	9	4	9	-	9	8	9	-	9	-	9	1	9	-	8	-	98	14
Control de maleza manual-chapia	M6	-	-	82	-	-	-	-	-	15	-	10	-	-	-	57	-	-	11	25	21	57	-	-	-	245	32
Control de Maleza-Limpieza en Franja	M38	-	23	-	-	-	-	-	30	-	57	-	8	-	39	-	30	-	27	-	45	-	16	-	16	-	**291**
Control de Maleza-Química en Franja	M39	-	-	-	-	-	4	-	2	-	15	-	3	-	7	-	4	-	17	-	-	-	8	-	-	-	60
Control fitosanitario manual - Arrieras	M13	-	-	3	-	3	-	3	-	3	1	3	-	3	-	3	-	3	-	3	-	3	-	3	-	38	1
Control fitosanitario manual - Hypsipyla grandella	M14	-	-	3	9	3	-	3	2	3	9	3	7	3	9	3	7	3	5	3	12	3	9	3	3	28	72
Control fitosanitario-Químico-Hypsipyla grandella	M11	-	-	1	-	1	-	1	-	1	1	1	-	1	3	1	-	1	-	1	3	1	-	0	-	12	7
CPC Incendios - mantener rondas corta fuego	M46	-	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
CPC Incendios-Barrer Calles	M48	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Deschuponado	M41	-	-	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Enderezado de plantas	M25	-	-	-	-	-	-	-	-	-	3	-	29	-	63	-	272	-	-	-	35	-	5	-	-	-	407
Fertilización foliar	M15	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	11	-	-	2	-	-	-	-	-	4	11
Fertilización granular	M16	3	-	-	-	-	-	-	-	47	-	-	-	-	-	-	13	-	7	-	-	-	2	-	-	49	22
Manejo de Rebrote cocobolo	M40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	4
Mantenimiento de caminos internos	I2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	3
Mantenimiento de cercas	I4	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Operador de Motosierra	I19	-	-	-	1	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	5
Plantado Manual	E26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	3
Poda Alta	M43	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Poda de formación	M18	-	19	-	5	-	-	-	3	-	9	15	-	-	10	-	4	-	20	-	-	15	-	-	-	30	70
Rodaja Orgánica	M33	-	46	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	60
Traslado hasta lugar de trabajo	M34	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Total general		**6**	**122**	**98**	**26**	**83**	**9**	**18**	**66**	**77**	**130**	**98**	**99**	**26**	**164**	**73**	**344**	**73**	**92**	**42**	**138**	**98**	**41**	**71**	**26**	**762**	**-**

5.2.32. Farm No. 30359842 Cati García (La Esperanza)

Summary of reforestation

Table 19. Categorization of reforested area.

Farm No. 30359842 - Cati García						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Cativo (sp) and Wild Cashew	*Prioria copaifera and Anacardium excelsum*	3x5	667	0.16		0.16
Rosewood	*Dalbergia retusa*	3x4	833	1.84		1.84
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	1.24	1.08	2.32
Rosy Trumpet Tree and Cativo (sp)	*Tabebuia rosea y Prioria copaifera*	3x4	833	2.27		2.27
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.92		0.92
Teak	*Tectona grandis*	4x5	500	2.43		2.43
Total, reforested				**8.86**	**1.08**	**9.94**
Protection area						6.16
Stream area						0.28
Internal road						0.10
Total Area						**16.48**

Map of the farm



FIGURE 41. MAP OF LA ESPERANZA FARM (NO. 30359842).

Table 20. Executed AOP 2024

FINCA 9842 ESPERANZA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Control de maleza - químico-Bomba Mochila	M1	-	-	-	-	70	-	-	-	-	-	57	-	13	4	-	-	57	-	-	-	13	-	57	-	266	4
Control de maleza manual - Corte Bejuco	M8	9	-	9	-	9	-	9	1	9	-	9	-	9	-	9	-	9	-	9	1	9	-	8	-	110	2
Control de maleza manual - rodajas de mantenimiento	M7	-	-	-	-	71	-	15	-	-	-	57	-	29	-	-	-	57	-	-	-	14	1	15	-	257	1
Control de maleza manual-chapia	M6	-	-	85	-	-	-	-	-	15	-	13	-	-	-	57	-	-	-	28	-	57	13	-	-	254	13
Control de Maleza-Limpieza en Franja	M38	-	2	-	-	-	-	-	22	-	-	-	48	-	9	-	-	-	34	-	-	-	14	-	-	-	**129**
Control de Maleza-Química en Franja	M39	-	-	-	-	-	-	-	1	-	-	-	-	-	6	-	6	-	4	-	-	-	-	-	-	-	17
Control fitosanitario manual - Arrieras	M13	4	-	4	-	4	1	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	4	-	44	1
CPC Incendios - mantener rondas corta fuego	M46	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		2
Deschuponado	M41	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	931	1
Despeje	M26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-		1
Enderezado de plantas	M25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-		25
Fertilización foliar	M15	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	7	-	-	2	-	-	-	-	-		7
Fertilización granular	M16	-	-	-	-	-	-	1	-	48	-	-	-	-	-	-	-	-	16	-	-	-	-	-	-		16
Manejo de Rebrote cocobolo	M40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	7	-	-	-	1		9
Mantenimiento de caminos internos	I2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	3	-	-		5
Operador de Motosierra	I19	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		2
Plantado Manual	E26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-		2
Poda de formación	M18	60	3	5	-	-	4	-	1	-	-	15	8	-	5	-	-	-	2	-	-	15	-	-	-		23
Rodaja Orgánica	M33	-	-	-	10	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		12

Grand Total	73	5	103	16	153	7	31	25	76	1	154	58	54	24	70	38	127	60	42	8	111	31	84	1	1,861	274

Monitoring and growth data

Among the monitored native species, *Tabebuia rosea* exhibits the best growth, with high annual increment rates. Similarly, *Dalbergia retusa* shows a high average height, indicating good field management and adaptation to site conditions.

On the other hand, *Tectona grandis* displayed ideal results for its age, with high annual increment rates in both diameter and total height.

Natives

Table 21. *Growth data*

Darién **Growth data: La Esperanza** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	0.61	NA	0.31
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2.0	NA	2.03	NA	1.02
Mahogany	*Swietenia macrophylla*	2022	jun-24	2.0	NA	1.61	NA	0.81
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	NA	3.32	NA	1.66
Cativo (sp)	*Prioria copaifera*	2022	jun-24	2.0	NA	0.80	NA	0.40
Guayacán Morado (sp)	*Tabebuia impetiginosa*	2022	jun-24	2.0	NA	2.27	NA	1.14
Rosy Trumpet Tree	*Tabebuia rosea*	2022	jun-24	2.0	6.68	6.00	3.34	3.00

Teak

Table 22. *Growth data*

Darién **Growth data: La Esperanza** **2022** **Teak**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	5.39	5.23	2.70	2.62

5.2.33. Farm No. 190400 David Fernández (Contenedores)

Summary of reforestation

Table 23. Categorization of reforested area.

Farm 190400 - David Fernández					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Spanish Cedar	*Cedrela odorata*	3x4	833	1.34	1.34
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.21	1.21
Santos Mahogany	*Myroxylon balsamum*	3x4	833	0.39	0.39
Cativo (sp)	*Prioria copaifera*	3x4	833	1.00	1.00
Mahogany	*Swietenia macrophylla*	3x4	833	2.26	2.26
Rosewood	*Dalbergia retusa*	3x4	833	5.59	5.59
Total, reforested				**11.79**	**11.79**
Protection area					9.02
Drainage area					0.20
Infrastructure					2.00
Road					0.84
Total Area					**23.85**

Map of the farm

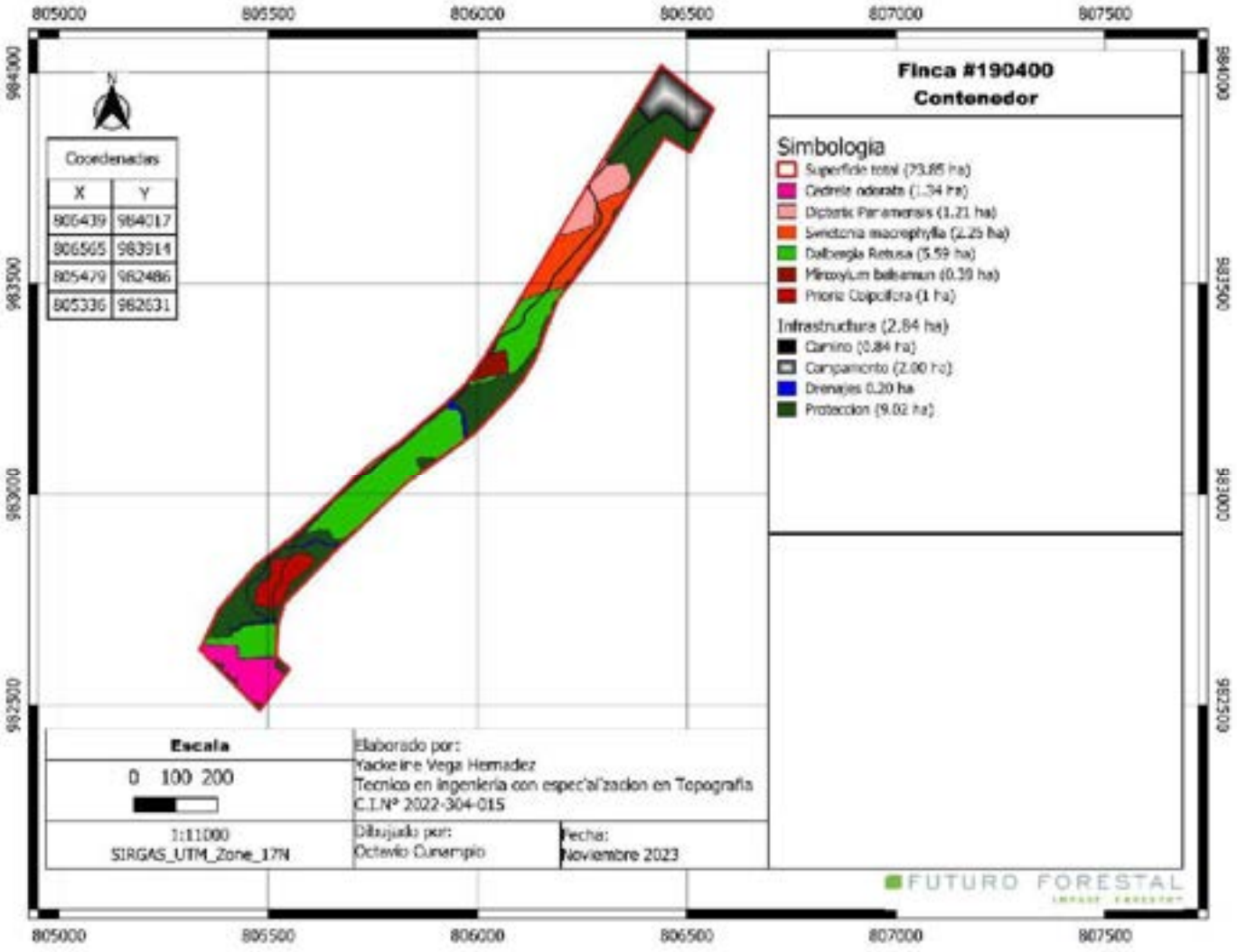


FIGURE 42. MAP OF CONTENEDOR FARM (NO. 190400).

5.2.34. Farm No. 190401 David Fernández (Contenedores)

Summary of reforestation

Table 24. Categorization of reforested area.

Finca No. 190401 - David Fernández					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Spanish Cedar	*Cedrela odorata*	3x4	833	0.92	0.92
Rosewood	*Dalbergia retusa*	3x4	833	0.98	0.98
Total, reforested				**1.90**	**1.90**
Protection area					0.26
Artificial lake					0.13
Total Area					**2.29**

Map of the farm

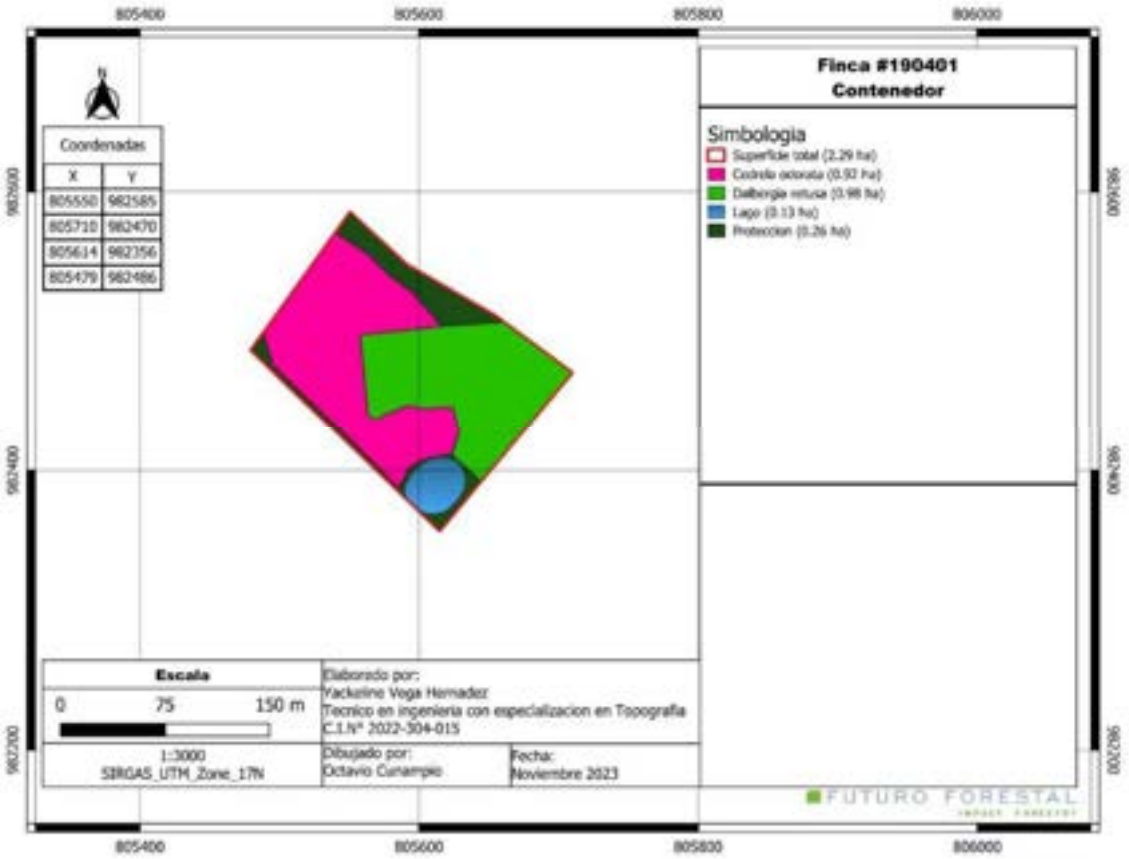


FIGURE 43. MAP OF CONTENEDOR FARM (NO. 190401).

5.2.35. Farm No. 190371 David Fernández (Contenedores)

Summary of reforestation

Table 25. Categorization of reforested area.

Farm 190371 - Contenedor						
Species planted		Initial dist. (m)	Tree/ha	Planting year		Reforested area/species (ha)
Common name	Scientific name			2023	2024	
Breadnut	*Brossimum alicastrum*	3x3	1111	0.37		0.37
Rosewood	*Dalbergia retusa*	3x4	833	0.54	1.18	1.72
Total, reforested				**0.91**	**1.18**	**2.09**
Protection area						0.39
Total Area						**2.48**

For 2024, specifically on Good Friday, the 1.18 hectares of the species known as *Myroxylon balsamum* (Santos Mahogany) were consumed by a forest fire originating from neighboring farms. This species did not produce regrowth and was therefore replaced with *Dalbergia retusa* (Rosewood) at the beginning of the rainy season.

Map of the farm

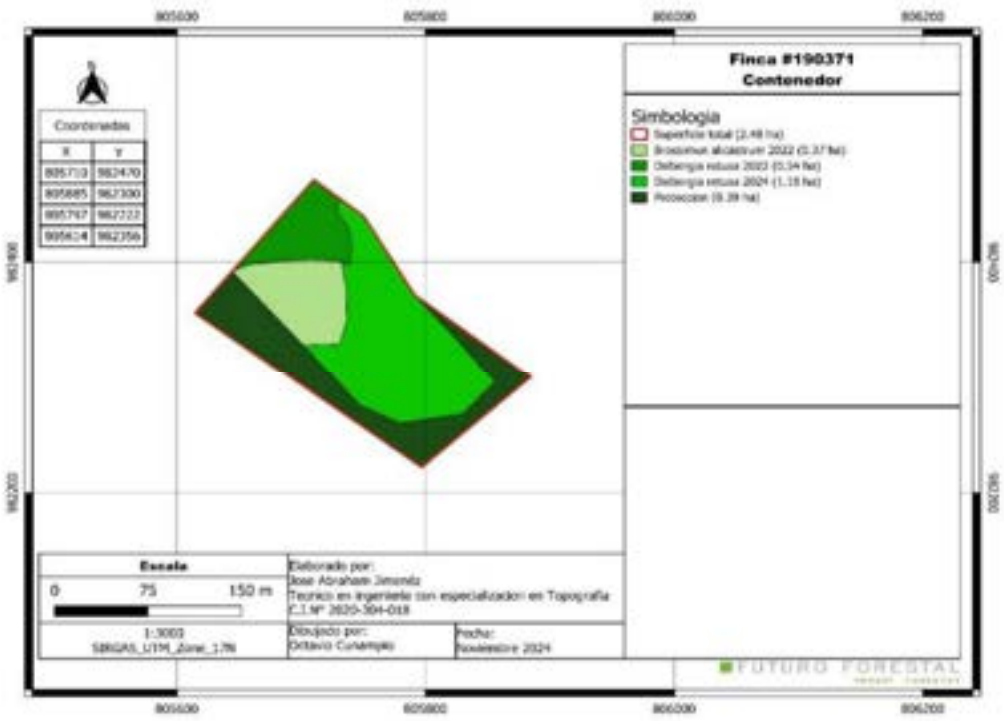


Figure 44. Map of Contenedor farm (No. 190371).

Table 26. Executed AOP 2024

FINCA 190371																													
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels			Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20		-	0.00	4.00	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	30.00	0	13.00	0	-	-	47
Control de maleza manual - Corte Bejuco	M8		-	9.00	-	1	8.00	1	-	1	-	0	6.00	1	-	1	-	1	-	1	-	0	-	0	-	16	14
Control de maleza manual - rodajas de mantenimiento	M7		-	0.00	-	8.3	-	0	-	0	-	0	-	8.3	-	0	1.00	8.3	-	0	-	0	-	0	-	25	1
Control de maleza manual-chapia	M6		-	78.30	-	0	-	8.3	-	0	-	0	-	0	-	0	-	0	-	0	1.00	0	-	0	-	87	1
Control de Maleza-Limpieza en Franja	M38		-	0.00	-	0	-	0	6.00	0	-	0	-	0	44.00	0	-	0	-	0	45.00	0	-	0	-	-	95
Control de Maleza-Química en Franja	M39		-	0.00	-	**0**	-	**0**	-	**0**	-	**0**	-	**0**	19.00	**0**	-	**0**	-	**0**	-	**0**	23.00	**0**	-	-	**42**
Control fitosanitario manual - Arrieras	M13		-	3.25	-	0.25	1.00	0.25	-	0.25	1.00	0	4.00	0.25	-	0.25	-	0.25	-	0.25	-	0	-	0	-	5	6
Control fitosanitario manual - Hypsipyla grandella	M14		-	4.00	7.00	0	4.00	0	4.00	0	8.00	0	6.00	0	9.00	0	5.00	0	13.00	0	5.00	0	11.00	0	9.00	4	81
Control fitosanitario-Químico-Hypsipyla grandella	M11		-	4.00	-		-		-		-		-		4.00		2.00		3.00		2.00		7.00		-		18
CPC Incendios - mantener rondas corta fuego	M46		-	0.00	72.00	9.55	-	9.55	-	1.25	-	0	-	9.55	-	1.25	-	9.55	-	1.25	-	0	16.00	0	-	137	88
CPC Incendios-Vigilancia de incendios	M50		-	0.00	-		-		3.00		-		-		-		-		-		-		-		-		3
Deshije	M17		-	0.00	-		-		-		-		-		-		-		-		-		-		4.00		4
Despeje	M26		-	48.00	-		-		-		-		-		4.00		-		2.00		-		1.00		6.00		13
Enderezado de plantas	M25		-	0.00	-		-		-		-		-		-		-		-		-		2.00		-		2
Fertilización foliar	M15		-	0.00	-		-		-		-		-		14.00		-		-		-		-		-		14

Fertilización granular	M16		-	0.00	-		-		-		-		-		-		23.00		2.00		-		6.00		-		31
Instalación y manteniendo letreros	I12		-	0.00	-		2.00		-		-		-		-		-		-		-		-		-		2
Limpieza y mantenimiento de infraestructura	I7		-	0.00	3.00		-		-		-		-		-		-		-		-		-		-		3
Manejo de Rebrote cocobolo	M40		-	0.00	-		-		-		-		-		4.00		-		-		14.00		-		-		18
Mantenimiento de cercas	I4		-	0.00	-		3.00		-		-		-		2.00		-		-		-		4.00		-		9
Operador de Motosierra	I19		-	0.00	4.00		-		-		-		-		-		-		-		30.00		13.00		-		47
Poda de formación	M18		-	0.00	9.00		-		4.00		-		-		-		-		-		-		-		-		13
Replantado	E29		-	0.00	-		-		-		-		-		-		8.00		-		-		-		-		8
Rodaja Orgánica	M33		-	0.00	-		-		-		-		-		-		-		-		-		-		7.00		7
Tramite Trabajadores	M54		-	0.00	-		-		-		-		-		-		-		-		-		-		-		-
Grand Total			-	146.55	99.00	19.10	18.00	19.10	17.00	2.50	9.00	-	16.00	19.10	100.00	2.50	39.00	19.10	20.00	2.50	127.00	-	96.00	-	26.00		567

5.3. Preliminary Mortality Table – Reforested Areas in Recovery 2024

The following table presents a preliminary analysis of mortality in reforested areas during 2024, with the objective of recovering plots where previous species failed to adapt and develop adequately. Different farms and planted species are analyzed, detailing the number of living and dead trees, as well as the preliminary mortality percentage.

Based on the results of this initial mortality review, the Claritas 1 farm (3319) shows the lowest overall mortality, indicating better adaptation of the planted species. Overall, average mortality ranges between 1 % and 11 %, depending on the farm and the reforested species, highlighting differences in adaptation and site conditions. Final data will be presented after the dry season, at the time of replanting.

Farm name	Farm number	Species	Scientific name	Amout living	Amount dead	Total amount	Mortalilty %
Las 15	**8047**	Rosy Trumpet Tree	*Tabebuia rosea*	73	11	84	1%
		Teak	*Tectona grandis*	46	4	50	8%
		Rosewood	*Dalbergia retusa*	19	1	20	5%
Total, Average				138	16	154	5%
Claritas 1	**4630**	Rosy Trumpet Tree	*Tabebuia rosea*	38	4	42	9%
		Teak	*Tectona grandis*	225	27	252	11%
		Guayabo de Charco (sp)	*Terminalia oblonga*	91	9	100	9%
		Genip Tree	*Genipa americana*	10	0	10	0%
Total, Average				364	40	404	7%
Claritas 1	**3319**	Rosy Trumpet Tree	*Tabebuia rosea*	39	3	42	7%
		Teak	*Tectona grandis*	246	6	252	2%
		Genip Tree	*Genipa americana*	10	0	10	0%
Total, Average				295	9	304	3%
Tello 3	**3123**	Rosy Trumpet Tree	*Tabebuia rosea*	37	5	42	11%
		Caobilla (sp)	*Tapirira guianensis*	39	3	42	7%
Total, Promedio				76	8	84	9%

5.4. Lastenia Unit

Description

The plantations show favorable development, with positive growth indicators within the expected ranges for Rosewood (*Dalbergia retusa*) and Bullywood (*Terminalia amazonia*).

At the beginning of the year, formative pruning was carried out to promote single-stem growth and produce high-quality timber. Additionally, plant straightening was performed to enhance this characteristic.

No major pest outbreaks have been detected; only defoliating insect attacks and termites, which were controlled in a timely manner.

The most frequently performed activities include manual weed control combined with chemical control (herbicide) and species management based on apex selection and sprout management criteria.

At the forestry unit level, clearing was carried out on a 10-hectare area to allow greater light penetration for the plants.

On the other hand, the good response of Cedar (*Cedrela odorata*) is noteworthy despite the high incidence of attacks by *Hypsipyla grandella*, thanks to constant monitoring and both manual and chemical phytosanitary controls. Initially, these controls were carried out every fifteen (15) days; however, as the number of attacks increased, it became necessary to shorten the control intervals to eight (8) days to reduce the incidence of damage and promote the growth of new shoots. A key factor in improving the growth of this species was the application of two (2) slow-release phosphorus (P) granular fertilizations.

In this context, *Tabebuia rosea* (Rosy Trumpet Tree) has shown good growth. With the first rains of 2024, straightening procedures were carried out, as the heavy foliage of the canopy weakened the trunk.



FIGURE 45. CEDAR GROWTH (LEFT) AND DIAMETER DEVELOPMENT OF CEDAR (RIGHT).

- Farm No. 2453 Lastenia 1 (Gilberto Samaniego)

Summary of reforestation

Table 27. Categorization of reforested

Farm No. 2453 - Lastenia 1 (Gilberto Samaniego)					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.87	0.87
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	2.70	2.70
Total, reforested				**3.57**	**3.57**
Area to be planted					28.00
Protection area					1.48
Low area					14.43
Stream area					2.00
Total Area					**49.48**

area.

The areas designated for planting are characterized by low-lying zones with high humidity, requiring the implementation of an efficient drainage system to remove excess water.

Dead Tonka Bean (*Dipteryx oleifera*) trees were replaced with Bullywood (*Terminalia amazonia*), which has demonstrated faster growth, effectively fulfilling its role as a pioneer species. Proper weed management and the initial application of fertilizer were key to the successful development of the different planted forest species. A total of 2,650 trees were replanted.

Map of the farm

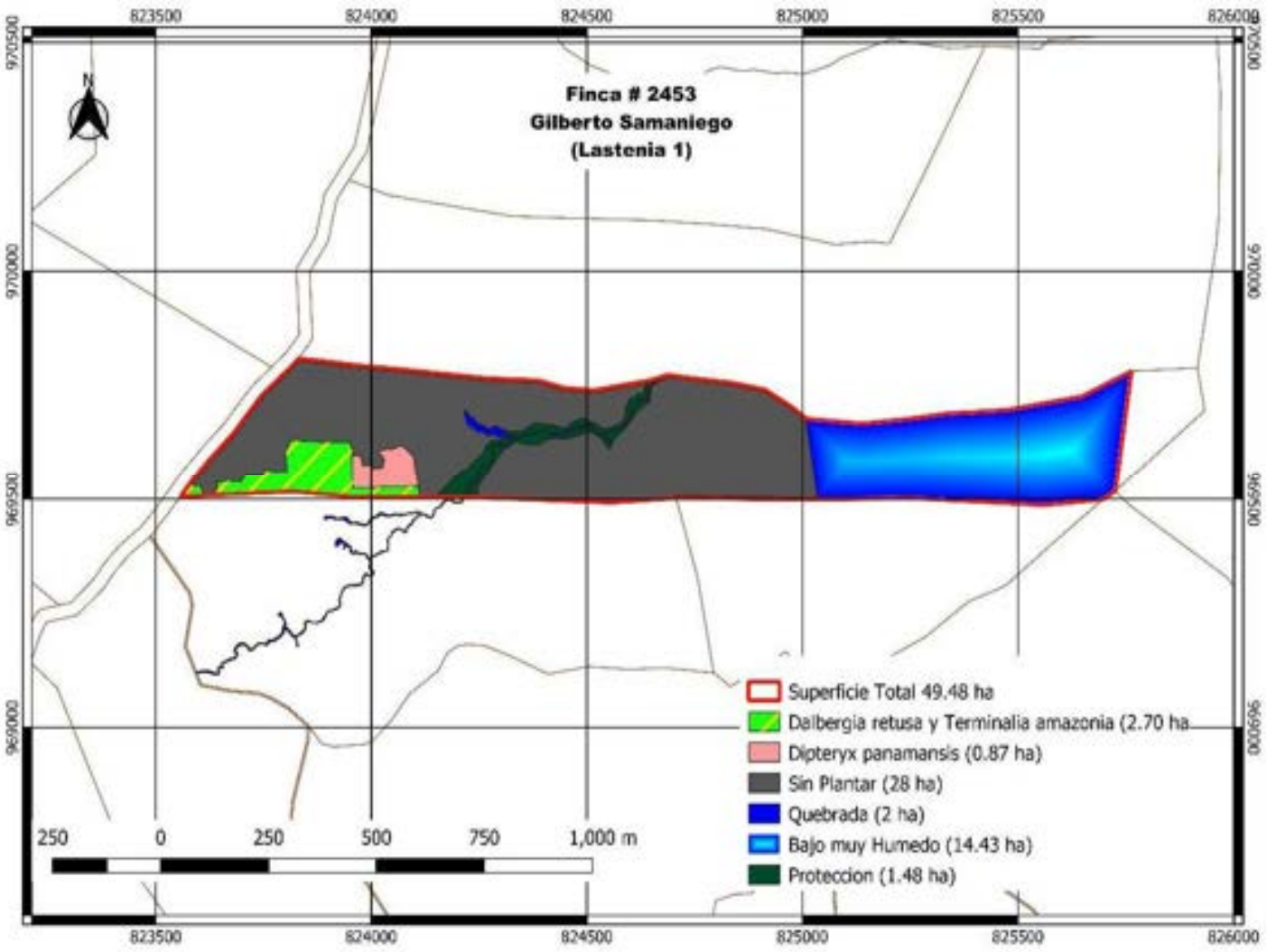


FIGURE 45. MAP OF LASTENIA 1 FARM (NO. 2453).

Table 28. Executed AOP 2024

FINCA 2453 LASTENIA																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Control de maleza - químico-Bomba Mochila	M1	0.00	-	0.00	-	10.56	-	0.00	-	0.00	-	0.00	-	3.42	-	0.00	-	0.00	-	2.70	2.00	0.72	-	0.00	-	17	2
Control de maleza manual - Corte Bejuco	M8	3.63	-	0.00	6.00	0.00	-	0.87	-	2.76	-	0.00	-	3.63	-	0.00	-	2.76	-	0.87	-	2.76	4.00	0.00	-	17	10
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control de maleza manual-chapia	M6	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	-	-	8
Control de Maleza-Limpieza en Franja	M38	9.08	-	0.00	22.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	6.90	15.00	2.18	1.00	0.00	-	0.00	-	18	38
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	9.00	0.00	-	0.00	-	-	9
Control fitosanitario manual - Arrieras	M13	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	-	1.30	1.00	1.30	1.00	16	2
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	26.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	29.00	-	55
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	-	0.00	17.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	17
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	2.00	0.00	2.00	0.00	-	-	11
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	5.43	-	0.00	1.00	0.00	1.00	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	5	3

Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	2.00	0.00	-	0.00	3.00	0.00	-	-	6
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	0.00	-	2.76	-	0.00	-	0.00	-	0.00	-	2.76	4.00	0.00	-	0.00	-	0.00	-	6	4
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
Poda de formación	M18	11.04	-	0.00	11.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	11	11
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	2.00	0.00	-	-	4
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Rodaja Orgánica	M33	0.00	-	2.20	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2.20	-	0.00	-	0.00	-	0.00	-	0.00	-	4	4
Grand Total		25.05	-	3.50	86.00	11.86	7.00	2.17	-	12.25	-	1.30	1.00	8.35	10.00	3.50	7.00	13.72	21.00	7.05	25.00	4.78	12.00	1.30	30.00	95	199

- Due to adverse weather conditions (strong winds or heavy rain), corrective action was needed to straighten plants to prevent permanent damage to the physical structure of the trees, ensuring future commercial quality.
- The perimeter fences were damaged by falling branches, animals passing through, and human activity.
- Corrections to the apices of Terminalia amazonia to prevent branching and recovery of a batch that showed asymmetry in its development.
- These activities were not included in the initial budget because they were corrective or specialized management interventions that arose in response to unforeseen conditions. However, they were necessary to maintain viability.

- Farm No. 1284 Lastenia 1 (Gilberto Samaniego)

Summary of reforestation

Table 29. Categorization of reforested area.

