



Republic of the Philippines
Department of Environment and Natural Resources
Provincial Environment and Natural Resources Office
MIMAROPA Region

Bgy. Sta. Monica, Puerto Princesa City, Palawan

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Telfax No. (048) 433-5638 / (048) 433-5638



April 12, 2023

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA
1515 DENR By the Bay Bldg., Roxas Boulevard,
Barangay 668, Ermita, Manila

THRU : The OIC, ARD for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : **PROGRESS REPORT ON THE CONDUCTED MONITORING
OF MANGROVES FOR MALAMPAYA SOUND PROTECTED
LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY-SAN
VICENTA, PALAWAN**

Respectfully forwarded is the memorandum dated March 22, 2023 of CENRO Taytay, Palawan re: the above subject.

Please be informed that on January 19 and March 9, 2023, the PAMO-MSPLS conducted monitoring of mangroves within Abolan river, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato, Taytay, Palawan. This serves as **Means of Verification (MoV)** for target activities under Management of Coastal and Marine Resources/Areas – Monitoring of corals, mangroves and seagrass per PAs for CY 2023.

Hence, the results showed that the mangroves from both sites surveyed were in excellent condition in terms of percent crown cover suggesting that the mangrove species abundant in the areas were diverse. Further, awareness amongst the locals and enforcement of locally existing conservation rules and regulations were recommended.

For information and record.




FELIZARDO B. CAYATOC





Republic of the Philippines
Department of Environment and Natural Resources
Region IV- MIMAROPA
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
by the National Highway, Poblacion, Taytay, Palawan 5312
Contact No.: 09265059335 (Globe) / 09121713889 (Smart)
Email address: cenrotaytay@denr.gov.ph

**DENR PENRO
PALAWAN RECORDS
RECEIVED**

March 22, 2023

MEMORANDUM

BY: [Signature]
DATE: 04-03-2023 ON 23-3052

FOR : The Provincial Environment and Natural Resources Officer- Palawan
FROM : The Community Environment and Natural Resources Officer
SUBJECT : **ACCOMPLISHMENT REPORT ON ACTIVITY PER WFP
Malampaya Sound Protected Landscape and Seascape (MSPLS)**

Activity: Monitoring of Corals, Mangroves and Seagrass				
Performance Indicator: Hectarage of habitats per PA monitored (Mangroves)				
Frequency of submission: Quarterly report				
Current submission: Memo report of Protected Area Superintendent/In, Charge CDS/For. III Clarissa P. Pador dated March 21, 2023 (CN 1969 in the eDATS) submitting the progress report on mangrove assessment at Abolan River, Barangay Alacalian and Sitio Ilaran, Barangay Bato, Taytay, Palawan for Protected Area Management Office of Malampaya Sound Protected Landscape and Seascape (MSPLS).				
Attachment: 1. Memo report of CMEMP E.O Maria Lilibeth E. Arojo dated March 17, 2023. 2. Photo documentation for sampling sites 3. Data Analysis with photo documentation (50 pages)				
Gender & Development (GaD) data	Male = 9	Female = 1	LGBTQ+ = 0	Prefer not to say = 0
Age Grouping	60 and above	18-59	17 and below	TOTAL
	0	10	0	10
Environmental Management System (EMS Compliance)	✓ Compliant to 5S organization techniques (SORT – keep only necessary items, SET IN ORDER – arrange items to promote efficient workflow, SHINE – clean the work area so it is neat and tidy, STANDARDIZE – set standards for a consistently organized workplace and SUSTAIN – maintain and review standard) ✓ Organizing of travel to maximize conveyance and observance of speed limit to practice the minimized used of fuel ✓ Carpooling ✓ No single use of plastic ✓ PENRO Memo No. 2023-001 dated February 21, 2023			

This shall form as part of the **Means of Verification (MoV)** on the activity. Please confirm your receipt hereof. Thank you.

**DENR CENRO
TAYTAY, PALAWAN
RELEASED**

CONRADO M. CORPUZ

Copy furnished:
PAMO-MSPLS

BY: [Signature]
DATE: MAR 29 2023 ON 1264



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROTECTED AREA MANAGEMENT OFFICE
MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
Taytay-San Vicente, Palawan
Barangay Old Guinlo, Taytay, Palawan
Email add: pamomsppls@gmail.com/Contact #: 0938-786-3728 (SMART)



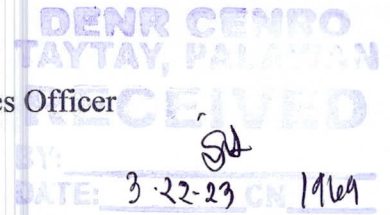
March 21, 2023

MEMORANDUM

FOR : The Community Environment and Natural Resources Officer
Taytay, Palawan

FROM : The In Charge, CDS/Protected Area Superintendent
Malampaya Sound Protected Landscape and Seascape (MSPLS)
Taytay-San Vicente, Palawan

SUBJECT : **PROGRESS REPORT ON THE CONDUCTED ASSESSMENT
OF MANGROVES FOR MALAMPAYA SOUND PROTECTED
LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY-SAN
VICENTE, PALAWAN**



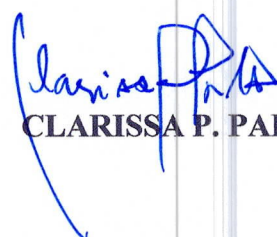
This pertains to the target activity on the Monitoring of Corals, Mangroves and Seagrass under 001 Management of Coastal and Marine Resources/Areas of Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay-San Vicente, Palawan.

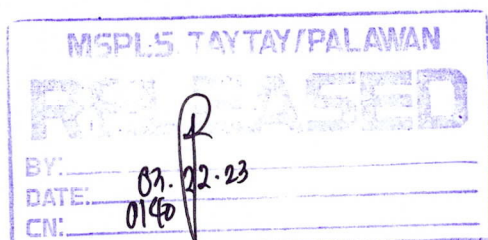
Respectfully forwarded is the memorandum dated March 17, 2023 of CMEMP Extension Officer Maria Lilibeth E. Arojo concerning the above subject. Please be informed that this Office conducted the mangrove assessment from January 19, 2023 to March 9, 2023 within Abolan River, Barangay Alacalian and Sitio Ilaran, Barangay Bato, Taytay, Palawan. Based on the report, this Office assessed and monitored a total of 45.13 hectares with thirteen (13) species recorded. Among the species recorded, *Ceriops tagal* is the most dominant species.

The team composed of nine (9) males and one (1) female.

This is our **Means of Verification (MoV)** on the said target activity.

For his information and record.


CLARISSA P. PADOR





Department of Environment and Natural Resources
MIMAROPA Region
PROTECTED AREA MANAGEMENT OFFICE
MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
Taytay-San Vicente, Palawan
Barangay Old Guinlo, Taytay, Palawan
Email add: pamomspls@gmail.com/Contact #: 0938-786-3728 (SMART)



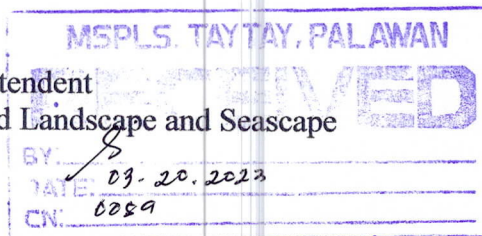
March 17, 2023

MEMORANDUM

FOR : The Protected Area Superintendent
Malampaya Sound Protected Landscape and Seascape
Taytay, Palawan

FROM : CMEMP Extension Officer
MSPLS, Taytay, Palawan

SUBJECT : **PROGRESS REPORT ON THE CONDUCTED ASSESSMENT OF MANGROVES FOR MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS), TAYTAY-SAN VICENTE, PALAWAN.**



This pertains to the target activity on the Coastal and Marine Ecosystems Rehabilitation Sub Program Scaling up Coastal and Marine Management for Malampaya Sound Protected Landscape and Seascape (MSPLS), Taytay, Palawan.

Please be informed that the undersigned together with Forest Rangers Ricardo S. Tandoc, Francis Abe G. Bose, Saturnino E. Habal, Jr. and PAMO-MSPLS personnel in coordination with Barangay Local Government Unit (BLGU) and partners conducted mangrove assessment from January 19, 2023 to March 9, 2023 within Abolan River, Bgy. Alacalian, and Sitio Ilaran, Bgy. Bato, Taytay, Palawan in accordance with BMB Technical Bulletin No. 2019-04. The were team composed of nine (9) males and one (1) female.

The team laid out 100 meters transect line from the shoreline of the 1st plot to landward with 100 meters interval in every quadrat. A 10 x 10 meters dimension and 2 x 2 meters quadrat was established in every transect. All species of mangroves present inside the plots were identified and recorded. During monitoring, a total of 45.13 hectares were assessed and monitored within the aforesaid areas. Thirteen (13) species were identified namely *Acanthus ebraeteatus*, *Bruguiera cylindrical*, *Bruguiera gymnorrhiza*, *Bruguiera parviflora*, *Bruguiera sexangula*, *Ceriops tagal*, *Excoecaria agallocha*, *Heritiera littoralis*, *Lumnitzera racemosa*, *Rhizophora apiculata*, *Rhizophora mucronata*, *Soneratia alba* and *Xylocarpus granatum*. Among these species, *Ceriops tagal* is the most dominant species monitored within the aforesaid areas. The mangrove area of the said sites were categorized as excellent condition in terms of percent crown cover. Seedlings, saplings and other associated flora were also recorded inside the 2 x 2 m plot within the 10 x10 plot. Other observations like disturbance, threats, uses, cuttings, garbage and fauna were also noted.

Global Positioning System (GPS) was also utilized to take readings otherwise note the points of the location of each corner of the plot in the Landsat imagery.

The undersigned recommends to create further awareness amongst the locales as well as enforce the local existing conservation rules.

Attached are the map and photos during the conduct of the activity.

For information and record.

MARIA LILIBETH E. AROJO

Sampling site

The assessment was conducted in Abolan River, Bgy. Alacalian, Taytay, Palawan situated at approximately 119°25'33" East Longitude and 10°44'47"N Latitude and Sitio Ilaran, Bgy. Bato, Taytay, Palawan with 119°27'23" East Longitude and 10°44'40"N Latitude . A total of 45.13 hectares of mangroves was assessed and monitored.



Figure I. Mangrove area in Abolan River, Bgy. Alacalian, Taytay, Palawan



Figure II. Mangrove area in Sitio Ilaran, Bgy. Abongan, Taytay, Palawan.

Data Analysis

Table I. Mangrove species in Abolan River, Bgy. Alacalian, Taytay, Palawan.

Scientific Name	Local Name
1. <i>Acanthus ebracteatus</i>	Lagiwliw
2. <i>Bruguiera cylindrica</i>	Pototan
3. <i>Bruguiera gymnorhiza</i>	Busain
4. <i>Bruguiera parviflora</i>	Langarai
5. <i>Bruguiera sexangula</i>	Pototan
6. <i>Ceriops tagal</i>	Tangal
7. <i>Ecoecaria agallocha</i>	Buta-buta
8. <i>Lumnitzera racemosa</i>	Tabao
9. <i>Rhizophora apiculata</i>	Bakaw lalaki
10. <i>Rhizophora mucronata</i>	Bakaw babae
11. <i>Soneratia alba</i>	Pagatpat
12. <i>Xylocarpus granatum</i>	Tabigi

Table II. Mangrove species in Sitio Ilaran, Bgy. Bato, Taytay, Palawan.

Scientific Name	Local Name
1. <i>Acanthus ebracteatus</i>	Lagiwliw
2. <i>Bruguiera cylindrica</i>	Pototan
3. <i>Bruguiera sexangula</i>	Pototan
4. <i>Ceriops tagal</i>	Tangal
5. <i>Ecoecaria agallocha</i>	Buta-buta
6. <i>Heritiera littoralis</i>	Dungon
7. <i>Rhizophora apiculata</i>	Bakaw lalaki
8. <i>Rhizophora mucronata</i>	Bakaw babae
9. <i>Soneratia alba</i>	Pagatpat
10. <i>Xylocarpus granatum</i>	Tabigi

Transect line plot (TLP) method was used to study the community structure of the area. A total of three (3) plots were laid in the mangrove area of Abolan River, Bgy. Alacalian, and Sitio Ilaran Bgy. Bato, Taytay, Palawan. Twelve (12) species of mangroves in Abolan River and ten (10) species of mangroves in Sitio Ilaran recorded during assessment. Identification of mangrove species is based on the book of J.H. Primavera (2004).

Table 3. Relative Density of mangrove species in Abolan River, Bgy. Alacalian, Taytay, Palawan.

