



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Provincial Environment and Natural Resources Office
Puerto Princesa City, Palawan
(048) 433-5638
E-mail: penropalawan@denr.gov.ph

January 19, 2023

MEMORANDUM

FOR : The Regional Executive Director
DENR- MIMAROPA Region
1515 L&S Bldg., Roxas Blvd.
Ermita, Manila

THRU : The OIC, Assistant Regional Director for Technical Services

FROM : The Provincial Environment And
Natural Resources Officer

SUBJECT : ANNUAL REPORT ON THE MAINTENANCE AND PROTECTION
OF SEED PRODUCTION AREA / INDIVIDUAL PLUS TRESS
(SPA/IPTs) WITHIN CENRO PUERTO PRINCESA CITY

Respectfully forwarding the Annual Report of the Maintenance and Protection of Seed Production Area (SPA)/Individual Plus Tress (IPTs) located at the Palawan Experimental Forest in Bgy. Bagong Bayan, Puerto Princesa City.


The Seed Production Area (SPA), with an area of 167.47 hectares, was established in October 2013. The subject CENRO collected seventeen thousand five hundred five (17,505) seeds from nineteen (19) IPTs of seven species of forest trees. For the CY 2022, the subject CENRO Puerto Princesa compound targeted the production of IPT seedlings of four thousand two hundred (4,200).

Please be informed that as an initiative of CENRO Puerto Princesa City, the Palawan Experimental Forest was surveyed to produce a SPA/IPT map which consists of 800 IPTs that were maintained and protected.

For information and record.


FELIZARDO B. CAYATOC

NGP MEMO:
DTF: 2022-11672
RRA

DENR-PALAWAN
PENRO-RECORDS
RELEASED
By 
Date: 24 JAN 2023 CN 2023-200



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Community Environment and Natural Resources Office
PUERTO PRINCESA
South National Highway, Sta. Monica, Puerto Princesa City, Palawan
E-mail: cenropuertoprincesa@denr.gov.ph

December 22, 2022

MEMORANDUM

FOR : The Provincial Environment and Natural Resources Officer
Sta. Monica, Puerto Princesa City

FROM : The OIC - Community Environment and Natural Resources Officer

SUBJECT : ANNUAL REPORT ON THE MAINTENANCE AND PROTECTION OF SEED PRODUCTION AREA/INDIVIDUAL PLUS TREES (SPA/IPTs) WITHIN CENRO PUERTO PRINCESA

DENR PENRO
PALAWAN RECORDS
RECEIVED
BY: *[Signature]*
DATE: 12-27-2022

Forwarded is the Annual Report on the Maintenance and Protection of Seed Production Area (SPA)/Individual Plus Trees (SPA/IPTs) located at the Palawan Experimental Forest in Barangay Bagong Bayan, Puerto Princesa City.

The SPA at the Palawan Experimental Forest was established in October 2013 and covered an area of 167.47 hectares. The SPA/IPTs consisted of eight hundred (800) Individual Plus Trees, belonging to twenty-three (23).

A total of 15,005 seeds were collected from nineteen (19) IPTs consisted of seven (7) species of forest trees namely: Batino, Lamio, Malakalumpit, Kalantas, Alalud, Ipil and Pangi. The office has submitted 6,320 seedlings to Ecosystems Research and Development Bureau (ERBD) through Southern Luzon Forest Tree Seed Center (SLFTSC), Urban & Biodiversity Research, Development & Extension Center (UBRDEC).

Among the activities accomplished from January to December CY 2022: 1. Maintenance and Protection Activities: Patrolling within the area with the assistance of hired one (1) Science Research Technician and two (2) Laborers as Forest Guards assigned at the Palawan Experimental Forest; 2. Underbrushing at the immediate vicinity of eight hundred (800) Individual Plus Trees (IPTs); 3. Phenological Observation; and Maintenance of nursery inside the SPA; Repainting of IPTs.

For CY 2022, the office has a target of seedling Production of IPTs Seeds at the CENRO Puerto Princesa compound with a total of four thousand two hundred (4,200) seedlings produced.