Farm No. 1284 - Lastenia 1 (Gilberto Samaniego)					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Spanish Cedar	*Cedrela odorata*	3x4	833	3.34	3.34
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	17.00	17.00
Rosy Trumpet Tree	*Tabebuia Rosea*	3x4	833	1.60	1.60
Teak	*Tectona grandis*	4x5	500	1.20	1.20
Total, reforested				**23.14**	**23.14**
Area to be planted					10.23
Protection area					5.96
Low area					8.30
Stream area					2.00
Total Area					**49.63**

Map of the farm

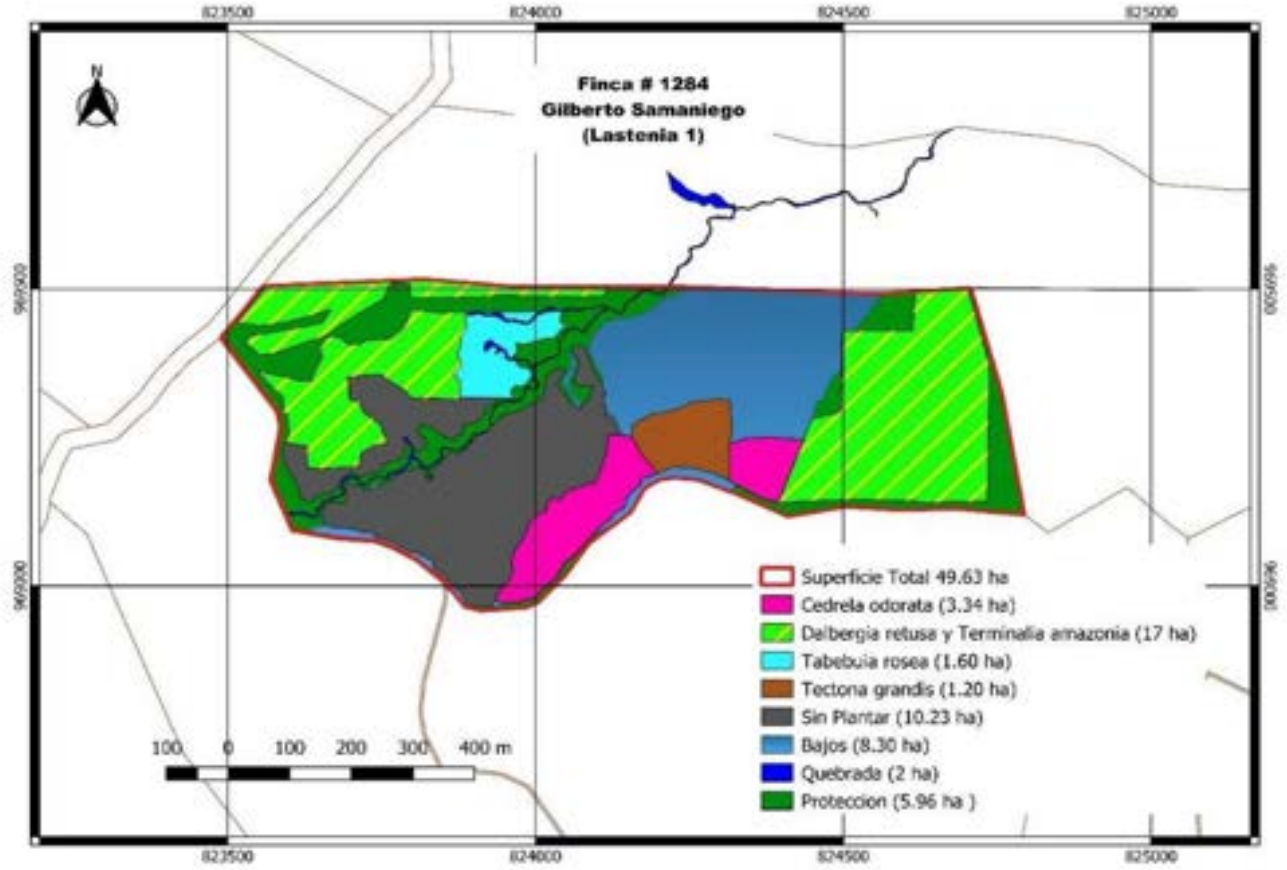


FIGURA 46. MAP OF LASTENIA 1 FARM (NO. 1284).

Monitoring and growth data

The monitored species show good development based on the results of this first monitoring. *Dalbergia retusa* stands out as the native species with the highest annual increments in both diameter and total height. *Cedrela odorata* also demonstrates good growth results. Likewise, *Tectona grandis* shows favorable average growth rates.

Natives

Table 30. *Growth data*

Darién **Growth data: Lastenia 1** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	3.13	3.47	1.57	1.73
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	1.86	1.78	0.93	0.89
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2.0	2.56	2.18	1.28	1.09
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	0.36	NA	0.18

Teak

Table 31. *Datos de crecimiento.*

Darién **Growth data: Lastenia 1** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	4.49	4.20	2.25	2.10

Executed AOP 2024

FINCA 1284 LASTENIA																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Capacitación	M31	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	-	7
Control de maleza - mecánico-Tractor	M10	0.00	1.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
Control de maleza - químico-Bomba Mochila	M1	0.00	-	0.00	-	33.22	6.00	0.00	3.00	0.00	6.00	0.00	-	33.22	-	0.00	1.00	0.00	-	16.93	-	16.29	2.00	0.00	-	100	18
Control de maleza manual - Corte Bejuco	M8	6.43	2.00	0.00	3.00	18.53	-	0.00	-	1.60	2.00	0.00	-	18.53	-	0.00	-	1.60	-	0.00	-	8.03	16.00	10.50	-	65	23
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	2.00	3.33	-	0.00	-	0.00	-	3.33	68.00	0.00	-	0.00	-	3.33	-	0.00	-	0.00	-	0.00	-	10	70
Control de maleza manual-chapia	M6	8.57	3.00	23.86	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	6.00	0.00	33.00	0.00	-	32	**49**
Control de Maleza-Limpieza en Franja	M38	42.33	2.00	0.00	73.00	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	61.00	34.60	-	4.00	-	0.00	-	0.00	-	81	138
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	16.00	0.00	-	0.00	-	0.00	20.00	0.00	2.00	0.00	-	0.00	24.00	0.00	-	-	62
Control fitosanitario manual - Arrieras	M13	3.65	-	3.65	-	3.65	1.00	3.65	-	3.65	-	3.65	-	3.65	-	3.65	-	3.65	-	3.65	1.00	3.65	2.00	3.65	-	44	4
Control fitosanitario manual - Hypsipyla grandella	M14	6.07	4.00	6.07	4.00	6.07	-	6.07	-	6.07	-	6.07	1.00	6.07	2.00	6.07	2.00	6.07	2.00	6.07	2.00	6.07	4.00	6.07	2.00	73	23
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	26.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	26
Control fitosanitario-Químico-Hypsipyla grandella	M11	1.67	-	1.67	2.00	1.67	1.00	1.67	-	1.67	4.00	1.67	2.00	1.67	2.00	1.67	2.00	1.67	2.00	1.67	5.00	1.67	4.00	1.67	2.00	20	26
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	17.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	23.00	-	40
Deschuponado	M41	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Deshije	M17	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	-	1
Despeje	M26	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
Enderezado de plantas	M25	0.00	-	0.00	2.00	0.00	1.00	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	25.00	0.00	6.00	0.00	-	0.00	12.00	0.00	-	-	49

Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	33.47	-	0.00	24.00	0.00	1.00	0.00	-	0.00	5.00	0.00	6.00	0.00	-	0.00	-	33	36
Imprevistos	I18	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Limpieza y mantenimiento de infraestructura	I7	0.00	1.00	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	2.00	0.00	2.00	0.00	4.00	0.00	1.00	-	16
Manejo de Rebrote cocobolo	M40	0.00	-	10.50	-	0.00	9.00	6.43	-	0.00	-	10.50	27.00	0.00	8.00	6.43	-	0.00	2.00	10.50	7.00	0.00	4.00	6.43	-	51	57
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	-	10
Poda de formación	M18	67.72	-	0.00	30.00	0.00	11.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	68	43
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	2.00	0.00	-	-	**4**
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	17.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	**17**
Rodaja Orgánica	M33	0.00	-	39.78	44.00	9.27	-	0.00	-	17.85	1.00	4.44	-	0.00	-	17.49	-	27.12	-	4.44	-	0.00	-	0.00	-	120	45
Tramite Trabajadores	M54	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	23.00	0.00	-	-	29
Traslado de Insumos	M35	0.00	2.00	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Grand Total		22.74	17.00	85.53	181.00	75.74	78.00	17.82	3.00	64.31	34.00	29.66	123.00	63.14	32.00	35.31	116.00	78.04	23.00	47.26	35.00	35.71	142.00	28.32	28.00	555	784

- Plowing with Agricultural Tractors (Mechanized Activities) Given the rapid growth of weeds in some areas and the need to increase control efficiency, we have opted to use mechanized plowing with tractors on larger plots, allowing us to cover more ground in less time and at a lower operating cost compared to the manual method.

- Insect control (termites): Termite attacks have been detected, especially in recently pruned species or those with open wounds. Specific treatments are required to prevent structural damage and protect the development of affected plants.

- Change of Activities According to Weed Behavior (Adaptive Management) Due to the variability of weed growth between different plots, it has become necessary to adjust the frequency of mowing, include follow-up work, or reduce interventions in other areas, depending on the actual evolution of conditions. This flexibility in planning creates a gap between what is planned and what is executed, since, combined with changes in weather conditions, it leads us to bring forward or delay control interventions.

- Farm No. 6159 Lastenia 2 (Gilberto Samaniego)

Summary of reforestation

Table 32. Categorization of reforested

Farm No. 6159 - Lastenia 2 (Gilberto Samaniego)						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	2.70	1.93	4.63
Spanish Cedar	*Cedrela odorata*	3x4	833	3.50		3.50
Rosewood	*Dalbergia retusa*	3x4	833		1.86	1.86
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	3.50		3.50
Spanish Elm	*Cordia alliodora*	3x4	833		2.16	2.16
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	6.33	1.00	7.33
Teak	*Tectona grandis*	4x5	500	5.88		5.88
Total, reforested				**21.91**	**6.95**	**28.86**
Area to be planted						7.00
Protection area						3.47
Stubble						3.78
Stream area						0.77
Lake						0.22
Firebreaks						1.04
Internal road						1.21
Total Area						**46.35**

area.

Map of the farm

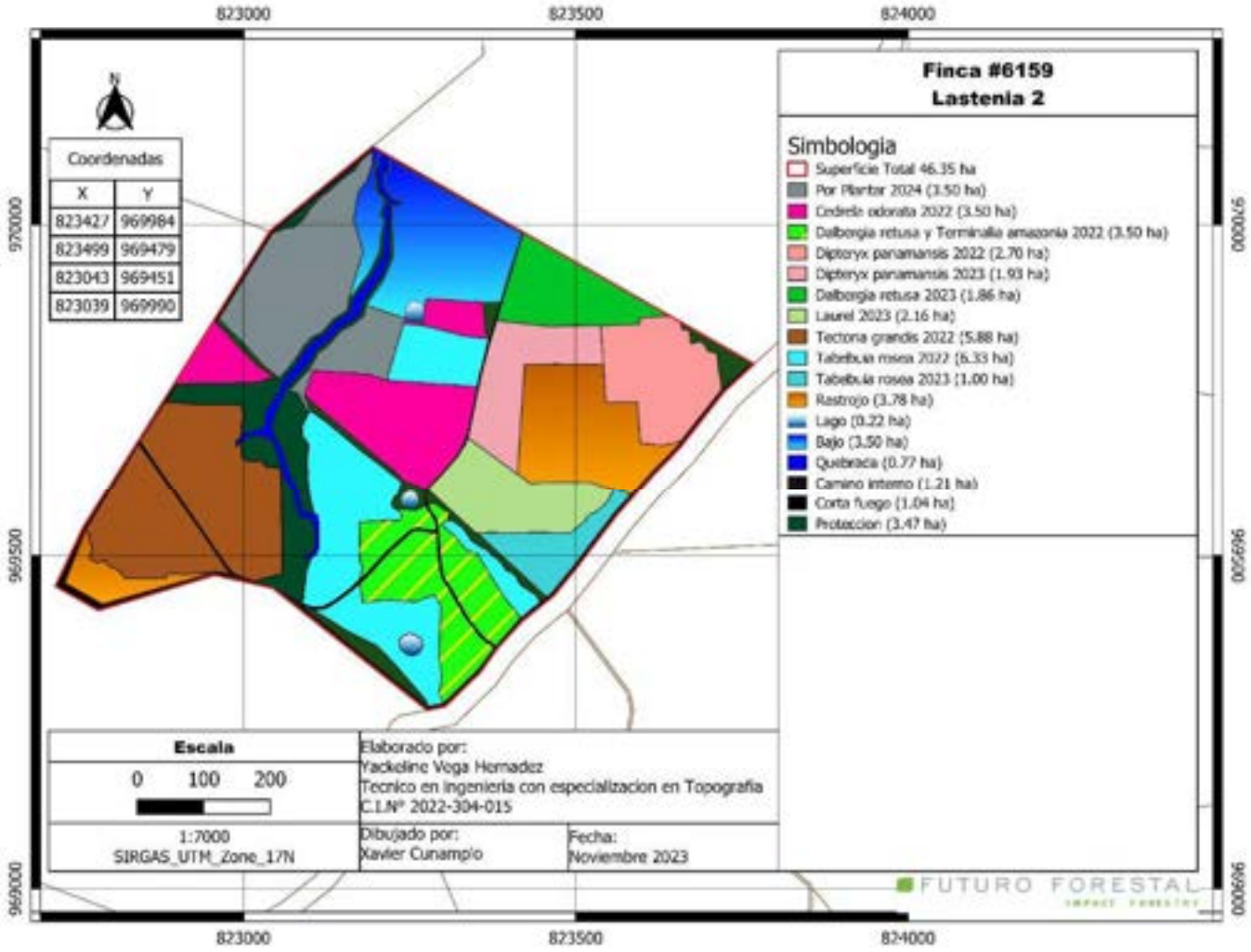


FIGURE 47. MAP OF LASTENIA 2 FARM (NO. 6159).

Mortality of Planting 2023

Table 33. SAMPLING OF MORTALITY IN PLANTING, FARM NO. 6159.

Farm name	Farm #	Plot	Planting year	Species replanted	Scientific name	Amount of tres planted 2023	Mortality %
Lastenia 2 (Gilberto Samaniego)	6159	Ca	2023	Rosewood	*Dalbergia retusa*	210	12%
		Dp	2022	Rosewood	*Dalbergia retusa*	560	25%
		Co	2022	Spanish Cedar	*Cedrela odorata*	630	22%
		Dp	2023	Rosewood	*Dalbergia retusa*	680	85%
	Total promedio					2080	36%

After planting in Farm 6159, the team conducted a sampling of the replanted areas to assess post-summer mortality by species, as shown in the previous tables.

Monitoring and growth data

The monitored *Tectona grandis* shows good results based on its growth. Among the two native species, *Tabebuia rosea* stands out with the best development and growth averages.

Natives

Table 34. *Growth data.*

Darién **Growth data: Lastenia 2** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosy Trumpet Tree	*Tabebuia rosea*	2022	jun-24	2.0	3.49	3.43	1.75	1.72
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2.0	NA	0.42	NA	0.21

Teak

Table 35. *Growth data.*

Darién **Growth data: Lastenia 2** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teca	*Tectona grandis*	2022	jun-24	2.0	5.25	4.75	2.62	2.37

Table 36. Executed AOP 2024

FINCA 6159 LASTENIA																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Control de maleza - mecánico-Tractor	M10	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control de maleza - químico-Bomba Mochila	M1	0.00	-	0.00	-	84.52	10.00	0.00	-	0.00	8.00	0.00	12.00	84.52	-	0.00	-	0.00	15.00	17.50	-	74.02	-	0.00	7.00	261	52
Control de maleza manual - Corte Bejuco	M8	2.70	11.00	1.00	-	10.21	-	1.00	2.00	22.37	-	2.86	-	22.37	-	2.86	-	22.37	-	6.36	-	16.04	19.00	11.21	-	121	32
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	9.00	64.00	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	5.00	9	71
Control de maleza manual-chapia	M6	66.43	-	0.00	-	0.00	-	0.00	10.00	0.00	7.00	0.00	2.00	0.00	-	0.00	-	0.00	18.00	0.00	18.00	0.00	-	0.00	-	66	55
Control de Maleza-Limpieza en Franja	M38	48.58	99.00	0.00	-	0.00	14.00	0.00	-	6.75	21.00	0.00	-	8.70	8.00	0.00	37.00	58.75	17.00	24.00	-	0.00	9.00	0.00	-	147	205
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	12.00	0.00	14.00	0.00	-	0.00	-	0.00	27.00	0.00	10.00	0.00	-	0.00	-	-	63
Control fitosanitario manual - Arrieras	M13	9.00	-	9.00	-	8.50	-	9.00	-	9.00	-	8.50	-	9.00	-	8.50	-	12.00	1.00	11.50	1.00	12.00	1.00	10.00	-	116	3
Control fitosanitario manual - Hypsipyla grandella	M14	6.36	3.00	6.36	-	6.36	-	6.36	2.00	6.36	-	6.36	-	6.36	2.00	6.36	6.00	6.36	-	6.36	2.00	6.36	4.00	6.36	4.00	76	23
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	1.00	0.00	2.00	0.00	-	0.00	2.00	-	8
Control fitosanitario-Químico-Hypsipyla grandella	M11	1.75	-	1.75	-	1.75	2.00	1.75	1.00	1.75	2.00	1.75	1.00	1.75	2.00	1.75	2.00	1.75	2.00	1.75	4.00	1.75	-	1.75	3.00	21	19

CPC Incendios - mantener rondas corta fuego	# N/D	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	-	2
CPC Incendios-Establecer rondas contrafuegos	# N/D	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Deschuponado	M 41	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	7
Deshije	# N/D	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	11.00	0.00	-	-	11
Despeje	M 26	0.00	-	22.80	11.00	0.00	22.00	0.00	-	0.00	8.00	0.00	-	0.00	-	0.00	13.00	0.00	-	0.00	8.00	0.00	4.00	0.00	9.00	23	75
Enderezado de plantas	M 25	0.00	-	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	4.00	0.00	-	0.00	14.00	0.00	12.00	0.00	9.00	0.00	5.00	0.00	-	-	52
Fertilización granular	M 16	0.00	-	0.00	-	0.00	-	0.00	-	43.02	-	0.00	8.00	0.00	11.00	0.00	-	5.24	-	0.00	12.00	0.00	-	0.00	-	48	31
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	9.00	0.00	4.00	0.00	4.00	0.00	1.00	-	21
Manejo de Rebrote cocobolo	M 40	0.00	-	3.50	-	0.00	-	3.50	-	0.00	3.00	0.00	7.00	0.00	5.00	3.50	1.00	0.00	2.00	3.50	2.00	0.00	2.00	3.50	-	18	22
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	7.00	0.00	19.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	4.00	0.00	-	-	32
Poda de formación	M 18	14.00	5.00	23.20	-	0.00	15.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	37	20
Poda Manual Selección Apice.	M 55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	-	3
Replantado	E2 9	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2.36	-	0.00	-	0.00	16.00	2.00	-	0.00	-	0.00	-	0.00	-	4	16
Rodaja Orgánica	M 33	0.00	-	63.96	8.00	15.60	36.00	0.00	-	0.00	-	32.46	-	0.00	-	0.00	-	19.72	-	79.28	-	0.00	-	0.00	-	211	44
Sendero	# N/D	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	-	1

Tramite Trabajadores	M 54	0.00	9.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	10.00	-	19
Grand Total		148.82	129.00	131.57	19.00	126.94	113.00	21.61	44.00	89.25	68.00	63.29	112.00	132.70	31.00	22.97	89.00	128.19	104.00	150.25	75.00	110.17	65.00	32.82	44.00	1,158.58	893.00

- Due to the temporary increase in staff to handle extraordinary activities (such as pruning, weed control, and repairs), additional steps were taken related to legal documentation, permits, and social security affiliations, which were necessary to comply with labor regulations and ensure the well-being of contracted personnel, as well as the purchase of supplies for personnel staying in the camps. This is recorded under the worker processing allocation.

- Firebreaks were opened and maintained as a preventive measure against the risk of forest fires, especially in areas vulnerable to the accumulation of dry plant material. This activity was essential to protect both existing plantations and the farm's infrastructure, and is part of a risk management strategy to address the high incidence of burning by agricultural producers in the Darién area.

- The perimeter fences were damaged by falling branches, animals passing through, and human activity.

- Insect control (termites): Termite attacks have been detected, especially in recently pruned species or those with open wounds. Specific treatments are required to prevent structural damage and protect the development of affected plants.

- Farm No. 342926 Lastenia 3 (Hermenegildo Espinosa)

Summary of reforestatio

Table 37. Categorization of reforested

Farm No. 342926 - Lastenia 3 (Hermenegildo Espinosa)					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Spanish Cedar	*Cedrela odorata*	3x4	833	1.99	1.99
Rosewood and Bullywood	*Dalbergia retusa* y *Terminalia amazonia*	3x4	833	14.45	14.45
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	2.71	2.71
Total, reforested				**19.15**	**19.15**
Área por plantar					16.49
Área de protección					2.31
Área de quebrada					0.50
Low area					8.38
Firebreaks					1.98
Total Area					**48.81**

a.

Map of the farm

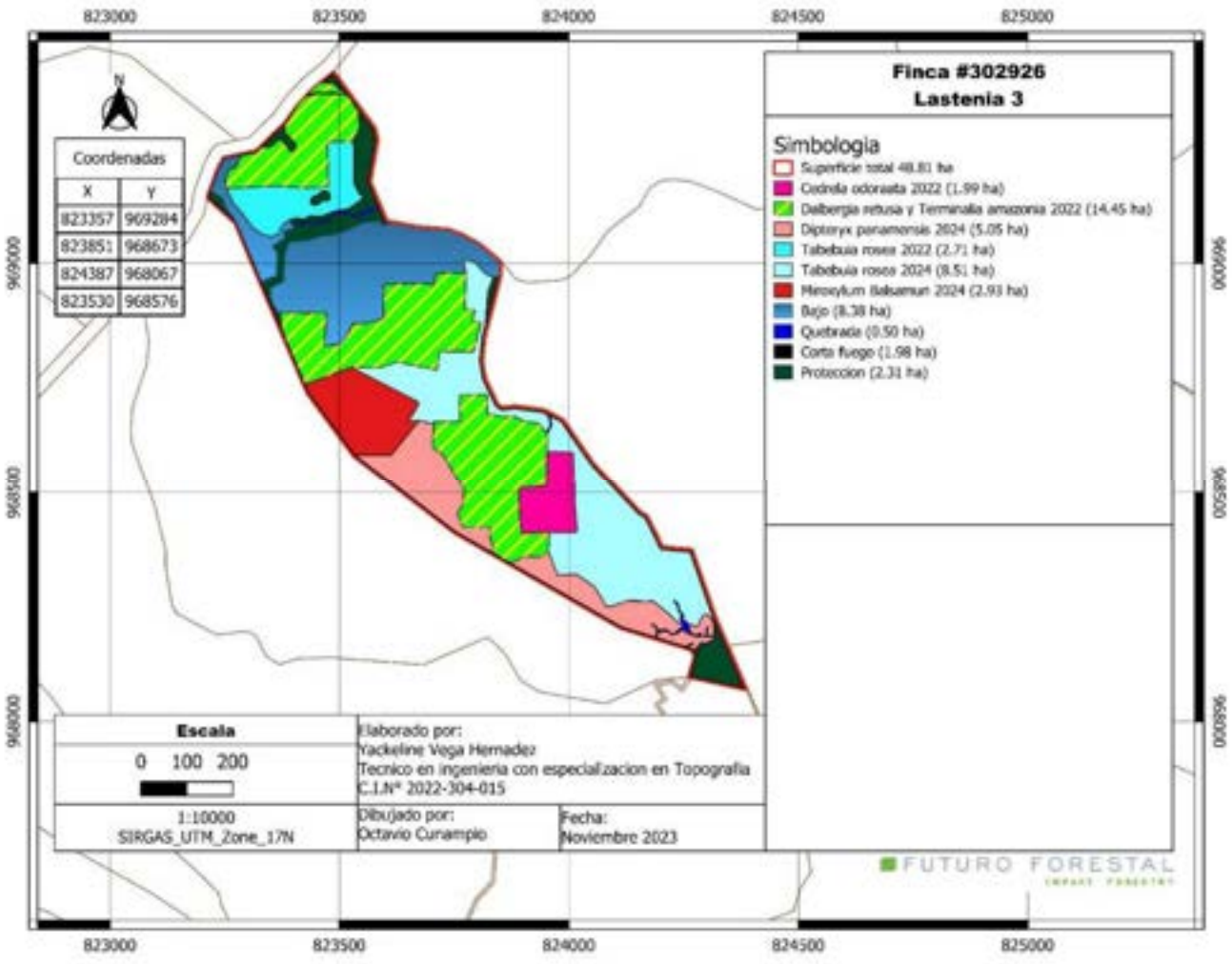


FIGURE 48. MAP OF LASTENIA 3 FARM (NO. 342926).

Monitoring and growth data

Based on the monitoring results, *Dalbergia retusa* and *Terminalia amazonia* show good growth results according to their age, with Rosewood being the species with the highest growth rates.

Natives

Table 38. *Growth data.*

Darién **Growth data: Lastenia 3** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	2.69	3.23	1.35	1.61
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	1.78	1.55	0.89	0.78

Table 39. Executed AOP 2024

FINCA 342926 LASTENIA																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Capacitación	M31	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	4.00	0.00	-	-	4
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	17.15	-	0.00	-	17.12	-	0.00	-	17.15	-	0.00	-	17.15	-	0.00	2.00	17.15	6.00	0.00	2.00	86	10
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	45.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	45
Control de maleza manual-chapia	M6	19.29	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	41.00	0.00	-	0.00	-	19	42
Control de Maleza-Limpieza en Franja	M38	37.31	-	0.00	6.00	0.00	42.00	0.00	6.00	0.00	2.00	0.00	-	0.00	44.00	0.00	5.00	36.13	-	6.75	-	0.00	-	0.00	-	80	105
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	19.00	0.00	-	0.00	-	0.00	-	0.00	23.00	0.00	-	0.00	-	0.00	15.00	0.00	13.00	-	70
Control fitosanitario manual - Arrieras	M13	6.07	-	6.07	-	6.07	-	6.07	-	6.07	-	6.07	1.00	6.07	-	6.07	-	6.07	-	6.07	2.00	6.07	1.00	6.07	-	73	4
Control fitosanitario manual - Hypsipyla grandella	M14	0.85	-	0.85	-	0.85	-	0.85	-	0.85	-	0.85	-	0.85	-	0.85	1.00	0.85	-	0.85	-	0.85	-	0.85	-	10	1
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	10.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	4.00	0.00	-	-	16

Control fitosanitario-Químico-Hypsipyla grandella	M11	0.24	-	0.24	-	0.24	-	0.24	-	0.24	1.00	0.24	-	0.24	-	0.24	-	0.24	-	0.24	-	0.24	-	0.24	-	0.24	-	3	1
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	23.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	23
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	7
Despeje	M26	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	-	6
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	2.00	0.00	-	0.00	-	0.00	9.00	0.00	2.00	0.00	6.00	0.00	12.00	0.00	-	-	33
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	22.30	-	0.00	-	0.00	1.00	0.00	-	0.67	-	0.00	-	0.00	-	0.00	-	23	1
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	11.00	0.00	-	0.00	5.00	0.00	-	-	26
Manejo de Rebrote cocobolo	M40	0.00	-	14.45	-	0.00	-	0.00	13.00	0.00	-	14.45	27.00	0.00	11.00	0.00	4.00	0.00	2.00	14.45	5.00	0.00	6.00	0.00	-	43	68
Mantenimiento de cercas	I4	0.00	9.00	0.00	-	0.00	21.00	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	33
Poda de formación	M18	57.80	-	0.00	20.00	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	58	23
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	8.00	-	9
Rodaja Orgánica	M33	1.31	-	47.62	41.00	0.00	-	0.00	-	41.43	-	0.00	-	0.00	-	0.00	-	40.12	-	8.81	-	0.00	-	0.00	-	139	41
Grand Total	#N/D	122.87	9.00	69.23	97.00	24.31	75.00	7.16	50.00	88.01	5.00	21.61	78.00	24.31	62.00	7.16	42.00	101.23	15.00	37.17	61.00	24.31	53.00	7.16	23.00	534.53	570.00

- Cocobolo (Dalbergia retusa) has shown a high rate of regrowth after initial pruning, making it necessary to intensify control efforts to maintain a desirable structure and prevent internal competition. These activities required greater frequency and resources than originally anticipated.

- The perimeter fences were damaged by falling branches, animals passing through, and human activity.

- Change of Activities According to Weed Behavior (Adaptive Management) Due to the variability of weed growth between different plots, it has become necessary to adjust the frequency of mowing, include follow-up work, or reduce interventions in other areas, depending on the actual evolution of conditions. This flexibility in planning creates a gap between what is planned and what is executed, since, combined with changes in weather conditions, it leads us to bring forward or delay control interventions.

- Farm No. 30163457 Lastenia 4 (Alfonso Valdés)

Summary of reforestation

Table 40. Categorization of reforested area.

Farm No. 30163457 - Lastenia 4 (Alfonso Valdés)					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Mahogany	*Swietenia macrophylla*	3x4	833	1.03	1.03
Spanish Cedar	*Cedrela odorata*	3x4	833	1.53	1.53
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	3.95	3.95
Wild Cashew	*Anacardium excelsum*	3x4	833	1.45	1.45
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	0.52	0.52
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.76	0.76
Teak	*Tectona grandis*	4x5	500	4.89	4.89
Total, reforested				**14.14**	**14.14**
Area to be planted					6.78
Protection area					2.92
Artificial lake					0.20
Stream area					2.00
Infrastructure					1.24
Total Area					**27.28**

In this farm, for the Rosewood and Bullywood plot, only the trees in areas where resprouting was unsuccessful were replaced. In some cases, the resprouts were weak or damaged, and in other cases, the trunks did not produce new shoots, so these spaces were replanted to ensure more uniform plantation coverage.

In 2025, the Wild Cashew plot will undergo recovery.

Map of the farm

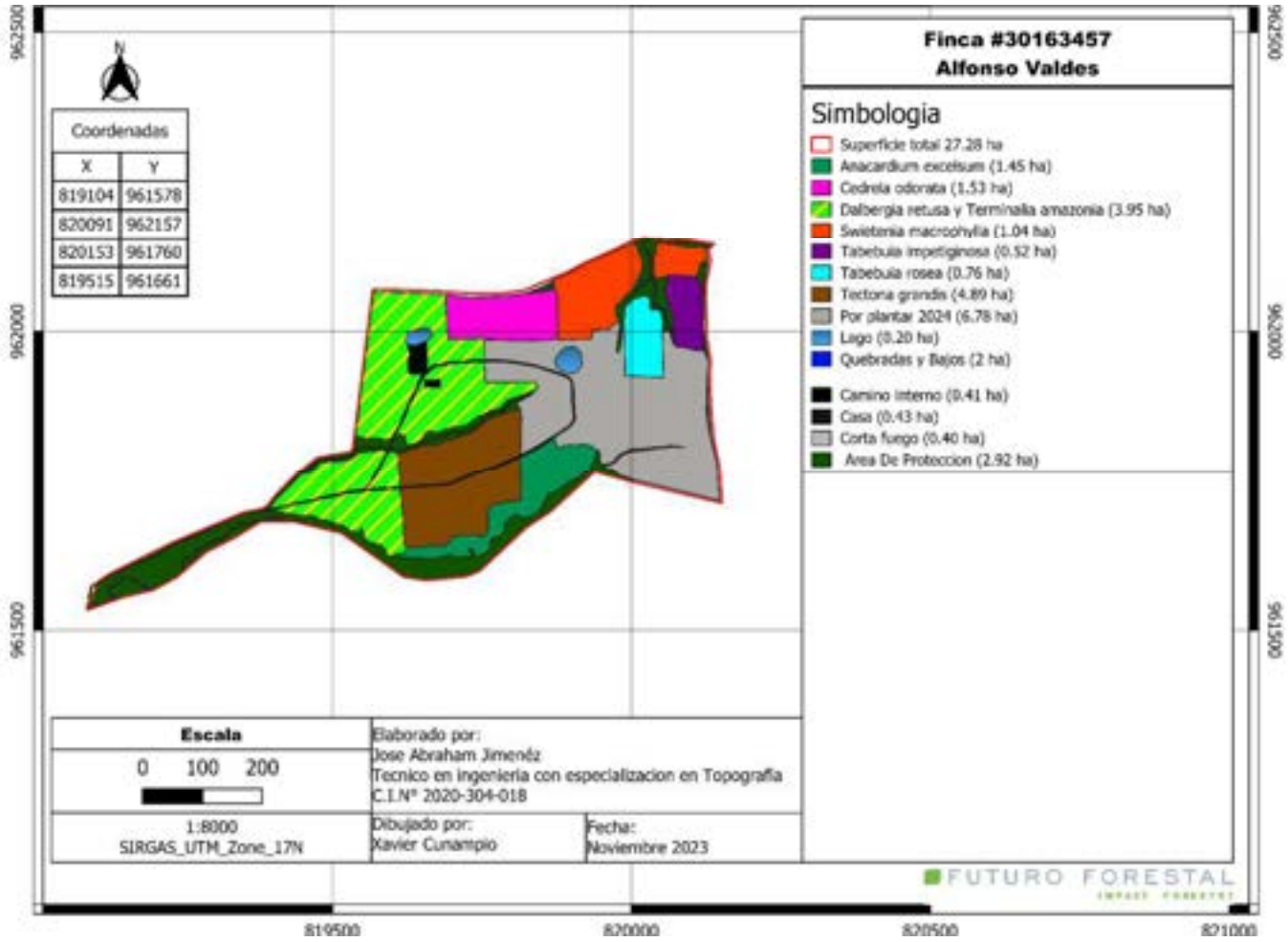


FIGURE 49. MAP OF LASTENIA 4 FARM (NO. 30163457).

Monitoring and growth data

The results obtained for *Tectona grandi*s demonstrate optimal growth for the species on this farm.

Teak

Table 41. *Growth data.*

Darién	Growth data: Lastenia 4	2022

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	6.41	6.10	3.21	3.05

Executed AOP 2024

FINCA 30163457 LASTENIA																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Control de maleza - químico-Bomba Mochila	M1	0.00	-	14.67	-	20.28	-	1.50	23.00	0.00	-	14.67	-	21.78	10.00	0.00	-	20.56	-	27.71	-	3.96	-	25.08	-	150	33
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	5.65	-	0.00	1.00	11.45	-	0.76	-	12.21	-	0.76	-	12.21	-	6.78	-	12.21	-	8.29	-	70	1
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	8.00	0.00	7.00	0.00	1.00	0.00	-	0.00	4.00	0.00	-	0.00	2.00	0.00	-	-	22
Control de maleza manual-chapia	M6	10.79	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	11	1
Control de Maleza-Limpieza en Franja	M38	26.76	-	0.00	14.00	0.00	15.00	0.00	-	0.00	6.00	0.00	-	1.90	22.00	1.25	2.00	19.70	-	0.00	-	3.78	-	0.00	-	53	59
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	6.00	0.00	-	0.00	2.00	0.00	4.00	0.00	1.00	0.00	-	0.00	-	0.00	-	-	15
Control fitosanitario manual - Hypsipyla grandella	M14	6.75	1.00	6.75	1.00	6.75	2.00	6.75	1.00	6.75	4.00	6.75	3.00	6.75	1.00	6.75	1.00	6.75	1.00	6.75	1.00	6.75	-	6.75	-	81	16
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	4.00	0.00	1.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	9
Control fitosanitario-Químico-Hypsipyla grandella	M11	2.62	1.00	2.62	1.00	2.62	5.00	2.62	2.00	2.62	2.00	2.62	3.00	2.62	3.00	2.62	-	2.62	-	2.62	-	2.62	-	2.62	-	31	17
CPC Incendios - mantener rondas corta fuego	M46	0.00	14.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	14
CPC Incendios-Barrer Calles	M48	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
CPC Incendios-Vigilancia de incendios	M50	0.00	-	0.00	-	0.00	-	4.45	1.00	0.00	-	0.00	-	0.00	-	4.45	-	0.00	-	0.00	-	0.00	-	4.45	-	13	1
Deschuponado	M41	0.00	-	0.00	-	0.00	-	4.89	-	0.00	2.00	4.89	-	0.00	-	4.89	-	0.00	-	4.89	-	0.00	-	4.89	-	24	2

Deshije	M17	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Despeje	M26	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	19.03	-	0.00	13.00	0.00	1.00	0.00	-	0.00	2.00	0.00	1.00	0.00	-	0.00	-	19	17
Imprevistos	M32	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	2.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	-	8
Manejo de Rebrote cocobolo	M40	0.00	-	3.95	-	0.00	4.00	0.00	-	0.00	2.00	3.95	-	0.00	4.00	0.00	6.00	0.00	-	3.95	-	0.00	-	0.00	-	12	16
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Poda de formación	M18	15.80	-	16.80	6.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	33	10
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	-	1
Rodaja Orgánica	M33	0.00	42.00	31.30	6.00	0.00	-	0.00	-	12.15	8.00	0.00	-	2.52	-	0.00	-	34.03	-	0.00	-	13.58	-	0.00	-	94	56
Tramite Trabajadores	M54	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Traslado de Insumos	M35	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Grand Total		62.72	65.00	76.09	28.00	35.30	39.00	20.21	41.00	52.00	44.00	33.64	26.00	47.78	46.00	20.72	14.00	95.87	11.00	52.70	2.00	42.90	2.00	52.08	-	592.01	318.00

- This farm has a high load of invasive grasses, mainly Alicia grass, which limit the development of forest species and promote competition for resources. As a management strategy, it was decided to carry out targeted applications of total glyphosate, with the aim of achieving better control of grasses and stimulating the emergence of broadleaf species, which are more manageable and less competitive. This decision is based on technical criteria for the efficient use of glyphosate.