Species	Scientific Name	Family Name	n	Den	R Den
			Total no. of species	no. of individual species/area sampled (sq.m)	(no. of individual species/sum of the densities of all species sampled) x 100 (1%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	555	0.002000721	51.38888889
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	76	0.000273973	7.037037037
Busain	<i>Bruguiera gymnorhiza</i>	Rhizophoraceae	12	4.32588E-05	1.111111111
Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	23	8.29128E-05	2.12962963
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	4	1.44196E-05	0.37037037
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	315	0.001135544	29.16666667
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	32	0.000115357	2.962962963
Tabao	<i>Lumnitzera racemosa</i>	Combretaceae	1	3.6049E-06	0.092592593
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	29	0.000104542	2.685185185
Bakaw Babae	<i>Rhizophora</i>	Rhizophoraceae	17	6.12833E-05	1.574074074

	<i>mucronata</i>				
Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	11	3.96539E-05	1.018518519
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	5	1.80245E-05	0.462962963
			1080	0.003893295	100

Table 3. Relative Density of mangrove species in Sitio Ilaran, Bgy. Bato, Taytay, Palawan.

Species	Scientific Name	Family Name	n	Den	R Den
			Total no. of species	no. of individual species/area sampled (sq.m)	(no. of individual species/sum of the densities of all species sampled) x 100 (1%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	1	5.75043E-06	0.285714286
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	14	8.0506E-05	4
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	8	4.60035E-05	2.285714286
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	196	0.001127085	56
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	7	4.0253E-05	2
Dungon	<i>Heritiera littoralis</i>	Sterculiaceae	3	1.72513E-05	0.857142857
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	16	9.20069E-05	4.571428571
Bakaw Babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	72	0.000414031	20.57142857
Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	10	5.75043E-05	2.857142857
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	23	0.00013226	6.571428571
			350	0.002012651	100

Table 3 &4 shows the relative density of mangrove species in Abolan River, Bgy. Alacalian, and Sitio Ilaran Bgy. Bato, Taytay, Palawan. *Acanthus ebraeteatus* has the highest relative density value of 51.38888889 in Abolan River, while *Rhizophora mucronata* with a value of 20.57142857 in Sitio Ilaran.

Table 5. Relative Frequency of mangrove species in Abolan River, Bgy. Alacalian, Taytay, Palawan

Species	Scientific Name	Family Name	no. of segments occurred	Frequency	Rf
			No. of quadrats spp found	Total no. of segments in which Species A occurs/Total no. of segments sampled	(f value of Species A occurs/Total f value of Species A) x 100 (%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	1	0.333333333	1.785714286
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	15	5	26.78571429
Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	2	0.666666667	3.571428571
Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	2	0.666666667	3.571428571
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	1	0.333333333	1.785714286
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	15	5	26.78571429
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	2	0.666666667	3.571428571
Tabao	<i>Lumnitzera racemosa</i>	Combretaceae	1	0.333333333	1.785714286
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	7	2.333333333	12.5
Bakaw	<i>Rhizophora</i>	Rhizophoraceae	4	1.333333333	7.142857143

Babae	<i>mucronata</i>				
Pagatpat	<i>Soneratia alba</i>	Sonneratiaceae	3	1	5.357142857
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	3	1	5.357142857
			56	18.66666667	100

Table 6. Relative Frequency of mangrove species in Sitio Ilaran, Bgy. Bato, Taytay, Palawan

Species	Scientific Name	Family Name	no. of segments occurred	Frequency	Rf
			No. of quadrats spp found	Total no. of segments in which Species A occurs/Total no. of segments sampled	(f value of Species A occurs/Total f value of Species A) x 100 (%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	1	0.333333333	2.222222222
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	6	2	13.33333333
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	1	0.333333333	2.222222222
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	13	4.333333333	28.88888889
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	1	0.333333333	2.222222222
Dungon	<i>Heritiera littoralis</i>	Sterculiaceae	2	0.666666667	4.444444444
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	4	1.333333333	8.888888889
Bakaw Babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	6	2	13.33333333
Pagatpat	<i>Soneratia alba</i>	Sonneratiaceae	3	1	6.666666667
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	8	2.666666667	17.77777778
			45	15	100

Table 5 and 6 shows the initial relative frequency of mangrove species in Abolan River, Bgy. Alacalian and Sition Ilaran, Bgy. Bato, Taytay, Palawan. The dominant mangrove species was *Bruguiera cylindrica* and *Ceriops tagal* with a relative frequency value of 26.78571429 in Abolan River, while *Ceriops tagal* with a value of 28.88888889 in Sitio Ilaran, Bgy. Bato.

Table 7. Relative Dominance of mangrove species in Abolan River, Bgy. Alacalian. Taytay, Palawan

Species	Scientific Name	Family Name	BA	Dom	R Dom
			Total BA of individual species (m2)	Total BA of individual species/area sampled	(Total Basal Area (BA) of Species A/total Dom of all species) x 100 (%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	555	0.002000721	0.15
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	65450	0.23594088	18.20
Busain	<i>Bruguiera gymnorhiza</i>	Rhizophoraceae	17550	0.063266042	4.88
Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	9625	0.034697188	2.68
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	8400	0.030281182	2.34
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	167325	0.603190339	46.52
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	22475	0.081020187	6.25
Tabao	<i>Lumnitzera racemosa</i>	Combretaceae	375	0.001351839	0.10
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	36425	0.13130858	10.13
Bakaw	<i>Rhizophora</i>	Rhizophoraceae	17175	0.061914203	4.78

Babae	<i>mucronata</i>				
Pagatpat	<i>Soneratia alba</i>	Sonneratiaceae	9825	0.035418169	2.73
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	4475	0.016131939	1.24
			359655	1.296521269	100

Table 8. Relative Dominance of mangrove species in Sitio Ilaran, Bgy. Bato. Taytay, Palawan

Species	Scientific Name	Family Name	BA	Dom	R Dom
			Total BA of individual species (m2)	Total BA of individual species/area sampled	(Total Basal Area (BA) of Species A/total Dom of all species) x 100 (%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	Acanthaceae	120	0.000690052	0.081
Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	8675	0.049884991	5.89
Pototan	<i>Bruguiera sexangula</i>	Rhizophoraceae	1425	0.008194365	0.97
Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	77625	0.446377228	52.7
Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	2525	0.014519839	1.71
Dungon lati	<i>Heritiera littoralis</i>	Sterculiaceae	625	0.00359402	0.42
Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	3400	0.019551466	2.31
Bakaw Babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	42025	0.241661875	28.53
Pagatpat	<i>Soneratia alba</i>	Sonneratiaceae	4025	0.023145486	2.73
Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	6875	0.039534215	4.67
			147320	0.847153537	100

Table 7 and 8 illustrates the initial computed average basal areas, dominance and relative dominance of the different mangrove species identified in Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato Taytay, Palawan. The total sampled basal area in Abolan River was 359655 m², wherein the highest value recorded was from *Ceriops tagal* with 46.52 relative dominance. In Sitio Ilaran the basal area was 147320 m² which *Ceriops tagal* has the highest relative dominance with a value of 52.7. The high average basal area indicates that *Ceriops tagal* within the mangrove area of Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato, Taytay, Palawan are healthy and in good condition.

Table 9. Importance Value of mangrove species in Abolan River, Bgy. Alacalian, Taytay, Palawan

Species	Scientific Name	R Den	Rf	R Dom	IV
		(no. of individual species / sum of the densities of all species sampled) x 100 (%)	(f value of Species A occurs / Total f value of Species A) x 100 (%)	(Total Basal Area (BA) of Species A / total Dom of all species) x 100 (%)	Rf + Rden + Rdom (%)
Lagiwliw	<i>Acanthus ebraeteatus</i>	51.38888889	1.785714286	0.15	53.32891773
Pototan	<i>Bruguiera cylindrica</i>	7.037037037	26.78571429	18.20	52.02074662
Busain	<i>Bruguiera gymnorrhiza</i>	1.111111111	3.571428571	4.88	9.562216039
Langarai	<i>Bruguiera parviflora</i>	2.12962963	3.571428571	2.68	8.377233981
Pototan	<i>Bruguiera sexangula</i>	0.37037037	1.785714286	2.34	4.491656246
Tangal	<i>Ceriops tagal</i>	29.16666667	26.78571429	46.52	102.4761329

Buta-buta	<i>Excoecaria agallocha</i>	2.962962963	3.571428571	6.25	12.78343576
Tabao	<i>Lumnitzera racemosa</i>	0.092592593	1.785714286	0.10	1.982573467
Bakaw lalaki	<i>Rhizophora apiculata</i>	2.685185185	12.5	10.13	25.31294651
Bakaw Babae	<i>Rhizophora mucronata</i>	1.574074074	7.142857143	4.78	13.49234098
Pagatpat	<i>Sonneratia alba</i>	1.018518519	5.357142857	2.73	9.107446003
Tabigi	<i>Xylocarpus granatum</i>	0.462962963	5.357142857	1.24	7.06435378
		100	100	100	300

Table 10. Importance Value of mangrove species in Sitio Ilaran, Bgy. Bato, Taytay, Palawan

Species	Scientific Name	R Den	Rf	R Dom	IV
		(no. of individual species / sum of the densities of all species sampled) x 100 (%)	(f value of Species A occurs / Total f value of Species A) x 100 (%)	(Total Basal Area (BA) of Species A / total Dom of all species) x 100 (%)	Rf + Rden + Rdom (%)
Lagiwliw	<i>Acanthus ebraeatus</i>	0.285714286	2.222222222	0.081	2.589391843
Pototan	<i>Bruguiera cylindrica</i>	4	13.33333333	5.89	23.22187528
Pototan	<i>Bruguiera sexangula</i>	2.285714286	2.222222222	0.97	5.475218615
Tangal	<i>Ceriops tagal</i>	56	28.88888889	52.7	137.5803089
Buta-buta	<i>Excoecaria agallocha</i>	2	2.222222222	1.71	5.936178236
Dungon	<i>Heritiera littoralis</i>	0.857142857	4.444444444	0.42	5.72583384
Bakaw lalaki	<i>Rhizophora apiculata</i>	4.571428571	8.888888889	2.31	15.76821863
Bakaw Babae	<i>Rhizophora mucronata</i>	20.57142857	13.33333333	28.53	62.43109913
Pagatpat	<i>Sonneratia alba</i>	2.857142857	6.666666667	2.73	12.25595723
Tabigi	<i>Xylocarpus granatum</i>	6.571428571	17.77777778	4.67	29.01591827
		100	100	100	300

Table 9 and 10 illustrates the computed importance value of the different mangrove species identified in Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato, Taytay, Palawan. Among these species, *Ceriops tagal* has the highest value recorded in both areas.

Table 11. Diversity Indices of mangrove species in Abolan River, Bgy. Alacalian, Taytay, Palawan

	Shannon- Weiner Index (H')			
		$\pi = n_i/n$	$\ln \pi = \ln (\pi)$	$\pi * \ln \pi$
Species	n			
<i>Acanthus ebraeteatus</i>	555	0.513888889	-0.665748206	-0.342120606
<i>Bruguiera cylindrica</i>	76	0.07037037	-2.65398298	-0.186761765
<i>Bruguiera gymnorrhiza</i>	12	0.011111111	-4.49980967	-0.049997885
<i>Bruguiera parviflora</i>	23	0.021296296	-3.849222104	-0.081974174
<i>Bruguiera sexangula</i>	4	0.003703704	-5.598421959	-0.020734896
<i>Ceriops tagal</i>	315	0.291666667	-1.232143681	-0.35937524
<i>Excoecaria agallocha</i>	32	0.02962963	-3.518980417	-0.104266086
<i>Lumnitzera racemosa</i>	1	0.000925926	-6.98471632	-0.00646733
<i>Rhizophora apiculata</i>	29	0.026851852	-3.61742049	-0.097134439
<i>Rhizophora mucronata</i>	17	0.015740741	-4.151502976	-0.065347732
<i>Sonneratia alba</i>	11	0.010185185	-4.586821047	-0.046717622
<i>Xylocarpus granatum</i>	5	0.00462963	-5.375278408	-0.024885548
	1080			-1.385783325

Table 12. Diversity Indices of mangrove species in Sitio Ilaran, Bgy. Bato, Taytay, Palawan

	Shannon- Weiner Index (H')			
		$\pi = n_i/n$	$\ln \pi = \ln (\pi)$	$\pi * \ln \pi$
Species	n			
<i>Acanthus ebraeteatus</i>	555	0.521616541	-0.650822556	-0.339479811
<i>Bruguiera cylindrica</i>	76	0.071428571	-2.63905733	-0.188504095
<i>Bruguiera sexangula</i>	12	0.011278195	-4.48488402	-0.050581399
<i>Ceriops tagal</i>	23	0.021616541	-3.834296454	-0.082884228
<i>Excoecaria agallocha</i>	4	0.003759398	-5.583496309	-0.020990588
<i>Heritiera littoralis</i>	315	0.296052632	-1.217218031	-0.360360601
<i>Rhizophora apiculata</i>	32	0.030075188	-3.504054767	-0.105385106
<i>Rhizophora mucronata</i>	1	0.00093985	-6.96979067	-0.006550555
<i>Sonneratia alba</i>	29	0.027255639	-3.60249484	-0.098188299
<i>Xylocarpus granatum</i>	17	0.015977444	-4.136577326	-0.066091931
	1064			-1.319016612

For the species diversity, the Shannon Biodiversity Index was applied to quantify the species Richness and distribution of the area. The Abolan River, Bgy. Alacalian mangrove forest had a Shannon diversity index (H') relative value of -1.385783325 and -1.319016612 in Sitio Ilaran, Bgy. Bato, Taytay, Palawan which both classified as very low based on Fernando Et. All 1998.