As an initiative of the office, the 800 IPTs maintained and protected within the SPA at the Palawan Experimental Forest were surveyed in order to produce a map of the SPA/IPTs. The relocation survey was undertaken by the SPA/IPTs hired personnel. A map showing the location of 800 IPTs was produced. (Copy of map attached)

For information and record.

[Signature]
PEDRO A. VELASCO

DENR MIMAROPA REGION
CI
PUERTO PRINCESA
RECEIVED
NO. 1355
DATE: 12-27-22
BY: *[Signature]*



ANNUAL REPORT
MAINTENANCE AND PROTECTION OF
SEED PRODUCTION AREA/INDIVIDUAL PLUS TREES (SPA/IPTs)
January to December CY 2022

I. INTRODUCTION

The Seed Production Area (SPA) : Individual Plus Trees (SPA/IPTs) located at the Palawan Experimental Forest in Barangay Bagong Bayan, Puerto Princesa City was established in October 2013 and covered an area of 167.47 hectares. The SPA/IPTs consisted of eight hundred (800) Individual Plus Trees, belonging to twenty-one (21) species upon establishment. But it was later realized that some of the identified species as White Nato (*Pouteria macrantha*) were actually identified as Alalud (*Planchonella foxworthyi*), an endemic species belonging to the same Family Sapotaceae like White Nato.

With the findings, the number of species became twenty-two (22). To date, a total of twenty-three (23) species (after some IPTs had been replaced due to damage caused by typhoon) comprised the SPA/IPTs, as shown in the following Table:

Table 1. IPTs within Palawan Experimental Forest

Tree Species	No. of Trees	Scientific Name	Family Name
1. Agoho del monte	10	<i>Casuarina rumphiana</i>	Casuarinaceae
2. Alalud	9	<i>Planchonella foxworthyi</i>	Sapotaceae
3. Amugis	41	<i>Koordersiodendron pinnatum</i>	Anacardiaceae
4. Batino	27	<i>Alstonia macrophylla</i>	Apocynaceae
5. Dita	9	<i>Alstonia scholaris</i>	Apocynaceae
6. Duguan panayong	37	<i>Myristica Umbellata</i>	Myristicaceae
7. Gatasan layugan	20	<i>Garcinia polyantha</i>	Guttiferae
8. Ilang-ilang	18	<i>Cananga odorata</i>	Annonaceae
9. Ipil	214	<i>Intsia bijuga</i>	Caesalpiniaceae
10. Kalantas	6	<i>Toona calantas</i>	Meliaceae
11. Kamagong	19	<i>Diospyros philippinensis</i>	Ebenaceae
12. Kupang	13	<i>Parkia timoriana</i>	Mimosaceae
13. Lamio	13	<i>Dracontomelon edule</i>	Anacardiaceae
14. Lumarao	61	<i>Swintinia foxworthyi</i>	Anarcardiaceae
15. Malakalumpit	9	<i>Terminalia calamansanai</i>	Combretaceae
16. Malugai	24	<i>Pometia pinnata</i>	Sapindaceae
17. Nato	54	<i>Palaquium luzoniense</i>	Sapotaceae
18. Pagsahingin	132	<i>Canarium asperum</i>	Burseraceae
19. Panau	3	<i>Dipterocarpus gracilis</i>	Dipterocarpaceae
20. Pangi	6	<i>Pangium edule</i>	Flaucourticeae
21. Small-leaf malugai	12	<i>Pometia pinnata forma repanda</i>	Sapindaceae
22. Talisai gubat	31	<i>Terminalia foetidissima</i>	Combretaceae