- Farm No. 2719 Lastenia 5

Summary of reforestation

Table 42. Categorization of reforested area.

Farm 2719 - Lastenia 5						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	13.16	0.50	13.66
Bullywood	*Terminalia amazonia*	3x4	833	1.23		1.23
Santos Mahogany	*Myroxylon balsamum*	3x4	833	0.84		0.84
Mahogany	*Swietenia macrophylla*	3x4	833	3.34		3.34
Spanish Cedar	*Cedrela odorata*	3x4	833	2.93		2.93
Rosewood	*Dalbergia retusa*	3x4	833	22.74		22.74
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	4.47		4.47
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	5.47		5.47
Teak	*Tectona grandis*	4x5	500	0.24		0.24
Total, reforested				**54.42**	**0.50**	**54.92**
Area to be planted						14.18
Protection area						22.63
Stream area						1.00
Artificial lake						1.00
Infrastructure						0.72
Total Area						**94.45**

On this farm, the soil's water retention capacity has directly affected the growth, development, and adaptation of the reforested species. Both Rosewood (*Dalbergia retusa*) and Bullywood (*Terminalia amazonia*) have responded differently to these conditions of excessive moisture, with a tendency for temporary and prolonged waterlogging in more critical areas.

Currently, a recovery plan is being implemented for the Tonka Bean (*Dipteryx oleifera*) area, which experienced an 80 % mortality rate. This involves introducing species better adapted

to the site, along with vegetation clearing to ensure sufficient light penetration for the plants, in preparation for future interventions in 2025.

Map of the farm

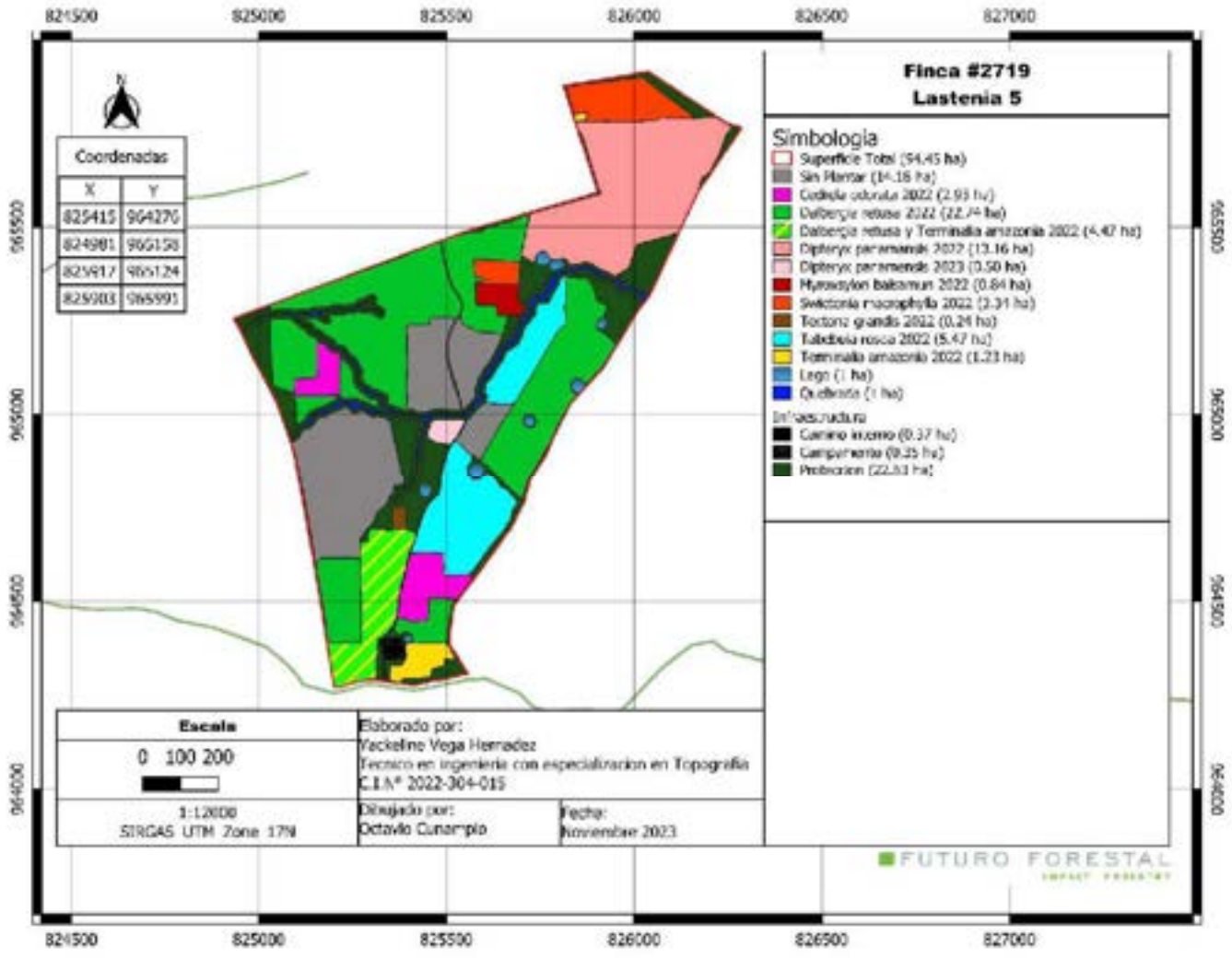


FIGURE 50. MAP OF LASTENIA 5 FARM (NO. 2719).

Monitoring and growth data

In this first monitoring, we can observe that the species show good development. Among them, *Tabebuia rosea*, *Terminalia amazonia*, *Dalbergia retusa*, and *Cedrela odorata* present the highest average growth rates and annual increment rates.

Natives

Table 43. *Growth data.*

Darién **Growth data: Lastenia 5** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Mahogany	*Swietenia macrophylla*	2022	jun-24	2.0	1.80	0.68	0.90	0.34
Rosewood	*Dalbergia retusa*	2022	jun-24	2.0	2.03	1.97	1.01	0.99
Bullywood	*Terminalia amazonia*	2022	jun-24	2.0	1.69	2.09	0.84	1.04
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2.0	2.33	1.97	1.17	0.99
Rosy Trumpet Tree	*Tabebuia rosea*	2022	jun-24	2.0	2.67	2.72	1.33	1.36
Santos Mahogany	*Myroxylon balsamum*	2022	jun-24	2.0	NA	0.48	NA	0.24

Table 44. Executed AOP 2024

FINCA 2719 LASTENIA																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	-	8
Construcción de Casa	I6	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control de maleza - químico-Control de Playo	M5	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	7
Control de maleza manual - Corte Bejuco	M8	22.74	-	0.00	-	29.44	-	0.00	-	43.44	3.00	0.00	-	43.44	-	0.00	-	43.44	-	0.00	2.00	43.44	9.00	0.00	-	226	14
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	52.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	55
Control de maleza manual-chapia	M6	99.50	12.00	0.00	6.00	0.00	-	0.00	5.00	0.00	4.00	0.00	-	0.00	-	0.00	3.00	78.57	-	0.00	-	0.00	18.00	0.00	4.00	178	**52**
Control de Maleza-Limpieza en Franja	M38	111.70	-	39.07	25.00	0.00	-	0.00	-	103.52	-	0.00	-	0.00	26.00	16.53	8.00	100.15	-	89.84	-	0.00	14.00	0.00	-	461	73
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	24.00	0.00	19.00	0.00	26.00	0.00	37.00	0.00	10.00	15.60	25.00	0.00	-	0.00	-	16	141
Control fitosanitario manual - Arrieras	M13	7.10	-	7.10	-	7.10	1.00	7.10	-	7.10	-	7.10	-	14.10	-	14.10	1.00	14.10	-	14.10	-	14.10	-	14.10	1.00	127	3
Control fitosanitario manual - Hypsipyla grandella	M14	11.28	-	11.28	-	11.28	-	11.28	-	11.28	7.00	11.28	2.00	11.28	-	11.28	3.00	11.28	1.00	11.28	3.00	11.28	4.00	11.28	3.00	135	23
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	9.00	0.00	19.00	0.00	13.00	0.00	5.00	0.00	3.00	0.00	15.00	0.00	-	0.00	-	0.00	-	0.00	8.00	-	72
Control fitosanitario-Químico-Hypsipyla grandella	M11	3.11	2.00	3.11	1.00	3.11	4.00	3.11	4.00	3.11	5.00	3.11	-	3.11	4.00	3.11	-	3.11	-	3.11	3.00	3.11	5.00	3.11	8.00	37	36

CPC Incendios - mantener rondas corta fuego	M46	0.00	22.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	-	24
CPC Incendios-Barrer Calles	M48	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Despeje	M26	0.00	38.00	28.32	51.00	0.00	-	0.00	2.00	0.00	40.00	0.00	4.00	0.00	-	0.00	16.00	0.00	-	0.00	-	0.00	-	0.00	8.00	28	159
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	2.00	0.00	6.00	0.00	5.00	0.00	1.00	0.00	-	0.00	-	0.00	-	-	22
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	44.67	-	0.00	6.00	0.00	5.00	0.00	1.00	4.39	2.00	4.90	1.00	0.00	-	0.00	-	54	15
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	1.00	0.00	3.00	0.00	-	0.00	4.00	0.00	-	0.00	-	-	12
Manejo de Rebrote cocobolo	M40	0.00	-	22.74	-	0.00	-	0.00	26.00	0.00	-	22.74	29.00	0.00	28.00	0.00	41.00	0.00	3.00	22.74	1.00	0.00	-	0.00	16.00	68	144
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Monitoreo	M44	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Operador de Motosierra	I19	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Poda de formación	M18	22.74	-	0.00	5.00	0.00	55.00	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	23	**61**
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	1.00	0.00	-	0.00	-	-	**2**
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.65	-	0.00	-	0.00	-	0.00	-	1	**1**
Rodaja Orgánica	M33	0.00	-	89.58	-	0.00	105.00	0.00	-	55.10	-	11.16	-	0.00	-	8.14	-	46.96	-	70.58	-	0.00	-	0.00	-	282	**105**
Sendero	GC1	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	**8**

Tramite Trabajadores		0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	-	**10**
Grand Total		278.17	94.00	201.20	89.00	50.93	179.00	21.49	69.00	268.22	107.00	55.39	128.00	71.93	102.00	53.16	139.00	302.65	17.00	232.15	40.00	71.93	53.00	28.49	50.00	1,635.71	**1,067.00**

- Insect control (termites): Termite infestations have been detected, especially in recently pruned species or those with open wounds. Specific treatments are required to prevent structural damage and protect the development of affected plants.

- One of the activities with the greatest impact on implementation was the clearing of shade in the cocobolo plots, as areas with excessive overhead vegetation cover were identified that limited light penetration and negatively affected tree growth and formation. Selective clearing improved sun exposure, reduced competition for light, and promoted vigorous and balanced plant development. This work required time, trained personnel, and logistical resources that were not initially contemplated, but its positive effect on yield fully justifies its implementation.

- The perimeter fences were damaged by falling branches, animals passing through, and human activity.

- Corrections to the apices of Terminalia amazonia to prevent branching and recovery of a plot that showed asymmetry in its development.

- Farm No. 444101 José García

Summary of reforestation

Farm No. 444101 - José García					
Species planted		Initial dist. (m)	Tree/ha	Planting year	Reforested area/species (ha)
Common name	Scientific name			2023	
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.05	1.05
Mahogany	*Swietenia macrophylla*	3x4	833	1.01	1.01
Rosewood	*Dalbergia retusa*	3x4	833	20.57	20.57
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	0.93	0.93
Total, reforested				**23.56**	**23.56**
Area to be planted					13.00
Protection area					7.43
Artificial lake					0.39
Stream area					0.69
Infrastructure					0.77
Firebreaks					0.66
Total Area					**46.50**

Table 45. Categorization of reforested area.

Map of the farm

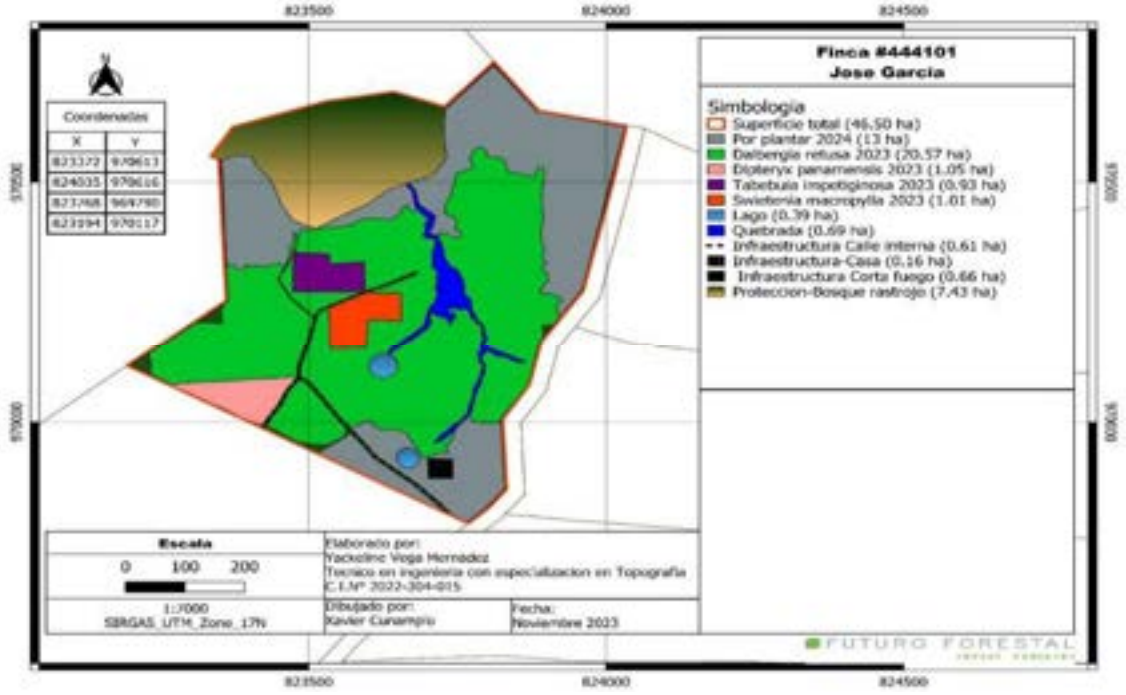


FIGURE 51. MAP OF JOSÉ GARCÍA FARM (NO. 444101).

Preliminary Mortality – Planting 2023

Table 46. PRELIMINARY SAMPLING OF MORTALITY IN PLANTED AREAS, FARM NO. 444101.

Farm name	Farm #	Species	Scientific name	Amount of trees planted 2023	Mortality %
José García Lastenia	444101	Tonka Bean	*Dipteryx oleifera*	3438	45%
		Mahogany	*Swietenia macrophylla*	72	10%
		Rosewood	*Dalbergia retusa*	80	18%
		Guayacán morado (sp)	*Tabebuia impetiginosa*	105	8%
Total average				3695	20%

The spaces of dead trees from different species were replanted according to plant availability. The mortality in the Rosewood (*Dalbergia retusa*) plot was replaced with the species Bullywood (*Terminalia amazonia*) as a strategy to correct growth issues and poor form in Rosewood. This species grows quickly, acts as a natural tutor, and promotes competition, encouraging the straight development of the trunk and improving overall plantation growth.

For the Tonka Bean (*Dipteryx oleifera*) plot, not all dead trees were replaced due to the limited availability of plants, considering site conditions and the reforested species.

- Farm No. 30336549 Marcelino Guerra

Summary of reforestation

Table 47. Categorization of reforested area.

Farm No. 30336549 Marcelino Guerra					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood	*Dalbergia retusa*	3x4	833	2.64	2.64
Spanish Elm	*Cordia alliodora*	3x4	833	0.87	0.87
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.16	1.16
Total, reforested				**4.67**	**4.67**
Protection area-Gallery forest					1.33
Infrastructure					0.53
Artificial lake					0.10
Stream area					0.10
Firebreak area					0.45
Total Area					**7.18**

Specifically in this farm, conditions of excess moisture and waterlogging have been identified as critical factors affecting the growth and survival of the species. When water remains stagnant for an extended period, the lack of oxygen in the soil disrupts root respiration, leading to growth stagnation, fungal proliferation, and, in extreme cases— as already observed—the death of plants.

The implementation of drainage systems, including trenches or water evacuation channels designed based on the lowest elevation, along with the selection of more resilient species better adapted to these conditions, will be the solution to this issue. This plan will be implemented in 2025.

Map of the farm

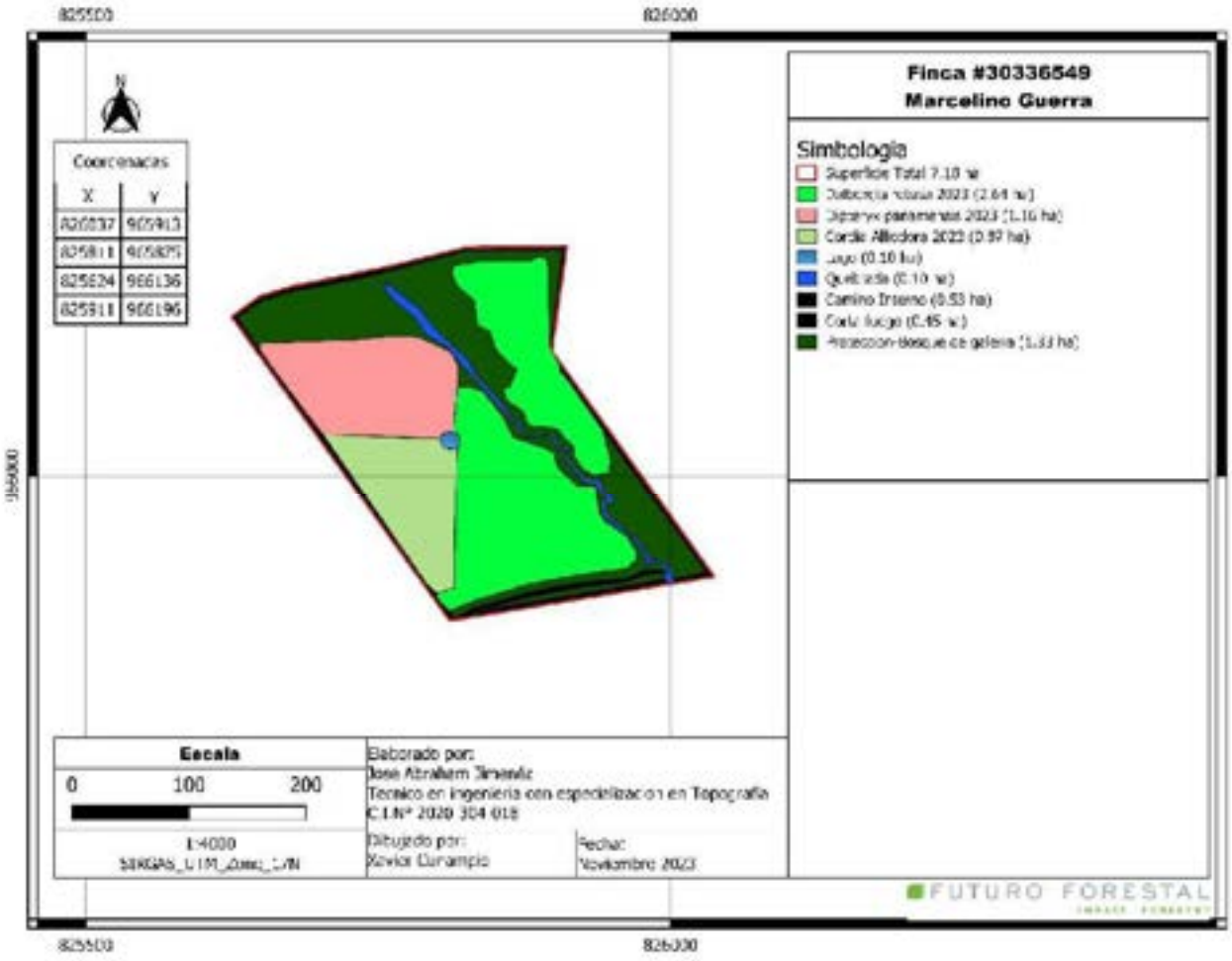


FIGURE 52. MAP OF MARCELINO GUERRA FARM (NO. 30336549).

Table 48. Executed AOP 2024

FINCA 30336549 MARCELINO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	18.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	18
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	8.63	-	0.00	-	0.00	-	0.00	-	7.87	-	0.00	1.00	0.00	-	0.00	-	7.87	-	0.00	-	24	1
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	-	-	13
Control de Maleza-Limpieza en Franja	M38	4.50	-	0.00	-	0.00	-	0.00	-	4.50	-	0.00	-	0.00	-	0.00	6.00	0.00	-	4.50	-	0.00	4.00	0.00	-	14	10
Control de Maleza-Química en Franja	M39	5.90	-	0.00	-	0.00	-	0.00	8.00	5.90	-	0.00	-	0.00	-	0.00	5.00	0.00	-	5.90	-	0.00	-	0.00	10.00	18	23
Control fitosanitario manual - Hypsipyla grandella	M14	0.00	-	0.00	-	3.44	-	0.00	-	0.00	-	0.00	-	3.44	-	0.00	-	0.00	-	0.00	**1.00**	3.44	-	0.00	-	10	1
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.00	-	0.00	-	0.95	-	0.00	-	0.00	-	0.00	-	0.95	-	0.00	-	0.00	-	0.00	1.00	0.95	-	0.00	-	3	1
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	-	1
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Despeje	M26	0.00	-	8.72	21.00	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	9	29
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	6.23	-	0.00	-	0.00	2.00	0.00	3.00	6.23	-	0.00	9.00	0.00	-	0.00	-	12	14
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	-	1
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	2.36	3.00	0.00	-	2.36	-	0.00	3.00	2.36	2.00	0.00	-	2.36	-	0.00	-	2.36	-	12	8
Operador de Motosierra	I19	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	7
Poda de formación	M18	0.00	-	9.44	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	9	4
Grand Total		10.40	0.00	18.16	21.00	13.02	5.00	2.36	14.00	16.63	8.00	2.36	6.00	12.26	29.00	2.36	17.00	6.23	-	12.76	19.00	12.26	5.00	2.36	11.00	111	135

- Farm No. 920 Marcelino Guerra

Summary of reforestation

Table 49. Categorization of reforested area.

Farm No. 920 Marcelino Guerra					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	
Rosewood	*Dalbergia retusa*	3x4	833	2.76	2.76
Total, reforested				**2.76**	**2.76**
Infrastructure					0.54
Artificial lake					0.05
Total Area					**3.35**

Mapa de la finca

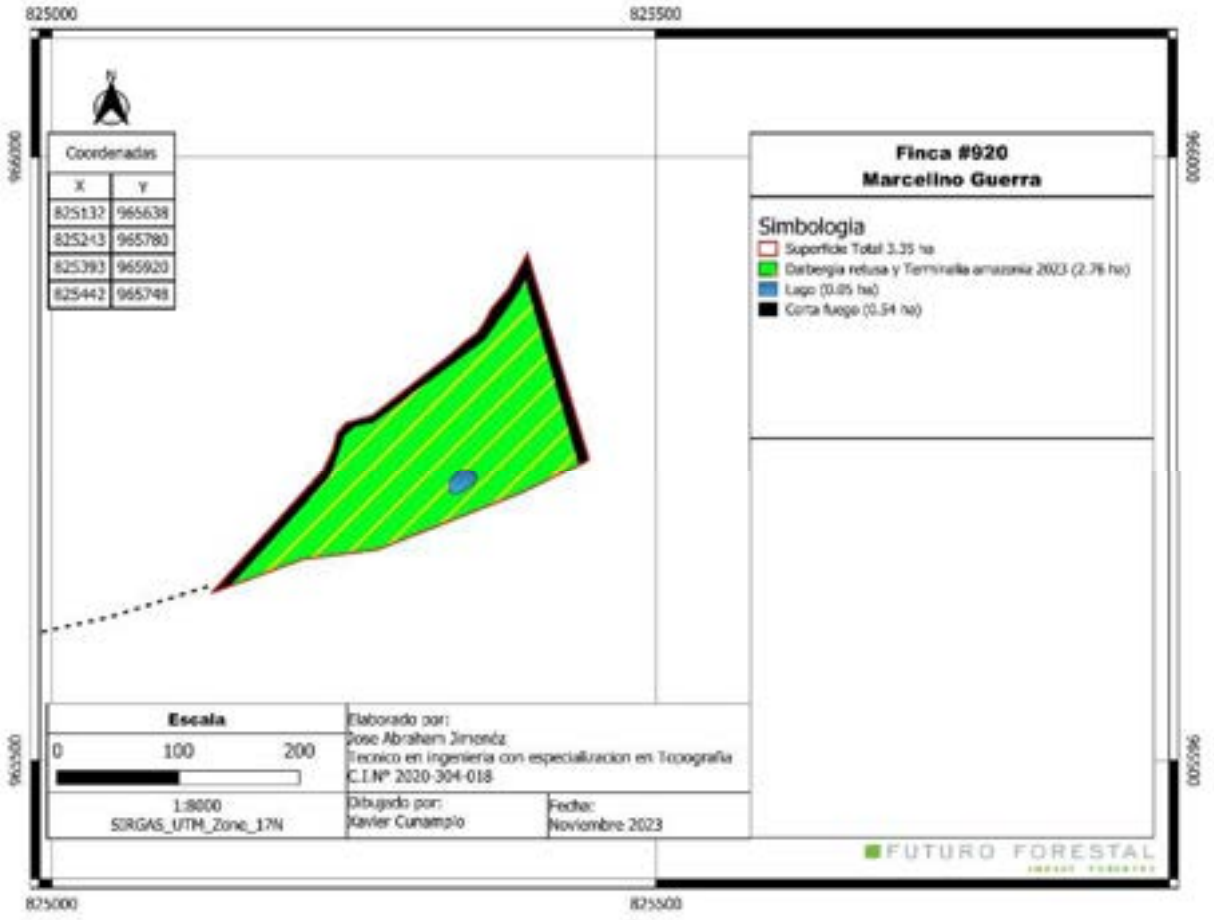


Figure 53. Map of Marcelino Guerra farm (No. 920).

Preliminary Mortality Planting 2023

Table 50. PRELIMINARY SAMPLING OF MORTALITY IN PLANTING, FARM NO. 920

Farm name	Farm #	Location	Operating unit	Species	Scientific name	Amount living	Amount dead	Total amount	Mortality %
Marcelino Guerra N°1	920	Lastenia	Lastenia	Rosewood and Bullywood	*Dalbergia retusa - Terminalia amazonia*	73	7	80	10%

In this farm, the replacement of mortality areas was not carried out due to the lack of species suitable for the site's conditions, which are characterized by high humidity levels and even persistent waterlogging in some areas. The available species did not meet the necessary characteristics to ensure survival and development under these conditions

Table 51. Executed AOP 2024

FINCA 920 MARCELINO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Control de Maleza-Limpieza en Franja	M38	0.00	-	0.00	7.00	0.00	-	0.00	-	5.25	-	0.00	-	0.00	6.00	0.00	-	0.00	-	5.25	-	0.00	8.00	0.00	-	11	21
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	-	0.00	2.00	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	4.00	-	14
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	-	1
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
Despeje	M26	0.00	-	0.00	-	0.00	-	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	3.14	-	0.00	-	0.00	4.00	0.00	-	3.14	-	0.00	4.00	0.00	-	0.00	-	6	8
Limpieza y mantenimiento de infraestructura	i7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	9
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	2.10	-	0.00	2.00	2.10	5.00	0.00	-	2.10	-	0.00	-	2.10	-	8	10
Mantenimiento de caminos internos	I2	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Poda de formación	M18	0.00	-	8.40	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	8	5
Grand Total		0.00	5.00	8.40	7.00	0.00	5.00	0.00	15.00	8.39	10.00	2.10	9.00	0.00	18.00	2.10	7.00	3.14	0.00	7.35	4.00	0.00	8.00	2.10	5.00	34	93

- These activities were not included in the initial budget because they were corrective or specialized management interventions that arose in response to unforeseen conditions. However, they were necessary to maintain viability.

- Firebreaks were opened and maintained as a preventive measure against the risk of forest fires, especially in areas vulnerable to the accumulation of dry plant material. This activity was essential to protect both existing plantations and the farm's infrastructure and is part of a risk management strategy to address the high incidence of burning by agricultural producers in the Darién area.

- The perimeter fences were damaged by falling branches, animals passing through, and human activity.

- Corrections to the apices of *Terminalia amazonia* to prevent branching and recovery of a batch that showed asymmetry in its development.

- Farm No. 1289 Avendaño (Altos del Cristo)

Summary of reforestation

Farm No. 1289 - Avendaño						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833		2.26	2.26
Bullywood	*Terminalia amazonia*	3x4	833		1.07	1.07
Mahogany	*Swietenia macrophylla*	3x4	833		2.06	2.06
Rosewood	*Dalbergia retusa*	3x4	833		3.24	3.24
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	8.03	2.61	10.64
Guayacán morado (sp)	*Tabebuia impetiginosa*	3x4	833		3.30	3.30
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	0.76	3.40	4.16
Zurich plots Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	0.25		0.25
Total, reforested				**9.04**	**17.94**	**26.98**
Area to be planted						0.25
Protection area						6.59
Stream area						2.23
Infrastructure						1.47
Total Area						**37.52**

Table 52. Categorization of reforested area.

Map of the farm

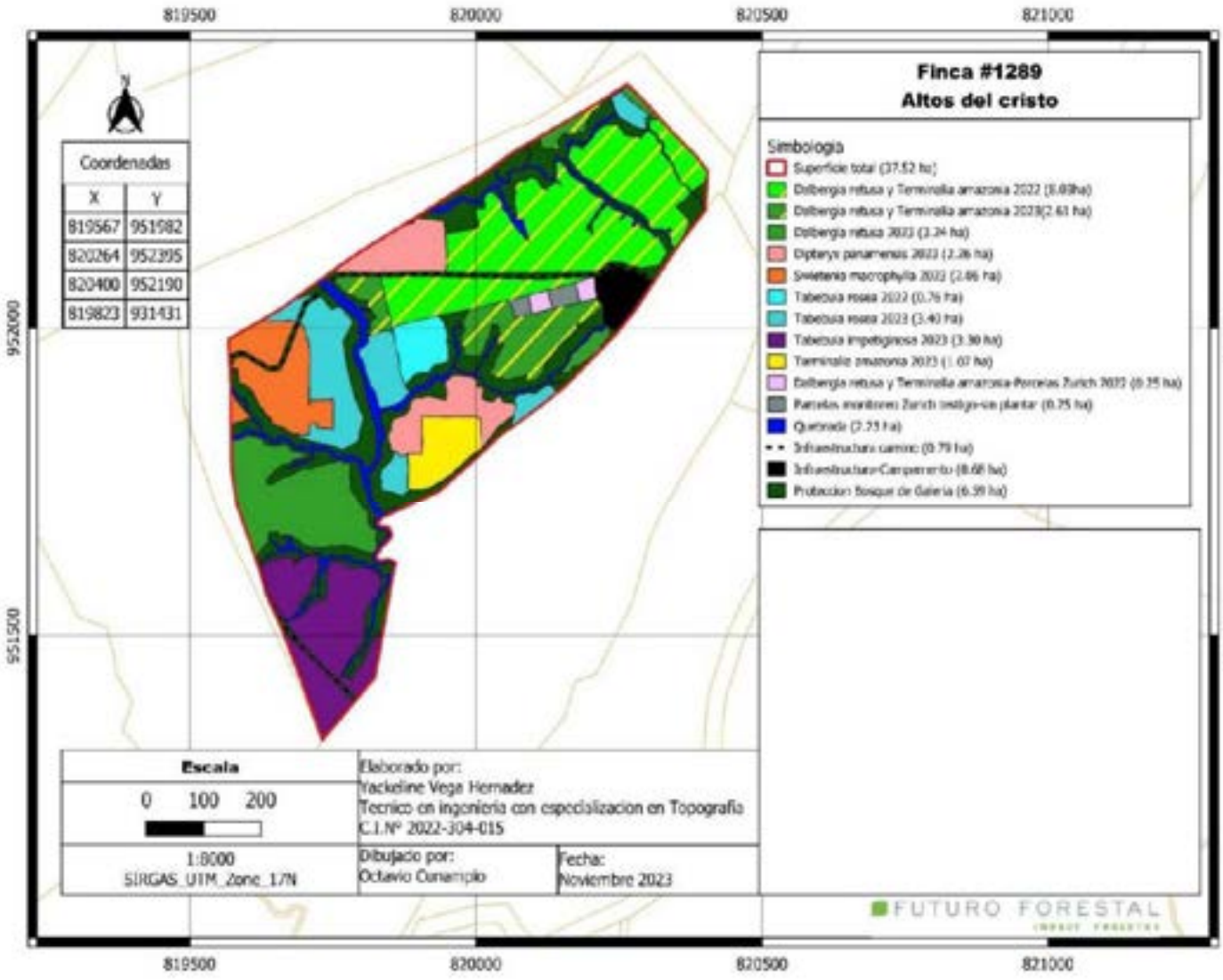


FIGURE 54. MAP OF ALTOS DEL CRISTO FARM (NO. 1289).