Table 13. Percent cover of Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato Taytay, Palawan.

Transect		Crown Cover		
Site	Total Crown diameter (m)	Total Crown Cover (m ²)	Percent Crown Cover (%)	
Abolan River, Bgy. Alacalian				
Transect 1	331	86, 049.21	107.562	
Transect 2	650.7	332, 546.6	369.496	
Transect 3	440.1	152, 122.6	190.153	
Sitio Ilaran, Bgy. Bato				
Transect 1	316.5	78, 675.29	131.125	
Transect 2	448	157, 632.9	242.512	
Transect 3	498.5	195, 173.7	300.267	

Result shows the percent cover of Abolan River, Bgy. Alacalian and Sitio Ipil, Bgy. Bato where the transect 2 of Abolan River had the highest value of 369. 496, while in Sitio Ipil transect 3 had the highest value of 300.267 percent cover.

Table 14. Average height of Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato Taytay, Palawan.

Transect		Height		
Site	Total height	Total number trees	Average height	
Abolan River, Bgy. Alacalian				
Transect 1	630.5	96.000	6.568	
Transect 2	1,119.1	270.000	4.145	
Transect 3	765	160.000	4.781	
Sitio Ilaran, Bgy. Bato				
Transect 1	598	112.000	5.339	
Transect 2	426.5	92.000	4.636	
Transect 3	766.5	145.000	5.286	

Result shows the average height of Abolan River, Bgy. Alacalian and Sitio Ipil, Bgy. Bato where the transect 1 of Abolan River had the highest value of 6.568, while in Sitio Ipil transect 1 had the highest value of 5.339 average height.

Table 15. Regeneration per sq.m. of Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato Taytay, Palawan.

Transect		Regeneration	
Site	Total regeneration count	Total no. of regeneration plots	Regeneration per sq.m.
Abolan River, Bgy. Alacalian			
Transect 1	180	3.000	60.000
Transect 2	214	3.000	71.333
Transect 3	22	3.000	7.333
Sitio Ilaran, Bgy. Bato			
Transect 1	58	3.000	19.333
Transect 2	2	3.000	0.667
Transect 3	148	3.000	49.333

For regeneration per sq.m. transect 2 of Abolan River had a highest value of 71.333, while in Sitio Ilaran transect 3 had the highest value of 49. 333.

Table 16. Condition of mangroves in Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato Taytay, Palawan.

Transect		Regeneration	
Site	Percent Crown Cover	Average Height	Regeneration per sq.m.
Abolan River, Bgy. Alacalian			
Transect 1	Excellent	Excellent	Excellent
Transect 2	Excellent	Good	Excellent
Transect 3	Excellent	Good	Excellent
Sitio Ilaran, Bgy. Bato			
Transect 1	Excellent	Excellent	Excellent
Transect 2	Excellent	Good	Fair
Transect 3	Excellent	Excellent	Excellent

Table shows the condition of the mangrove areas of Abolan River, Bgy. Alacalian and Sitio Ilaran, Bgy. Bato in terms of percent crown cover the two (2) sites were in excellent condition. In terms of average height the two (2) sites were categorized in excellent and good condition may be due to slightly disturbances in the area. Regeneration per sq.m in the Abolan River were in excellent condition, while in Sitio Ilaran excellent and fair condition due to moderate disturbances in the area. The categorization with corresponding condition of the mangrove areas was based on PRCA, 2004.

Recommendation

The result of assessment conducted in Abolan River, Brgy. Alacalian, and Sitio Ilaran, Bgy. Bato, Taytay, Palawan, had a Shannon diversity index (H') value of -1.385783325 and categorized in excellent condition in terms of percent crown cover and suggesting that the mangrove species growing in the area are diverse. It is recommended to create further awareness amongst the locales as well as enforce the local existing conservation rules.

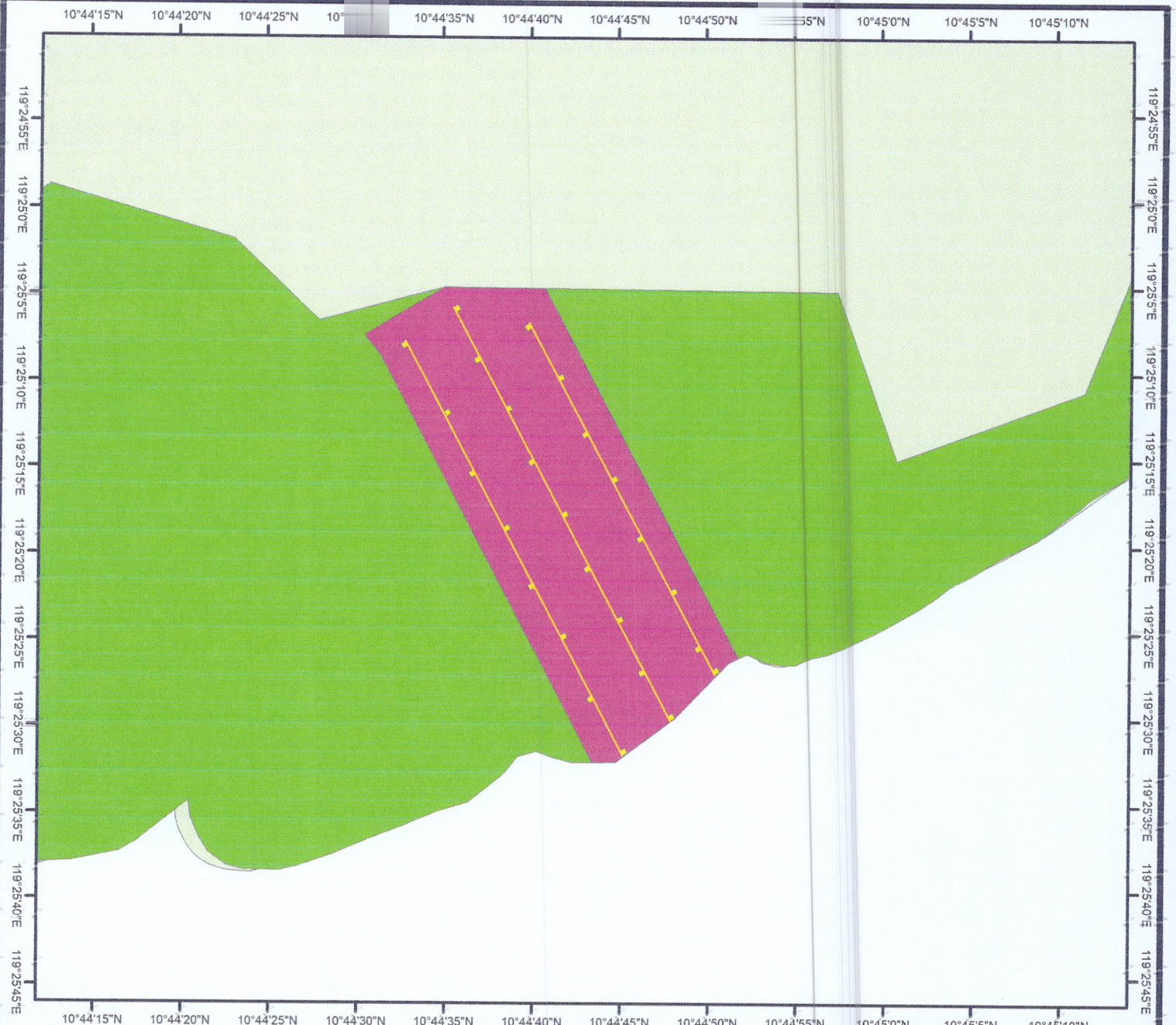
Photo Documentation





I hereby certify that the above photos are true and correct and taken during mangrove assessment and monitoring on January 19 to March 9, 2023 within MSPLS.

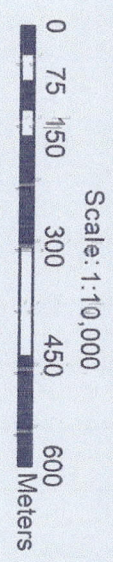
MARIA LILIBETH E. AROJO



Republic of the Philippines
 Department of Environment and Natural Resources
 MIMAROPA Region
 PROTECTED AREA MANAGEMENT OFFICE
 MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS) Taytay, San Vicente, Palawan
 Barangay Old Guinlo, Taytay, Palawan
 Email add: pamomaps@gmail.com/Contact #: 0938-786-3728 (SMART)



LOCATION MAP SHOWING THE MANGROVE ASSESSMENT SITES LOCATED AT ABOLAN RIVER, BARANGAY ALACALIAN, TAYTAY, PALAWAN.



Projection: Transverse_Mercator
 PROJECTED COORDINATE SYSTEM: WGS_1984_UTM_Zone_50N

Legend

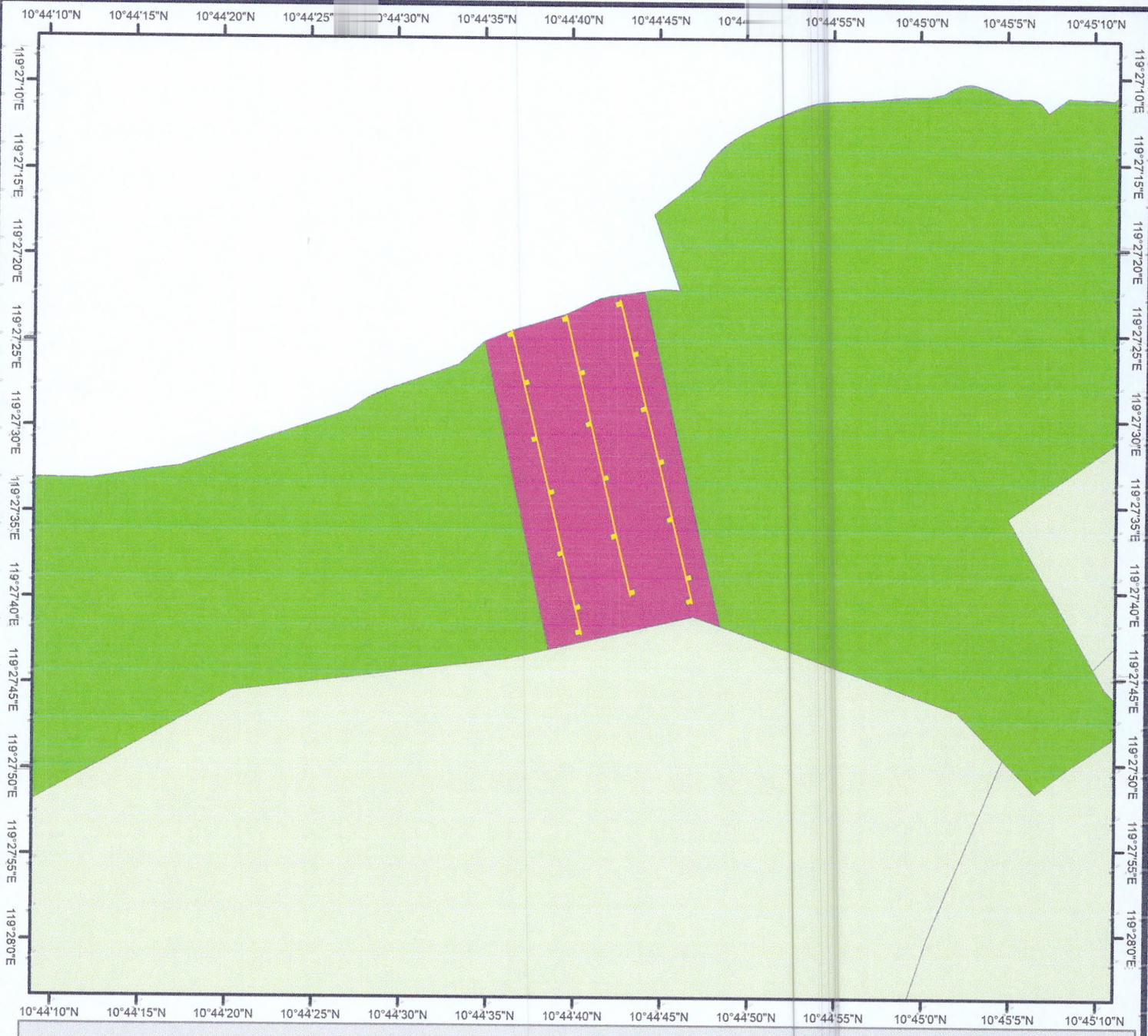
- TRANSECT LINE
- QUADRANT SAMPLES
- MSPLS MANGROVE ASSESSMENT SITE
- MSPLS MANGROVE AREAS

CERTIFICATION

THIS IS TO CERTIFY that this area is within MALAMPAYA
 SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
 per Presidential Proclamation No. 342 dated July 12, 2000

Digitized by:
 RONIEL C. SOLANA
 GIS Specialist

Checked/Verify by:
 CLARISSA P. PADOR
 For: III/PASu, MSPLS

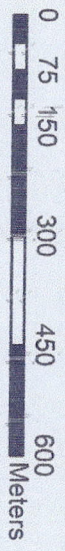


Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROTECTED AREA MANAGEMENT OFFICE
MALAMPAYA SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS) Taytay-San Vicente, Palawan
Barangay Old Gudio, Taytay, Palawan
Email add: pamomspl@gmail.com/Contact #: 0838-786-3728 (SMA RT)



LOCATION MAP SHOWING THE MANGROVE ASSESSMENT SITES LOCATED AT SITIO ILARAN, BARANGAY BATO, TAYTAY, PALAWAN.