II. SEED COLLECTION

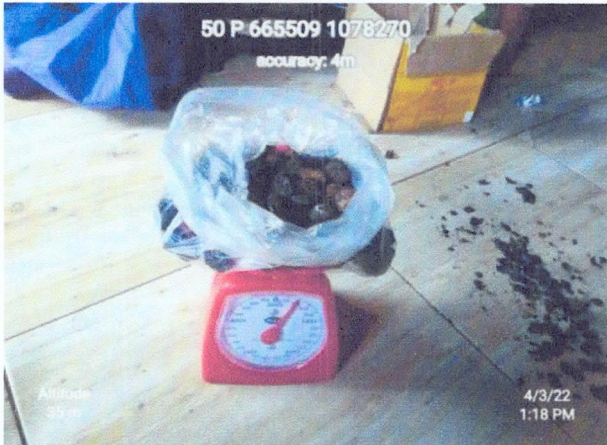
Summary of Seed Collection from January to December CY 2022 at the Seed Production Area located at Palawan Experimental Forest, Barangay Bagong Bayan, Puerto Princesa City is shown in the table below:

Table 2. Summary of Seed Collection from January to December CY 2022

IPT Number	Common Name	Scientific Name	Seed Collection		
			Date	Counts	kg
IPT-4B-058-PEF	Batino	<i>Alstonia macrophylla</i>	February 25, 2022	600	0.02
IPT-4B-234-PEF	Lamio	<i>Dracontomelon edule</i>	March 2, 2022	180	0.4
IPT-4B-058-PEF	Batino	<i>Alstonia macrophylla</i>	April 22, 2022	620	0.01
IPT-4B-240-PEF	Lamio	<i>Dracontomelon edule</i>	May 25, 2022	2,000	3.8
IPT-4B-342-PEF	Malakalumpit	<i>Terminalia calamansanai</i>	June 13, 2022	350	0.4
IPT-4B-690-PEF	Kalantas	<i>Toona calantas</i>	June 15, 2022	560	0.0002
IPT-4B-690-PEF	Kalantas	<i>Toona calantas</i>	June 16, 2022	650	0.0002
IPT-4B-432-PEF	Kalantas	<i>Toona calantas</i>	June 16, 2022	2400	0.1
IPT-4B-687-PEF	Kalantas	<i>Toona calantas</i>	June 16, 2022	500	0.0001
IPT-4B-690-PEF	Kalantas	<i>Toona calantas</i>	June 16, 2022	3,000	0.2
IPT-4B-432-PEF	Kalantas	<i>Toona calantas</i>	June 16, 2022	600	0.001
IPT-4B-260-PEF	Alalud	<i>Planchonella foxworthyi</i>	July 7, 2022	320	0.5
IPT-4B-691-PEF	Alalud	<i>Planchonella foxworthyi</i>	July 7, 2022	1285	1.8
IPT-4B-690-PEF	Kalantas	<i>Toona calantas</i>	July 7, 2022	2700	0.2
IPT-4B-806-PEF	Alalud	<i>Planchonella foxworthyi</i>	August 12, 2022	550	0.6
IPT-4B-228-PEF	Ipil	<i>Instia bijuga</i>	August 23, 2022	510	4
IPT-4B-738-PEF	Ipil	<i>Instia bijuga</i>	August 25, 2022	300	2.1
IPT-4B-010-PEF	Pangi	<i>Panguim edule</i>	October 4, 2022	160	2.6
IPT-841-PEF	Alalud	<i>Planchonella foxworthyi</i>	November 29, 2022	180	0.2
IPT-841-PEF	Alalud	<i>Planchonella foxworthyi</i>	December 8, 2022	40	0.01

A total of 17,505 seeds were collected from nineteen (19) IPTs consisted of seven (7) species of forest trees namely: Batino, Lamio, Malakalumpit, Kalantas, Alalud, Ipil and Pangi. For CY 202, the office has submitted a total of 6,320 seeds collected from IPTs to Ecosystems Research and Development Bureau (ERBD) through Southern Luzon Forest Tree Seed Center (SLFTSC) - Urban & Biodiversity Research, Development & Extension Center (UBRDEC).