Mortality Planting 2023

Table 53. FARM AVENDAÑO 1289 PLANTED IN 2023.

Farm	Farm N °	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Avendaño	1289	Rosewood	*Dalbergia retusa*	1131	20%
		Bullywood	*Terminalia amazonia*	1129	23%
		Rosy Trumpet Tree	*Tabebuia rosea*	2236	5%
		Tonka Bean	*Dipteryx oleifera*	1882	17%
		Mahogany	*Swietenia macrophylla*	1575	5%
		Bullywood	*Terminalia amazonia*	910	34%
		Guayacán morado (sp)	*Tabebuia Impetiginosa*	2835	4%
		Rosewood	*Dalbergia retusa*	2975	20%
Total, average				14673	16%

For the year 2024, at the beginning of the rainy season, replanting was carried out on this farm, which increased the mortality rate by 13 % due to the availability of rainfall.

INCA 1289 AVENDAÑO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Acomodo e inventario de deposito	M28	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Capacitación	M31	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	-	3
Control de maleza - químico-Bomba Mochila	M1	0.00	-	28.59	-	51.65	-	0.00	15.00	0.00	-	28.59	-	51.65	-	0.00	-	0.00	-	28.59	-	51.65	-	0.00	-	241	15
Control de maleza manual - Corte Bejuco	M8	8.63	-	0.00	-	8.63	-	0.00	3.00	8.63	3.00	0.00	-	8.63	-	0.00	-	8.63	1.00	0.00	-	8.63	11.00	0.00	5.00	52	23
Control de maleza manual - rodajas de mantenimiento	M7	8.53	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	74.00	0.00	-	0.00	-	0.00	7.00	0.00	10.00	0.00	-	0.00	-	9	91
Control de maleza manual-chapia	M6	0.00	-	83.08	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	**1.00**	0.00	-	0.00	-	0.00	-	83	1
Control de Maleza-Limpieza en Franja	M38	23.76	-	37.36	-	0.00	-	0.00	4.00	29.08	-	37.36	-	0.00	88.00	0.00	17.00	29.08	2.00	37.36	13.00	0.00	24.00	0.00	-	194	148
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	18.00	0.00	-	0.00	-	0.00	-	0.00	72.00	0.00	2.00	0.00	-	0.00	-	0.00	-	-	92
Control fitosanitario manual - Arrieras	M13	6.69	-	6.69	-	6.69	3.00	6.69	-	6.69	-	6.69	-	6.69	-	6.69	-	6.69	-	6.69	-	6.69	-	1.71	-	75	3
Control fitosanitario manual - Hypsipyla grandella	M14	3.44	-	3.44	-	3.44	2.00	3.44	-	3.44	-	3.44	-	3.44	-	3.44	-	3.44	1.00	3.44	-	3.44	-	3.44	-	41	3
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	2.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.95	-	0.95	-	0.95	3.00	0.95	4.00	0.95	2.00	0.95	4.00	0.95	2.00	0.95	4.00	0.95	2.00	0.95	5.00	0.95	2.00	0.95	-	11	28
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Despeje	M26	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	12.00	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	13
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Fertilización foliar	M15	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	39.78	-	0.00	38.00	0.00	-	0.00	-	22.76	-	4.07	4.00	0.00	-	0.00	-	67	42
Imprevistos	M32	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2

Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	8.00	0.00	-	0.00	-	-	9
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	14.16	11.00	0.00	-	14.16	8.00	0.00	1.00	14.16	6.00	0.00	13.00	14.16	1.00	0.00	-	7.87	-	65	40
Mantenimiento de caminos internos	I2	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	-	1
Mantenimiento de cercas	I4	0.00	1.00	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
Operador de Motosierra	I19	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Poda de formación	M18	0.00	-	56.73	8.00	0.00	15.00	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	57	25
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	-	6
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	8.38	-	0.00	22.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	8	22
Rodaja Orgánica	M33	32.29	-	41.49	-	0.00	21.00	0.00	-	22.78	-	0.00	-	37.53	-	0.00	-	17.53	-	0.00	-	57.34	-	0.00	1.00	209	22
Tramite Trabajadores	M54	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	1.00	-	3
Vigilacia Fincas		0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	-	2
Grand Total		84.29	7.00	258.33	8.00	71.36	51.00	25.24	66.00	111.35	7.00	99.57	138.00	108.89	117.00	25.24	99.00	89.08	29.00	95.26	42.00	128.70	48.00	13.97	9.00	1,111	621

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that act as living walls, minimizing the risk of erosion and helping to preserve soil structure.

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that function as living walls, minimizing the risk of erosion and helping to preserve soil structure.

- In addition, these vegetative corridors have proven effective in biological pest control, as they favor the presence of natural enemies and hinder the movement of pests such as Hypsipyla grandella, which affects commercially valuable species such as mahogany and cedar. This led to changes in activities, thereby reducing some daily wages.

- Farm No. 2162 Avendaño (Altos del Cristo)

Summary of reforestation

Table 54. Categorization of reforested area.

Finca 2162 - Avendaño						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833		1.02	1.02
Rosewood	*Dalbergia retusa*	3x4	833		4.17	4.17
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	0.47	1.26	1.73
Total, reforested				**0.47**	**6.45**	**6.92**
Protection area						2.79
Stream area						0.67
Infrastructure						0.42
Total Area						**10.80**

Map of the farm

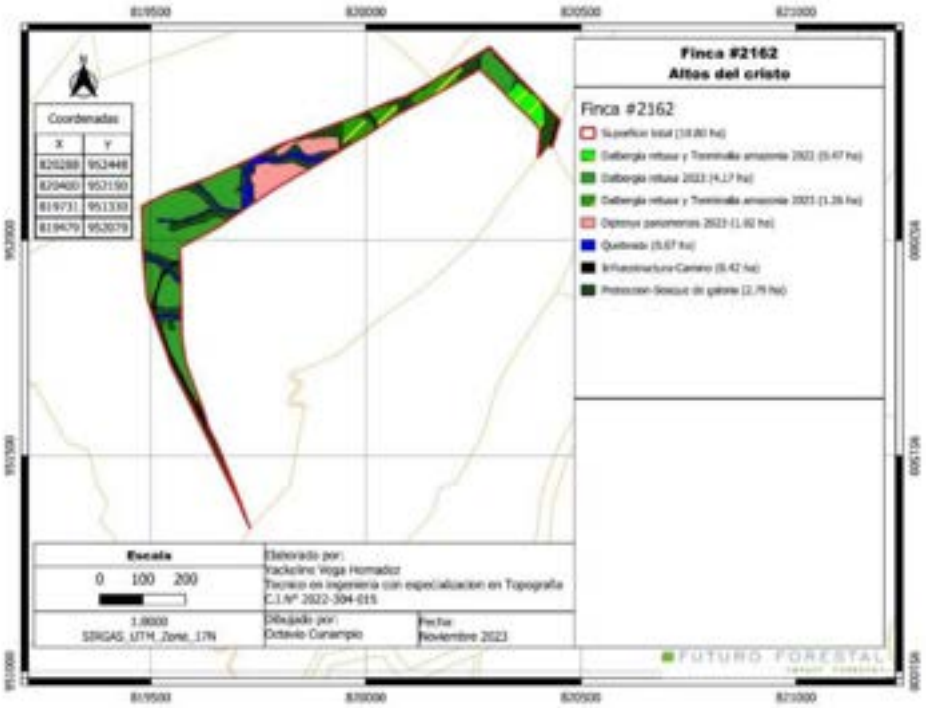


Figura 55. Map of Altos Del Cristo farm (No. 2162).

Mortality Planting 2023

Table 55. PERCENTAGE OF MORTALITY PLANTED 2023.

Farm	Farm N °	Common name	Scientfic name	Amount of trees planted 2023	Mortality %
Avendaño	2162	Rosewood	*Dalbergia retusa*	525	16%
		Bullywood	*Terminalia amazonia*	525	0%
		Rosy Trumpet Tree	*Tabebuia rosea*	135	3%
		Tonka Bean	*Dipteryx oleifera*	966	8%
		Rosewood	*Dalbergia retusa*	3115	1%
Total, average				5266	6%

For the species reforested in 2023 on this farm, the mortality rate was significantly low, with 1 % in the year of establishment. However, in the 2024 replanting, the mortality rate increased to 5 %

FINCA 2162 AVENDAÑO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - químico-Bomba Mochila	M1	0.00	13.00	12.62	-	6.31	-	0.00	-	0.00	-	12.62	-	6.31	-	0.00	-	0.00	-	12.62	-	6.31	-	0	-	57	13
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0	-	-	1
Control de maleza manual - rodajas de mantenimiento	M7	1.55	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	11.00	0.00	-	0.00	-	0.00	-	0.00	11.00	0.00	-	0	-	2	29
Control de Maleza-Limpieza en Franja	M38	15.01	-	0.00	-	0.00	-	0.00	-	10.75	-	0.00	-	0.00	-	0.00	19.00	10.75	-	7.78	5.00	0.00	-	0	-	44	24
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	17.00	0.00	-	0.00	-	0.00	-	0	-	-	17
Control fitosanitario manual - Arrieras	M13	1.25	-	1.25	-	1.25	1.00	1.25	-	1.25	-	1.25	-	1.25	-	1.25	-	1.25	-	1.25	-	1.25	-	0.08	-	14	1
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0	-	-	1
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	14.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0	-	-	14
Despeje	M26	0.00	-	3.70	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0	-	4	3
Fertilización foliar	M15	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0	-	-	1
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	11.10	1.00	0.00	8.00	0.00	-	0.00	-	11.10	-	0.00	-	0.00	-	0	-	22	9
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	1.26	1.00	0.00	10.00	1.26	1.00	0.00	-	1.26	-	0.00	-	1.26	2.00	0.00	1.00	0	-	5	15
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	20.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0	-	-	20
Poda de formación	M18	0.00	-	5.04	-	0.00	13.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0	-	5	13
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2.40	-	0.00	2.00	0.00	12.00	0.00	1.00	0.00	-	0.00	-	0	-	2	15

Rodaja Orgánica	M33	0.00	-	5.14	-	0.00	4.00	0.00	-	0.00	-	0.00	-	3.50	-	0.00	-	10.38	-	5.14	-	0.00	-	0	-	24	4
Grand Total		17.81	27.00	27.75	-	7.56	39.00	2.51	1.00	23.10	21.00	17.53	20.00	11.06	3.00	2.51	48.00	33.48	1.00	28.05	18.00	7.56	2.00	0.08	-	179	180

- Farm No. 1663 Avendaño (Altos del Cristo)

Summary of reforestation

Table 56. Categorization of reforested are

Map of the farm

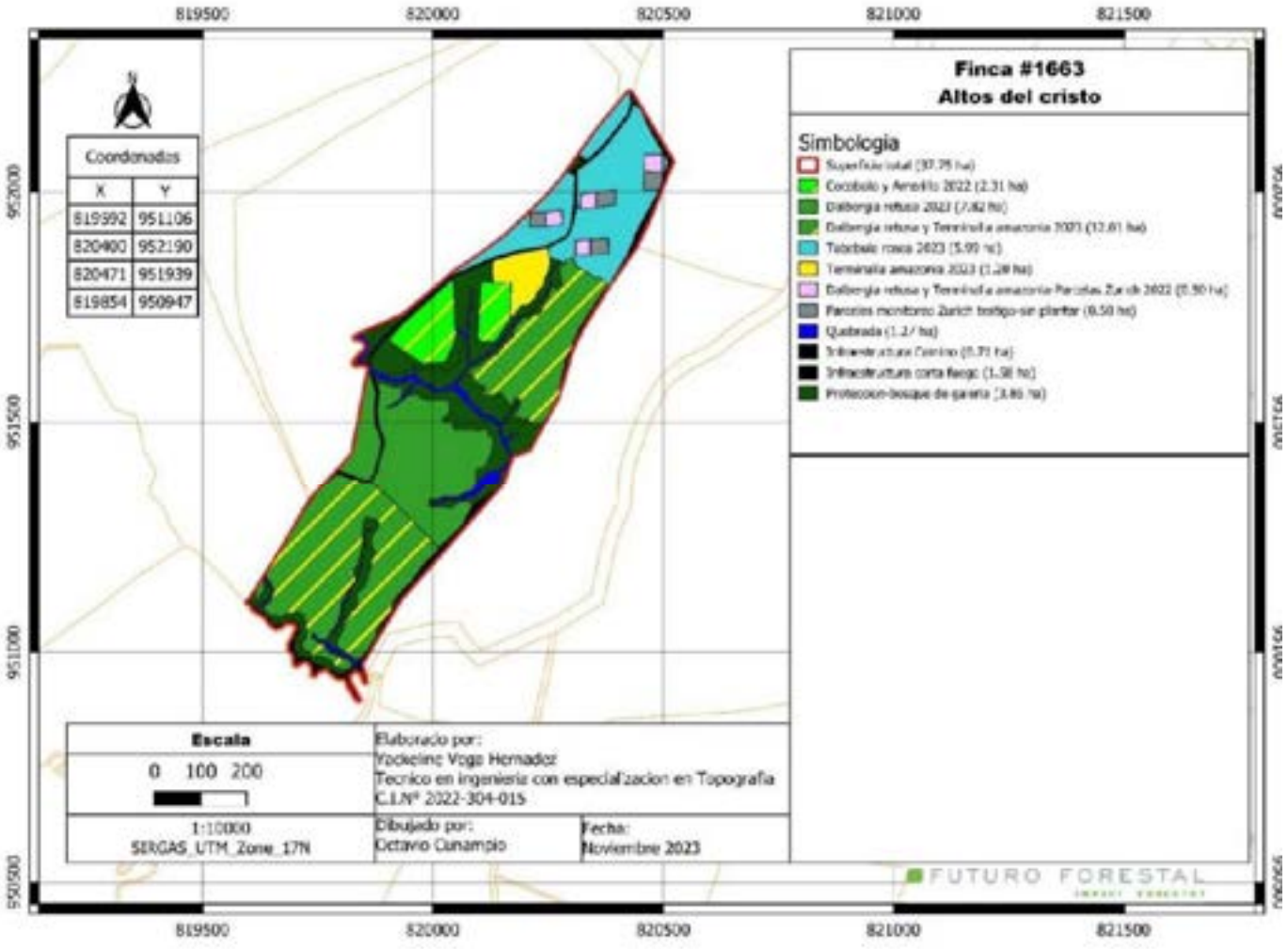


FIGURE 56. MAP OF ALTO DEL CRISTO FARM (NO. 1663).

Preliminary Mortality – Planting 2023

Table 57. MORTALITY – PLANTING 2023.

Farm	Farm N °	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Avendaño	1663	Rosewood	*Dalbergia retusa*	4900	10%
		Bullywood	*Terminalia amazonia*	4830	10%
		Rosy Trumpet Tree	*Tabebuia rosea*	4687	5%
		Rosewood	*Dalbergia retusa*	6475	11%
		Bullywood	*Terminalia amazonia*	910	10%
Total, average				**21802**	**9%**

For the year 2024, the mortality rate increased by 6 % compared to the year of establishment. However, it remains a low mortality rate, and the plantation is homogeneous.

Table 58. Executed AOP 2024

FINCA 1663 AVENDAÑO																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Control de maleza - químico-Bomba Mochila	M1	0.00	16.00	0.00	-	88.54	-	0.00	-	0.00	-	0.00	22.00	88.54	-	0.00	-	0.00	-	0.00	-	88.54	-	0.00	-	266	38
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	3.00	-	6
Control de maleza manual - rodajas de mantenimiento	M7	3.05	-	0.00	-	0.00	-	0.00	-	0.00	43.00	0.00	6.00	0.00	-	0.00	-	0.00	2.00	0.00	8.00	0.00	29.00	0.00	-	3	88
Control de maleza manual-chapia	M6	16.29	-	49.57	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	4.00	0.00	-	0.00	-	0.00	-	66	4
Control de Maleza-Limpieza en Franja	M38	19.25	-	17.05	-	0.00	-	0.00	-	51.20	17.00	0.00	35.00	0.00	27.00	0.00	70.00	2.75	45.00	71.20	-	0.00	-	0.00	-	161	194
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	16.00	0.00	**60.00**	0.00	-	0.00	-	0.00	-	-	76
Control fitosanitario - arrieras	E15	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	-	2
Control fitosanitario manual - Arrieras	M13	4.57	-	4.57	-	4.57	1.00	4.57	-	4.57	-	4.57	-	4.57	-	4.57	-	4.57	-	4.57	-	4.57	-	0.17	4.00	50	5
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	-	0.00	19.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	19
Despeje	M26	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	-	3
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	44.29	-	0.00	50.00	0.00	-	0.00	-	44.29	-	0.00	-	0.00	-	0.00	-	89	50
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1

Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	21.66	13.00	0.00	-	21.66	27.00	0.00	1.00	21.66	2.00	0.00	-	21.66	1.00	0.00	-	19.38	-	106	44
Mantenimiento de caminos internos	I2	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	-	1
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	11.00	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	19
Poda de formación	M18	0.00	-	86.64	-	0.00	26.00	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	87	28
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	2.00	0.00	-	-	5
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	10.52	-	0.00	28.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	11	28
Rodaja Orgánica	M33	3.05	10.00	66.11	18.00	0.00	1.00	0.00	2.00	1.83	-	0.00	-	57.41	-	0.00	-	1.83	-	0.00	-	51.44	-	0.00	-	182	31
Vigilacia Fincas	I27	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Grand Total		46.21	26.00	223.94	40.00	93.11	40.00	26.23	26.00	101.89	60.00	36.75	140.00	15052	56.00	26.23	88.00	53.44	112.00	97.43	12.00	14.455	33.00	19.55	12.00	1,020	645

- Organic mulch was planned to be laid as a measure to conserve soil moisture, especially in anticipation of possible dry periods. However, due to increased rainfall during the season, it was not necessary to carry out the plan in its entirety. The activity focused only on the species most susceptible to drought, which allowed for the optimization of materials and labor, maintaining technical criteria without incurring unnecessary costs. Similarly, due to the good development of the plantation, fertilization was focused only on species that required these nutritional inputs, as they are subject to special management, such as mahogany and cedar.

- Corrections to the apices of *Terminalia amazonia* to prevent branching and recovery of a plot that showed asymmetry in its development.

- Insect control (termites): Termite infestations have been detected, especially in recently pruned species or those with open wounds. Specific treatments are required to prevent structural damage and protect the development of affected plants.

- Change of Activities According to Weed Behavior (Adaptive Management) Due to the variability of weed growth between different plots, it has become necessary to adjust the frequency of mowing, include follow-up work, or reduce interventions in other areas, depending on the actual evolution of conditions. This flexibility in planning creates a gap between what is planned and what is executed, since, combined with changes in weather conditions, it leads us to bring forward or delay control interventions.

5.5. Farms in the Colón province

Description of development

The plantation in the Colón area farms is maintaining growth within the expected range, which is considered good development. This growth is largely due to the fact that most of the species are native to the area's forests, making them better adapted to the soil.

- **Farm Gatún 1**

The reforestation on this farm includes a variety of species, each maintaining good development according to its growth characteristics. Species such *as Dipteryx oleifera, Terminalia amazonia*, *Carapa guianensis*, *Tapirira guianensis*, *Calophyllum brasiliense*, and *Aspidosperma desmanthum* exhibit better development due to their growth traits in these areas. Other species, like *Manilkara bidentata*, exhibit slower growth in their early years but recover when the canopy develops, doubling in size annually once in this state. All these species mentioned have high commercial value. On the other hand, *Dalbergia retusa*, which is not native to the area, shows slower growth, but this has been compensated by natural regeneration with species like *Vochysia ferruginea* and *Simarouba amara*.

- **Farm Gatún 2**

The plantation on this farm is only 1 year old, but to date, there has been optimal development of the species. Within this plantation, the species that are showing good growth rates are *Dipteryx oleifera*, *Terminalia amazonia*, *Carapa guianensis*, and *Calophyllum brasiliense*, all of which have high commercial value. Other species that stand out in growth, but with ecological value that far exceeds their commercial value, include *Vochysia ferruginea*, *Simarouba amara*, and *Jacaranda sp*.

- **Farm Conexión**

This farm maintains plantations with a variety of native species that, being local to the area, exhibit good development. Additionally, species such as *Calophyllum brasiliense*, *Dipteryx oleifera*, and *Manilkara bidentata* stand out for their better growth due to their native status.

Throughout 2024, the main activities that have contributed to optimizing the plantation's development were fertilization to provide nutrients to the plants, and the key management practices were: strip weeding, shade clearance, vine cutting, and pruning. These activities are essential for the plantation's growth.

Pest attacks, diseases or fire occurrences

There have been reports of attacks by *Arriera atta*, which build their nests within the plantation or in neighboring farms. These ants cut and carry fragments of tender leaves with high water content to cultivate fungus. This activity is dependent on periods of abundant or scarce rainfall, with the latter case resulting in ants foraging at night between 6 pm and 10 pm. The ants strip the plants of their leaves entirely, slowing down plant growth. Ant nests have been found in various locations, and for control, we manually apply Mirex (granular insecticide) and have developed an action plan to prevent the formation of new nests and to control or eradicate the existing ones through regular patrols. As of now, the issue is under control.

Regarding forest fires, on Saturday, March 30, 2024, a fire broke out in an area of the farm. It was reported at 10:47 am and was controlled by 12:30 pm, consuming 4.72 hectares of *Terminalia amazonia* and *Dipteryx oleifera* plantations. The firefighting efforts were quite challenging as the fire started near the road, so the team had to take a detour of at least 20 minutes through rough terrain to control the blaze.

The fire covered several fronts that were ultimately distant from each other, but it was extinguished with the support of the collaborators. As mentioned, one factor that delays these activities is the distance from where the equipment needs to be carried on foot, as the terrain does not have a road to access the plantation by vehicle. This area was replanted with a lower-value species in 2024. Due to the conflict with the neighbors, saplings were uprooted in the same area. The legal process is currently being carried out with lawyers.

- Farm Gatún 1

Summary of reforestation

Table 59. Categorization of reforested area.

Finca Gatún 1 DP Record ADJ-3-98-2019					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2019**	
Alcarreto (sp)	*Aspidosperma desmanthum*	5x3	666	1.92	1.92
Breadnut	*Brosimum alicastrum*	5x3	666	0.52	0.52
Brazil Beauty Leaf	*Calophyllum brasilienses*	5x3	666	2.24	2.24
Bateo (sp)	*Carapa guianensis*	5x3	666	2.1	2.1
Rosewood	*Dalbergia retusa*	5x3	666	8.4	8.4
Rosewood	*Dalbergia retusa*	3x3	1111	1.95	1.95
Tonka Bean	*Dipteryx oleifera*	5x3	666	2.21	2.21
Níspero (sp)	*Manilkara bidentata*	5x3	666	1.93	1.93
Caobillo (sp)	*Tapirira guianensis*	5x3	333	1.09	1.09
Bullywood	*Terminalia amazonia*	5x3	666	1.84	1.84
Bullywood	*Terminalia amazonia*	3x3	1111	3.04	3.04
Total, reforested				**27.24**	**27.24**
Protection area					21.74
Total Area					**48.98**

Map of the farm



FIGURE 57. MAP OF GATÚN 1 FARM.

Monitoring and growth data

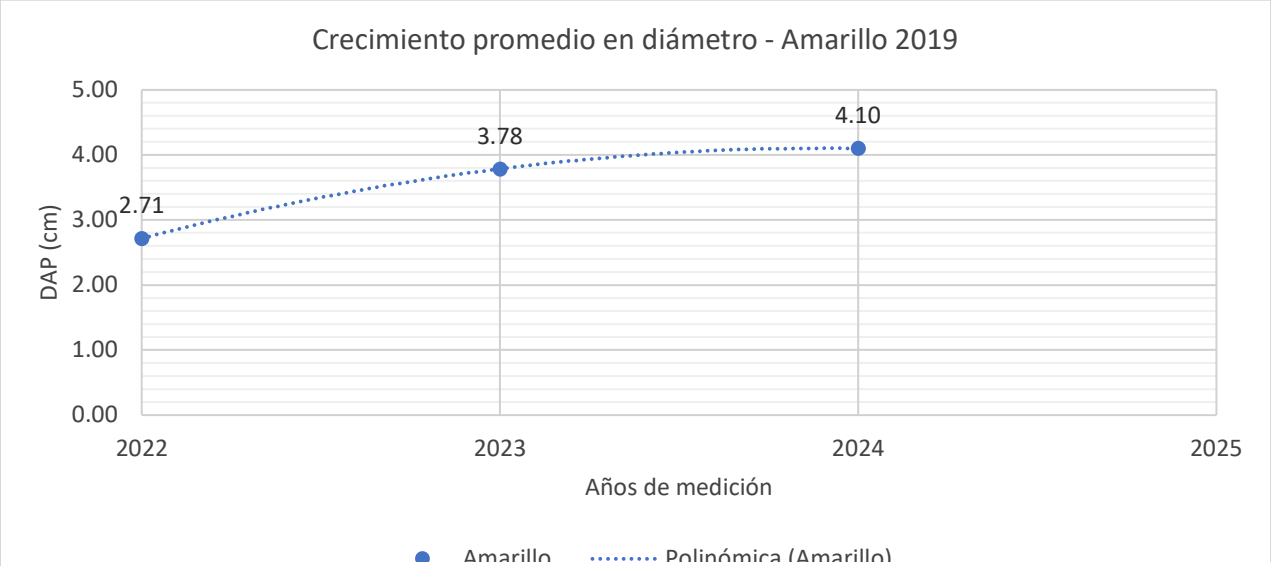
Average growth of natives planted in 2019

Based on the results presented in the following tables, the growth of the species has been good. Species like *Dipteryx oleifera*, *Aspidosperma desmanthum*, and *Carapa guianensis*, which were planted bare root, have faced challenges in their development. The growth of *Dalbergia retusa* has been good despite not being a native species of the area, as it has adapted well to the site conditions. On the other hand, *Terminalia amazonia* has shown a good response to its development and the soil in the area, with the need for proper management to optimize its growth. The species *Calophyllum brasiliense* and Caobillo have reacted very well to the site's soil.

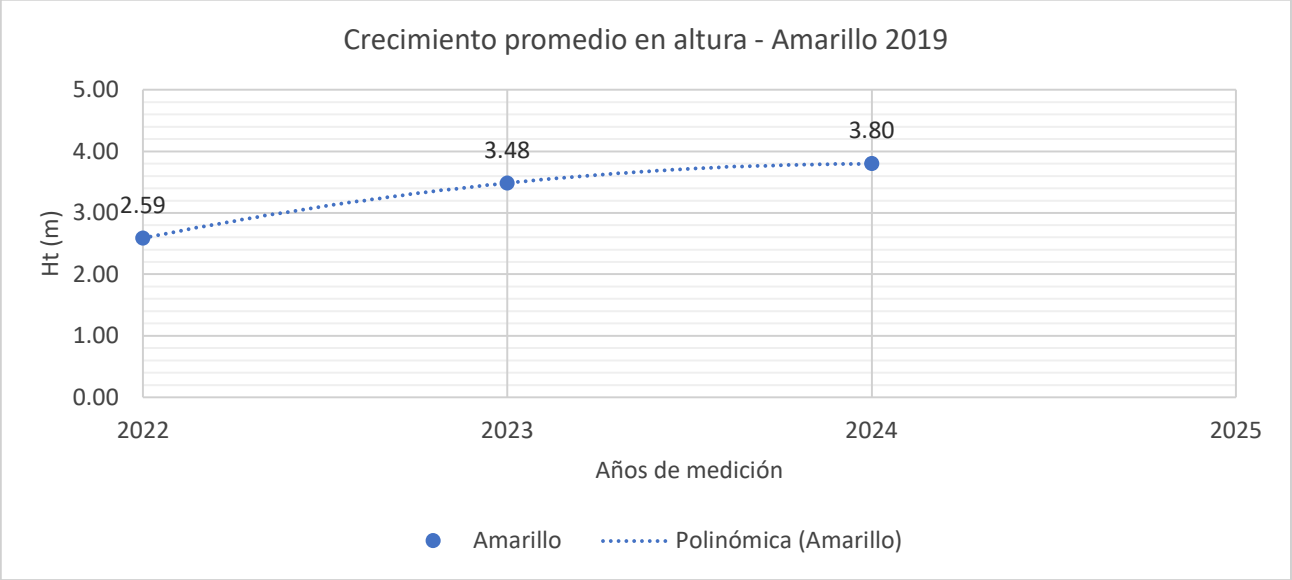
Terminalia amazonia

Table 60. *Growth data.*

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Bullywood	*Terminalia amazonia*	2019	feb-22	2.8	2.13	3.42	0.71	1.14
Bullywood	*Terminalia amazonia*	2019	feb-23	3.8	2.35	3.61	0.59	0.90
Bullywood	*Terminalia amazonia*	2019	jan-24	4.9	2.78	3.84	0.57	0.78



Graph 12. Average diameter growth of Bullywood, planted 2019.

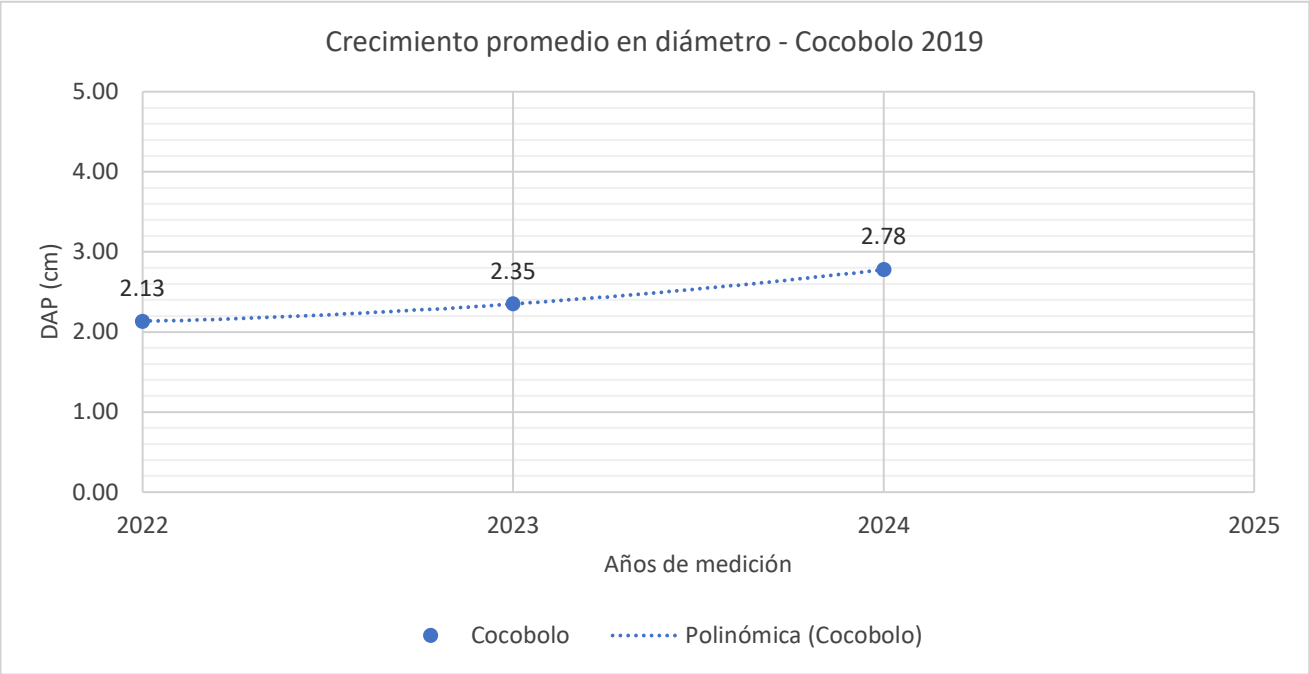


Graph 13. Average growth in total height of Bullywood, planted 2019.

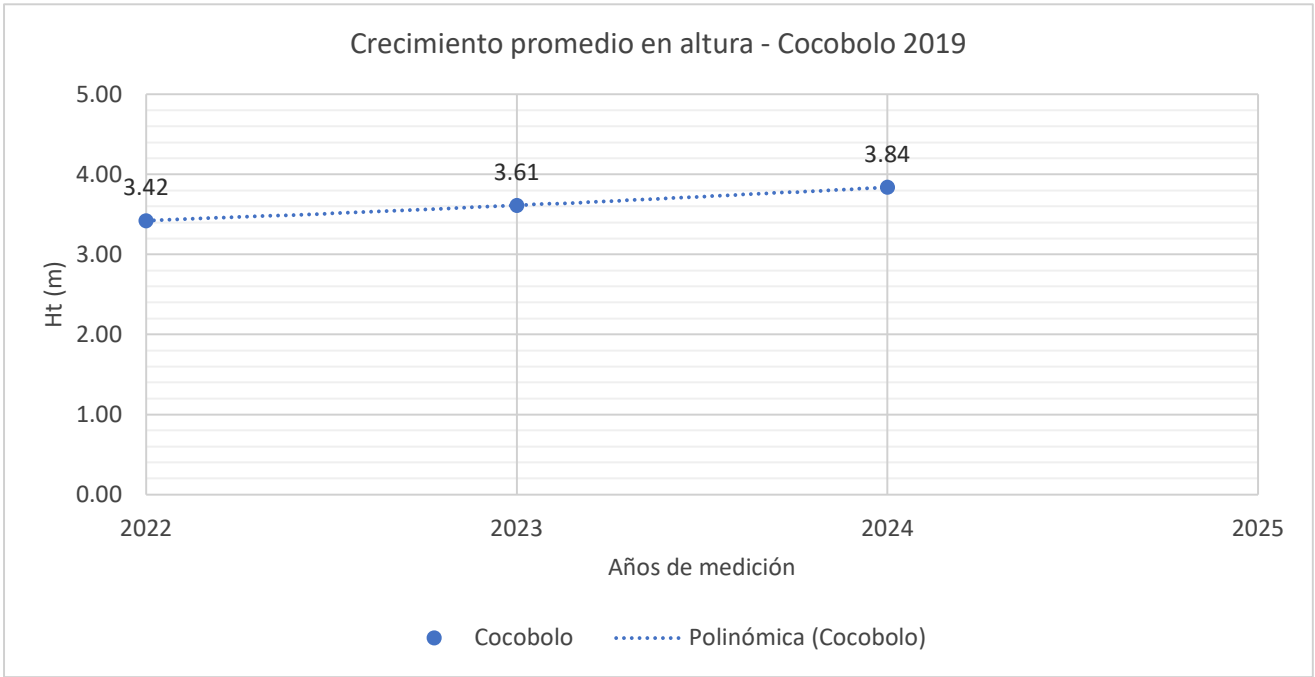
Dalbergia retusa

Table 61. *Growth data.*

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2019	feb-22	2.8	1.10	2.33	0.37	0.78
Rosewood	*Dalbergia retusa*	2019	feb-23	3.8	1.99	2.92	0.52	0.77
Rosewood	*Dalbergia retusa*	2019	jan-24	4.9	2.91	3.89	0.59	0.79



Graph 14. Average diameter growth of Rosewood planted 2019.