Scale: 1:10,000



Projection: Transverse_Mercator
PROJECTED COORDINATE SYSTEM: WGS_1984_UTM_Zone_50N

Legend

- TRANSECT LINE
- QUADRANT SAMPLES
- MSPLS MANGROVE ASSESSMENT SITE
- MSPLS MANGROVE AREAS

CERTIFICATION

THIS IS TO CERTIFY that this area is within MALAMPAYA
SOUND PROTECTED LANDSCAPE AND SEASCAPE (MSPLS)
per Presidential Proclamation No. 342 dated July 12, 2000

Digitized by:

Rommel C. Solana
ROMMEL C. SOLANA
GIS Specialist

Checked/Verify by:

Clarissa F. Pador
CLARISSA F. PADOR
For. III/PASU, MSPLS

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 1

Quadrat No. 1
Transect No. 1

Coordinates:
N: 10°44'50.484"N
E: 119°25'26.811"E

DATA SHEET FOR MANGROVE ASSESSMENT (inside 10 x 10m plot)

Date: January 19, 2023
Time:9:24 am
Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type:Moderate
Weather: Cloudy

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								(m)	(m)	

1	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	12	4.5	2	1	0.5	Mangrove cutting Disposal of garbage waste Sandpiper
2	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	18	4	1.5	1	1	
3	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	10	5	2	1	1	
4	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	20	7	3	4	3	
5	Muddy	Bakaw lalake	<i>Rhizophora apiculata</i>	Rhizophoraceae	36	10	1	4	2	
6	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	32	10	5	3	2	
7	Muddy	Bakaw Babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	30	11	6	1	1	
8	Muddy	Bakaw lalake	<i>Rhizophora apiculata</i>	Rhizophoraceae	70	12	5	3	3	
9	Muddy	Bakaw Babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	30	11	10	1	0.5	
10	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	25	7	2.5	2	1.5	
11	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	40	9	4	3	1.5	
12	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	15	6	2	2.5	1.5	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

No: 1
Quadrat No. 2
Transect No. 1

Coordinates:
N: 10°44'49.426"N
E: 119°25'25.529"E

Date: January 19, 2023
Time:9:56 am
Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type:Moderate
Weather: Cloudy

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								(m)	(m)	

1	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	18	4	1	1.5	1	Sunbird
2	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	15	4	2	2	1	
3	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	12	6	1	0.5	1	
4	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	60	9	8	1	1	

5	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	12	5	2	1	1	WC Kingfisher
6	Muddy	Tangal	<i>Ceriops Tagal</i>	Rhizophoraceae	20	10	3	1	1	
7	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	50	12	3	4	4	
8	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	35	9	7	1.5	1	
9	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	35	8	4	0.5	0.5	
10	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	30	9	8	0.5	0.5	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 1

Quadrat No. 3	Coordinates:	Date: January 19, 2023	Time: 10:28 am
Transect No. 1	N: 10°44'48.13"N E: 119°25'22.144"E	Observer: Francis Abe Bose, Joseph Agbist, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc	
	Vegetation type: Moderate	Weather: Cloudy	

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	
1	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	60	10	2	4	3	
2	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	45	7	4	2	1	
3	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	48	12	10	2	1.5	
4	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	38	10	8	2	1	
5	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	47	12	6	4	2	
6	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	40	10	5	2	1	
7	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	35	6	3	4	1	
8	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	48	8	4	3	3	
	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	45	9	5	3	2	
	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	46	10	7	1	1	
11	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	45	12	8	1	1	
12	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	60	11	3	3	2	
13	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	50	11	6	3	1	
14	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	40	8	2.5	3	2	
15	Muddy	Bakaw babae	<i>Rhizophora mucrunata</i>	Rhizophoraceae	45	11	4	3	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Quadrat No. 4
Transect No. 1

Coordinates:
N: 10°44'46.176"N
E: 119°25'19.1"E

Date: January 19, 2022
Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type: Moderate
Weather: Cloudy

Time: 10:51 am

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	

	Muddy	Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	30	5	1	2	2	WC Kingfisher
	Muddy	Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	58	10	4	3	3	
3	Muddy	Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	48	10	3	4	2	
4	Muddy	Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	45	8	2	3	3	
5	Muddy	Busain	<i>Bruguiera gymnorrhiza</i>	Rhizophoraceae	110	12	1	4	3	
6	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	45	9	5	2	2	
7	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	35	7	4	2	1	
8	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	20	5	4	1	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 1
Quadrat No. 5
Transect No. 1

Coordinates:
N: 10°44'44.824"N
E: 119°25'15.605"E

Date: January 19, 2023
Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type: Moderate
Weather: Cloudy

Time: 11:29 am

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	

1	Muddy	Tangal	<i>Ceriops Tagal</i>	Rhizophoraceae	30	5	1	1	1	
2	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	45	5	2.5	1	1	
3	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	30	5	2	2	1	
4	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	20	3	1.5	2	0.5	
5	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	40	5	2	2.5	1.5	
6	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	18	5	2	1	0.5	
7	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	18	2.5	1.5	1	0.5	
8	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	25	6	3	1	1	
9	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	35	6	2.5	3	1	
10	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	65	7	1.5	4	3	
11	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	35	6	1.5	3	2	
12	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	30	7	2.5	1.5	1	

13	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	60	7	4	3	2	
14	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	40	7	1.5	2	1	
15	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	35	7	3	2.5	1	
16	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	30	4	1	2	1.5	

Location: Abolan, Bgy. Alacalian, Taytay, Palawan
Plot No: 1

Quadrat No. 6
 Transect No. 1

Coordinates:
 N: 10°44'42.969"N
 E: 119°25'13.105"E

Date: January 19, 2023
 Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
 Vegetation type: Moderate
 Weather: Cloudy

Time: 11:43 am

OBSERVATIONS

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	(disturbance, threats, uses, cuttings, garbage, fauna)
1	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	40	4	0.5	2	1	
2	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	45	4	1	2	1.5	
3	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	5	1	2	2	
4	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	38	4	2	2	2	
5	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	5	1	2	2	
6	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	46	5	0.5	2	2	
7	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	45	4	1	1	1	
8	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	60	5	0.5	3	2	
9	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	5	2.5	3	2	
10	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	3	1	2	1	
11	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	5	1	2	2	
12	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	20	3	2	1	1	
13	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	25	4	0.7	1	1	
14	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	5	3	1	1	
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	30	4	1.5	1	1	
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	25	3	1	1	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 1

Quadrat No. 7
 Transect No. 1

Coordinates:
 N: 10°44'41.663"N
 E: 119°25'9.757"E

Date: January 19, 2023
 Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
 Vegetation type: Moderate
 Weather: Cloudy

Time: 11:58 am

OBSERVATIONS

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	(disturbance, threats, uses, cuttings, garbage, fauna)
1	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	80	7	2	4	3	Hornbill

2	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	70	7	1	3	3
3	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	65	7	1.5	3	1.5
4	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	40	6	1	2	1
5	Muddy	Tangal	<i>Ceriops Tagal</i>	Rhizophoraceae	75	7	2.5	3	1
6	Muddy	Tangal	<i>Ceriops Tagal</i>	Rhizophoraceae	30	6.5	1.5	3	2
7	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	55	7	2	4	2.5
8	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	20	3	1	1.5	1
9	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	50	7	2	3	2.5
10	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	40	4	1.5	2.5	1

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 1	Quadrat No. 8	Coordinates:	Date: January 19, 2022	Time:12:12 am
	Transect No. 1	N: 10°44'39.831"N E: 119°25'6.809"E	Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc	
		Vegetation type:Moderate		
		Weather: Cloudy		

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	
1	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	55	4	1	3	2	
2	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	50	4	1.5	3	2	
3	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	30	4	1	1	1	
4	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	30	3	0.5	1	1	
5	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	40	5	0.7	1	1	
6	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	30	3	0.5	1	1	
7	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	35	4	0.6	1	1	
	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	30	4	1	1	1	
	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	36	3	0.4	0.5	5	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Quadrat No. 1
Transect No. 2

Coordinates:
N: 10°44'47.965"N
E: 119°25'29.408"E

Date: January 27, 2023
Time: 8:45 am
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
Vegetation type: Moderate
Weather: Cloudy

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MIH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
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1	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	65	10	3	4	3
2	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	64	10	4	3	2
3	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	66	10	6	2	1
4	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	84	9	2	5	4
5	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	57	10	3	5	4
6	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	104	10	3	5	5

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Quadrat No. 2
Transect No. 2

Coordinates:
N: 10°44'46.384"N
E: 119°25'26.805"E

Date: January 27, 2023
Time: 9:02 am
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
Vegetation type: Moderate
Weather: Cloudy

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MIH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
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1	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	58	12	4	5	3	Garbage
2	Muddy	Tangal	<i>Ceriops Tagal</i>	Rhizophoraceae	16	4	1	2	2	
3	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	19	4	3	1	2	
4	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	18	3	1	2	1	
5	Muddy	Busain	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	100	10	2	6	5	
6	Muddy	Tangal	<i>Cerriops Tagal</i>	Rhizophoraceae	30	7	2	2	1	
7	Muddy	Busain	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	68	12	7	6	5	
8	Muddy	Busain	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	30	8	3	5	4	
9	Muddy	Busain	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	15	4	3	2	1	
10	Muddy	Pototan	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	19	4	2	1	1	
11	Muddy	Pototan	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	81	10	4	6	5	
12	Muddy	Pototan	<i>Bruguiera gynorhiza</i>	Rhizophoraceae	98	10	6	4	2	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 3
Transect No. 2

Coordinates:
N: 10°44'45.109"N
E: 119°25'23.747"E

Date: January 27, 2023
Time: 9:16 am
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
Vegetation type: Moderate
Weather: Cloudy

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	

1	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	19	3	2	1	1	Kingfisher
2	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	55	7	1	3	3	
3	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	80	8	2	4	4	
4	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	19	4	0.5	1	1	
5	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	31	5	1.5	3	1	
6	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	34	5	3	2	1	
7	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	50	5	3	4	3	
8	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	23	4	3	1	1	
9	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	40	4	0.5	2	2	
10	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	18	3	0.5	1	1	
11	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	15	3	0.5	1	1	
12	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	55	5	3	3	2	
13	Muddy	Pototan	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	23	3	2	1	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 4
Transect No. 2

Coordinates:
N: 10°44'43.224"N
E: 119°25'20.779"E

Date: January 27, 2023
Time: 9:52 am
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
Vegetation type: Moderate
Weather: Cloudy

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	

1	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2	1	1	0.5	
2	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	23	4	2	1	1	
3	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2	0.7	0.5	0.5	
4	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	1	0.6	0.6	
5	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	2	1	0.5	

6	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	3	2	0.5	0.5
7	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	2	1	1
8	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	13	3	0.9	1	1
9	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2	1	1	1
10	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	24	3	2	1.5	1
11	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2	0.5	1	0.5
12	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	3	2	1	1
13	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	4	2	1	1
14	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	2	0.5	0.5
15	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	3	0.4	0.5	0.5
16	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	3	1	0.5	0.5
17	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	2	1	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	13	3	1.5	1	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	17	3	2	1	1
20	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	28	4	1	2	2
21	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	28	2	1	1	1
22	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	17	3	1.6	1	1
23	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	16	3	1	1	1
24	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2	1	0.5	0.5
25	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2	0.6	1	1
26	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2.5	1	0.5	0.5
27	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2	1	0.5	0.5
28	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	2	1	1
29	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	2	0.5	0.5
30	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	17	3	2	1	1
31	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	1.5	0.5	0.5
32	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	3	1	1	1
33	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2	1.5	0.5	0.5
34	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2	0.6	1	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	2	1	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	13	3	1.5	1	1
37	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	15	3	0.8	1	1
38	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	3	1	1	1
39	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	19	4	3	0.5	0.5
40	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	2	0.5	0.5
41	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	2	0.5	0.5
42	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	0.6	1	0.5
43	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	1.6	1	0.5
44	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	1.9	1	0.6
45	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	13	3	2	1	1
46	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	2	0.7	0.5	0.5
47	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	7	2	0.5	0.5	0.5
48	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	5	2	0.5	0.5	0.5