A. Seeds Collection from IPTs within SPA located in Barangay Bagong Bayan, Puerto Princesa City



III. PHENOLOGY CALENDAR

Through the observation of the phenological characteristic of IPTs, it was noted that there are individual *differences among mother trees of the same species, some bear mother flowers earlier than expected while others flower at a later time*. For Ipil (*Intsia bijuga*), some mother trees started flowering in April and seed were collected in August. There were also mother trees of Duguan Pinayung (*Myristica umbellate*) started flowering in June. Prior to the establishment of the Seed Production Area, flowering of Ipil used to start in the January and dropping of mature fruits was in May. Climate change could have affected the phenology of mother trees.

Based on observation, many of the species were observed to bear flowers and fruits. Although flowers of some mother trees did not develop into fruits due to strong wind and/or rainfall, the flowering of the mother trees had been given a hint for the observers on what to expect on the following year. For this 2022, Batino and Pagsahingin started flowering in August while Batino and Duguan pinayung also had flowers in September. Gatasan layugan and Talisai gubat started flowering in October. Table 3 shows the phenological calendar CY 2022.

A. Observation of Flowering and Fruits of Individuals Plus Trees (IPTs) at the SPA



Observation of flowering and fruits of Individuals Plus Trees (IPTs) at the Seed Source



B. Seedlings from IPTs Individual Plus Trees Donated to Philippine Coast Guard



Table 4. Summary of Donated Seedlings from IPT Seeds CY 2022

SPECIES	NO. OF SEEDLINGS	DONATED TO	DATE
Ipil	50	PMAJ. Aldrian P. Nangit	February 5, 2022
Nato	50	PMAJ. Aldrian P. Nangit	February 5, 2022
Kamagong	100	Al Egeno	May 17, 2022
Pangi	100	Anna Jane S. Deguzman	June 24, 2022
Kamagong	73	Shendyleen Aquino	July 1, 2022
Nato	100	PSMS Marlon P. Basaya	August 8, 2022
TOTAL	473		

C. Relocation Survey and Replacement of 800 Individual Plus Trees (IPTs)



Table 5. Replacement of Dead/Damaged by Typhoon Odette Individual Plus Trees (IPTs)

IPTs Dead/Damaged of Typhoon Odette	IPTs replacement
IPT # 14 Malugai	IPT # 813 Alalud
IPT # 17 Malugai	IPT # 814 Malugai
IPT # 21 Pangi	IPT # 815 Amugis
IPT # 29 Nato	IPT # 816 Panau
IPT # 30 Malugai	IPT # 817 Amugis
IPT # 47 Ilang-ilang	IPT # 818 Amugis
IPT # 48 Ilang-ilang	IPT # 819 Pangi
IPT # 141 Ilang-ilang	IPT # 820 kalantas
IPT # 154 Ipil	IPT # 821 Amugis
IPT # 170 Ipil	IPT # 822 Ipil
IPT # 203 Ipil	IPT # 823 Amugis
IPT # 216 Ipil	IPT # 824 malugai
IPT # 262 Pagsahingin	IPT # 825 Malugai
IPT # 264 Batino	IPT # 826 Malugai
IPT # 265 Lamio	IPT # 827 Panau
IPT # 271 Pagsahingin	IPT # 828 Pagsahingin
IPT # 272 Ipil	IPT # 829 Ipil
IPT # 274 Amugis	IPT # 830 Lamio
IPT # 275 Ipil	IPT # 831Malugai
IPT # 284 Ipil	IPT # 832 Amugis
IPT # 303 Pagsahingin	IPT # 833 Amugis
IPT # 306 Pagsahingin	IPT # 834 Malugai
IPT # 405 Nato	IPT # 835 Amugis
IPT # 423 Pagsahingin	IPT # 836 kalantas
IPT # 424 Pagsahingin	IPT # 837 Amugis
IPT # 548 Agoho Del Monte	IPT # 838 Panau
IPT # 576 Dita	IPT # 839 Alalud
IPT # 593 Nato	IPT # 840 Malugai
IPT # 784 Lumarao	IPT # 841 Alalud
IPT # 800Nato	IPT # 842 Panau