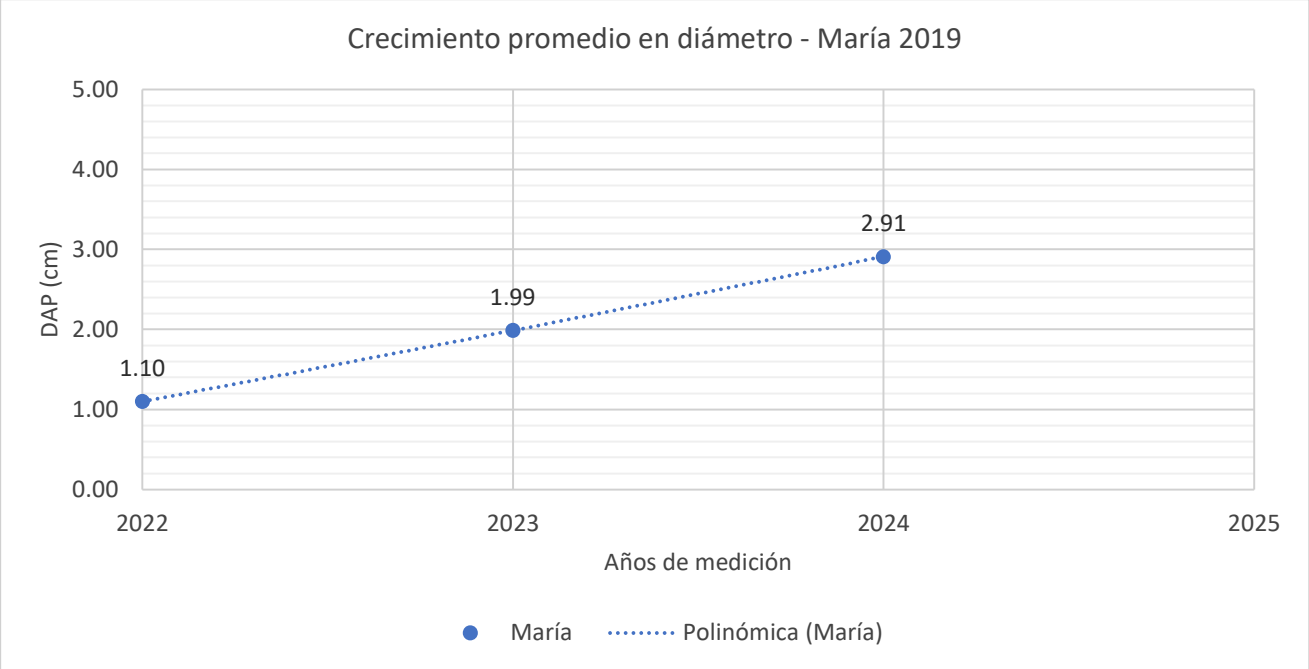


Graph 15. Average growth in total height of Rosewood planted 2019.

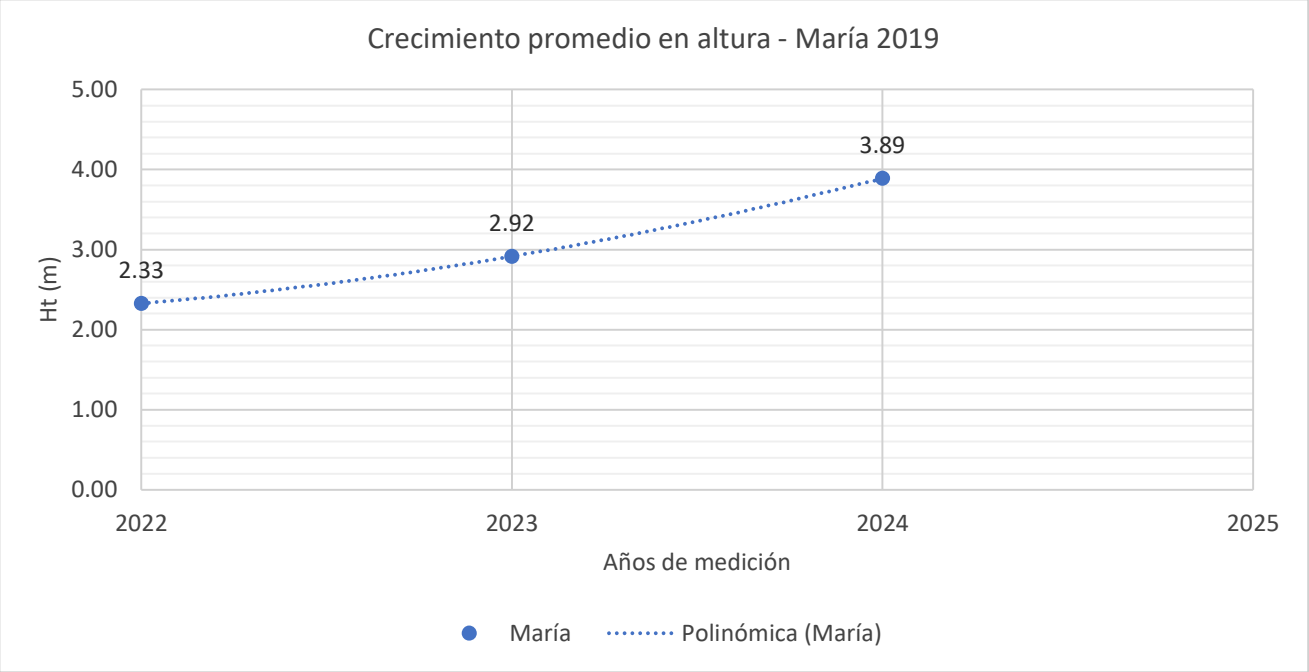
Calophylum brasiliense

Table 62. *Datos de crecimiento.*

Colón		Datos de crecimiento: Gatún 1				2019		Almendro
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Brazil Beauty Leaf	*Calophylum brasiliense*	2019	feb-22	2.8	1.10	2.33	0.37	0.78
Brazil Beauty Leaf	*Calophylum brasiliense*	2019	feb-23	3.8	1.99	2.92	0.50	0.77
Brazil Beauty Leaf	*Calophylum brasiliense*	2019	jan-24	4.8	2.91	3.89	0.59	0.79



Graph 16. Average diameter growth of Brazil Beauty Leaf planted 2019.



Graph 17. Average growth in total height of Brazil Beauty Leaf planted 2019.

Aspidosperma desmanthum

Table 63. *Growth data.*

Colón		Growth data: Gatún 1				2019		Alcarreto
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Alcarreto (sp)	*Aspidosperma desmanthum*	2019	feb-23	3.8	n/a	1.23	n/a	0.31
Alcarreto (sp)	*Aspidosperma desmanthum*	2019	jan-24	4.9	n/a	1.75	n/a	0.36

Dipteryx oleifera

Table 64. *Growth data.*

Colón		Growth data: Gatún 1				2019		Tonka Bean
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Tonka Bean	*Dipteryx oleifera*	2019	feb-23	3.8	1.37	0.91	0.34	0.23
Tonka Bean	*Dipteryx oleifera*	2019	jan-24	4.8	2.28	1.39	0.47	0.29

Tapirira guianensis

Table 65. *Growth data.*

Colón	Growth data: Gatún 1	2019	Caobillo

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Caobillo (sp)	*Tapirira guianensis*	2019	feb-23	3.8	n/a	0.99	n/a	0.25
Caobillo (sp)	*Tapirira guianensis*	2019	feb-24	4.8	1.40	1.72	0.29	0.36

Carapa guianensis

Table 66. *Growth data.*

Colón	Growth data: Gatún 1	2019	Carapa

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Carapa (sp)	*Carapa guianensis*	2019	feb-23	3.8	2.10	1.37	0.53	0.34
Carapa (sp)	*Carapa guianensis*	2019	jan-24	4.9	3.34	1.91	0.68	0.39

Manilkara bidentata

Table 67. *Growth data.*

Colón	Growth data: Gatún 1	2019	Níspero

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Níspero (sp)	*Manilkara bidentata*	2019	feb-23	3.8	1.38	1.39	0.34	0.35
Níspero (sp)	*Manilkara bidentata*	2019	jan-24	4.9	1.84	1.88	0.37	0.38

- Farm No. 4516 Gatún 2

Summary of reforestation

Table 68. Categorization of reforested area.

Farm No. 4516 - Gatún 2					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.42	1.42
Tonka Bean and Mayo (sp)	*Dipteryx oleifera and Vochysia sp.*	3x4	833	0.10	0.10
Tonka Bean, Bullywood and Jacaranda	*Dipteryx oleifera, Terminalia amazonia and Jacaranda copaia*	3x4	833	4.18	4.18
Aceituno (sp), Tonka Bean and Brazil Beauty Leaf	*Simarouba amara, Dipteryx oleifera and Calophyllum brasiliense*	3x4	833	0.44	0.44
Bullywood	*Terminalia amazonia*	3x4	833	6.33	6.33
Carapa (sp)	*Carapa guianensis*	3x4	833	14.09	14.09
Cocoa Tree, Tonka Bean, Níspero (sp) and Mahogany	*Theobroma cacao, Dipteryx oleifera, Manilkara zapota and Swietenia macrophylla*	3x4	833	0.49	0.49
Brazil Beauty Leaf, Tonka Bean and Bullywood	*Calophyllum brasiliense, Dipteryx oleifera and Terminalia amazonia*	3x4	833	0.50	0.50
Tonka Bean, Aceituno (sp) and Mayo (sp)	*Dipteryx oleifera, Simarouba amara and Vochysia sp.*	3x4	833	0.30	0.30
Mixed Plantation		3x4	833	12.15	12.15
Total reforested				**40.00**	**40.00**
Protection area					9.89
Infrastructure					0.11
Total Area					**50.00**

Map of the farm

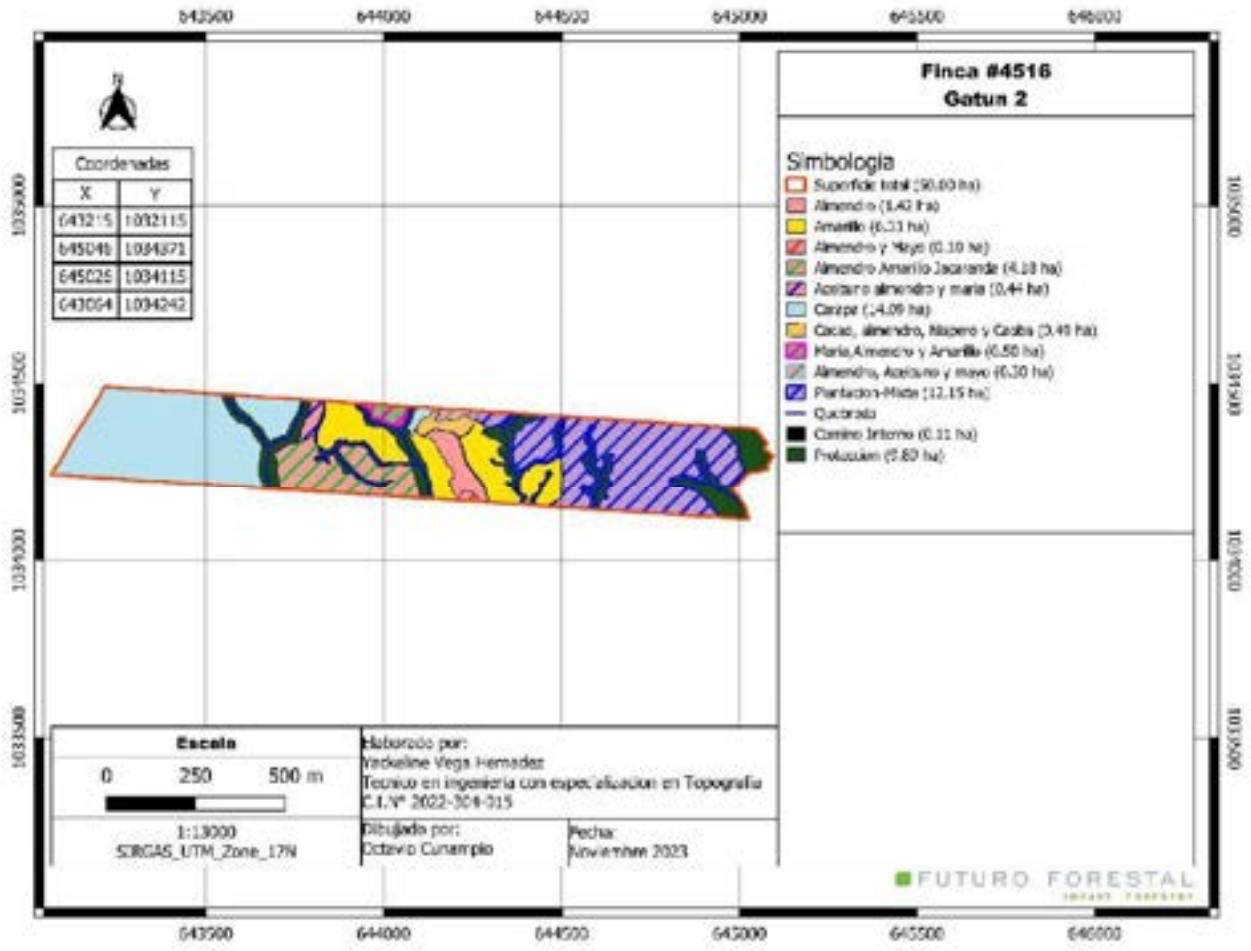


FIGURE 58. MAP OF GATÚN2 FARM (NO. 4516).

- Farm No. 6704 Conexión

Summary of reforestation

Table 69. Categorization of reforested area.

Farm 6704 - La Conexión					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			2019	
Mixed Natives		3x5	666	5.07	5.07
Total reforested				**5.07**	**5.07**
Protection area					43.92
Total Area					**48.99**

Map of the farm

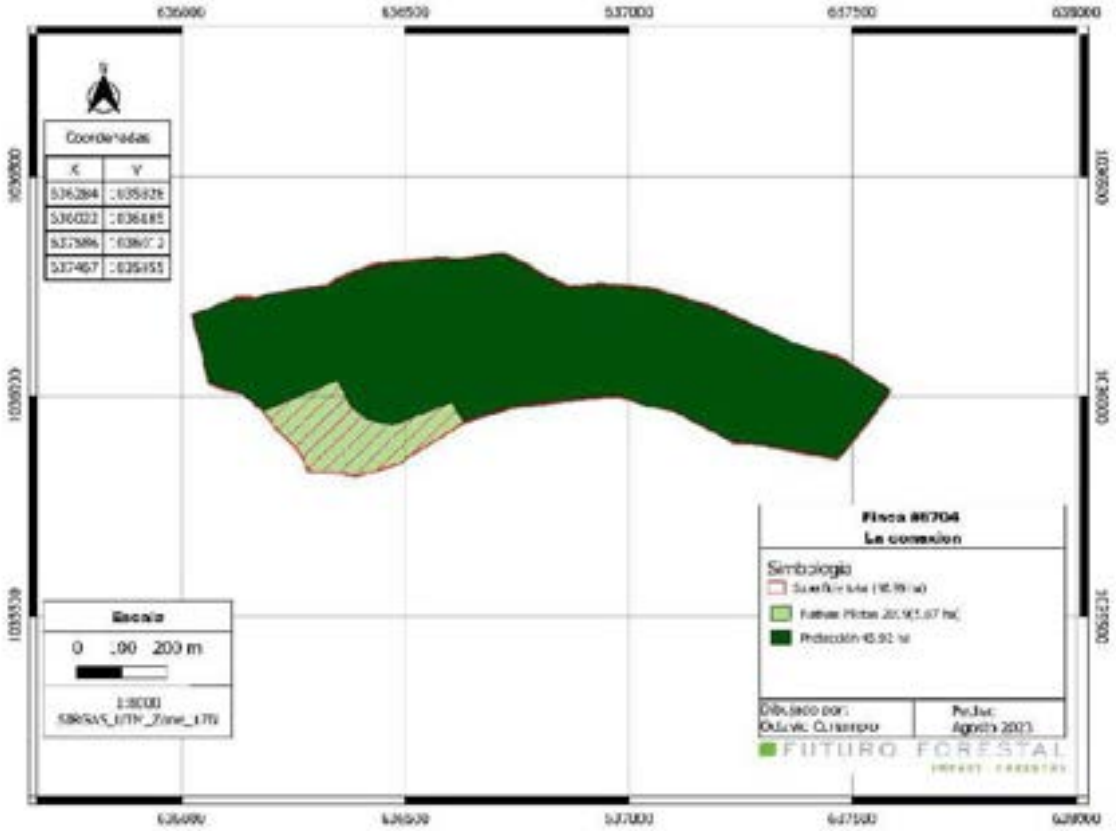


FIGURE 59. MAP OF CONEXIÓN FARM (NO. 6704).

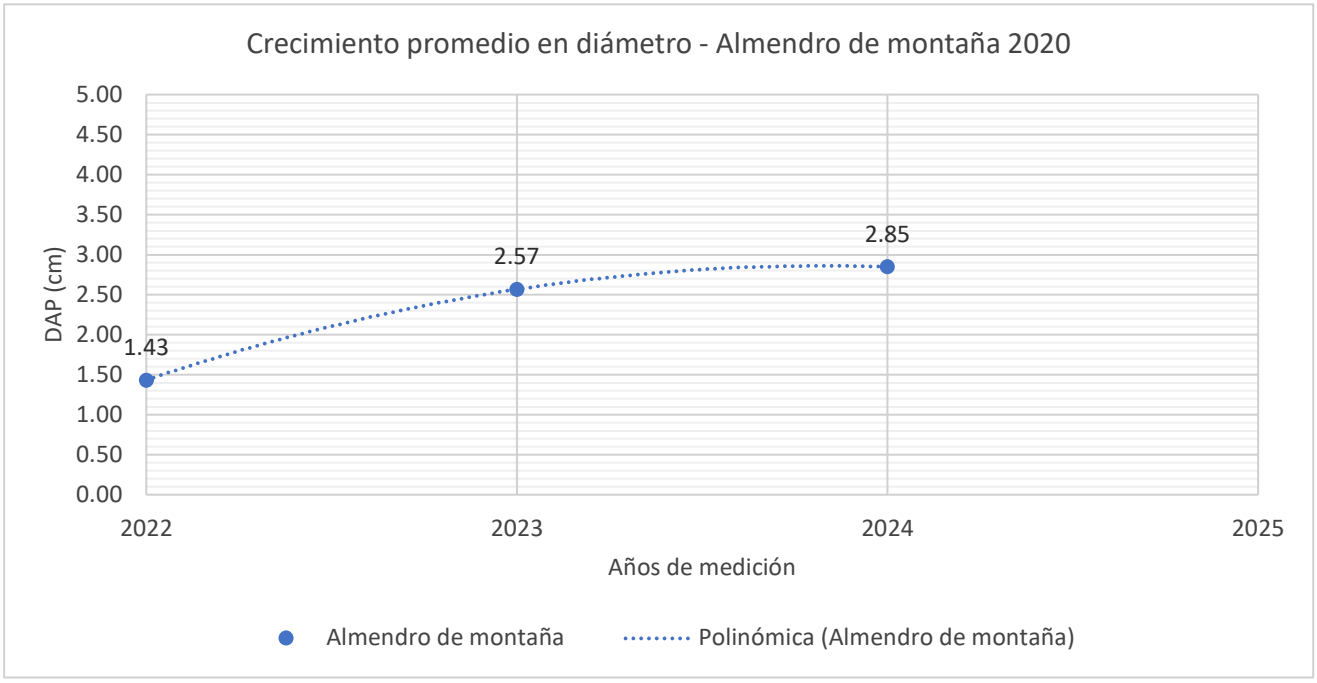
Monitoring and growth data

The growth of *Dalbergia retusa* and *Calophyllum brasiliense* has been favorable since their planting, showing good adaptation to the site. It is important to note that *Dipteryx oleifera* and *Aspidosperma desmanthum* were planted bare root, which has limited their optimal development.

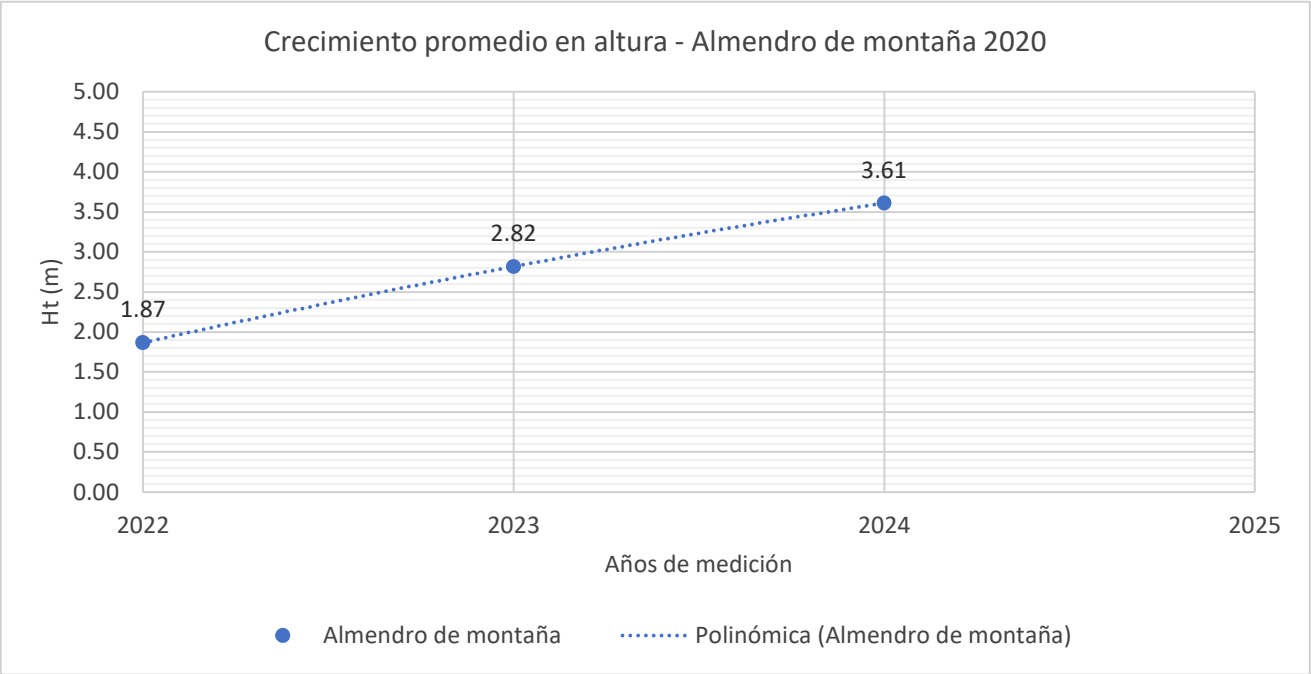
Dipteryx oleifera

Table 70. *Growth data.*

Colón		Growth data: Conexión				2020		Tonka Bean
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Tonka Bean	*Dipteryx oleifera*	2020	mar-22	1.8	1.43	1.87	0.72	0.93
Tonka Bean	*Dipteryx oleifera*	2020	feb-23	2.8	2.57	2.82	0.86	0.94
Tonka Bean	*Dipteryx oleifera*	2020	feb-24	3.8	2.85	3.61	0.74	0.94



Graph 18. Average diameter growth of Tonka Bean planted 2020.

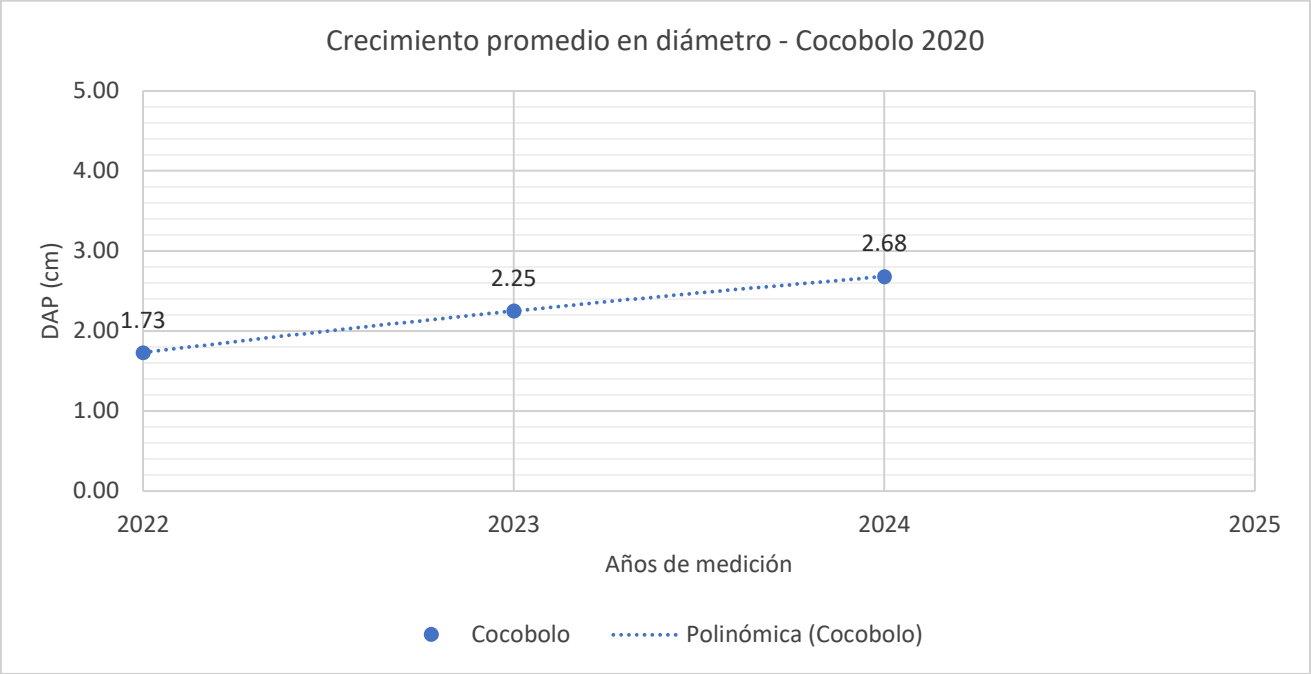


Graph 19. Average growth in total height of Tonka Bean planted 2020.

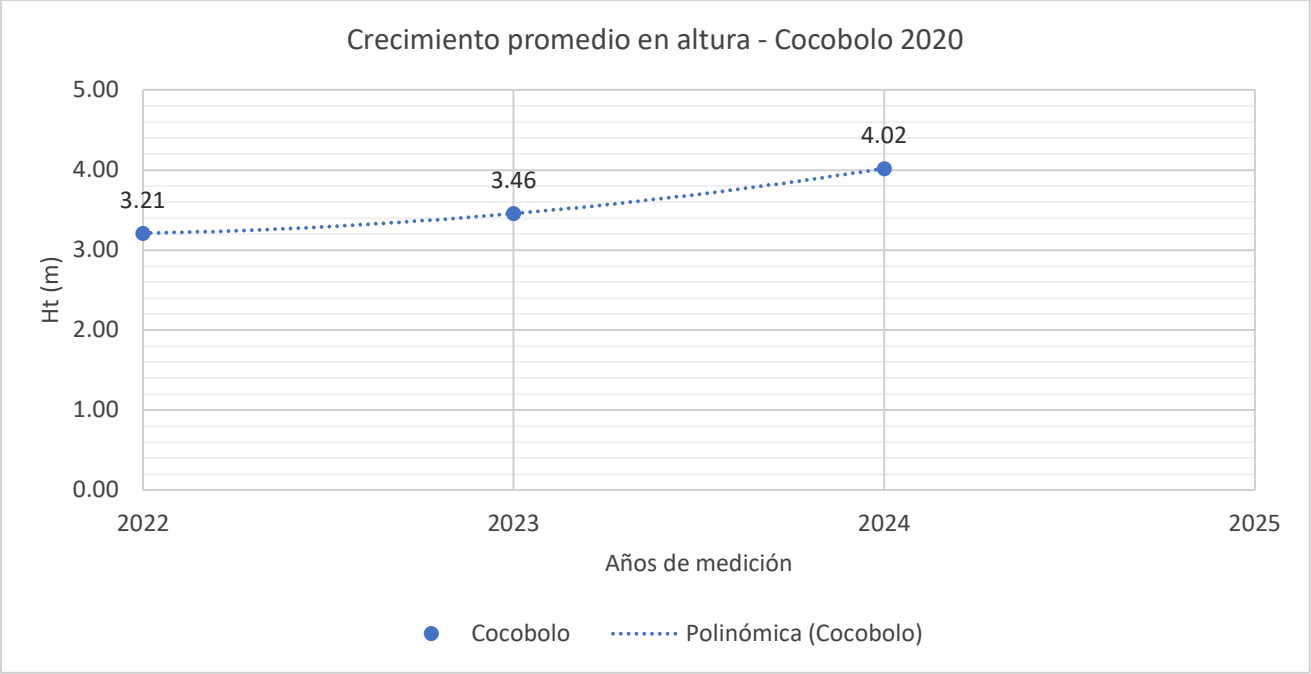
Dalbergia retusa

Table 71. *Growth data.*

Colón		Growth data: Conexión				2020		Rosewood
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Rosewood	*Dalbergia retusa*	2020	mar-22	1.8	1.73	3.21	0.87	1.61
Rosewood	*Dalbergia retusa*	2020	feb-23	2.8	2.25	3.46	0.75	1.15
Rosewood	*Dalbergia retusa*	2020	jan-24	3.9	2.68	4.02	0.68	1.03



Graph 20. Average diameter growth of Rosewood planted 2020.



Graph 21. Average growth in total height of Rosewood planted 2020.

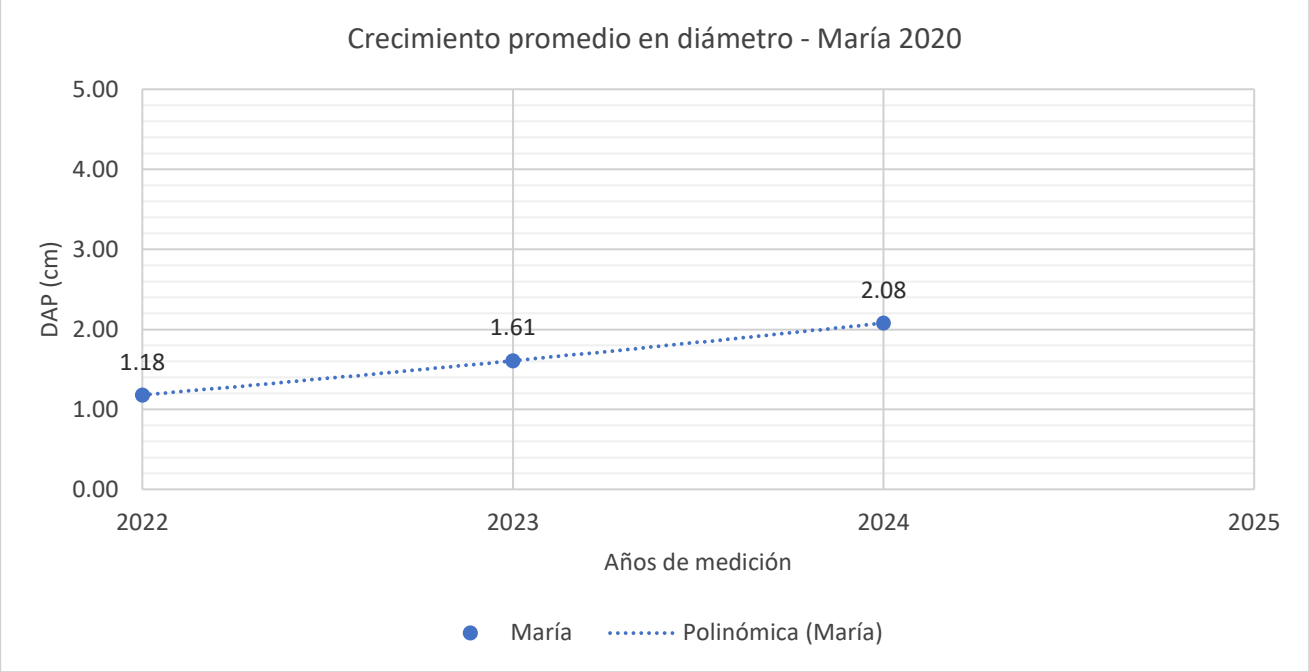
Calophyllum brasiliense

Table 72. *Growth data*

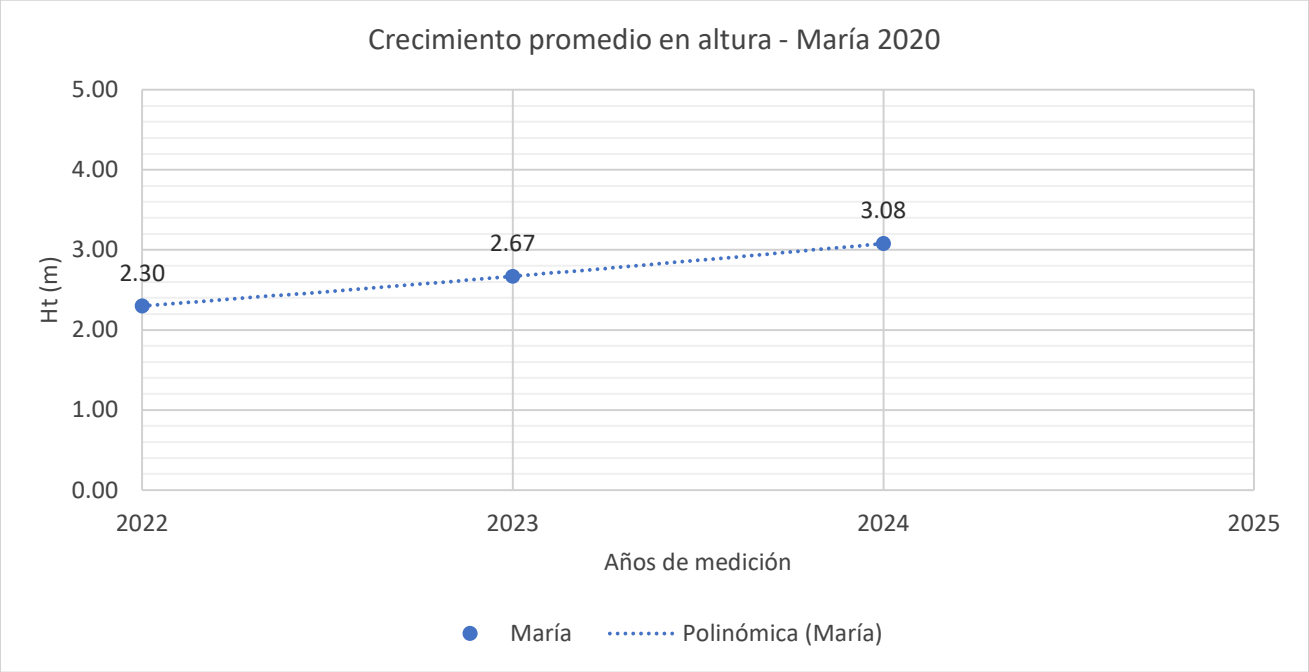
Colón **Growth data: Conexión** **2020** **Brazil Beauty Leaf**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Brazil Beauty Leaf	*Calophyllum brasiliense*	2020	mar-22	1.8	1.18	2.30	0.59	1.15
Brazil Beauty Leaf	*Calophyllum brasiliense*	2020	feb-23*	2.8	1.61	2.67	0.57	0.94
Brazil Beauty Leaf	*Calophyllum brasiliense*	2020	feb-24	3.8	2.08	3.08	0.54	0.80

*Changes in the data due to the increase in trees with diameter measurements.