49	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2	0.5	0.5	0.5	0.5
50	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	2.5	1	0.5	0.5	0.5
51	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	2.5	1	0.5	0.5	0.5
52	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	16	3	1	0.5	0.5	0.5
53	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	17	3	1.5	0.5	0.5	0.5
54	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	3	1	0.5	0.5	0.5
55	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	13	3	1	0.5	0.5	0.5
56	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2	0.5	0.5	0.5	0.5
57	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2	0.5	0.5	0.5	0.5
58	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2.5	1	0.5	0.5	0.5
59	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	7	2.5	5	0.5	0.5	0.5
60	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	3	1	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	10	2.5	1	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	7	2.5	0.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2.5	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	1.5	0.5	0.5	0.5
70	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	3	1.5	0.5	0.5	0.5
71	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2.5	1.5	0.5	0.5	0.5
72	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	8	2.5	1.5	0.5	0.5	0.5
73	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	11	3	1.5	0.5	0.5	0.5
74	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	20	3.5	2	1	0.5	0.5
75	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	12	3	1	0.5	0.5	0.5
76	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	3	2	0.5	0.5	0.5
77	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	14	2.5	1.5	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	9	1	1	0.5	0.5	0.5
	Muddy	Tangal	<i>Cerlops Tagal</i>	Rhizophoraceae	16	3	2	0.5	0.5	0.5

Location: Abolan River, Bgy. Alacalan, Taytay, Palawan

Plot No: 2

Quadrat No. 5
Transect No. 2

Coordinates:
N: 10°44'41.911"N
E: 119°25'17.661"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
Vegetation type: Moderate
Weather: Cloudy

Time: 10:09 am

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	W1	W2	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
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1	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	17	5	2	3	2	
2	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	38	7	3	2	3	
3	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	40	8	2	3	2	
4	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	35	8	3	3	1	
5	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	46	8	2	4	2	
6	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	35	8	3	1	1	
7	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	40	8	2	3	2	
8	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	42	7	1	3	2	
9	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	44	8	0.5	4	2	
10	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	42	8	1	2	1	
11	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	24	5	0.5	2	1	
12	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	28	7	0.5	3	2	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	34	8	1	3	1	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	15	5	0.3	1	0.5	
15	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	35	7	1	3	2	
16	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	69	8	1	4	2	
17	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	26	5	0.5	1	3	
18	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	37	8	0.4	3	2	
19	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	27	8	0.5	3	3	
20	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	33	8	1	3	2	
21	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	27	8	2	3	2	
22	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	34	4	1	1.1	0.5	
23	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	3	0.5	0.5	0.5	
24	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	21	4	2	1.5	0.5	
25	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	15	4	1	0.5	1	
26	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	3	1	0.5	0.5	
27	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	2.5	1	0.5	0.5	
28	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	24	5	1	1.5	1.5	
29	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	2.5	0.5	0.5	0.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	22	4	0.5	0.5	0.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	32	5	1.5	1	0.5	
32	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	28	5	3	1.5	1	
33	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	31	5	1	1	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 2

Quadrat No. 6

Transect No. 2

Coordinates:

N: 10°44'40.091"N

E: 119°25'14.596"E

Date: January 27, 2023

Time: 10:36 am

Observer: Ricardo Tando, Maria Lilibeth Arojo, Joseph Agbisit, Ricken Armenta and Erwin Barvin

Vegetation type: Moderate

Weather: Cloudy

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
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1	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	30	5	2	3	2
2	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	18	5	1	2	1
3	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	18	3	1	1	1
4	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	4	1	1	0.5
5	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	4	0.5	1	0.5
6	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	3	0.5	0.5	1
7	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	40	6	1	3	3
8	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	38	6	2	2	1
9	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	24	5	3	0.5	1
10	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	37	5	1	3	3
11	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	21	5	1	2	1
13	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	5	0.6	0.5	1
14	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	20	5	1	1	0.5
15	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	21	5	1	0.5	1
16	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	18	4	1	1	1
17	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	25	5	0.7	2	1
18	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	36	5	2	2	2
19	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	23	5	1.5	2	1
20	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	28	5	1	2	1
21	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	14	3	1	1	1
22	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	3	0.5	0.5	0.5
23	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	19	3	0.6	1	0.5
24	Muddy	Pototan	<i>Cerriops tagal</i>	Rhizophoraceae	10	3	0.4	1	0.5
25	Muddy	Tangal	<i>Bruguiera Cylindrica</i>	Rhizophoraceae	46	6	2.5	1.5	1.5
26	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5
27	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5
28	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	15	3	1	1.5	0.5
29	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	3	0.5	0.5	0.5
30	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5
31	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	16	3	0.5	0.5	0.5
32	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	22	3	1.5	1.5	1.5
33	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	9	2.5	0.5	0.5	0.5
34	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	7	2.5	0.5	0.5	0.5
35	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	12	3	0.5	0.5	0.5
36	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5
37	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	3	1	1	1
38	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	2.5	1	0.5	0.5
39	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	10	2.5	0.5	1	1
			<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	0.5	1	1

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Quadrat No. 7

Coordinates:

Transect No. 2

N: 10°44'38.82"N
E: 119°25'11.453"E

Time:10:43 am

Date: January 27, 2023

Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin

Vegetation type:Moderate

Weather: Cloudy

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	W1	W2
1	Muddy	Tangal	Cerriops tagal	Rhizophoraceae	30	3	0.2	1	1	1
2		Pototan	Bruguiera Cylindrica	Rhizophoraceae	8	2	0.5	0.5	0.5	0.5
3		Tangal	Cerriops tagal	Rhizophoraceae	15	2.5	0.3	1	1	1
4		Tangal	Cerriops tagal	Rhizophoraceae	13	3	0.4	1	1	1
5		Pototan	Bruguiera Cylindrica	Rhizophoraceae	8	2	0.3	1	1	1
6		Pototan	Bruguiera Cylindrica	Rhizophoraceae	7	2	0.2	1	1	1
7		Tangal	Cerriops tagal	Rhizophoraceae	9	3	0.3	1	1	1
8		Tangal	Cerriops tagal	Rhizophoraceae	12	3	0.2	1	1	0.5
9		Tangal	Cerriops tagal	Rhizophoraceae	13	2.5	0.2	1	1	1
10		Pototan	Bruguiera Cylindrica	Rhizophoraceae	10	3	0.3	1	1	0.5
11		Tangal	Cerriops tagal	Rhizophoraceae	15	3	0.2	1	1	1

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Quadrat No. 8

Coordinates:

Transect No. 2

N: 10°44'37.013"N
E: 119°25'8.644"E

Date: January 27, 2023

Time:10:52 am

Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin

Vegetation type:Moderate

Weather: Cloudy

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	W1	W2
1	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	20	4	0.2	2	2	1
2	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	16	3	0.3	1	1	1
3	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	9	3	2	0.5	0.5	0.5
4	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	11	2	0.5	0.5	0.5	0.5
5	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	14	3	2	1	1	0.5
6	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	19	3	0.5	1	1	1
7	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	12	3	3	0.5	0.5	0.5
8	Muddy	Langarai	Bruguiera parviflora	Rhizophoraceae	12	3	3	0.5	0.5	0.5

9	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	10	2.5	2	1	0.5	
10	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	11	3	2	0.5	0.5	
11	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	12	3	2	1	0.5	
12	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	11	2.6	2	0.5	0.5	
13	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	21	4	2	2	1	
14	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	20	4	2	1	1	
15	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	15	4	2	1	0.5	
16	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	17	3	0.5	2	0.5	
17	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	13	2	1	1	0.5	
18	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	10	2.5	2	0.5	0.5	
19	Muddy	Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	10	2	0.1	1	1	
20	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	9	2	0.2	1	1	
21-36	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	48	4	2.5	3	2	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	9	1.5	0.1	0.5	0.5	
	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	9	2	0.1	1	1	
	Muddy	Langarai	<i>Bruguiera parviflora</i>	Rhizophoraceae	12	4	3	0.5	0.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	8	2.5	5	0.5	0.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	22	3	2	1	1	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	26	3	1.5	1	1	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	20	4	3	1	1	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	20	4	3	1	1	
	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	7	3	2.5	0.5	0.5	
31	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	10	3	2	1	0.5	
32	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	17	3	1	1	1	
33	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	11	3	2.5	1	1	
34	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	26	4	3	1	1	
35	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	19	3	3	1	1	
36	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	15	3	1	1	1	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
 Transect No. 2

Coordinates: N: 10°44'35.795"N E: 119°25'5.715"E
 Date: January 27, 2023 Time: 11:06 am
 Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Richen Armenia and Erwin Barvin
 Vegetation type: Moderate
 Weather: Cloudy

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)	
1	Muddy	Buta buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	14	4	3	0.5	W1	W2
2	Muddy	Buta buta	<i>Excoecaria agallocha</i>	Euphorbiaceae	9	2.5	2	0.5		

3	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	8	3	2	0.4	0.4
4	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	9	3	2	0.5	0.5
5	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	14	4	3	0.5	1
6	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	28	6	3	1	1
7	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	20	6	4	0.5	1
8	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	17	5	4	0.5	0.5
9	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	22	6	4	0.5	0.5
10	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	24	7	5	0.5	0.5
11	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	29	8	6	1	1
12	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	15	4	3	1	0.5
13	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	16	5	4	0.5	0.5
14	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	20	7	5	0.5	0.5
	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	22	7	5	1	1
	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	24	7	4	1	1
17	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	28	7	2	2	0.5
18	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	21	7	2	0.5	0.5
19	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	34	7	1	2	1
20	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	43	7	0.5	2	2
21	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	66	7	1.5	2	2
22	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	30	6	0.5	0.5	1
23	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	45	7	1	1.5	1
24	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	10	3	0.5	1	1
25	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	30	6	2	0.5	0.5
26	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	12	3	0.5	0.5	0.5
27	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	50	7	0.5	1	2
28	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	8	4	0.5	0.5	0.5
29	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	40	7	3	0.5	1
30	Muddy	Tabao	Lumnitzera racemosa	Combretaceae	15	5	1	1	1
31	Muddy	Tabigi	Xylocarpus granatum	Meliaceae	20	3	1	0.5	0.5
	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	8	5	1	0.5	0.5
	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	10	4	0.5	1	1
34	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	10	4	1	1	1
35	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	46	4	1	1	1
36	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	7	2.5	0.5	1	1
37	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	8	5	3	1	1
38	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	10	3	0.5	0.5	0.5
39	Muddy	Tabigi	Xylocarpus granatum	Meliaceae	9	2.5	2	1	1
40	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	8	3	0.5	0.5	0.5
41	Muddy	Buta buta	Excoecaria agallocha	Euphorbiaceae	40	6	2	2.5	2.5

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
Location: Abolan River, Bgy. Alacalian, Taytay, Palawan Quadrant No. 1				Coordinates:	Date: February 9, 2023				Time: 9:38 am
Plot No: 3				N: 10°44'45.257"N	Observer: Ricardo Tandoc, Maria Lilibeth Arojo and Rennie Tenolite				
				E: 119°25'31.395"E	Vegetation type: Moderate				
					Weather: Sunny				
								W1	W2

OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)									
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TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
1	Muddy	Pototan	Broguiera cylindrica	Rhizophoraceae	48	10	3	W1	W2
2	Muddy	Pototan	Broguiera cylindrica	Rhizophoraceae	105	10	1	4	4
3	Muddy	Pototan	Broguiera Sexangula	Rhizophoraceae	110	10	4	5	4
4	Muddy	Pototan	Broguiera Sexangula	Rhizophoraceae	52	12	3	3	3
5	Muddy	Pototan	Broguiera Sexangula	Rhizophoraceae	89	10	3	5	4
6	Muddy	Pototan	Broguiera Sexangula	Rhizophoraceae	85	12	4	3	4
7	Muddy	Lalaki	Rhizophora apiculata	Rhizophoraceae	110	10	3	4	3
8	Muddy	Lalaki	Rhizophora apiculata	Rhizophoraceae	74	12	3	4	3
9	Muddy	Lagiwiliw	Acanthus ebracteatus	Rhizophoraceae	555 p.c.s				
10	Muddy	Pototan	Broguiera cylindrica	Rhizophoraceae	74	12	1.5	4	4
11	Muddy	Pegatpat	Sonneratia Alba	Sonneratiaceae	37	4	1	1	1

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan Quadrant No. 2

Plot No: 3

Transsect No. 3

Coordinates: N: 10°44'43.345"N E: 119°25'28.364"E

Date: February 9, 2023

Time: 9:48 am

Observer: Ricben Armenta, Erwin Balvin and Francis Abe Bose

Vegetation type: Moderate

Weather: Sunny

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
1	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	12	4	1.5	W1	W2
2	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	9	3.5	1	0.5	0.5
3	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	79	8	1	0.4	0.3
4	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	10	4	1	0.5	0.5
5	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	9	5	1.5	0.5	0.5
6	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	9	5	1.5	0.5	0.5
7	Muddy	Tangal	Cerlops tagel	Rhizophoraceae	10	4	2	0.5	0.5

Kingfisher

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 3

Coordinates:
N: 10°44'39.995"N
E: 119°25'21.812"E

Date: February 9, 2023
Observer: Ricken Armenia, Erwin Balvin and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