D. Maintenance of Nursery at CENRO Puerto Princesa Compound and Seedling Production seeds collected from IPTs



E. Seedlings Produced from IPTs Seeds housed at the newly constructed Nursery at CENRO Puerto Princesa Compound



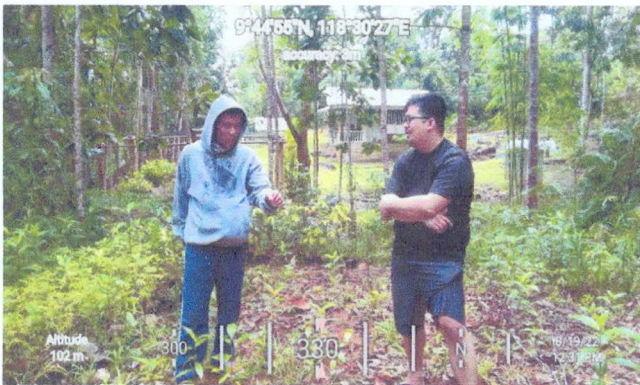
F. Seedlings Produced from IPTs Seeds housed at the newly constructed Nursery at CENRO Puerto Princesa Compound



G. Assistance to ERDB personnel in the conduct of validation of seed collection from the selected Individual Plus Trees (IPTs) inside the SPA



H. Assistance to DENR MIMAROPA Region - Planning Management Division personnel in the conduct of site visitation at the SPA/IPTs



IV. ACCOMPLISHMENT

Among the activities accomplished for the 1st Quarter to 4th Quarter CY 2022 (from January to December) are the following:

1. Maintenance and Protection Activities

The maintenance and protection activities includes the following:

- a. Patrolling within the area with the assistance of hired one (1) Science Research Technician and two (2) Laborers as Forest Guards assigned at the Palawan Experimental Forest;
- b. Under brushing at the immediate vicinity of eight hundred (800) Individual Plus Trees (IPTs);
- c. Phenological Observation; and
- d. Maintenance of nursery inside the SPA

2. Repainting of IPTs

Repainting of IPT codes conducted within the SPA.

3. Seedling Production of IPTs Seeds at the CENRO Puerto Princesa compound

A total of four thousand two hundred (4,200) seedlings from seeds collected in IPTs were produced at the nursery within the CENRO Puerto Princesa compound.

4. Relocation Survey of eight hundred (800) IPTs for mapping purposes

As an initiative of CENRO Puerto Princesa, OIC CENRO Pedro A. Velasco instructed the conduct of relocation survey of the 800 IPTs maintained and protected within the SPA at the Palawan Experimental Forest in order to produce a map of the SPA/IPTs. The activity was undertaken by the undersigned together with two (2) Forest Guards.

5. Preparation of Map of IPTs within the SPA


The undersigned assisted by the other NGP Unit personnel facilitated the inputting of data and attributes of surveyed Individual Plus Trees (IPTs) using Manifold Software.

A map showing the location of 800 IPTs was produced. (Copy of map attached)

Prepared by:


EDWARD GABASAN
Science Research Technician

Reviewed by:


DEXTER A. BOLIDO
Forester I/NGP Coordinator

Noted by:


MA. VIVIAN O. SORIANO
Sr. Ecosystems Management Specialist
Chief, Conservation and Development Section