Graph 22. Average diameter growth of Brazil Beauty Leaf planted 2020.



Graph 23. Average growth in total height of Brazil Beauty Leaf planted 2020.

Manilkara bidentata

Table 73. *Growth data.*

Colón		Growth data: Conexión				2020	Níspero	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Níspero (sp)	*Manilkara bidentata*	2020	feb-23	2.8	1.30	1.14	0.43	0.38
Níspero (sp)	*Manilkara bidentata*	2020	jan-24	3.9	1.31*	1.46	0.33	0.37

*With the increase in trees with diameter data, the increase in averages is not as significant.

5.6. Nicanor Unit

Description of development

On March 29, 2024, a fire occurred in farms #1336 and #1339, located in the province of Darién, Pinogana district, Metetí township, Nicanor community. The exact origin of the fire is unknown, but it is suspected to be human provoked. The fire affected 45.68 hectares, impacting plantations established in 2023, protection areas such as gallery forests, and infrastructure, including perimeter fences.

Our plantations, although generally more resilient than exotic species, are not exempt from phytosanitary issues, pest attacks, and diseases, which vary depending on the planted species and environmental conditions.

The attacks of the meliaceae shoot borer (*Hypsipyla grandella*) on species such as Cedar (*Cedrela odorata*) and Mahogany (*Swietenia macrophylla*) cause perforations in stems and branches, affecting growth and causing deformations.

As part of the extensive monitoring and control efforts, termite infestations have been identified in the plantation. The Rosewood (*Dalbergia retusa*) and Bullywood (*Terminalia amazonia*) plots have been the most affected, particularly in areas where wounds from formative pruning are present.

There have also been recorded cases of leaf-cutting insects and locusts affecting the foliage of the Bullywood (*Terminalia amazonia*) species. Additionally, Spanish Elm (*Cordia alliodora*) and Mahogany (*Swietenia macrophylla*) have been impacted by lace bugs (*Dictyla monotropidia)*, which suck the sap from leaves, leading to discoloration, wilting, death, and ultimately, leaf shedding.

Unlike other farms, attacks by leafcutter ants (*Atta cephalotes*) have been specifically localized to the Tonka Bean (*Dipteryx oleifera*) and Bullywood (*Terminalia amazonia*) species.

In response to all these impacts, periodic phytosanitary controls—both manual and chemical—are carried out, successfully reducing their incidence.

- Farm No. 1182 Nicanor 1

Summary of reforestation

Table 74. Categorization of reforested area.

Farm No. 1182 - Nicanor 1						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.33		0.33
Bullywood	*Terminalia amazonia*	3x4	833	0.92	0.42	1.34
Mahogany	*Swietenia macrophylla*	3x4	833	0.33	0.29	0.62
Spanish Cedar	*Cedrela odorata*	3x4	833	1.10	0.25	1.35
Rosewood	*Dalbergia retusa*	3x4	833		1.26	1.26
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	8.49		8.49
Rosewood and Ormosia (sp)	*Dalbergia retusa* and *Ormosia macrocalyx*	3x4	833	0.34		0.34
Spanish Elm	*Cordia alliodora*	3x4	833		0.25	0.25
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	1.73		1.73
Teak	*Tectona grandis*	4x5	500	3.08		3.08
Total, reforested				**16.32**	**2.47**	**18.79**
Mahogany Regeneration						0.15
Area to be planted						4.53
Protection area						10.02
Stream area						2.50
Infrastructure						0.72
Firebreaks						0.39
Total Area						**37.10**

Map of the farm

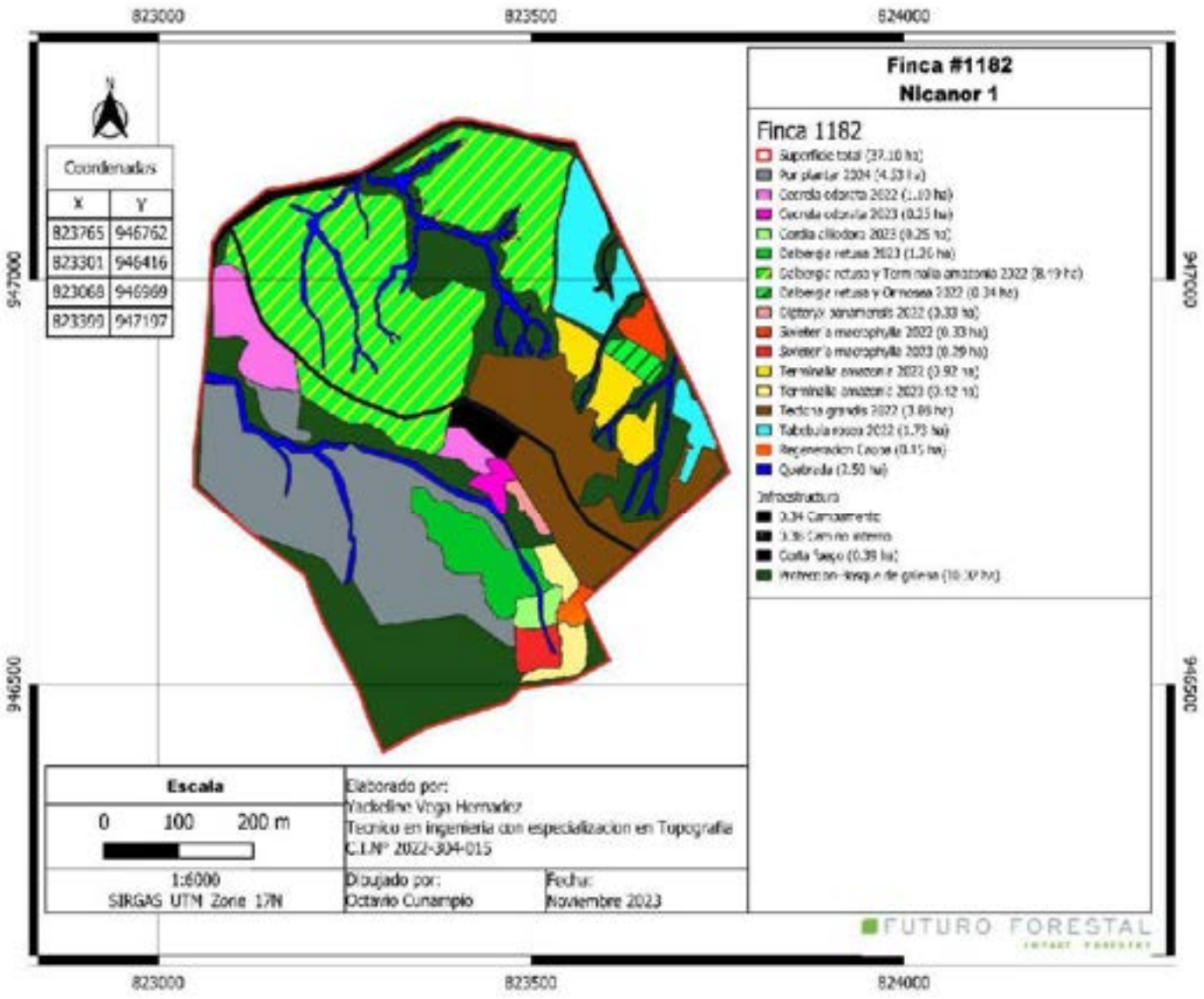


FIGURE 60. MAP OF NICANOR 1 FARM (NO. 1182).

Mortality – Planting 2023

Table 75. MORTALITY OF PLANTING 2023.

Farm	Farm N °	Common name	Scientific name	Amount of planted tres 2023	Mortality %
Nicanor # 1 (Dalia Vega)	**1182**	Spanish Cedar	*Cedrela odorata*	210	1%
		Mahogany	*Swietenia macrophylla*	245	2%
		Bullywood	*Terminalia amazonia*	350	4%
		Rosewood	*Dalbergia retusa*	1050	5%
		Spanish Elm	*Cordia alliodora*	210	1%
Total, average				**2065**	**3%**

For the 2024 rainy season, this farm was not replanted due to the low mortality rate (3 %).

Monitoring and growth data

The initial monitoring results for these native species indicate that *Terminalia amazonia* and *Dalbergia retusa* exhibit the highest average total height growth. The other species show good growth, with *Dipteryx oleifera* having the lowest growth rate compared to the rest.

Natives

Table 76. *Growth data.*

Darién **Growth data: Nicanor 1** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2022	jun-24	2	NA	2.79	NA	1.40
Bullywood	*Terminalia amazonia*	2022	jun-24	2	NA	3.06	NA	1.53
Spanish Cedar	*Cedrela odorata*	2022	jun-24	2	NA	1.27	NA	0.64
Rosy Trumpet Tree	*Tabebuia rosea*	2022	apr-24	2	NA	1.21	NA	0.61
Tonka Bean	*Dipteryx oleifera*	2022	jun-24	2	NA	0.36	NA	0.18

The species *Tectona grandis* shows good growth based on the results from this first monitoring for the plantation.

Teak

Table 77. *Growth data*

Darién		Growth data: Nicanor 1				2022	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2	5.60	5.17	2.80	2.59

Table 78. Executed AOP 2024

FINCA 1182 NICANOR																									
DESCRIPCION		Enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels	Codigo Actividad	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Mantenimiento de cercas	I4	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Control de maleza - químico-Bomba Mochila	M1	0	9.00	0	-	51.15	-	3.52	-	0	-	0	-	54.67	-	0	-	0	-	0	-	54.67	-	0	-	164	9
Control de Maleza-Química en Franja	M39	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	16.00	0	-	-	16
Traslado de Insumos	M35	0	-	0		0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Control de Maleza-Limpieza en Franja	M38	31.42	-	0	-	0	-	0	-	3.14	-	23.95	-	0	27.00	3.15	-	0	30.00	26.87	16.00	3.58	16.00	0	6.00	92	95
CPC Incendios-Establecer rondas contrafuegos	M49	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Limpieza y mantenimiento de infraestructura	I7	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Poda de formación	M18	0	-	55.68	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	56	-
Despeje	M26	0	-	10.58	-	0	-	0	-	0	-	0	-	0	9.00	0	2.00	0	-	0	-	0	-	0	-	11	11
Control fitosanitario-Químico-Hypsipyla grandella	M11	1	-	1	-	1	-	1	-	1	-	1	-	1	2.00	1	2.00	1	2.00	1	1.00	1	-	1	-	12	7
Control fitosanitario-Químico-Hongos	M12	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Rodaja Orgánica	M33	0	-	24.72	-	0	-	0.92	-	3.35	-	8.4	-	9.47	-	0	-	3.35	-	5.35	-	0	3.00	0	-	56	3
Control fitosanitario manual - Hypsipyla grandella	M14	3.58	-	3.58	-	3.58	-	3.58	-	3.58	-	3.58	-	3.58	1.00	3.58	1.00	3.58	2.00	3.58	2.00	3.58	1.00	3.58	-	43	7
CPC Incendios-Barrer Calles	M48	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
CPC Incendios - mantener rondas corta fuego	M46	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-

Manejo de Rebrote cocobolo	M40	0	-	0	-	0	-	10.84	-	0	-	9.58	5.00	0	5.00	10.84	-	0	-	10.84	2.00	0	-	10.84	-	53	12
Deschuponado	M41	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Monitoreo	M44	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-
Control de maleza manual-chapia	M6	32.22	-	0	-	1.5	-	9	-	0	-	0	-	1.5	-	7.86	13.00	0	-	0	-	0	-	0	-	52	13
Control de maleza manual - rodajas de mantenimiento	M7	0	-	0	-	0	-	0	-	0	-	0	8.00	0	16.00	0	-	0	-	0	-	0	-	0	-	-	24
Fertilización granular	M16	0	-	0	-	0	-	0	-	23.31	-	0	-	0	8.00	0	-	2.57	-	0.37	-	0	-	0	-	26	8
Deshije	M17	0	-	0	-	0	-	0	-	3	-	0	-	3	-	0	3.00	3	-	0	2.00	0	-	0	-	9	5
Poda Manual Selección Apice.	M55	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	9.00	0	-	-	9
Control de maleza manual - Corte Bejuco	M8	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	8.00	0	-	-	8
Grand Total		68.22	9.00	95.56	-	57.23	-	28.86	-	37.38	-	46.51	13.00	73.22	68.00	26.43	21.00	13.50	34.00	48.01	23.00	62.83	53.00	15.42	6.00	573.17	227

- The overall reduction in the use of labor in various maintenance activities is due to the positive impact of previous glyphosate applications, which significantly reduced grass pressure.

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that act as living walls, minimizing the risk of erosion and helping to preserve soil structure.

- In addition, these vegetative corridors have proven effective in biological pest control, as they favor the presence of natural enemies and hinder the movement of pests such as *Hypsipyla grandella*, which affects commercially valuable species such as mahogany and cedar. This led to changes in activities, thereby reducing some daily wages.

- Change of Activities According to Weed Behavior (Adaptive Management) Due to the variability of weed growth between different plots, it has become necessary to adjust the frequency of mowing, include follow-up work, or reduce interventions in other areas, depending on the actual evolution of conditions. This flexibility in planning creates a gap between what is planned and what is executed, since, combined with changes in weather conditions, it leads us to bring forward or delay control interventions.

- Farm No. 5553 Nicanor 2

Summary of reforestation

Table 79. Categorization of reforested area.

Farm No. 5553 - Nicanor 2						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Mahogany	*Swietenia macrophylla*	3x4	833		2.58	2.58
Spanish Cedar	*Cedrela odorata*	3x4	833	1.51		1.51
Rosewood	*Dalbergia retusa*	3x4	833		5.43	5.43
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	4.64	2.9	7.54
Genip Tree and Panama Tree	*Genipa americana* and *Sterculia apetala*	3x4	833			
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833			
Teak	*Tectona grandis*	4x5	500	4.20		4.20
Total, reforested				**10.35**	**10.91**	**21.26**
Area to be planted						4.24
Protection area						7.12
Stream area						1.00
Low area						0.63
Infrastructure						0.44
Firebreaks						0.44
Total Area						**35.13**

Mapa de la finca

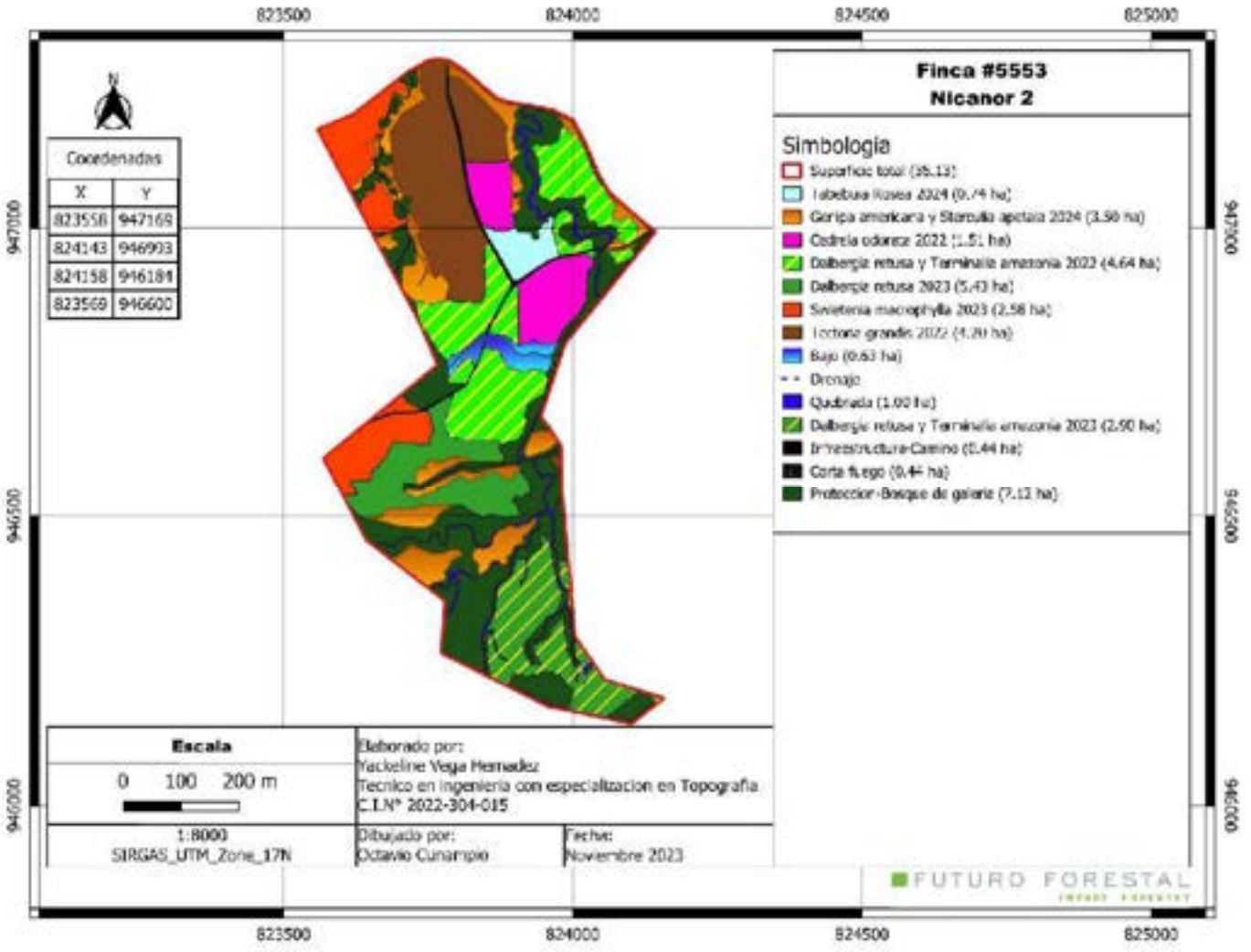


FIGURE 61. MAP OF NICANOR 2 FARM (NO. 5553).

Mortality – Planting 2023

Table 80. MORTALITY OF PLANTING 2023.

Farm	Farm N °	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Nicanor #2 (Jennifer Moreno)	**5553**	Mahogany	*Swietenia macrophylla*	1890	7%
		Rosewood	*Dalbergia retusa*	3255	4%
Total, average				5145	6%

For the rainy season of 2024, 4 % of the Rosewood was replanted. However, the replanting of Mahogany was not possible because of the lack of available seedlings.

Monitoring and growth data

Like in other farms, *Dalbergia retusa* shows the best growth in height. In general, all species reflect good growth rates for total height. *Tectona grandis* also shows good average growth in both diameter and total height.

Natives

Table 81. *Growth data*

Darién **Growth data: Nicanor 2** **2022**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Rosewood	*Dalbergia retusa*	2022	jun-23	2.0	NA	2.65	NA	1.33
Bullywood	*Terminalia amazonia*	2022	jun-23	2.0	NA	1.81	NA	0.91
Spanish cedar	*Cedrela odorata*	2022	jun-24	2.0	NA	1.66	NA	0.83

Teak

Table 82. *Growth data*

Darién **Datos de crecimiento: Growth data** **2022** **Teca**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	2.0	6.65	5.92	3.33	2.96

Table 83. Executed AOP 2024

FINCA 5553 NICANOR																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Control de maleza - químico-Bomba Mochila	M1	0.00	25.00	0.00	-	48.50	-	1.36	16.00	0.00	8.00	0.00	-	48.50	-	0.00	-	0.00	-	13.52	-	31.70	-	4.52	-	148	49
Control de maleza manual - Corte Bejuco	M8	0.00	5.00	0.00	-	2.27	-	0.00	-	0.00	-	2.27	-	2.27	-	2.27	-	2.27	-	0.00	-	2.27	-	0.00	-	14	5
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	33.00	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	36
Control de maleza manual-chapia	M6	30.00	29.00	0.00	-	0.00	-	0.00	-	0.00	-	10.79	-	0.00	-	0.00	26.00	0.00	8.00	0.00	-	0.00	-	0.00	-	41	63
Control de Maleza-Limpieza en Franja	M38	44.29	44.00	0.00	-	0.00	17.00	0.00	11.00	28.83	-	9.78	7.00	0.00	-	4.98	12.00	34.01	10.00	15.46	18.00	3.78	2.00	0.00	-	141	121
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	35.00	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	43
Control fitosanitario manual - Hypsipyla grandella	M14	6.88	1.00	6.88	-	6.88	1.00	6.88	-	6.88	3.00	6.88	1.00	6.88	1.00	6.88	3.00	6.88	2.00	6.88	3.00	6.88	-	6.88	-	83	15
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.84	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	1	2
Control fitosanitario-Químico-Hypsipyla grandella	M11	2.65	-	2.65	1.00	2.65	2.00	2.65	4.00	2.65	5.00	2.65	6.00	2.65	5.00	2.65	5.00	2.65	4.00	2.65	3.00	2.65	-	2.65	-	32	35
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	6
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	11.00	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	18

Deschuponado	M41	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Deshije	M17	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	4.00	-	0.00	-	0.00	3.00	0.00	-	4.00	2.00	0.00	-	0.00	-	8	5
Despeje	M26	0.00	-	4.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	4	1
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	-	2
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	22.32	-	0.00	15.00	0.00	8.00	0.00	-	15.37	-	0.00	-	0.00	-	0.00	-	38	23
Manejo de Rebrote cocobolo	M40	0.00	-	4.64	-	0.00	-	3.91	3.00	0.00	-	8.55	6.00	0.00	-	8.55	-	0.00	2.00	8.55	-	0.00	-	3.91	-	38	11
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Poda de formación	M18	18.65	-	32.44	3.00	0.00	14.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	51	17
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	-	3
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2.10	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	2	2
Rodaja Orgánica	M33	0.00	-	41.91	-	0.00	22.00	0.00	-	21.35	-	1.70	-	7.63	-	11.66	-	21.35	-	1.70	-	0.00	-	0.00	-	107	22
Grand Total		102.47	115.00	92.52	11.00	60.30	56.00	14.80	78.00	82.03	26.00	49.56	70.00	67.93	18.00	36.99	49.00	82.53	28.00	52.76	28.00	47.28	5.00	17.96	-	707.13	484.00

- Organic Slices in Plantations

- The placement of organic mulch had been planned as a measure to conserve soil moisture, especially in anticipation of possible dry periods. However, due to increased rainfall during the season, it was not necessary to implement this measure in its entirety. The activity focused only on the species most susceptible to drought, which allowed for the optimization of materials and labor, maintaining technical criteria without incurring unnecessary costs. Similarly, due to the good development of the plantation, fertilization focused only on species that required these nutritional inputs, as they are subject to special management, such as mahogany and cedar.

- Farm No. 1519 Nicanor 3

Summary of reforestation

Table 84. Categorization of reforested area.

Farm No. 1519 - Nicanor 3						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Tonka Bean	*Dipteryx oleifera*	4x3	833		1.79	1.79
Mahogany	*Swietenia macrophylla*	4x3	833		0.42	0.42
Spanish Cedar	*Cedrela odorata*	4x3	833		1.30	1.30
Rosewood	*Dalbergia retusa*	4x3	833		5.94	5.94
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	4x3	833		2.96	2.96
Genip Tree and Panama Tree	*Genipa americana* and *Sterculia apetala*	4x3	833			
Spanish Elm	*Cordia alliodora*	4x3	833		0.71	0.71
Rosy Trumpet Tree	*Tabebuia rosea*	4x3	833		7.83	7.83
Teak	*Tectona grandis*	4x5	500	10.00		10.00
Total, reforested				**10.00**	**20.95**	**30.95**
Area to be planted						6.56
Protection area						7.07
Stream area						1.13
Artificial lake						0.10
Infrastructure						1.22
Firebreaks						0.60
Total Area						**47.63**

Map of the farm

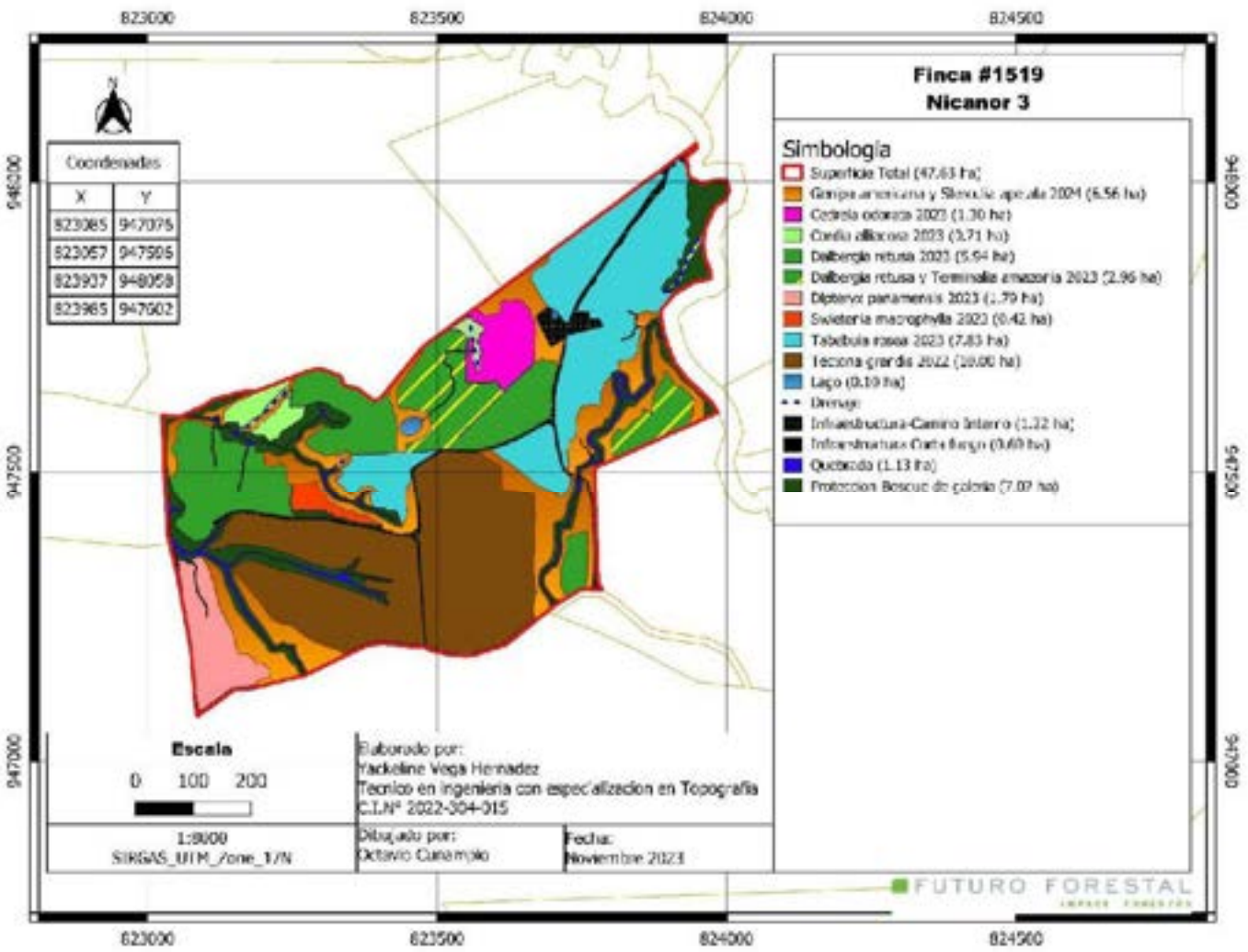


FIGURE 62. MAPA OF NICANOR 3 FARM (NO. 1519).

Prelliminary Mortality – Planting 2023

Farm	Farm N°	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Nicanor # 3 (Elizabeth Moreno)	**1519**	Mahogany	*Swietenia macrophylla*	371	2%
		Rosewood	*Dalbergia retusa*	5099	19%
		Rosy Trumpet Tree	Tabebuia rosea	6475	5%
		Rosewood	*Dalbergia retusa*	1190	3%
		Bullywood	*Terminalia amazonia*	1225	2%
		Spanish Elm	*Cordia alliodora*	630	1%
		Spanish Cedar	*Cedrela odorata*	875	5%
		Tonka Bean	*Dipteryx oleifera*	1190	18%
Total, average				17055	6.8%

For the 2024 replanting, only the species Rosewood and Tonka Bean were replanted, as the other species were not available in the nursery. The mortality rate increased from 3 % to 6.8 %.

Monitoring and growth data

The species *Tectona grandis* shows good growth based on the results of this initial monitoring for the plantation.

Teak

Table 85. *Growth data*

Darién **Growth data: Nicanor 3** **2022** **Teca**

Common name	Scientific name	Year planted	Date of measurement	Age	Average DBH (cm)	Average Ht (m)	MAI DBH	MAI Ht
Teak	*Tectona grandis*	2022	jun-24	1.5	5.25	5.26	2.26	2.26

Table 86. Executed AOP 2024

FINCA 1519 NICANOR																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Ayudante Operador de Motosierra	I20	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Construcción de Galerón	I5	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Control de maleza - mecánico-Tractor	M10	2.94	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2.00	-	0.36	-	0.00	-	0.00	-	5	5
Control de maleza - químico-Bomba Mochila	M1	0.00	-	57.59	23.00	32.28	2.00	0.00	-	0.00	44.00	57.59	19.00	32.28	-	0.00	-	0.00	-	5.20	8.00	84.67	-	0.00	-	270	96
Control de maleza manual - Corte Bejuco	M8	2.90	20.00	0.00	-	2.90	-	0.00	-	2.90	6.00	0.00	-	2.90	-	0.00	-	2.90	-	0.00	-	2.90	-	0.00	-	17	26
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control de maleza manual-chapia	M6	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	10.00	-	10
Control de Maleza-Limpieza en Franja	M38	77.91	-	0.00	29.00	0.00	-	0.00	12.00	17.20	6.00	0.00	-	0.00	48.00	0.00	4.00	29.38	14.00	48.53	42.00	0.00	-	0.00	-	173	155
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	35.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	35
Control fitosanitario manual - Arrieras	M13	8.16	-	8.16	-	8.16	1.00	8.16	-	8.16	-	8.16	-	8.16	-	8.16	-	8.16	-	8.16	-	8.16	-	3.33	-	93	1
Control fitosanitario manual - Hypsipyla grandella	M14	3.18	-	3.18	-	3.18	-	3.18	2.00	3.18	-	3.18	1.00	3.18	1.00	3.18	1.00	3.18	2.00	3.18	1.00	3.18	-	3.18	-	38	8
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.88	-	0.88	-	0.88	1.00	0.88	1.00	0.88	2.00	0.88	2.00	0.88	2.00	0.88	-	0.88	1.00	0.88	3.00	0.88	-	0.88	-	11	12
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
CPC Incendios-Barrer Calles	M48	0.00	-	0.00	-	0.00	-	0.00	9.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	9
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	6.00	0.00	15.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	21
Deschuponado	M41	0.00	-	0.00	5.00	0.00	-	0.00	5.00	14.97	-	0.00	6.00	0.00	-	0.00	-	0.00	-	14.97	-	0.00	-	0.00	-	30	16

Deshije	M17	0.00	-	0.00	-	0.00	-	0.00	1.00	10.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	10	8
Despeje	M26	0.00	-	10.00	-	0.00	1.00	0.00	2.00	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	11.00	10	20
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	2.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	-	9
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	37.66	-	0.00	-	0.00	3.00	0.00	39.00	18.91	-	0.00	-	0.00	-	0.00	-	57	42
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	2.00	9.02	5.00	0.00	-	2.90	4.00	0.00	2.00	9.02	-	0.00	-	2.90	-	0.00	2.00	6.12	-	30	15
Mantenimiento de cercas	I4	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Operador de Motosierra	I19	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Poda de formación	M18	0.00	-	76.08	-	0.00	11.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	76	11
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	6.32	-	0.00	-	0.00	-	0.00	12.00	0.00	-	0.00	-	0.00	-	6	12
Rodaja Orgánica	M33	2.55	-	62.86	37.00	0.00	6.00	0.00	-	19.97	-	0.00	-	45.44	-	0.00	-	0.76	-	1.25	-	10.20	-	0.00	-	143	43
Grand Total		98.52	32.00	218.75	114.00	47.40	24.00	21.24	42.00	114.92	99.00	79.03	32.00	92.84	60.00	21.24	55.00	66.17	29.00	85.43	54.00	109.99	3.00	13.51	21.00	969	565

- The placement of organic mulch had been planned as a measure to conserve soil moisture, especially in anticipation of possible dry periods. However, due to increased rainfall during the season, it was not necessary to implement this measure in its entirety. The activity focused only on the species most susceptible to drought, which allowed for the optimization of materials and labor, maintaining technical criteria without incurring unnecessary costs. Similarly, due to the good development of the plantation, fertilization was focused only on species that required these nutritional inputs, as they are subject to special management, such as mahogany and cedar.