Time: 10:21 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)
1	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	22	7	4	W1 2 W2 3
2	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	86	12	4	4 3
3	Muddy	Bakau lalaki	Rhizophora apiculata	Rhizophoraceae	44	12	4	1 2
4	Muddy	Bakau lalaki	Rhizophora apiculata	Rhizophoraceae	54	12	7	3 2
5	Muddy	Bakau lalaki	Rhizophora apiculata	Rhizophoraceae	85	12	2	5 3
6	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	83	11	5	1 5
7	Muddy	Bakau lalaki	Rhizophora apiculata	Rhizophoraceae	86	12	7	4 3
8	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	31	8	4	2 2
9	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	15	3	2	2 5
10	Muddy	Pototan lalaki	Broguiera cylindrica	Rhizophoraceae	17	5	2	2 1
11	Muddy	Bakau lalaki	Rhizophora apiculata	Rhizophoraceae	80	12	3	4 2.5

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 3

Coordinates:
N: 10°44'38.623"N
N: 119°25'18.411"E

Date: February 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo and Rennie Tenolite
Vegetation type: Moderate
Weather: Sunny

Time: 10:33 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)
1	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	18	3	0.2	W1 1 W2 0.5
2	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	3	2	0.5 0.5
3	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	13	3	2	0.5 0.5
4	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	3	2	0.5 0.5
5	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	10	3	2	0.5 0.5
6	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	3	1	1 1
7	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	20	3	0.7	0.5 0.5
8	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	3	2	0.5 0.5
9	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	14	3	0.8	1 2
10	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	3	2	0.5 0.5

11	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	15	3	1	1	0.5
12	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	3	1	0.5	0.5
13	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	2	1	0.4	0.4
14	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	3	1	0.5	0.5
15	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	13	3	1.5	0.5	0.5
16	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	17	3	0.7	1	0.2
17	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	3	1	0.5	0.4
18	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	14	3	0.5	0.5	1
19	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	15	3	1	1	1
20	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	28	3	0.7	1	1
21	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	14	3	1	0.4	0.4
22	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	21	3	2	0.5	0.5
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	20	3	1	1	1
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	28	4	2	1	1
25	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	17	3	1	0.5	0.5
26	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	17	3	1	1	0.5
27	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	18	3	0.5	0.5	1
28	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	13	3	1	0.4	0.4
29	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	9	2	0.5	0.5	0.4
30	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	14	2	1	1	0.5
31	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	24	4	1	1	5
32	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	13	3	1	0.5	1
33	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	34	4	1	2	2
34	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	8	3	2	0.4	0.4
35	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	18	3	0.2	1	0.5
36	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	12	3	2	0.5	0.5
37	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	13	3	2	0.5	0.5
38	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	12	3	2	0.5	0.5
39	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	3	2	0.5	0.5
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	3	1	1	1
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	20	3	0.7	0.5	0.5
42	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	3	2	0.5	0.5
43	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	14	3	0.8	1	0.2
44	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	12	3	2	0.5	0.5
45	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	15	3	1	1	0.5
46	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	3	1	0.5	0.5
47	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	16	2	1	0.4	0.4
48	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	2	1	0.5	0.5
49	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	13	3	1.5	0.5	0.5
50	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	17	3	0.7	1	0.2
51	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	3	1	0.5	0.4

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 3

Coordinates:
N: 10°44'36.63"N
E: 119°25'15.283"E

Date: February 9, 2023
Observer: Ricken Armenia, Erwin Balvin and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

Time: 10:40 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		
1	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	78	3	4	W1 4	W2 3	
2	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	63	8	3	3	2	
3	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	33	8	3	1	0.5	
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	41	8	2	2	2	
	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	40	8	4	1	1	
6	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	33	8	3	0.5	0.5	
7	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	32	8	3	0.5	0.5	
8	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	10	3	1	1	0.5	
9	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	26	8	2.5	1	0.5	
10	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	45	7	3	4	1	
11	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	57	7	2.5	4	2	
12	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	12	3	0.5	1	0.5	
13	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	47	7	1	3	1	
14	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	106	7	0.5	5	3	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 3

Coordinates:
N: 10°44'35.238"N
E: 119°25'11.747"E

Date: February 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo and Rennie Tenolite
Vegetation type: Moderate
Weather: Sunny

Time: 11:21 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		
1	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	51	5	0.4	W1 3	W2 3	
2	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	53	5	1	3	3	
3	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	21	5	3	2	1	
4	Muddy	Langarai	<i>Bruquiera parviflora</i>	Rhizophoraceae	23	5	3	1	1	
5	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	14	3	0.4	0.5	0.6	
6	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	48	5	1	3	3	
7	Muddy	Tangal	<i>Cerlops tagal</i>	Rhizophoraceae	40	4	0.3	2	2	
8	Muddy	Langarai	<i>Bruquiera parviflora</i>	Rhizophoraceae	40	5	3	1	1	

9	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	12	2	0.2	0.5	1
10	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	21	3	2	1	1
11	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	21	3	0.4	1	1
12	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	21	3	0.4	0.5	1
13	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	15	3	0.5	0.5	1
14	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	24	3	2	0.5	0.5
15	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	29	4	1.5	1	1
16	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	37	4	0.3	2	2
17	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	18	3	0.2	1	1
18	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	20	3	0.2	1	2
19	Muddy	Tangal	<i>Cerios tagal</i>	Rhizophoraceae	31	4	3	2	2

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Quadrat No. 8

Coordinates:
N: 10°44'32.794"N
E: 119°25'7.821"E

Date: February 9, 2023
Observer: Ricken Armenia, Erwin Balvin and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

Time: 11:33 am

Tree No.	Substrate	Species	Scientific Name	Family Name	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		Observations
1	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	50	6	1	W1	W2	
2	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	59	6	1	3	2	
3	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	20	3	0.5	0.5	0.5	
4	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	41	6	1	3	2	
5	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	31	6	0.5	3	2	
6	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	11	3	0.5	0.5	0	
7	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	16	5	2.5	1	0.5	
8	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	21	4.5	1	1.5	0.5	
9	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	22	5	0.5	3	1	
10	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	14	3	1.5	1	0.5	
11	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	10	2.5	0.5	0.5	0.5	
12	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	11	3	1	0.5	0.5	
13	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	14	3	1	1	0.5	
14	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	9	2.5	1	0.5	0.5	
15	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	11	3	0.5	0.5	0.5	
16	Muddy	Pototan lalaki	<i>Bruguiera cylindrica</i>	Rhizophoraceae	8	2.5	0.5	0.5	0.5	
17	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Melaceae	51	4	1	1.5	1.5	

DATA SHEET FOR MANGROVE ASSESSMENT (Inside 2 x 2m plot)

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan
Plot No: 1

Quadrat No. 1
Coordinates:
N: 10°44'50.484"N
N: 119°25'26.811"E
Date: January 19, 2023
Observer: Francis Abe Bose, Joseph Agbist, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type:Moderate
Weather: Cloudy

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
1	1	Rhizophora apiculata	13	150 cm	6	30 cm	
Location: Abolan River, Bgy. Alacalian, Taytay, Palawan Plot No: 1							
			Quadrat No. 2 Transect No. 1	Coordinates: N: 10°44'49.426"N E: 119°25'25.529"E	Date: January 19, 2023 Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Richard Valones and Cyril Valente Vegetation type:Moderate Weather: Cloudy	Time:9:56 am	

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
2	1	Rhizophora apiculata	2	70 cm	1	40 cm	
Location: Sitio Balingbing, Bgy. Alacalian, Taytay, Palawan Plot No: 1							
			Quadrat No. 6 Transect No. 1	Coordinates: N: 10°44'42.969"N E: 119°25'13.105"E	Date: January 19, 2023 Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Richard Valones and Cyril Valente Vegetation type:Moderate Weather: Cloudy	Time:11:43 am	

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
6	1	Cerlops tagal	8	150 cm	12	50 cm	
Location: Abolan River, Bgy. Alacalian, Taytay, Palawan Plot No: 1							
			Quadrat No. 7 Transect No. 1	Coordinates: N: 10°44'41.663"N E: 119°25'9.757"E	Date:January 19, 2023 Observer: Francis Abe Bose, Joseph Agbist, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc Vegetation type:Moderate Weather: Cloudy	Time:11:58 am	

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
7	1	Cerlops togol	3	50 cm	38	40 cm	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 1

Quadrat No. 8
Transect No. 1

Coordinates:
N: 10°44'39.831"N
E: 119°25'6.809"E

Date: January 19, 2023
Observer: Francis Abe Bose, Joseph Agbisit, Maria Lilibeth Arojo, Cyril Valente and Ricardo Tandoc
Vegetation type:Moderate
Weather: Cloudy

Time:12:12 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
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8	1	<i>Sonneratia alba</i>	75	70 cm	22	30 cm	
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Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 2

Quadrat No. 1
Transect No. 2

Coordinates:
N: 10°44'47.965"N
E: 119°25'29.408"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

Time:8:45 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
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1	1	<i>Broguiera cylindrica</i>	2	70 cm	16	30 cm	
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Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 2

Quadrat No. 2
Transect No. 2

Coordinates:
N: 10°44'46.384"N
E: 119°25'26.805"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

Time:9:02 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
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2	1	<i>Xylocarpus granatum</i>	1	40 cm			
	2	<i>Broguiera cylindrica</i>			27	40 cm	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 2

Quadrat No. 3
Transect No. 2

Coordinates:
N: 10°44'45.109"N
E: 119°25'23.747"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

Time:9:16 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
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3	1	<i>Cerlops tagal</i>	1	80 cm	1	40 cm	
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Location: Abolian River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 5
Transect No. 2

Coordinates:
N: 10°44'41.911"N
E: 119°25'17.661"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
5	1	Cerlops tagal			38	40 cm	

Location: Abolian River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 6
Transect No. 2

Coordinates:
N: 10°44'40.091"N
E: 119°25'14.596"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
6	1	Cerlops tagal	19	80 cm	30	35 cm	

Location: Abolian River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 7
Transect No. 2

Coordinates:
N: 10°44'38.82"N
E: 119°25'11.453"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
7	1	Cerlops tagal			47	50 cm	

Location: Abolian River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 8
Transect No. 2

Coordinates:
N: 10°44'37.018"N
E: 119°25'8.644"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
8	1	Cerlops tagal	21	95 cm	10	50 cm	

Location: Abolian River, Bgy. Alacalian, Taytay, Palawan
Plot No: 2

Quadrat No. 9
Transect No. 2

Coordinates:
N: 10°44'35.796"N
E: 119°25'5.715"E

Date: January 27, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Joseph Agbisit, Ricben, Armenia and Erwin Balvin
Vegetation type:Moderate
Weather: Sunny

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
9	1	Excoecaria allocha	1	70 cm			

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 3

Quadrat No. 1

Transect No. 3

Coordinates:

N: 10°44'45.257"N

E: 119°25'31.395"E

Date: February 9, 2023

Observer: Ricardo Tandoc, Maria Lilibeth Arojo and Joseph Agbisit

Vegetation type: Moderate

Weather: Sunny

Time: 9:38 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
1	1	<i>Xylocarpus granatum</i>	1	50 cm			
1	2	<i>Broguiera cylindrica</i>			15	30 cm	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 3

Quadrat No. 2

Transect No. 3

Coordinates:

N: 10°44'43.345"N

E: 119°25'28.364"E

Date: February 9, 2023

Observer: Francis Abe Bose, Richen Armenia and Erwin Balvin

Vegetation type: Moderate

Weather: Sunny

Time: 9:48 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
2	1	<i>Ceriops tagal</i>			3	3.7 cm	

Location: Abolan River, Bgy. Alacalian, Taytay, Palawan

Plot No: 3

Quadrat No. 7

Transect No. 3

Coordinates:

N: 10°44'35.238"N

E: 119°25'11.747"E

Date: February 9, 2023

Observer: Ricardo Tandoc, Maria Lilibeth Arojo and Joseph Agbisit

Vegetation type: Moderate

Weather: Sunny

Time: 11:21 am

QUADRAT NO.	TREE NO.	SPECIES	SAPLING COUNT (<5 CM DBH)	AVERAGE HEIGHT	SEEDLING COUNT	AVERAGE HEIGHT	REMARKS
7	1	<i>Cerlops tagal</i>	3	40 cm			

Location: Sitio Ilatan, Bgy. Bato, Taytay, Palawan
Plot No: 1

Quadrat No. 1
Transect No. 1

Coordinates:
N: 10°44'39.593"N
E: 119°27'23.678"E

Date: March 9, 2023
Time: 10:40 am
Observer: Ricben Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	W1	W2
1	Muddy	Bakaw Babae	Rhizophora mucronata	Rhizophoraceae	33	7	2			
2	Muddy	Bakaw Babae	Rhizophora mucronata	Rhizophoraceae	21	5	1	1.5	1	1
3	Muddy	Bakaw Babae	Rhizophora mucronata	Rhizophoraceae	30	6	2	1.5	1	1