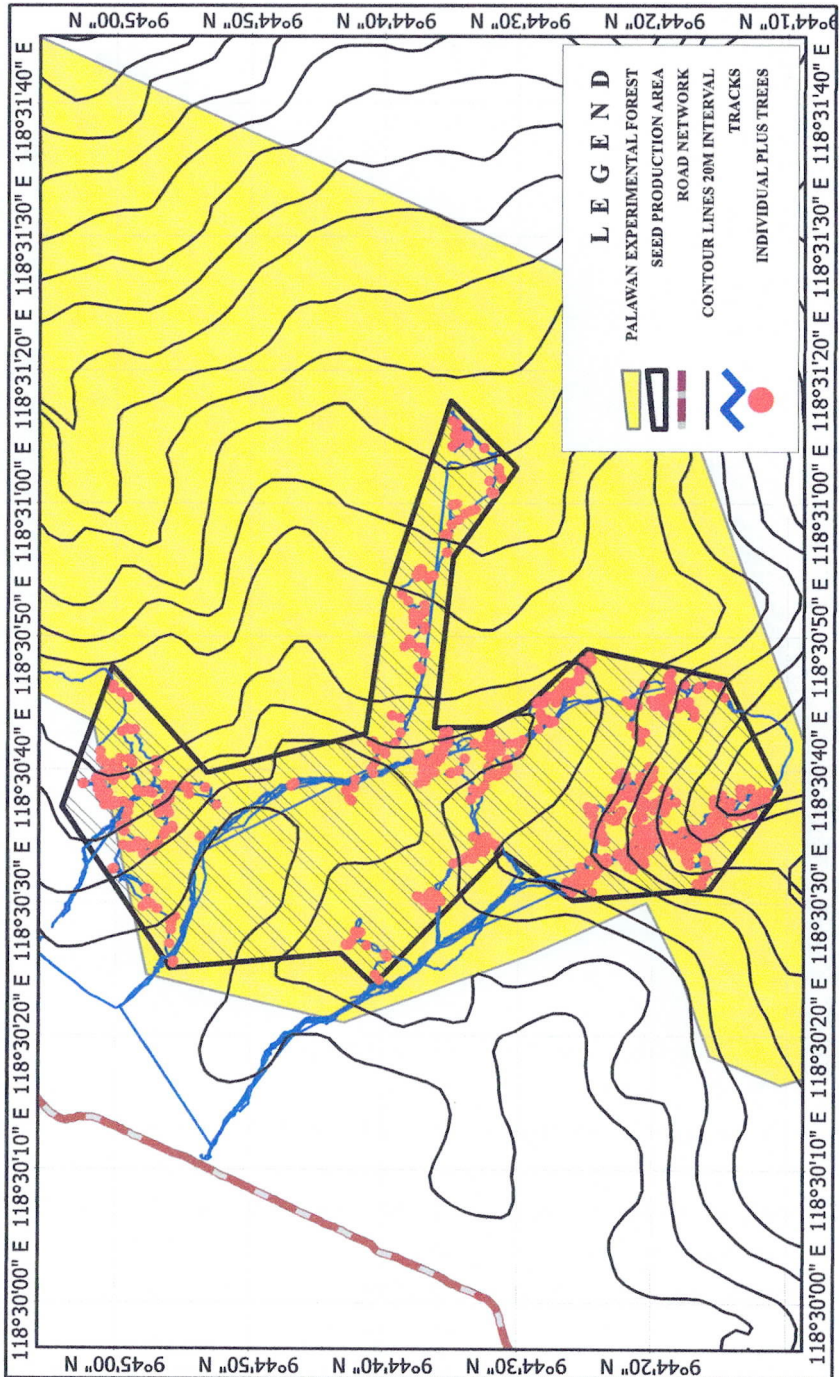
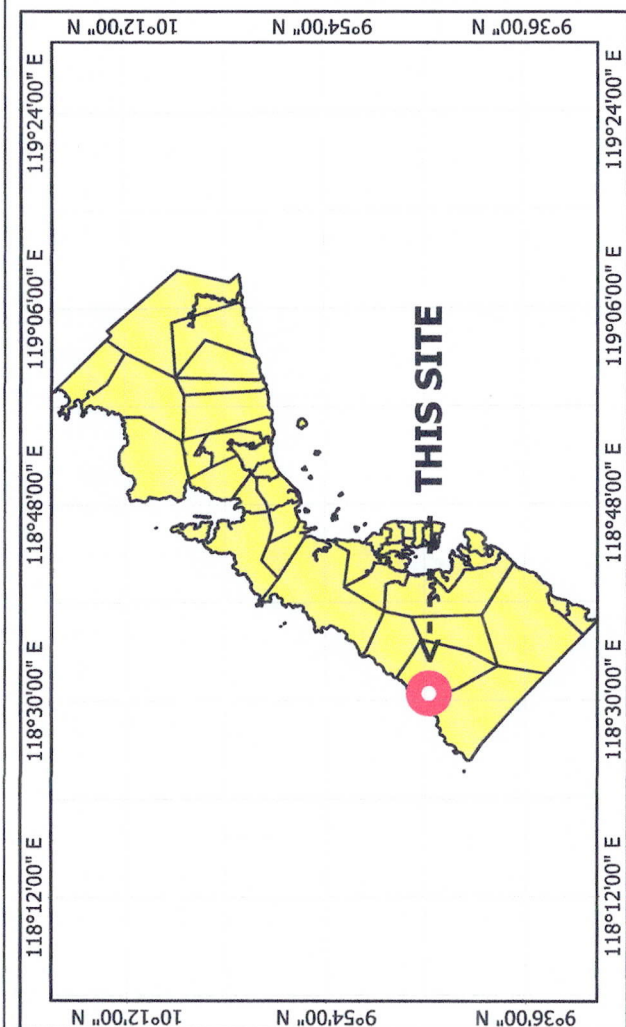
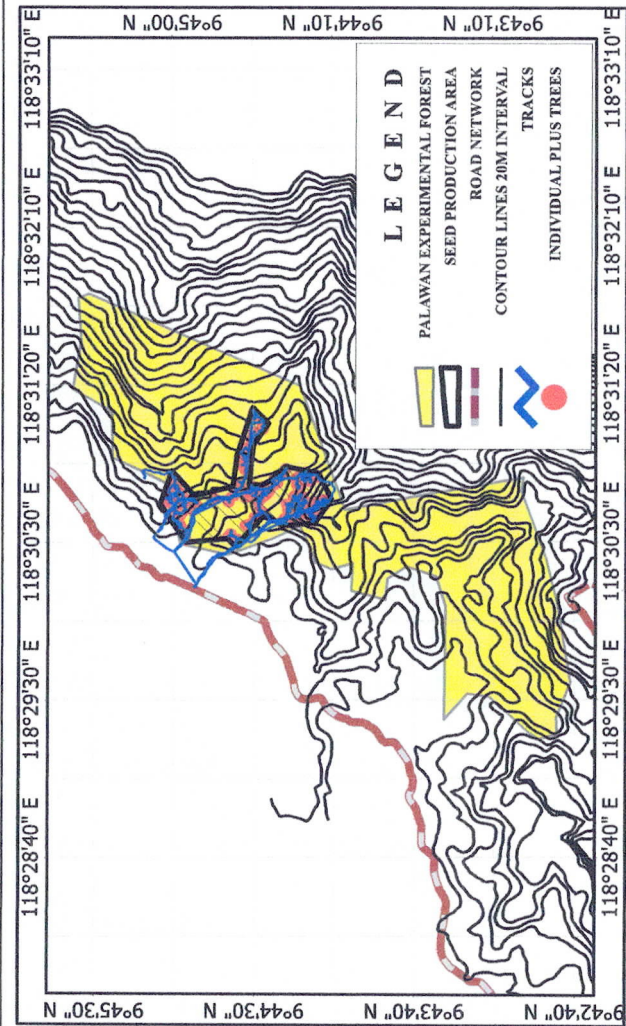
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Republic of the Philippines
Department of Environment and Natural Resources
Region-IV MIMAROPA
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES

MAP
SHOWING THE AREA
OF
INDIVIDUAL PLUS TREES
LOCATION
BARANGAY BAGONG BAYAN, PUERTO PRINCESA CITY
World Geodetic 1984 (WGS84)
Universal Transverse Mercator - Zone 50 (N)
1 cm : 748.51 m

NO. OF IPT'S: 800 TREES MAINTAINED

Digitized by: JOFFREY TJARZAGA
Site Coordinator

Reviewed by: DEXTER A. BOHBO
Forester I/NGP Coordinator

Checked by: MA. VIVIAN O. SORIANO
SEMS/Chief, CDS

Attested by: PEDRO A. VEIA SCO
OIC-CENRO