- A specific example is the task of controlling trails, which was taken on directly by the field foreman, thereby reducing the use of labor originally planned for this task. This decision helped optimize costs without compromising the effectiveness of control.

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that function as living walls, minimizing the risk of erosion, and helping to preserve soil structure.

- Farm No. 1781 Nicanor 4

Summary of reforestation

Table 87. Categorization of reforested area.

Farm No. 1781 - Nicanor 4						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2022**	**2023**	
Mahogany	*Swietenia macrophylla*	3x4	833		1.16	1.16
Spanish Cedar	*Cedrela odorata*	3x4	833		0.73	0.73
Rosewood	*Dalbergia retusa*	3x4	833		2.11	2.11
Rosewood and Bullywood	*Dalbergia retusa* y *Terminalia amazonia*	3x4	833	1.44	5.54	6.98
Guayacán morado (sp)	*Tabebuia impetiginosa*	3x4	833		0.95	0.95
Genip Tree and Panama Tree	*Genipa americana* y *Sterculia apetala*	3x4	833			
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833		6.61	6.61
Ron Ron (sp)	*Astronium graveolens*	3x4	833		0.92	0.92
Teak	*Tectona grandis*	4x5	500	4.16		4.16
Total, reforested				**5.60**	**18.02**	**23.62**
Area to be planted						3.14
Protection area						18.81
Stream area						1.36
Artificial lake						0.45
Infrastructure						0.74
Total Area						**48.12**

Map of the farm

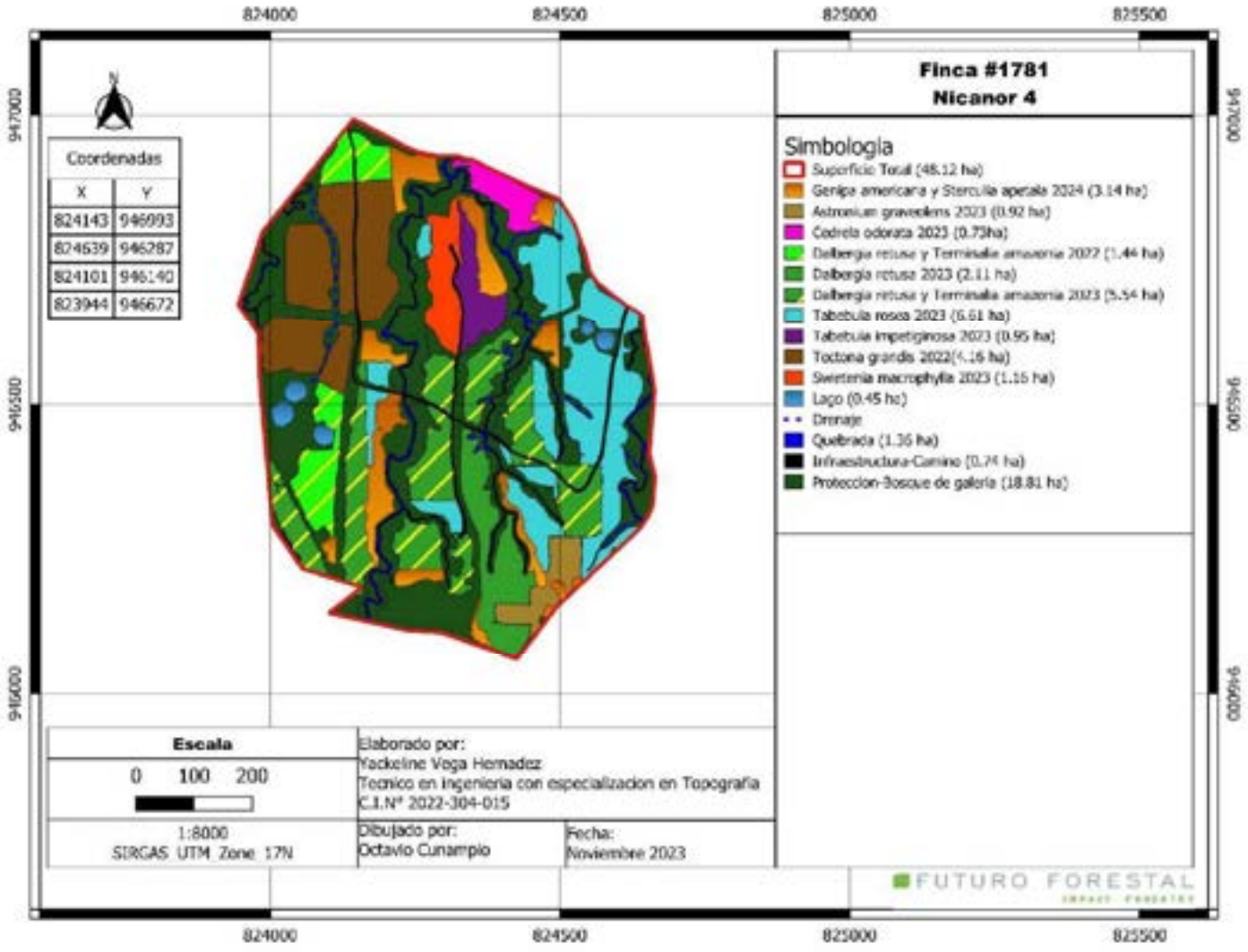


FIGURE 63. MAP OF NICANOR 4 FARM (NO. 1781).

Mortality – Planting 2023

Table 88. PERCENTAGE OF MORTALITY IN PLANTING 2023.

Farm	Farm N °	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Nicanor # 3 (Elizabeth Moreno)	1781	Rosy Trumpet Tree	*Tabebuia rosea*	4935	7%
		Ron Ron (sp)	*Astronium graveolens*	840	3%
		Spanish Cedar	*Cedrela odorata*	1190	5%
		Guayacán Morado (sp)	*Tabebuia impetiginosa*	840	6%
		Rosewood	*Dalbergia retusa*	2345	4%
		Mahogany	*Swietenia macrophylla*	910	8%
		Rosewood	*Dalbergia retusa*	2048	6%
		Bullywood	*Terminalia amazonia*	2013	6%
Total, average				15121	6%

For replanting during the 2024 rainy season, the species Rosewood was used.

The other species show good homogeneity in development, and due to the low mortality rate, no replanting was necessary. For 2025, it is planned to enrich the Guayacán Morado (sp) plot with Amarillo Guayaquil (sp).

Monitoring and growth data

The species *Tectona grandis* shows good growth based on the results from the first monitoring for the plantation.

Teak

Table 89. *Growth data*

Darién		Growth data: Nicanor 4				2022	Teak	
Common name	**Scientific name**	**Year planted**	**Date of measurement**	**Age**	**Average DBH (cm)**	**Average Ht (m)**	**MAI DBH**	**MAI Ht**
Teak	*Tectona grandis*	2022	jun-24	2.0	3.90	3.91	1.95	1.96

Table 90. Executed AOP 2024

FINCA 1781 NICANOR																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**	**Plan**	**Ejec**
Control de maleza - mecánico-Tractor	M10	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Control de maleza - químico-Bomba Mochila	M1	0.00	16.00	7.58	-	67.63	12.00	0.00	34.00	0.00	-	7.58	-	67.63	-	0.00	-	0.00	-	62.81	2.00	12.40	-	0.00	-	226	64
Control de maleza manual - Corte Bejuco	M8	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	8
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	37.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	37
Control de maleza manual-chapia	M6	0.00	-	0.00	-	35.14	-	0.00	-	0.00	-	0.00	-	35.14	2.00	0.00	26.00	0.00	-	0.00	-	0.00	-	0.00	-	70	28
Control de Maleza-Limpieza en Franja	M38	62.80	10.00	0.00	30.00	0.00	-	0.00	14.00	59.20	-	0.00	-	0.00	69.00	3.60	-	52.89	**45.00**	6.31	**8.00**	0.00	-	3.60	12.00	188	188
Control de Maleza-Química en Franja	M39	0.00	19.00	0.00	-	0.00	-	0.00	9.00	0.00	24.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	52
Control fitosanitario manual - Arrieras	M13	3.68	-	3.68	-	3.68	1.00	3.68	-	3.68	-	3.68	-	3.68	-	3.68	-	3.68	-	3.68	-	3.68	-	3.68	-	44	1
Control fitosanitario manual - Hypsipyla grandella	M14	4.58	-	4.58	-	4.58	-	4.58	2.00	4.58	2.00	4.58	1.00	4.58	1.00	4.58	4.00	4.58	2.00	4.58	1.00	4.58	-	4.58	-	55	13
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Control fitosanitario-Químico-Hypsipyla grandella	M11	1.22	-	1.22	-	1.22	2.00	1.22	2.00	1.22	2.00	1.22	2.00	1.22	2.00	1.22	-	1.22	2.00	1.22	3.00	1.22	-	1.22	-	15	15
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	10.00	0.00	6.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	16
Deschuponado	M41	0.00	-	0.00	2.00	0.00	-	0.00	1.00	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	4
Deshije	M17	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	4.00	-	0.00	-	0.00	3.00	0.00	-	4.00	2.00	0.00	-	0.00	-	8	5
Despeje	M26	0.00	-	4.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	22.00	4	24
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	3.00	0.00	1.00	0.00	4.00	0.00	2.00	0.00	-	0.00	-	-	12

Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	33.87	-	0.00	47.00	0.00	-	0.00	-	33.87	-	0.00	-	0.00	-	0.00	-	68	47
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Manejo de Rebrote cocobolo	M40	0.00	-	6.98	-	0.00	-	6.98	7.00	0.00	-	6.98	6.00	0.00	-	6.98	-	0.00	10.00	1.44	-	0.00	-	0.00	-	29	23
Operador de Motosierra	I19	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Plantado Manual	E26	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	-	2
Poda de formación	M18	27.92	-	16.80	2.00	0.00	15.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	45	17
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	9.28	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	9	2
Rodaja Orgánica	M33	7.00	-	62.71	-	0.00	46.00	0.00	-	34.81	-	0.00	-	0.00	-	11.55	-	47.16	-	7.00	-	0.00	-	0.00	-	170	46
Grand Total		107.20	67.00	107.55	42.00	112.25	76.00	16.46	77.00	137.36	28.00	37.32	97.00	112.25	77.00	31.61	34.00	143.40	68.00	91.04	18.00	21.88	0.00	13.08	34.00	931	618

- The placement of organic mulch had been planned as a measure to conserve soil moisture, especially in anticipation of possible dry periods. However, due to increased rainfall during the season, it was not necessary to implement this measure in its entirety. The activity focused only on the species most susceptible to drought, which allowed for the optimization of materials and labor, maintaining technical criteria without incurring unnecessary costs. Similarly, due to the good development of the plantation, fertilization focused only on species that required these nutritional inputs, as they are subject to special management, such as mahogany and cedar.

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that act as living walls, minimizing the risk of erosion and helping to preserve soil structure.

- A specific example is the task of controlling trails, which was taken on directly by the field foreman, thereby reducing the use of labor originally planned for this task. This decision helped optimize costs

- without compromising the effectiveness of control.

- Farm No. 1339 Margarito Banda

Summary of reforestation

Table 91. Categorization of reforested area.

Farm 1339 - Margarito Banda						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	**2024**	
Rosewood	*Dalbergia retusa*	3x4	833	0.77		0.77
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	6.90		6.90
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	5.96	6.00	11.96
Total, reforested				**13.63**	**6.00**	**19.63**
Area to be planted						0.23
Protection area						6.63
Stream area						1.00
Artificial lake						0.10
Infrastructure						0.87
Firebreaks						0.43
Total Area						**28.89**

During the Holy Week of 2024, specifically on March 29th, a wildfire that spread from a neighboring reforestation farm affected 6 hectares of Rosy Trumpet Tree (Tr23). Due to the species' inability to regenerate, it was classified as Tr24 and replanted during the rainy season.

Map of the farm

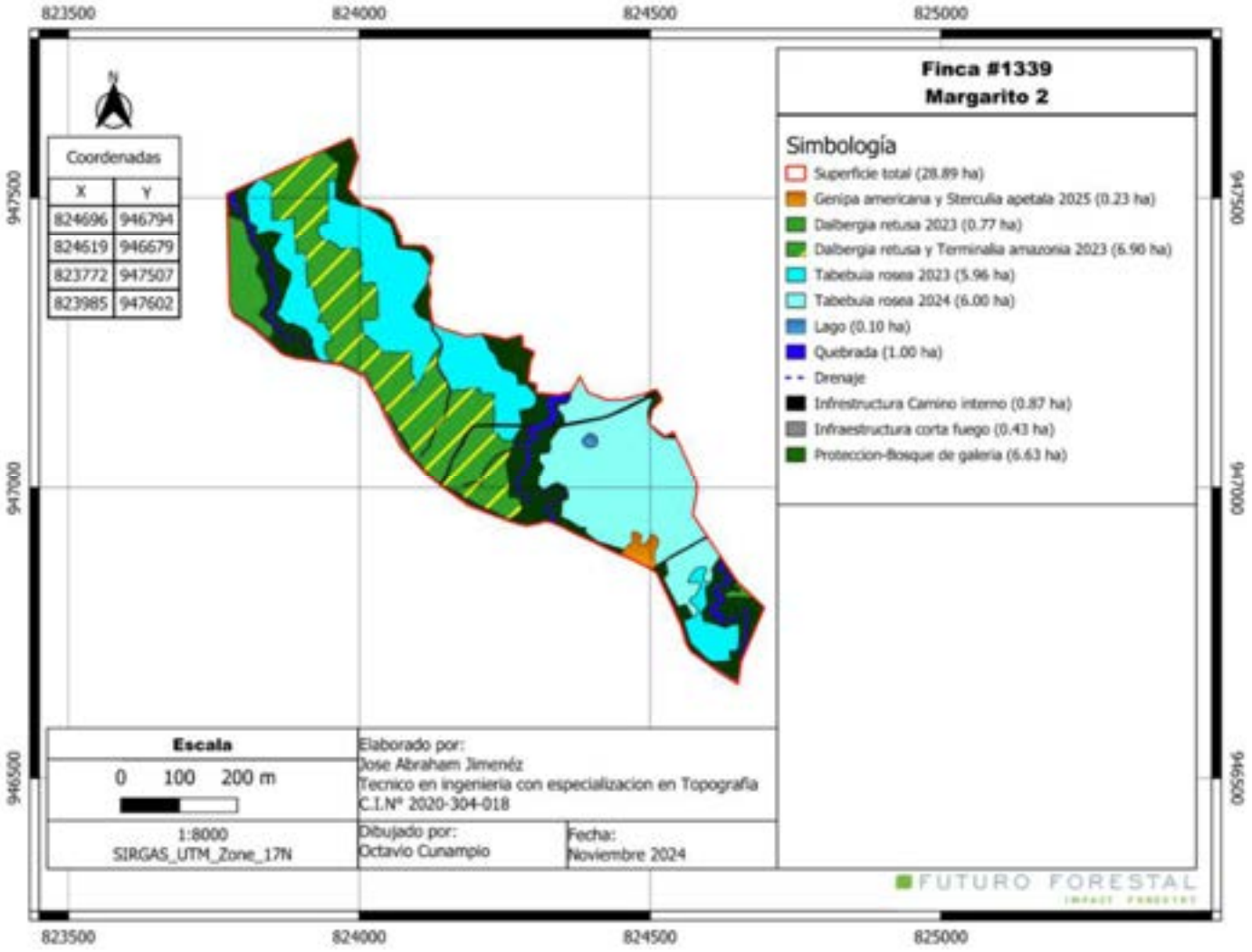


FIGURE 64. MAP OF MARGARITO BANDA FARM (NO. 1339).

Preliminary Mortality – Planting 2023

Table 92. MORTALITY OF PLANTING.

Farm	Farm N °	Common name	Scientific name	Amount of trees planted 2023	Mortality %
Margarito Banda 1	**1339**	Rosewood	*Dalbergia retusa*	2396	3%
		Bullywood	*Terminalia amazonia*	2039	2%
		Rosewood	*Dalbergia retusa*	490	1%
		Rosy Trumpet Tree	*Tabebuia rosea*	9385	3%
Total, average				14310	2%

Based on the low mortality rate of this plantation, it was technically decided that replanting was not feasible, considering that the plantation is homogeneous and there are no large patches of dead trees.

FINCA 1339 MARGARITOS																											
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Capacitación	M31	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Control de maleza - mecanico - Guira	#N/D	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Control de maleza - químico-Bomba Mochila	M1	0.00	-	15.96	-	35.49	-	0.00	-	0.00	-	15.96	-	35.49	-	0.00	-	0.00	-	0.00	-	51.45	-	0.00	-	154	-
Control de maleza manual - Corte Bejuco	M8	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	6.00	-	6
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	11.00	0.00	-	0.00	-	0.00	-	0.00	-	-	11
Control de maleza manual-chapia	M6	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Control de Maleza-Limpieza en Franja	M38	13.30	-	29.66	-	0.00	-	0.00	1.00	13.30	9.00	29.66	-	0.00	-	0.00	7.00	0.00	5.00	43.16	4.00	0.00	34.00	0.00	-	129	60
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	11.00	0.00	12.00	-	23
Control fitosanitario manual - Arrieras	M13	2.49	-	2.49	-	2.49	1.00	2.49	-	2.49	-	2.49	-	2.49	-	2.49	-	2.49	-	2.49	-	2.49	-	0.00	-	27	1
Control fitosanitario manual - Hypsipyla grandella	M14	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
CPC Incendios - mantener rondas corta fuego	M46	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Deschuponado	M41	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-

Deshije	M17	0.00	-	0.00	-	0.00	5.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	5
Enderezado de plantas	M25	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	25.71	-	0.00	-	0.00	-	0.00	-	25.71	11.00	0.00	-	0.00	-	0.00	-	51	11
Limpieza y mantenimiento de infraestructura	I7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	-	5.99	2.00	0.00	-	5.99	-	0.00	-	5.99	-	0.00	-	5.99	-	0.00	-	0.59	-	25	2
Mantenimiento de cercas	I4	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	-	3
Poda de formación	M18	0.00	-	24.01	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	24	7
Poda Manual Selección Apice.	M55	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	-	3
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	5.95	-	0.00	29.00	0.00	4.00	0.00	-	0.00	-	0.00	-	0.00	-	6	33
Rodaja Orgánica	M33	0.00	-	47.92	-	0.00	69.00	0.00	-	0.00	-	0.00	-	28.62	-	0.00	-	0.00	-	0.00	-	28.62	-	0.00	5.00	105	74
Tramite Trabajadores	M54	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Traslado de Insumos	M35	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	-
Grand Total		15.79	-	120.04	3.00	37.98	82.00	8.48	4.00	41.50	9.00	60.05	-	66.60	29.00	8.48	23.00	28.20	16.00	51.64	4.00	82.56	50.00	0.59	23.00	522	243

- The overall reduction in the use of labor in various maintenance activities is due to the positive impact of previous glyphosate applications, which significantly reduced grass pressure.

- In areas with moderate slopes, a strip weed control strategy was adopted, leaving vegetation corridors that function as living walls, minimizing the risk of erosion and helping to preserve soil structure.

- Change of Activities According to Weed Behavior (Adaptive Management) Due to the variability of weed growth between different plots, it has become necessary to adjust the frequency of mowing, include follow-up work, or reduce interventions in other areas, depending on the actual evolution of conditions. This flexibility in planning creates a gap between what is planned and what is executed, since, combined with changes in weather conditions, it leads us to bring forward or delay control interventions.

- In addition, these vegetative corridors have proven effective in

- biological pest control, as they favor the presence of natural enemies and hinder the movement of pests such as Hypsipyla grandella, which affects commercially valuable species such as mahogany and cedar. This led to changes in activities, thereby reducing some daily wages.

- Farm No. 1336 Margarito Banda

Summary of reforestation

Table 93. Categorization of reforested area.

Farm No. 1336 - Margarito Banda					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2024**	
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	9.34	9.34
Amarillo Guayaquil (sp)	*Centrolobium yavizanum*	3x4	833	0.52	0.52
Caobilla (sp)	*Tapirira guianensis*	3x4	833	0.41	0.41
Abarco (sp)	*Cariniana pyriformis*	3x4	833	2.46	2.46
Rosewood	*Dalbergia retusa*	3x4	833	2.24	2.24
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	5.43	5.43
Total, reforested				**20.40**	**20.40**
Area to be planted					3.67
Protection area					6.94
Stream area					3.26
Low area					0.97
Infrastructure					0.93
Firebreaks					0.98
Total Area					**37.15**

Map of the farm

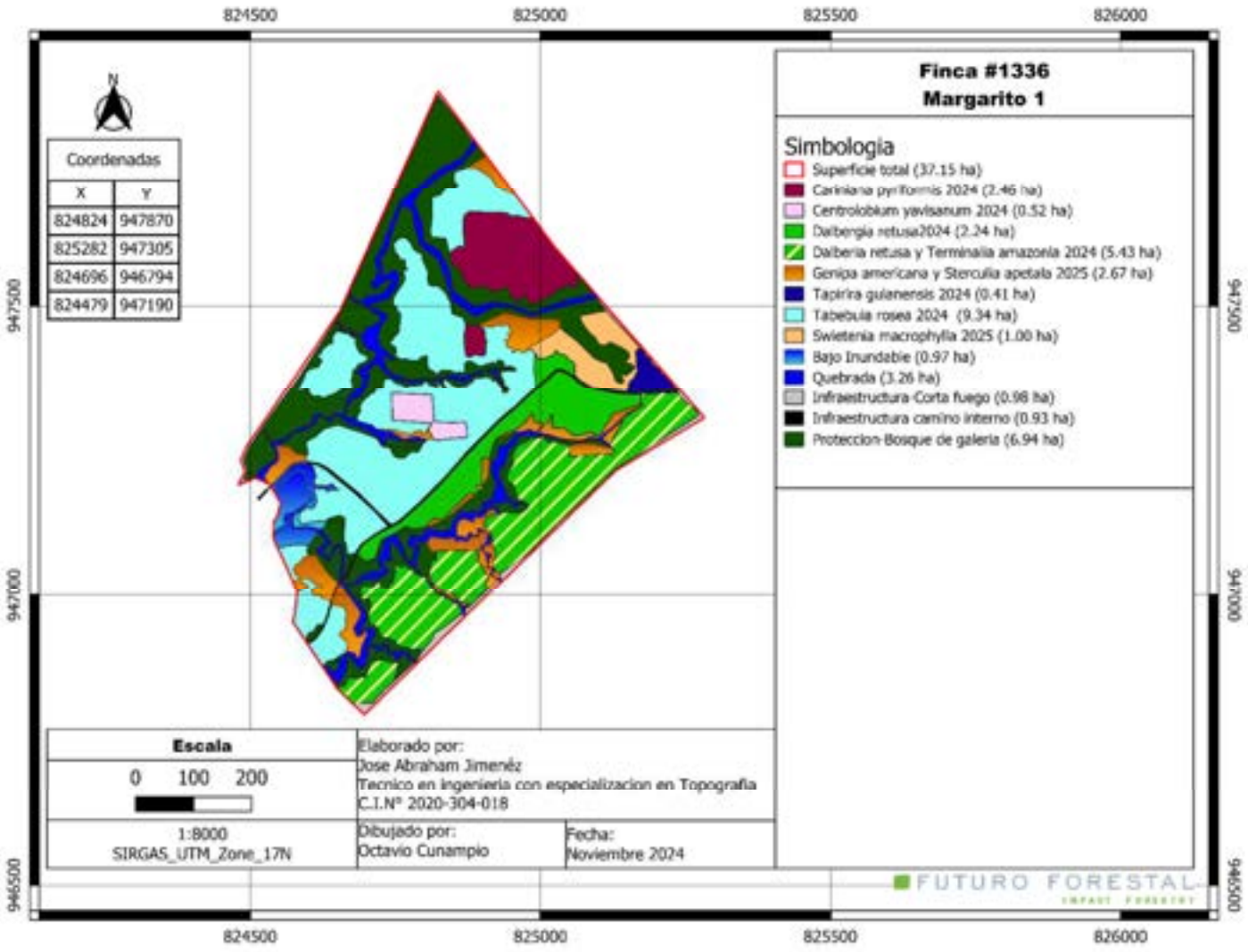


FIGURE 65. MAP OF MARGARITO BANDA FARM (NO. 1336).

Table 1. Executed AOP 2024

INCA 1336 MARGARITO																									
DESCRIPCION		enero		Febrero		Marzo		Abril		Mayo		Junio		Julio		Agosto		Septiembre		Octubre		Noviembre		Diciembre		Totales	
Row Labels		Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec	Plan	Ejec
Acomodo e inventario de deposito	M28	0.00	9.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	9
Control de maleza - mecanico - Guira	M9	1.10	-	0.00	-	0.00	-	0.00	-	0.00	-	1.10	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	2	3
Control de maleza - mecánico-Tractor	M10	0.00	1.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	1
Control de maleza - químico-Bomba Mochila	M1	0.00	-	18.81	-	42.80	-	0.00	-	0.00	-	18.81	-	42.80	-	0.00	-	0.00	-	1.68	-	59.93	-	0.00	1.00	185	1
Control de maleza manual - Corte Bejuco	M8	0.00	8.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	-	9
Control de maleza manual - rodajas de mantenimiento	M7	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	31.00	0.00	**24.00**	0.00	-	0.00	2.00	0.00	3.00	-	60
Control de Maleza-Limpieza en Franja	M38	15.98	85.00	29.01	-	0.00	-	0.00	-	21.43	6.00	29.01	41.00	0.00	20.00	0.00	-	5.45	-	44.99	27.00	0.85	52.00	0.00	2.00	147	233
Control de Maleza-Química en Franja	M39	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	30.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	22.00	-	52
Control fitosanitario-Químico-Hongos	M12	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	1.00	0.00	-	0.00	-	0.00	-	-	1
Control fitosanitario-Químico-Hypsipyla grandella	M11	0.47	-	0.47	-	0.47	1.00	0.47	-	0.47	-	0.47	-	0.47	-	0.47	-	0.47	-	0.47	-	0.47	-	0.47	-	6	1
CPC Incendios-Establecer rondas contrafuegos	M49	0.00	36.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	36
Deshije	M17	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	2
Fertilización granular	M16	0.00	-	0.00	-	0.00	-	0.00	-	30.96	-	0.00	-	0.00	-	0.00	-	30.96	43.00	0.00	-	0.00	-	0.00	-	62	43
Manejo de Rebrote cocobolo	M40	0.00	-	0.00	-	0.00	2.00	8.03	-	0.00	-	8.03	4.00	0.00	-	8.03	-	0.00	2.00	8.03	-	0.00	1.00	8.03	-	40	9
Mantenimiento de cercas	I4	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	2.00	0.00	-	-	4
Poda de formación	M18	0.00	-	32.12	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	32	7
Replantado	E29	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	6.77	-	0.00	32.00	0.00	77.00	0.00	-	0.00	-	0.00	-	0.00	-	7	109
Rodaja Orgánica	M33	6.64	6.00	49.70	23.00	0.00	25.00	0.00	-	4.79	-	0.47	-	28.99	-	0.00	-	4.20	-	1.06	-	28.99	-	0.00	5.00	125	59
Tramite Trabajadores	M54	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Trochado	E4	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	3.00	0.00	-	0.00	-	0.00	-	0.00	-	-	3
Trochado- cortar balizas	E3	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	7.00	0.00	-	0.00	-	0.00	-	0.00	-	-	7
Grand Total		24.19	148.00	130.11	23.00	43.27	37.00	8.50	2.00	57.65	6.00	64.66	48.00	72.26	82.00	8.50	118.00	41.08	70.00	56.23	27.00	90.24	58.00	8.50	33.00	605	652

5.7. Filo del Tallo Unit

Description of development

In 2024, maintenance and management activities were carried out for the 2023 plantations, resulting in good development and growth of the trees. The activities performed during this period included: manual weed control, chemical weed control, formative pruning, apex management, manual vine control across the entire plantation, and control of defoliating insect pests.

Continuing, new planting areas were established in collaboration with the University of Freiburg, covering an area of 8.83 hectares in 50 m x 50 m plots, each with a surface area of 0.25 hectares per plot. In total, 36 plots were established with three different planting densities: 3m x 2m, 3m x 3m, and 3m x 4m. Four tree species were considered for planting: Tonka Bean (*Dipteryx oleifera*), Rosewood (*Dalbergia retusa*), Guayacán Morado (sp) (*Tabebuia impetiginosa*), and Rosy Trumpet Tree (*Tabebuia rosea*).

NOTE: These trial plots are designed such that for each tree species, there are a total of 9 plots, 3 of which correspond to each planting density. The distribution is as follows:

1. First Plot: Control plot, with no fertilization.
2. Second Plot: Fertilized with a standard dose of fertilizer.
3. Third Plot: Fertilized with a double dose of fertilizer.

These treatments were replicated for the other planting densities and species to assess the development and growth of the plants with the fertilization treatments and to determine which density is most suitable for each species.

At the location where the study plots (Freiburg) were established, there is a remaining area of 10.98 ha prepared, which was also planted with tree species such as Amarillo Guayaquil (sp) (*Centrolobium yavizanum*), Rosewood (*Dalbergia retusa*), Ormosia (sp) (*Ormosia macrocalyx*), Cedro Espino (sp) (*Pachira quinata*), Genip Tree (*Genipa americana*), and Teak (*Tectona grandis*). So far, the plantation has shown good development and growth.

Soil preparation activities, planting, maintenance, management, pest control, diseases or fire occurrences.



FIGURE 66. PREPARATION OF SOIL PLANTED IN 2024

In this soil preparation stage, most of the area to be planted was done mechanically, while some areas were done manually due to the site's topography. Afterward, planting activities were initiated, as shown in the figures. Prior to this, a field training session was held with the planting personnel.



FIGURE 67. MARKING OF PLANTING, AND PLANTING ACTIVITIES.



FIGURE 68. MANUAL WEED CONTROL AND MANUAL HYPSIPYLA GRANDELLA CONTROL.

The maintenance and management of the plantations are activities carried out throughout the year to ensure good development and growth of the trees. Various activities were conducted, which are important for the proper trunk development of the individual trees.



FIGURE 69. SEEDLINGS OF RON RON (ASTRONIUM GRAVEOLENS) WITH PEST INFESTATIONS AND CHEMICAL CONTROL.

- Farm No. 3754 Agustín Freddy González

Summary of reforestation

Table 2. Categorization of reforested area.

Farm No. 3754 - Agustín Freddy González						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	**2024**	
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	3.95		3.95
Rosewood and Bullywood	*Dalbergia retusa* and *Terminalia amazonia*	3x4	833	3.43		3.43
Mahogany	*Swietenia macrophylla*	3x4	833	0.75		0.75
Ron Ron (sp)	*Astronium graveolens*	3x4	833	1.24		1.24
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	1.25		1.25
Tonka Bean	*Dipteryx oleifera*	3x4	833	1.55		1.55
Amarillo Guayaquil (sp)	*Centrolobium yavizanum*	3x4	833	0.68	0.34	1.02
Spanish Cedar	*Cedrela odorata*	3x4	833	1.95		1.95
Total, reforested				**14.80**	**0.34**	**15.14**
Protection area						2.09
Stream area						0.65
Infrastructure (Road)						0.41
Firebreaks						0.80
Artificial lake						0.10
Total Area						**19.19**

Map of the farm

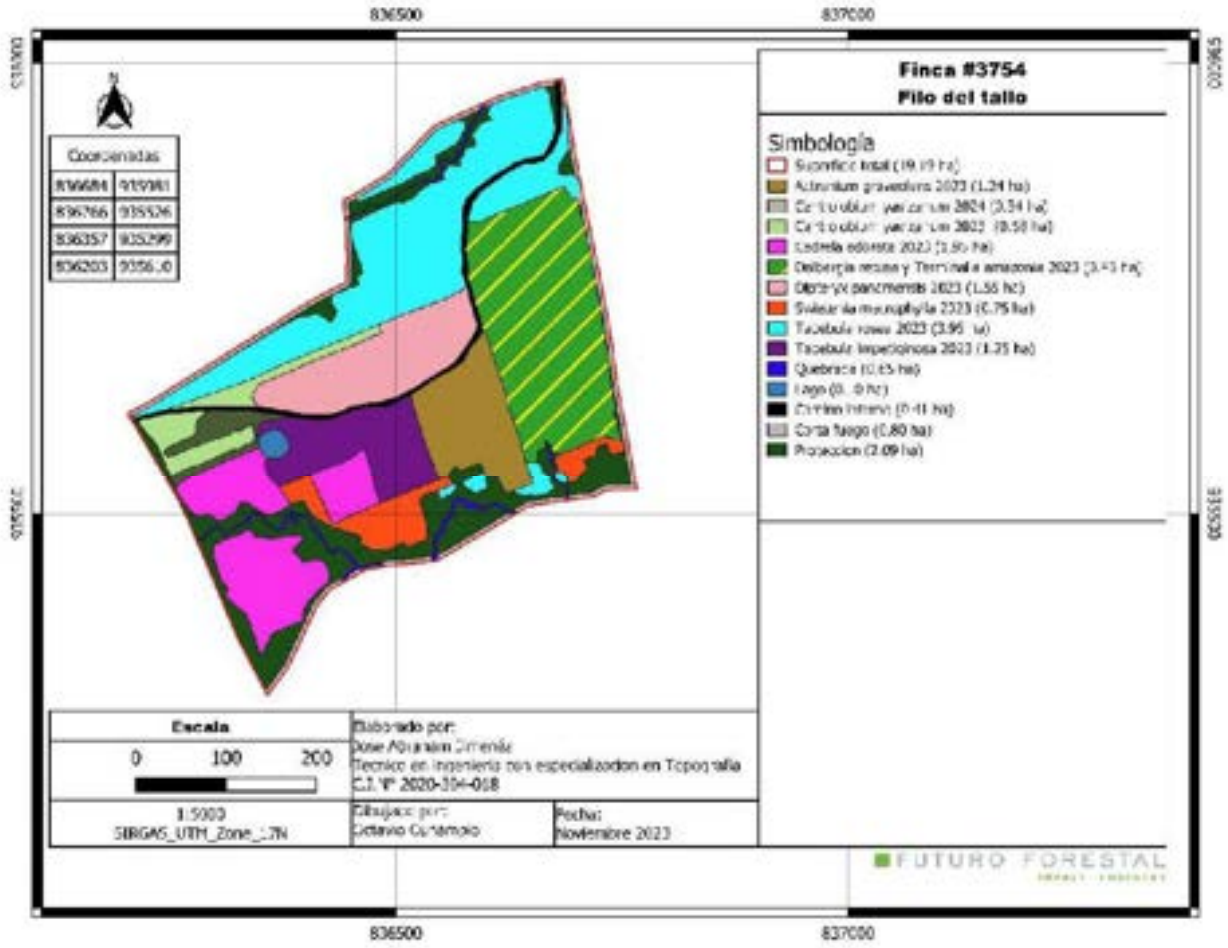


FIGURE 67. MAP OF FILO DEL TALLO FARM (NO. 3754).