Location: Sitio Ilatan, Bgy. Bato, Taytay, Palawan
Plot No: 1

Quadrat No. 2
Transect No. 1

Coordinates:
N: 10°44'40.585"N
E: 119°27'26.767"E

Date: March 9, 2023
Time: 10:58 am
Observer: Ricben Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	W1	W2
1	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	44	8	2.2			
2	Muddy	Bakaw lalaki	Rhizophora apiculata	Rhizophoraceae	12	5	1	1	2	1.5
3	Muddy	Bakaw lalaki	Rhizophora apiculata	Rhizophoraceae	22	8	1	1	1	1
4	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	22	7	1	1	1	1
5	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	13	6	1	2	1	1
6	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	26	7	1	1	1	2
	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	50	9	4	1	1	2
	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	7	4	1	2	2	1
9	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	18	6	2.5	1	1	2
10	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	20	6	3	1	1	2
11	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	26	8	4	1.5	1	1.5
12	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	30	7	7	2	2	2
13	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	28	7	4	1.5	2	2
14	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	33	7	3	1	1.5	1.5
15	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	32	9	2.5	1.5	1	1
16	Muddy	Pototan	Bruguiera cylindrica	Rhizophoraceae	36	9	6	3	2	2
17	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	52	9	2	2	3	3
18	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	35	9	6	2	2	3
19	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	40	8	4	2.5	3	3
20	Muddy	Tangal	Ceripora togal	Rhizophoraceae	10	6	2	1	1	1

21	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	53	7	1	1.5	3
22	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	24	6	1	1.5	1
23	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	17	5	2.5	1	1
24	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	14	6	1.5	1	1
25	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	50	6	2.5	1	1
26	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	50	6	2	1	1
27	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	57	7	1	2	3
28	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	20	6	2	1	1
29	Muddy	Bakaw balbae	<i>Rhizophora mucronata</i>	Rhizophoraceae	20	7	4	1	1.5
30	Muddy	Bakaw balbae	<i>Rhizophora mucronata</i>	Rhizophoraceae	25	4	2.5	1	1
31	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	38	7	1	1.5	2
32	Muddy	Tangal	<i>Cerlops tangal</i>	Rhizophoraceae	13	6	1	1	1.5
	Muddy	Bakaw balbae	<i>Rhizophora mucronata</i>	Rhizophoraceae	13	7	2.5	1	1

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 1

Quadrat No. 3
Transect No. 1

Coordinates:
N: 10°44'40.974"N
E: 119°27'29.747"E

Date: March 9, 2023
Observer: Ricken Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)	
1	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	4	2	W1 1.5 W2 1.5	Mangrove cutting Sunbird	
2	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	11	4	1.5	0.5		
3	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	11	5	1.5	1		
4	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	5	3	1.5		
5	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	11	5	2.5	1		
	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	10	4.5	1.5	1.5		
8	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	3.5	5	1.5		
9	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	4	1.5	1		
10	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	20	4.5	2	2		
11	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	5	2.5	1.5		
12	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	16	5	2.5	2		
13	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	13	5	1	2		
14	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	16	5	2	2		
15	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	19	5.5	1	1		
16	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	26	3	1	2		
17	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	20	4	1.5	1.5		
18	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	18	4	1.5	1.5		
19	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	8	2.5	1.5	1.5		
	Muddy	Tagal	<i>Cerlops tangal</i>	Rhizophoraceae	10	3	2	1		

20	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	3.5	0.5	1	1
21	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	13	4	2	1.5	1
22	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	14	3	1	1.5	1
23	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	17	3.5	2	1.5	1
24	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	16	3.5	1	0.5	0.5
25	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	14	3.5	1	1	0.5
26	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	14	4	2.5	1.5	1
27	Muddy	Tagal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	16	4	2	1	1.5

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan

Quadrat No. 4

Coordinates:

N: 10°44'41.982"N

E: 119°27'32.889"E

Date: March 9, 2023

Time: 11:35 am

Plot No: 1

Transect No. 1

Observer: Ricben Armenia, Erwin Balvin, Joseph Agbisit and Francis Abe Bose

Vegetation type: Moderate

Weather: Sunny

OBSERVATIONS

(disturbance, threats,

uses, cuttings, garbage,

fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	
1	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	10	2.5	0.5	W1 2	W2 1.5
2	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	2.5	2.5	1.5	1
3	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	2.5	0.5	1.5	1
4	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	10	2.5	1	1	0.5
5	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	18	3.5	2	1	1
6	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	18	2.5	2.5	1	1
7	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	3	1.5	1	0.5
8	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	9	3	2	0.5	0.5
9	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	16	2.5	1	1	0.5
10	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	20	2	1.5	1.5	1.5
11	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	12	2.5	0.5	0.5	0.5
12	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	19	2.5	0.5	2	1.5
13	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	18	2.5	2	1	1
14	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	16	2.5	0.5	1.5	1
15	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	9	2.5	1	0.5	0.5
16	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	2.5	0.5	1	0.5
17	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	20	2.5	0.5	1	1
18	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	15	2.5	0.5	1	1
19	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	25	2.5	0.5	1	1
20	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	13	2.5	0.5	0.5	0.5
21	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	12	2	0.5	1	0.5
22	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	23	2.5	1	2	2
23	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	13	2.5	0.5	1	0.5

24	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	14	2.5	0.5	2	2
25	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	18	2.5	0.5	1.5	1

Location: Sitio Iliaran, Bgy. Bato, Taytay, Palawan

Plot No: 1

Quadrat No. 5

Transect No. 1

Coordinates:

N: 10°44'42.333"N

E: 119°27'36.356"E

Date: March 9, 2023

Time:12:10 am

Observer: Riden Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Buse

Vegetation type:Moderate

Weather: Sunny

Date: March 9, 2023

Time:12:10 am

Observer: Riden Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Buse

Vegetation type:Moderate

Weather: Sunny

OBSERVATIONS

(disturbance, threats, uses, cuttings, garbage, fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		fauna
								W1	W2	
1	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	46	7	2	1	0.5	Cutting of mangroves
2	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	8	2	5	1	0.5	
3	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	76	7	1	2.5	3	
4	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	51	7	1	2.5	2	
5	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	38	7	1.5	2.5	2	
6	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	40	6.5	1	2	1.5	
7	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	53	7	2	1.5	1.5	
8	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	45	7	2	2	1.5	
9	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	19	4.5	2	2	1	
10	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	38	4.5	1	1.5	1	
11	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	60	5	1	2	1	
12	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	34	5	1	2	1	
13	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	31	5	1	2	1.5	
14	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	27	4	1.5	1.5	1.5	
15	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	43	5	1.5	2	2	
	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	12	4	2.5	1.5	1	
	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	53	5	1	1	1	
18	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	16	4.5	1	1	1	

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan

Plot No: 1

Quadrat No. 6

Transect No. 1

Coordinates:
N: 10°44'43.375"N
E: 119°27'39.55"E

Date: March 9, 2023
Observer: Ribben Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

Time: 12:24 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	
1	Muddy	Tangkal	Ceriops tagal	Rhizophoraceae	37	7	5	3	2	
2	Muddy	Tangkal	Cerriops tagal	Rhizophoraceae	38	7	1.5	3	3	
3	Muddy	Tangkal	Cerriops tagal	Rhizophoraceae	45	7	1	4	3	
	Muddy	Tangkal	Cerriops tagal	Rhizophoraceae	50	8	3	3	2	
	Muddy	Pototan	Bruquiera cylindrica	Rhizophoraceae	58	8	3	4	3	
6	Muddy	Tangkal	Cerriops tagal	Rhizophoraceae	31	7	2.5	2	1	
7	Muddy	Pototan	Bruquiera cylindrica	Rhizophoraceae	57	7	2.5	3	1	

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan

Plot No: 2

Quadrat No. 1

Transect No. 2

Coordinates:
N: 10°44'36.454"N
E: 119°27'24.541"E

Date: March 9, 2023
Observer: Maria Lilbeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 10:35 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	
1	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	59	6	2	4	4	
2	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	34	5	3	3	3	
	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	34	6	4	3	3	
	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	42	6	1	3	3	
5	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	40	6	1	3	2	
6	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	38	5	1	3	3	
7	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	42	5	1.5	5	3	
8	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	34	4	1	3	2	
9	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	35	3	1	3	2	
10	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	34	4	2	3	3	
11	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	39	5	0.5	3	3	
12	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	40	6	1	3	3	
13	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	34	5	2	3	3	
14	Muddy	Bakaw babae	Rhizophora mucronata	Rhizophoraceae	31	4	1	3	3	

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan
Plot No: 2

Quadrat No. 2
Transect No. 2

Coordinates:
N: 10°44'37.395"N
E: 119°27'27.316"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 10:58 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
1	Muddy	Tangal	<i>Ceriops tagal</i>	<i>Rhizophoraceae</i>	24	4	0.7	W1	W2	
2	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	20	3	1	2	2	
3	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	5	3	0.3	2	1.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	31	5	0.8	3	2.5	
	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	5	3	0.6	2	1.5	
6	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	5	2.5	0.4	1.5	1.5	
7	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	5	2.5	0.4	1.5	1.5	
8	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	12	4	0.7	3	3	
9	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	8	3	1	2	0.5	
10	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	15	5	1	4	3	
11	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	9	4	1	3	3	
12	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	5	3	0.5	2	2	
13	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	10	4	1	3	3	
14	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	9	4	2	2.5	2.5	
15	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	9	3.5	1	2	1.5	

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan
Plot No: 2

Quadrat No. 3
Transect No. 2

Coordinates:
N: 10°44'37.851"N
E: 119°27'30.627"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 11:26 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
1	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	8	4	1	W1	W2	Mangrove cutting
2	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	6	4	0.5	3	2	
3	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	6	3	0.5	2	2	
4	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	13	4	0.5	5	2	
5	Muddy	Tabigi	<i>Xylocarpuz granatum</i>	<i>Meliaceae</i>	12	4	0.5	3	2	
6	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	13	6	2	4	3	
7	Muddy	Tangal	<i>Cerriops tagal</i>	<i>Rhizophoraceae</i>	12	6	3	3	2	

8	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	22	5	1.5	5	3	
9	Muddy	Tagal	<i>Ceriops tagal</i>	Rhizophoraceae	10	6	2	4	4	
10	Muddy	Tagal	<i>Cerriops tagal</i>	Rhizophoraceae	8	5	0.5	3	2	
11	Muddy	Tagal	<i>Cerriops tagal</i>	Rhizophoraceae	12	5	2	3	3	
12	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	5	5	2	2	2	
13	Muddy	Tagal	<i>Cerriops tagal</i>	Rhizophoraceae	6	3	0.4	2	2	

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan

Plot No: 2

Quadrat No. 4

Transect No. 2

Coordinates:
N: 10°44'38.72"N
E: 119°27'33.751"E

Date: March 9, 2023

Time: 11:39 am

Observer: Maria Lilibeth Arjojo, Rennie Tenolite, Rich and Valones and Ricardo Tandoc

Vegetation type: Moderate

Weather: Sunny

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
								W1	W2	
1	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	12	10	5	2	2	
2	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	10	10	1	3	3	
3	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	11	8	2	4	4	
4	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	14	10	5	3	3	
5	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	8	5	3	3	3	
6	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	14	12	8	4	3	
7	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	7	6	3	3	3	
8	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	6	5	3	2	2	
9	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	15	10	4	3	3	
10	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	16	10	6	3	3	
11	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	17	10	5	4	3	
12	Muddy	Pototan	<i>Bruguiera cylindrica</i>	Rhizophoraceae	28	10	1.5	6	4	
13	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	7	8	3	3	2	
14	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	16	10	5	3	3	

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 2

Quadrat No. 5
Transect No. 2

Coordinates:
N: 10°44'39.24"N
E: 119°27'37.393"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 12:01 am

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		(distance, direction, uses, cuttings, garbage, fauna)
								W1	W2	
1	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	11	7	3	4	4	Little Egret
2	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	10	7	3	4	4	
3	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	25	10	7	4	3	
4	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	24	12	8	5	4	
	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	12	10	6	3	3	
6	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	9	7	3	3	3	
7	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	24	12	8	4	4	
8	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	Rhizophoraceae	14	10	6	4	4	
9	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	8	5	2	2	2	
10	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	21	8	1	6	4	
11	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	6	4	2	3	2	

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 2

Quadrat No. 6
Transect No. 2

Coordinates:
N: 10°44'40.305"N
E: 119°27'40.396"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 12:16 pm

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		(unsustainable, uneatable, uses, cuttings, garbage, fauna)
								W1	W2	
1	Muddy	Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	20	5	0.5	6	5	
2	Muddy	Pagatpat	<i>Sonneratia alba</i>	Sonneratiaceae	22	6	2	5	3	
3	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	7	4	1.5	2.5	2	
4	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	6	3	0.3	3	2	
5	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	8	4	0.5	3	3	
6	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	6	3	0.5	3	2	
7	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	6	3	0.5	4	2	
8	Muddy	Tabigi	<i>Xylocarpuz granatum</i>	Meliaceae	6	3	2	2	2	
9	Muddy	Langarai	<i>Broguiera sexangula</i>	Rhizophoraceae	7	4	2	4	3	
10	Muddy	Tabigi	<i>Xylocarpuz granatum</i>	Meliaceae	8	4	1	3	3	
11	Muddy	Tabigi	<i>Xylocarpuz granatum</i>	Meliaceae	8	4	1	2	2	
12	Muddy	Tabigi	<i>Xylocarpuz granatum</i>	Meliaceae	12	6	2	3	3	