- Farm No. 1427 Agustín Freddy González

Summary of reforestation

Table 3. Categorization of reforested area.

Farm No. 1427 - Agustín Freddy González					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	5.17	5.17
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	4.63	4.63
Mahogany	*Swietenia macrophylla*	3x4	833	2.69	2.69
Ron Ron (sp)	*Astronium graveolens*	3x4	833	4.41	4.41
Tonka Bean	*Dipteryx oleifera*	3x4	833	5.26	5.26
Rosewood	*Dalbergia retusa*	3x4	833	6.45	6.45
Coco (sp)	*Lecythis tuyrana*	6x4	416	0.96	0.96
Bullywood and Tonka Bean	*Terminalia amazonia and Dipteryx oleifera*	3x4	833	0.53	0.53
Total, reforested				**30.10**	**30.10**
Area to be planted					3.36
Protection area					11.39
Stream area					1.07
Artificial lake					0.25
Infrastructure (road)					0.60
Firebreaks					0.15
Total Area					**46.92**

Map of the farm

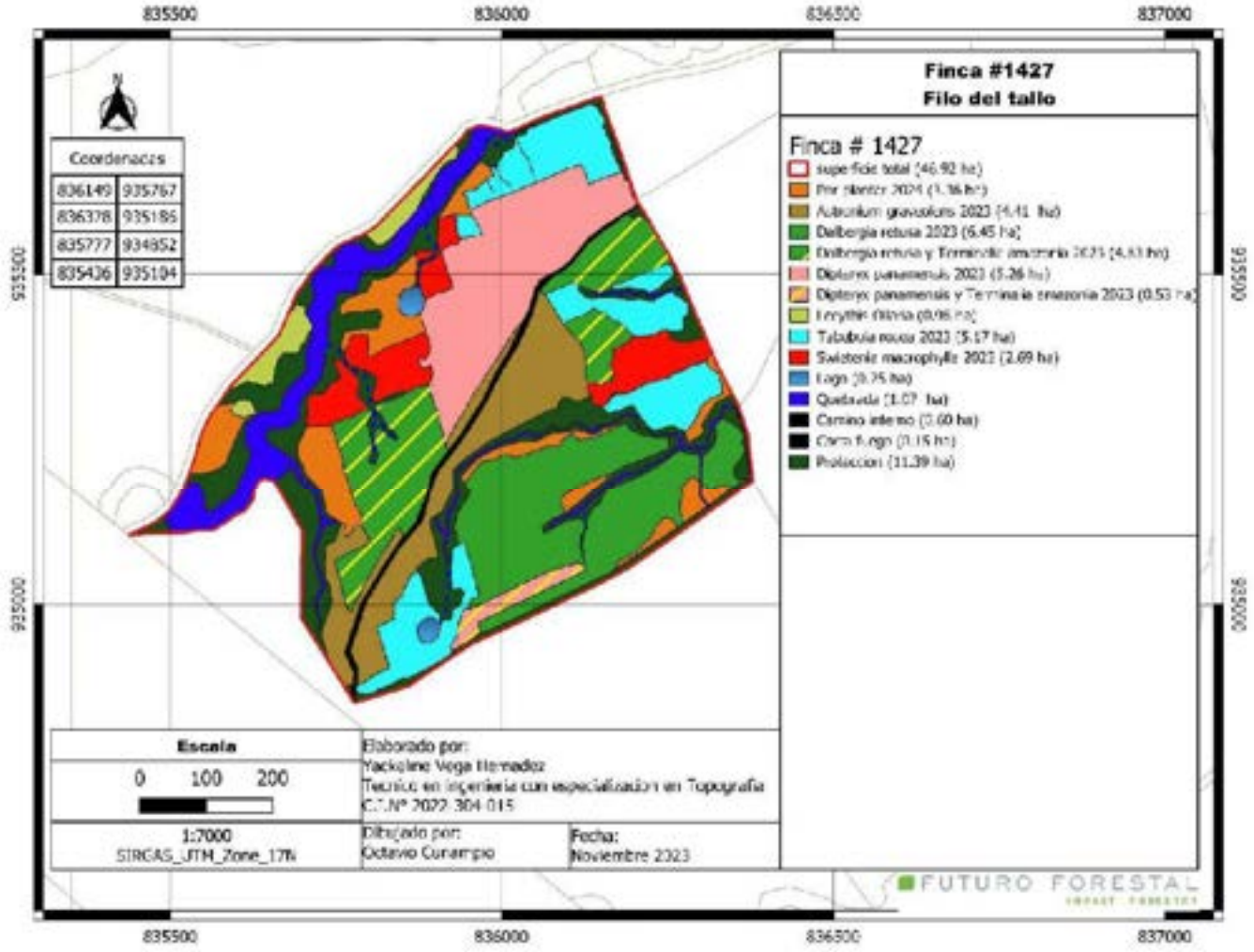


FIGURE 68. MAP OF FILO DEL TALLO FARM (NO. 1427).

- Farm No. 1668 Freddy Agustín Gonzalez y Hermanos

Summary of reforestation

Table 4. Categorization of reforested area.

Farm No. 1668 - Freddy Agustín González y Hermanos						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	**2024**	
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	9.27		9.27
Rosewood	*Dalbergia retusa*	3x4	833	3.05		3.05
Spanish Cedar	*Cedrela Odorata*	3x4	833	5.03		5.03
Coco (sp)	*Lecythis tuyrana*	6x4	416	0.34		0.34
Guachapalí (sp)	*Albizia guachapele*	3x4	833	0.32		0.32
Níspero (sp)	*Manilkara zapota*	3x4	833	0.25		0.25
Panama Tree	*Sterculia apetala*	6x4	416	0.63		0.63
Ron Ron (sp)	*Astronium graveolens*	3x4	833	0.63		0.63
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	1.17		1.17
Breadnut	*Brossimum alicastrum*	3x4	833	1.44		1.44
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.08		0.08
Freiburg plots (Rosewood)	*Dalbergia retusa*	Mixed dist.			2.25	2.25
Chibugá/Abarco (sp)	*Cariniana pyriformis*	3x4	833		0.26	0.26
Amarillo Guayaquil (sp)	*Centrolobium yavizanum*	3x4	833		2.36	2.36
Total, reforested				**22.21**	**4.87**	**27.08**
Area to be planted						1.80
Protection area						8.76
Stream area						1.50
Artificial lake						0.60
Internal road						0.48
Total Area						**40.22**

Map of the farm

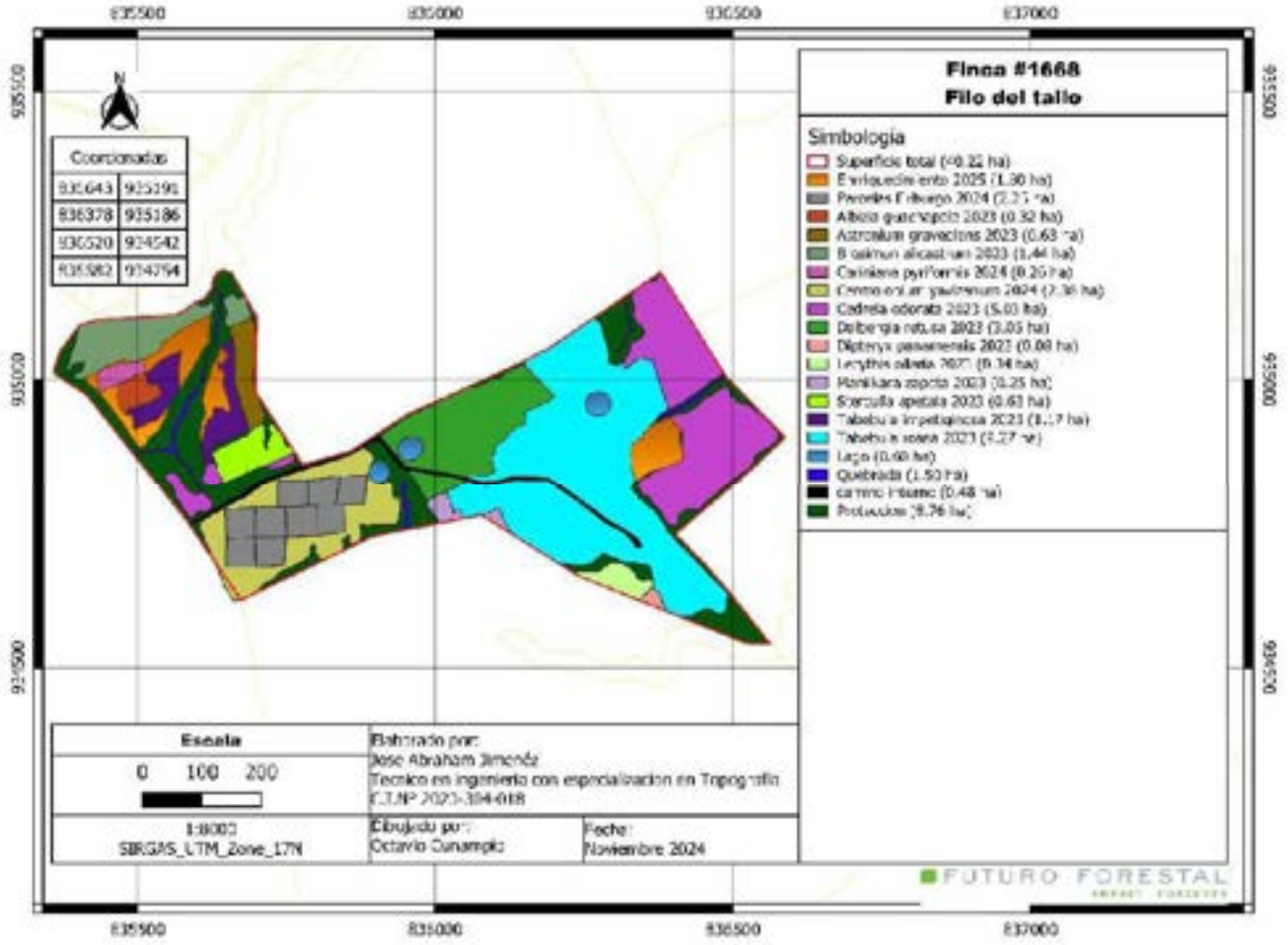


FIGURE 69. MAP OF FILO DEL TALLO FARM (NO. 1668).

- Farm No. 1069 Hermenegildo Castro

Summary of reforestation

Table 5. Categorization of reforested area.

Farm No. 1069 - Hermenegildo Castro						
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**		**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	**2024**	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	4.90		4.90
Rosewood	*Dalbergia retusa*	3x4	833	12.58		12.58
Rosewood and Tonka Bean	*Dipteryx oleifera and Dalbergia retusa*	3x4	833	4.90		4.90
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	2.78		2.78
Mahogany	*Swietenia macrophylla*	3x4	833	0.67		0.67
Tonka Bean	*Dipteryx oleifera*	3x4	833	0.82		0.82
Coco (sp)	*Lecythis tuyrana*	3x4	833	0.15		0.15
Níspero (sp)	*Manilkara zapota*	3x4	833	2.42		2.42
Freiburg plot	Mixed dist.				6.58	6.58
Rosewood	*Dalbergia retusa*	3x4	833		1.12	1.12
Genip Tree	*Genipa americana*	3x4	833		0.12	0.12
Ormosia (sp)	*Ormosia macrocalyx*	3x4	833		0.39	0.39
Cedro Espino (sp)	*Pachira quinata*	3x2	1666		0.23	0.23
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833		1.28	1.28
Teak	*Tectona grandis*	4x5	500		5.48	5.48
Total, reforested				**29.22**	**15.20**	**44.42**
Area to be planted (Enrichment and Mix)						6.29
Protection Area						9.15
Forest protection						6.94
Stream area						2.74
Lake						0.30
Internal road						1.15
Total Area						**70.99**

Map of the farm

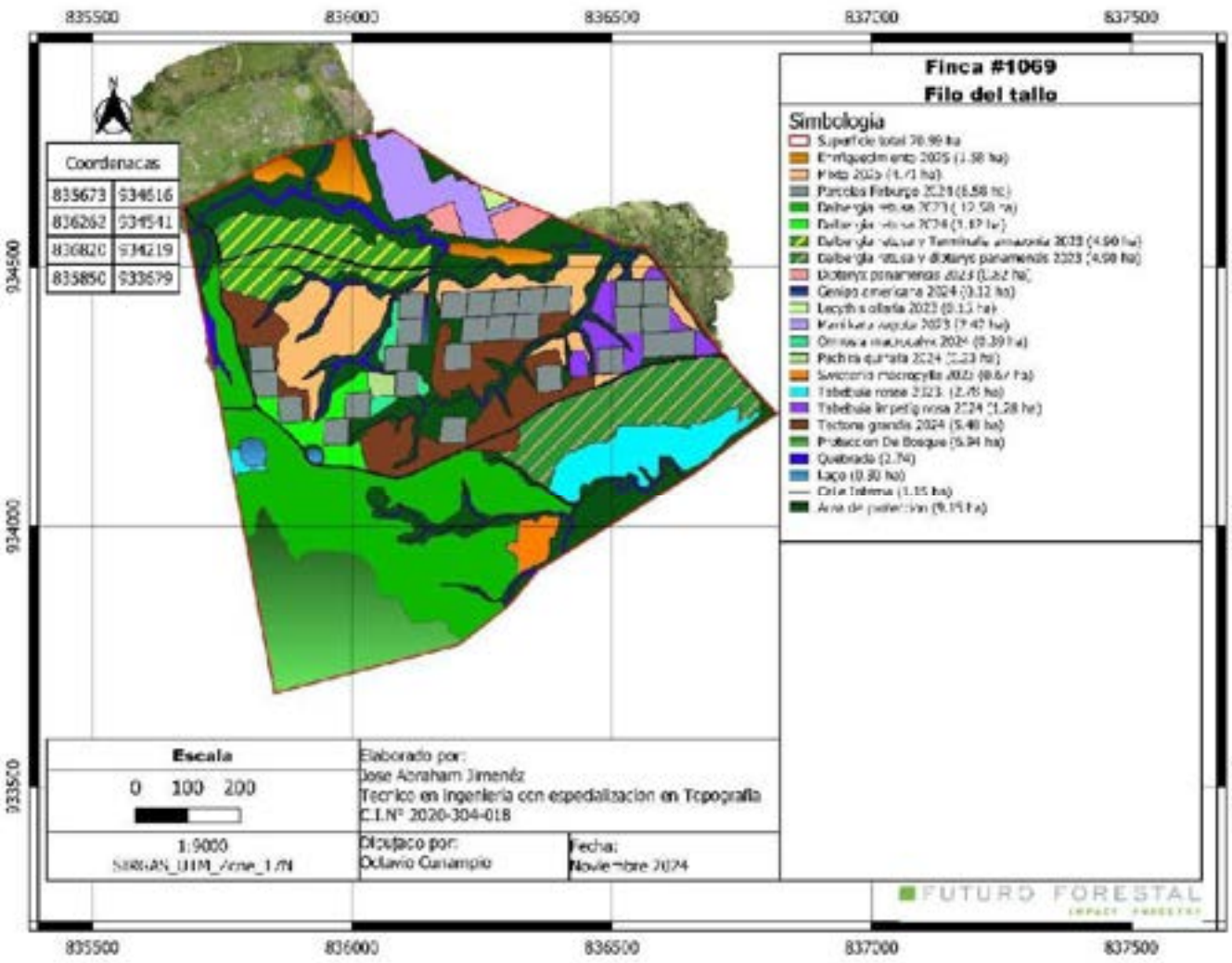


FIGURE 70. MAP OF FILO DEL TALLO FARM (NO. 1069).

- Farm No. 2001 Hermenegildo Castro

Summary of reforestation

Table 6. Categorization of reforested area.

Finca No. 2001 - Hermenegildo Castro					
Species planted		**Initial dist. (m)**	**Tree/ha**	**Planting year**	**Reforested area/species (ha)**
Common name	**Scientific name**			**2023**	
Rosewood and Bullywood	*Dalbergia retusa and Terminalia amazonia*	3x4	833	12.07	12.07
Rosewood	*Dalbergia retusa*	3x4	833	7.03	7.03
Rosewood and Tonka Bean	*Dalbergia retusa and Dipteryx oleifera*	3x4	833	2.85	2.85
Rosy Trumpet Tree	*Tabebuia rosea*	3x4	833	10.42	10.42
Spanish Cedar	*Cedrela odorata*	3x4	833	8.69	8.69
Amarillo Guayaquil (sp)	*Centrolobium yavizanum*	3x4	833	0.47	0.47
Ron Ron (sp)	*Astronium graveolens*	3x4	833	0.86	0.86
Bullywood	*Terminalia amazonia*	3x4	833	5.16	5.16
Breadnut	*Brossimum alicastrum*	3x4	833	0.60	0.60
Níspero (sp)	*Manilkara zapota*	3x4	833	1.77	1.77
Zapatero (sp)	*Hieronyma alchorneoides*	3x4	833	2.50	2.50
Guayacán Morado (sp)	*Tabebuia impetiginosa*	3x4	833	1.56	1.56
Mahogany (sp)	*Swietenia macrophylla*	3x4	833	0.69	0.69
Total, reforested				**54.67**	**54.67**
Enrichment					6.81
Protection area					32.61
Stream area					4.00
Internal road					1.29
Artificial lake					0.16
Total Area					**99.54**

Map of the farm

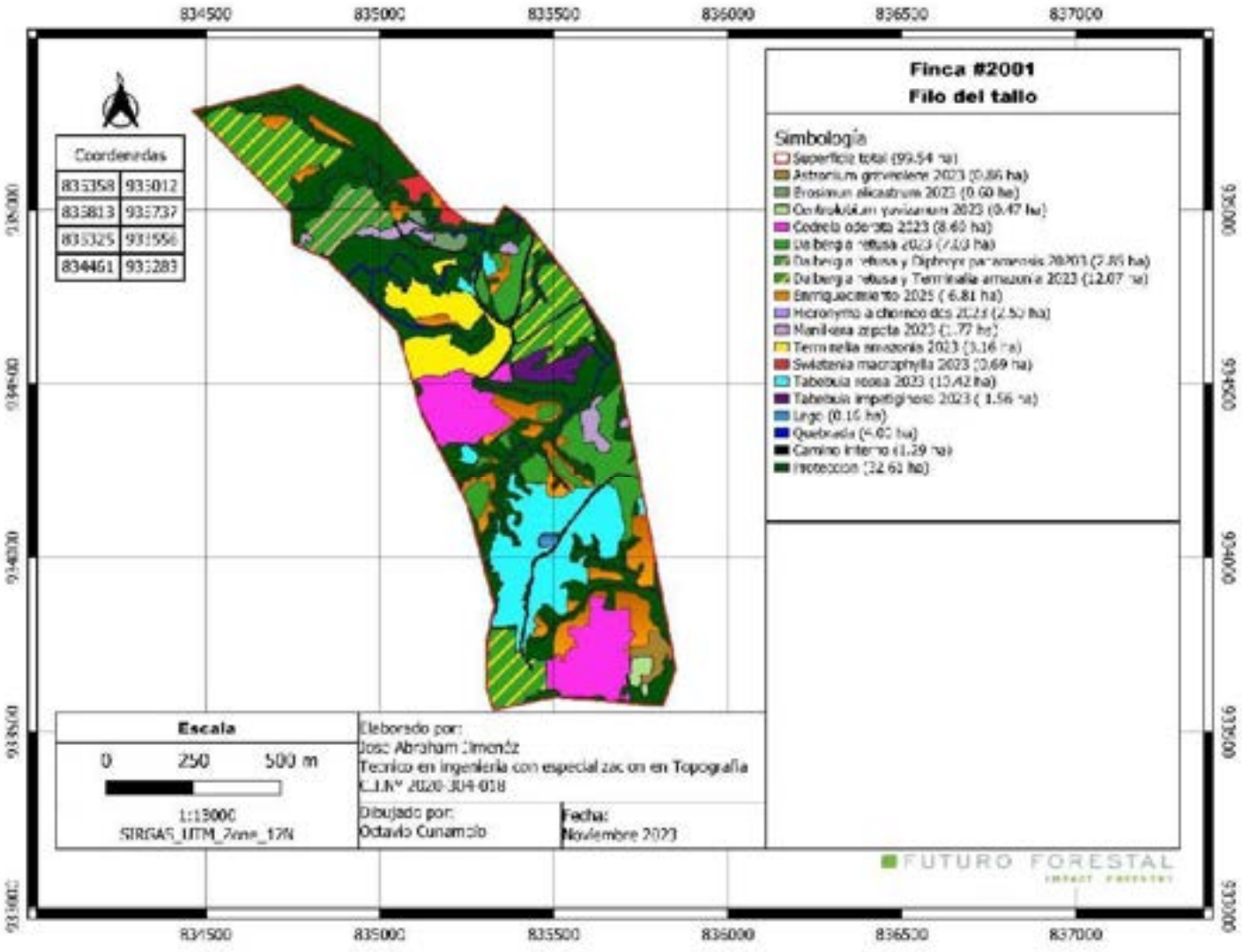


FIGURE 71. MAP OF FILO DEL TALLO FARM (NO. 2001).

Table 7. Executed AOP 2024

- Preliminary Mortality of Filo del Tallo Planting 2023

The following is a general outline of the mortality percentage recorded in the Filo del Tallo unit of the 2023 planting, according to the replanting carried out by the field personnel and field data control (Data Capturer). The data was taken from the replanting database.

Table 8. Mortality of planting.

ESPECIES	TOTAL, PLANTED (Ha.)	Replanted seedings	Replanting area (Ha.)	MORTALITY (%)
Tonka Bean (*Dipteryx oleifera*)	9.21	191	0.23	2.5%
Bullywood (*Terminalia amazonia*)	17.84	537	0.64	3.6%
Breadnut (*Brosimum alicastrum*)	2.04	637	0.76	37.5%
Mahogany (*Swietenia macrophylla*)	4.80	295	0.35	7.4%
Coco (sp) (*Lecythis tuyrana*)	1.49	139	0.17	11.2%
Rosewood (*Dalbergia retusa*)	46.85	1777	2.13	4.6%
Guachapalí (sp) (*Albizia guachapele*)	0.32	13	0.02	4.9%
Níspero (sp) (*Manilkara zapota*)	4.48	645	0.77	17.3%
Rosy Trumpet Tree (*Tabebuia rosea*)	31.70	1162	1.39	4.4%
Ron Ron (sp) (*Astronium graveolens*)	6.98	92	0.11	1.6%
Zapatero (sp) (*Hieronyma alchorneoides*)	2.50	490	0.59	23.5%
Overall Average Mortality				**6%**

In this replanting phase, the average mortality was 6 %. The increase in mortality was due to the trees coming from a period of severe drought; looking at the mortality table, there are species where there was more mortality due to their low drought tolerance, such as Breadnut (*Brosimum alicastrum*), Coco (*Lecythis tuyrana*), Níspero (sp) (*Manilkara zapota*), and Zapatero (sp) (*Hieronyma alchorneoides*). During this year, the weather conditions were not ideal, but it is hoped that the younger plants will be able to withstand this dry season.

6. Roads and infrastructure

Table 9. Table of Contributions for Road Maintenance 2024

Road Maintenance in 2024						
UNIT	**FARM**	**Farm No**	**INTERNAL**		**EXTERNAL**	
			Ford	**Road (m)**	**Road (m)**	**Ford**
Claritas	Tello#1	**3905**	1	50		
	Uri	**6276**	1			
	Clarita 1	**4630**			200	
	La Esperanza	**9853**			150	
	Gindi	**886**				1
	Tello#3	**3123**				1
	La Ponderosa	**5655**			120	
	Teófilo	**6087**			100	
	Total		**2**	**50**	**570**	**2**
Filo del Tallo	Agustín González	**3754**				1
	Total		**2**	**50**	**0**	**1**
Nicanor	Nicanor#1	**1182**	1	100		
	Nicanor#2	**5553**				
	Nicanor#3	**1519**			100	
	Nicanor#4	**1781**				
	Margarito Banda	**1336-1339**				
	Avendaño				100	
	Total		**1**	**100**	**200**	**0**

Soruce: Tec. Eduardo Córdoba – Road Manager 2024

6.1. Claritas Operating Unit

In 2024, two (02) meetings were held with the Sailas (ancestral authorities) of the Guna Ethnicity from the Wala community, where the company owns land bordering this natural reserve. The purpose was to promote strategies for the government authorities and neighbors from the Claritas community, who benefit from the main road (public road), to contribute equally with materials for the maintenance of this road.

Photos of road works on the Main Road of Claritas



FIGURES 72-73. REPAIRING OF THE PUBLIC ACCESS ROAD OF CLARITAS.





FIGURES 74-75. WORKS ON MAIN ROAD OF CLARITAS.

6.2. Colón Operating Unit

Photos of the condition of the roads leading to the Waldmenschen farms.





FIGURES 76-77. CONDITION OF THE ROADS LEADING TO THE FARMS, WITHOUT A BASE OF CALCAREOUS TUFF.

6.3. Nicanor Operating Unit



FIGURES 78-79. MAINTENANCE OF EXTERNAL PUBLIC ROAD, FARMS LEADING TO NICANOR.

7. Science and certification

FSC Audit and Recertification

In November 2024, we received the FSC® audit for the recertification of Forest Management (FM) and Chain of Custody (CoC) for FSC® for a period of 5 years (2025 to 2030). The audit began virtually on November 22 and continued with field visits from the 25th to the 27th of the same month. During this period, key information was shared with the auditor regarding the verification of the principles and criteria of the various FSC® standards.

The auditor selected the following sites for review:

- Garden Eden: Los Llanos Farm.
- Kapok Farm.
- Waldmenschen: Nicanor Farms, including both certified and non-certified farms.
- Office in Darién, warehouses, and La Curva camp.

During these visits, interviews were conducted with staff and third parties, and tours were carried out on the farms, camps, and warehouses to assess compliance with the standards.

Additionally, for the first time, the Ecosystem Services (ES) Certification was included, covering the following services:

- ES1: Biodiversity
- ES2: Carbon
- ES3: Water Protection
- ES4: Soil Protection

Results:

The recertification of Forest Management (FM) and Chain of Custody (CoC) for FSC® was successfully completed, issuing the certificate for the period from February 2025 to February 2030 (see certificate below).

The audit was closed with the following results:

- FSC® Forest Management (FM) / Chain of Custody (CoC) Standard: only 4 minor CARs, satisfactory recertification for the next 5 years
- FSC® Group Standard: only 1 minor request, successful recertification for the next 5 years
- FSC® Ecosystem Services Certification: 4 major CARs and 1 minor CAR
- Additionally, 1 observation was recorded that needs to be corrected.

An Action Plan was developed to address these CARs, and all necessary documentation for the closure of the major CARs has been submitted, which is currently under review by GFA (FSC auditors).

Certified farms

The Waldmenschen certified farms are as follows:

- La Ponderosa N° 280254
- La Ponderosa N° 235655
- La Ponderosa N° 218957
- Claritas 1 N° 30123319
- Claritas 1 N° 30124630
- Darío Castro N° 1866
- Raul Castro N° 3479
- Gindi Trujillo N° 886
- Joaquín Hernandez N° 30387827
- Claritas 2 N° 218060
- Tello 1 N° 3905
- Límite N° 30358872
- La Esperanza (Miguel García) N° 1962
- Raul Espinoza N° 217884
- Teófilo Herrera N° 6087
- La Esperanza (Ediberta Garcia) N° 30359110

- La Esperanza (Belgica García) N° 30359029
- La Esperanza (Dalys García) N° 30359853
- La Esperanza (Maite García) N° 30358613
- La Esperanza (Maite García) N° 30358742
- Nicanor 2 N° 5553
- Nicanor 4 N° 1781
- Nicanor 3 N° 1519
- Espavé N° 960
- Reina N° 2015
- La Esperanza (Cati García) N° 30359842
- Las 15 N° 218047
- Nicanor 1 N° 1182
- Conexión N° 6704
- Gatún 1 DP Record ADJ-3-98-2019

Forest Management Certificate (FM) and Chain of Custody (CoC) of FSC®

GFA CERTIFICATION

CERTIFICADO

Anexo del Certificado

FUTURO FORESTAL S.A.

Calle Parker Drive, Oficina: 923 A · 0819-07583 Clayton · Panamá

Código de registro de certificado				
GFA-FM/COC-004187				
Fecha de emisión	**21.02.2025**	·	Fecha de vencimiento*	**20.02.2030**
Emisión número	2	·	Versión	1

El Certificado FSC® incluye además de la empresa arriba mencionada a las siguientes unidades de gestión forestal:

GFA-FM/COC-004187-B: Brain Forest INC. S. A., Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá. Miembro desde: 21.02.2020

GFA-FM/COC-004187-C: Garden Eden International S.A ., Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá. Miembro desde: 21.02.2020

GFA-FM/COC-004187-D: Kapok LTD, Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá. Miembro desde: 21.02.2020

GFA-FM/COC-004187-E: Red Lotus Reforestation S. A., Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá. Miembro desde :21.02.2020

GFA-FM/COC-004187-F: Finca Santa Rita S. A., Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá Miembro desde: 21.02.2020

GFA-FM/COC-004187-G: Waldmenschen, Calle Parker Drive, Oficina: 923 A, 0819-07583 Clayton, Panamá. Miembro desde: 21.02.2020

FSC
www.fsc.org
FSC® A000511

La marca de la gestión forestal responsable

Jörn Ackermann, Director General
GFA Certification GmbH • Alter Teichweg 15 • 22081 Hamburgo • Alemania
Teléfono: + 49 40 5247431 0 • Fax: +49 40 5247431 999 • www.gfa-cert.com

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8. Difficulties

8.1. Overall

- In 2023, a high incidence of attacks by *Hypsipyla grandella* on the Cedar (*Cedrela odorata*) plantations was reported, and in some cases, also on the Mahogany (*Swietenia macrophylla*). Despite manual controls and the use of insecticides, losses in the Cedar plantation area were reported in the Claritas forest unit. As part of the recovery plan, other high-value commercial and fast-growing tree species were established.

- Damage to the main roads or public routes leading to the Lastenia, Nicanor, and Claritas farms, due to the lack of maintenance in the drainage ditches for rainwater and the culverts that should be provided by the Ministry of Public Works, the government entity responsible for the country's primary and secondary roads.

- In 2024, at the farms in Darién, three (03) unforeseen or unexpected natural events occurred, such as strong winds accompanied by rainfall, which affected the plantations by bending the trees. In response, farm maintenance activities were temporarily halted to prevent losses in the quality of the tree trunks.

- Regarding the project in Colón, the main difficulty is the access road for 4x4 vehicles during the rainy season, as it lacks a non-petro material layer such as calcareous tuff or rocks, which would help facilitate vehicle access. Additionally, the conflict with the neighbors has affected part of the plantation.

8.2. Claritas Unit

- The biggest difficulty at the beginning of 2024 (January, February, and March) was having the required labor force to carry out the delayed maintenance work from 2023 (due to budget cuts in the fourth quarter), along with the firebreak rounds for the protection of the plantations.

- Having three (03) employee camps with a total capacity of 22 people makes us heavily reliant on the local communities for labor. During the summer months, many of these work for the teak companies in thinning, extraction, and container loading tasks. At the end of the harvest season (the local term for this activity), many returns to their farms to work on subsistence crops, which makes labor availability difficult.
- At the end of November, the chemical control work for *Hypsipyla grandella* and weed control in strips had to be suspended due to low cholinesterase levels in the application crew (18 employees in total). Therefore, herbicides could not be applied in December. In this context, 10 new employees were sent to undergo this medical test, and 9 of them had optimal levels for applications in January 2025.

8.3. Filo del Tallo Unit

- The biggest challenge faced in 2024 was obtaining the required field personnel for maintenance and establishment tasks, which resulted in delays in scheduled activities.
- During the 2024 establishment (which was for a few hectares), a drought of approximately 15 days occurred in July and August, which led to the need for watering the seedlings with backpack pumps to reduce the mortality rate.

8.4. Lastenia and Nicanor Units

- Irregular rainfall: The rainfall regime was low and irregular during the planting period, and the severe drought during the dry season made the soils require more water to reach field capacity, the optimal condition for planting.
- Limited availability of vehicles: One of the most limiting factors was transportation, as the demand for mobilization was and continues to be high. This limits our ability to work in parallel on different farms and activities, leading to delays in operations.
- Delay in administrative processes: One of the problems that has a significant impact on operations is delays in administrative and field processes such as payments, purchases, hiring, timely payroll, and the long approval process. This is due to staff turnover in the administrative department.

- Lack of seedlings of species suitable for site conditions to plant in areas with mortality and special site conditions.

  Poor quality equipment: Although we have rolling equipment (4x4 vehicles), these are not available for field supervision because they are broken.

8.5. Colón Unit

- Access roads are in poor condition, which means that during the rainy season, employees must walk to buy supplies until they reach the pick-up point because vehicles cannot enter. This meant 1.5 hours to go down and 2 hours to go back up carrying the load on their shoulders.
- Due to the poor road conditions during the rainy season and not having a vehicle available for any emergencies in case of illness or injury, a stretcher is improvised using a hammock carried between colleagues.
- In 2024, difficulties with squatters on the farm continued, including threats to company workers and damage to the plantation. Two families, the Villegas and the Castillos, were identified as responsible for these harmful acts, and the corresponding legal complaints have been filed with the competent authorities.

9. Conclusions and Recommendations

- Implement strategies for the detection, surveillance, monitoring, control, and eradication of forest fires that may occur around the farms in all forest units in Panama.
- Continue improving infrastructure and facilities in the camps to provide a better quality of life for the employees.
- Maintain the farm recovery plan to gradually recover areas or spaces within the plantation with already identified species.
- In Colón, follow up on the legal process regarding the conflict with the Villegas and Castillo families to resolve the issue of squatters on the farms. Improve the conditions of the employee camp and ensure the availability of a vehicle unit for quick responses to accidents and extreme situations.
- Rehabilitate some parts of the roads and fords (internal-external) to improve control and supervision of fieldwork.
- Provide means of transportation (vehicle, motorcycle) for the mobilization and supervision of the project, specifically for activities carried out on the different farms of Lastenia.
- Maintain the continuous training program related to specific plantation management practices such as pruning, sprout removal, and apex selection, involving all employees.