13	Muddy	Tabigi	<i>Xylocarpus granatum</i>	<i>Meliaceae</i>	12	6	2	4	3	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
14	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	13	6	3	2	2	
15	Muddy	Langarai	<i>Bruguiera sexangula</i>	<i>Rhizophoraceae</i>	10	6	1.5	3	3	
16	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	22	6	2	4	3	
17	Muddy	Langarai	<i>Bruguiera sexangula</i>	<i>Rhizophoraceae</i>	7	4	1.5	3	3	

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan

Quadrat No. 7

Coordinates:
N: 10°44'40.292"N
E: 119°27'41.952"E

Time:12:28 pm

Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc

Plot No: 2

Transect No. 2

Vegetation type:Moderate

Weather: Sunny

E N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	
1	Muddy	Tabigi	<i>Xylocarpus granatum</i>	<i>Meliaceae</i>	14	8	3	4	3	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
2	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	28	8	1	6	4	
3	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	27	7	2	4	4	
4	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	14	7	2	4	4	
5	Muddy	Dungon	<i>Heritiera littoralis</i>	<i>Sterculiaceae</i>	12	7	3	5	5	
6	Muddy	Pototan	<i>Bruguiera cylindrica</i>	<i>Rhizophoraceae</i>	9	6	3	5	3	
7	Muddy	Dungon	<i>Heritiera littoralis</i>	<i>Sterculiaceae</i>	7	4	2	3	3	
8	Muddy	Lagitiw	<i>Acanthus ebracteatus</i>	<i>Acanthaceae</i>	120 pcs			3	3	

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan

Quadrat No. 1

Coordinates:
N: 10°44'42.682"N
E: 119°27'22.815"E

Time:1:02 pm

Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc

Plot No: 3

Transect No. 3

Vegetation type:Moderate

Weather: Sunny

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		OBSERVATIONS
								W1	W2	
1	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	22	6	1.5	6	4	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
2	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	20	5	1	4	4	
3	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	20	6	1	5	3	
4	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	17	6	2	3	3	
5	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	18	5	1	3	3	
6	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	16	7	4	3	3	
7	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	8	6	0.5	3	2	
8	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	8	5	1	2	1	

9	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	8	5	1.5	3	3
10	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	16	8	4	3	3
11	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	16	8	4	4	3
12	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	18	7	2	4	4
13	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	14	5	4	2	2
14	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	17	8	5	3	2
15	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	15	10	4	3	2
16	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	15	10	4	3	2
17	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	17	10	4	3	3
18	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	16	10	2	4	3
19	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	16	10	5	2	2
20	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	14	8	5	3	2
21	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	18	10	6	3.5	3
22	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	18	10	4	5	4.5
23	Muddy	Bakaw babae	<i>Rhizophora mucronata</i>	<i>Rhizophoraceae</i>	12	8	4	3	2

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 2
Transect No. 3

Coordinates:
N: 10°44'43.657"N
E: 119°27'25.678"E

Date: March 9, 2023
Time: 1:08 pm

Observer: Richen Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose

Vegetation type: Moderate

Weather: Sunny

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)		
1	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	6	3.5	2	W1	W2	
2	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	5	4	2.5	1	0.5	
3	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	5	4	2.5	1	0.5	
4	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	5	4	2.5	1	0.5	
5	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	6	2.5	1	1	2	
6	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	15	4.5	1.5	1	1	
7	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	8	4.5	0.5	1	1	
8	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	7	4	1.5	1.5	1	
9	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	8	4.5	1.5	1	0.5	
10	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	7	4	1	1	1	
11	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	6	4	1	1	0.5	
12	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	8	4	0.5	1	1	
13	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	10	4.5	0.5	1.5	1.5	
14	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	10	4.5	0.5	1.5	1.5	
15	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	10	4.5	3	1	1	
16	Muddy	Pototan	<i>Broguiera cylindrica</i>	<i>Rhizophoraceae</i>	8	4.5	2	1	1	
17	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	<i>Rhizophoraceae</i>	7	5	1.5	1	0.5	

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

18	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	10	5	3	1.5	1
19	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	8	3	0.5	0.5	0.5
20	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	13	4.5	2	1	0.5
21	Muddy	Bakaw lalaki	<i>Rhizophora apiculata</i>	Rhizophoraceae	7	4	2	1	0.5
22	Muddy	Tabigi	<i>Xylocarpus granatum</i>	Meliaceae	7	4.5	1.5	1	1

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan

Plot No: 3

Quadrat No. 3

Transect No. 3

Coordinates:
N: 10°44'44.027"N
E: 119°27'28.937"E

Date: March 9, 2023

Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc

Vegetation type: Moderate

Weather: Sunny

Time: 1:26 pm

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

E N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	
1	Muddy	Tangal	<i>Ceriops tagal</i>	Rhizophoraceae	6	2	1	W1	W2
2	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	6	2	1	1	1
3	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	0.5	2	1
4	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	0.3	2	1
5	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	0.5	2	1
6	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	2	0.5	2	1
7	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	2	0.4	2	1
8	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	2	0.5	2	1
9	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	7	3	0.3	2	1
10	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	1	2	1
11	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	6	3	1	2	1
12	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	2	1.5	2	1
13	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	1.5	2	1
14	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	2	1	1
15	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	5	3	1	2	1

Location: Sitio Iltaran, Bgy. Bato, Taytay, Palawan

Plot No: 3

Quadrat No. 4

Transect No. 3

Coordinates:
N: 10°44'45.105"N
E: 119°27'31.992"E

Date: March 9, 2023

Observer: Richen Armenta, Erwin Balvin, Joseph Agbisit and Francis Abe Bose

Vegetation type: Moderate

Weather: Sunny

Time: 1:22 pm

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	
1	Muddy	Tangal	<i>Cerriops tagal</i>	Rhizophoraceae	13	7	4	W1 1.5	W2 1.5

2	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	6	4.5	3	1.5	1
3	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	12	7	3	2	1.5
4	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	12	7	2.5	1.5	1
5	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	9	7	2	1	1
6	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	11	7	2.5	1.5	1
7	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	6	4.5	2	1	1
8	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	8	7	4	1	1
9	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	12	7	1.5	2	1
10	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	11	7	2.5	1.5	1
11	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	13	7	2	1	1
12	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	9	7	3	1.5	1
13	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	12	7	2.5	1.5	1
14	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	10	7	2.5	1.5	1
15	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	8	7	3.5	1	1
16	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	6	6.5	2	0.5	0.5
17	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	7	7	4	1	0.5
18	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	8	7	3.5	1.5	1
19	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	12	7	2	1	0.5
20	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	13	7	1.5	1.5	1
21	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	6	6.5	3	0.5	0.5
22	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	6	6.5	2.5	1	1
23	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	9	7	4	1.5	1
24	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	13	7	3	1.5	2
25	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	7	5	2	1	1
26	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	10	7	2	1.5	1
27	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	14	7	4.5	2.5	2.5
28	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	5	4	1.5	1	0.5
29	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	5	3.5	2	1	0.5
30	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	9	7	3	2.5	1.5
31	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	10	7	1	1	1
32	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	10	7	5	2.5	1.5
33	Muddy	Tangal	<i>Cerlops tangal</i>	<i>Rhizophoraceae</i>	9	7	2.5	2	1

Location: Sitio Iliaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 5
Transect No. 3

Coordinates:
N: 10°44'45.491"N
E: 119°27'35.372"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 1:55 pm

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	
1	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	3	5	W1	W2
2	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	3	6	4	4
3	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	8	6	2	4	3
4	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	8	2.5	3	3
5	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	21	10	2	4	4
6	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	7	6	2	3	2
7	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	5	4	1	3	2
8	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	22	12	3	5	4
9	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	22	12	2.5	8	5
10	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	10	2	5	4
11	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	6	3	1.5	2	1
12	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	14	8	3	4	4
13	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	15	8	3	4	4
14	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	7	5	0.4	3	3
15	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	10	2.5	5	4
16	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	10	4	4	4
17	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	10	3	4	4
18	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	10	8	5	3	3
19	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	16	10	3	5	4

Location: Sitio Iliaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 6
Transect No. 3

Coordinates:
N: 10°44'46.549"N
E: 119°27'38.758"E

Date: March 9, 2023
Observer: Ricken Armenia, Erwin Balvin, Joseph Agbist and Francis Abe Bose
Vegetation type: Moderate
Weather: Sunny

Time: 1:54 pm

OBSERVATIONS
(disturbance, threats,
uses, cuttings, garbage,
fauna)

TREE NO.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	
1	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	12	6	1	W1	W2
2	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	8	4.5	0.5	1	0.5
3	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	8	4	1.5	1.5	1
4	Muddy	Tangal	Cerlops tagal	Rhizophoraceae	9	5	1.5	1.5	1

5	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	8	5	1	1	0.5
6	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	9	6.5	1.5	1	1.5
7	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	12	6.5	1	1	0.5
8	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	8	4.5	1.5	1	0.5
9	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	6	3.5	1	1	1
10	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	11	6	1	1.5	1
11	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	23	7	1.5	1.5	1.5
12	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	23	2.5	1	1	0.5
13	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	10	6.5	3	1	0.5
14	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	7	5	1	1	0.5
15	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	6	3.5	3	1	0.5
16	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	5	2	1	1	0.5
	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	6	4.5	2	0.5	0.5
	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	13	5	1.5	2	1.5
19	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	10	5	2.5	1	1
20	Muddy	Pagatpat	<i>Sonneratia alba</i>	<i>Sonneratiaceae</i>	6	3	2	0.5	0.5

Location: Sitio Iliaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 7
Transect No. 3

Coordinates:
N: 10°44'46.653"N
E: 119°27'40.169"E

Date: March 9, 2023
Observer: Maria Lilibeth Arojo, Rennie Tenolite, Richard Valones and Ricardo Tandoc
Vegetation type: Moderate
Weather: Sunny

Time: 2:18 pm

TREE N.O.	SUBSTRATE	SPECIES	SCIENTIFIC NAME	FAMILY NAME	DBH/Girth (cm)	TH (m)	MH (m)	Crown Diameter (m)	OBSERVATIONS (disturbance, threats, uses, cuttings, garbage, fauna)
1	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	18	10	2	5	W1
2	Muddy	Tangal	<i>Cerlops tagal</i>	<i>Rhizophoraceae</i>	6	4	0.5	4	W2
	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	32	8	5	3	
	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	15	8	2	3	
5	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	10	8	6	2	
6	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	6	4	3	2	
7	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	8	4	1	2	
8	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	18	7	5	2	
9	Muddy	Buta-buta	<i>Excoecaria agallocha</i>	<i>Euphorbiaceae</i>	12	4	3	2	
10	Muddy	Dungon	<i>Heritiera littoralis</i>	<i>Sterculiaceae</i>	6	3	2	1	
11	Muddy	Pototan	<i>Bruguiera cylindrica</i>	<i>Rhizophoraceae</i>	34	12	3	6	
12	Muddy	Pototan	<i>Bruguiera cylindrica</i>	<i>Rhizophoraceae</i>	29	10	2	6	
13	Muddy	Tabigi	<i>Xylocarpus granatum</i>	<i>Meliaceae</i>	6	4.5	2	1	

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 1

Quadrat No. 6
Transect No. 1

Coordinates:
N: 10°44'43.375"N
E: 119°27'39.55"E

Date: March 9, 2023
Observer: Francis Abe Bose, Richen Armenia, Erwin Balvin and Joseph Agbisit
Vegetation type:Moderate
Weather: Sunny

Time:12:24 am

QUADRAT NO. TREE NO. SPECIES

SAPLING COUNT (<5 CM DBH)

AVERAGE HEIGHT

SEEDLING COUNT

AVERAGE HEIGHT REMARKS

11

60 cm

47

20 cm

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 2

Quadrat No. 5
Transect No. 2

Coordinates:
N: 10°44'39.244"N
E: 119°27'37.393"E

Date: March 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Rennie Tenolite and Richard Valones
Vegetation type:Moderate
Weather: Sunny

Time:1:31 pm

QUADRAT NO. TREE NO. SPECIES

SAPLING COUNT (<5 CM DBH)

AVERAGE HEIGHT

SEEDLING COUNT

AVERAGE HEIGHT REMARKS

2

20 cm

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 3
Transect No. 3

Coordinates:
N: 10°44'44.027"N
E: 119°27'28.937"E

Date: March 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Rennie Tenolite and Richard Valones
Vegetation type:Moderate
Weather: Sunny

Time:1:26 pm

QUADRAT NO. TREE NO. SPECIES

SAPLING COUNT (<5 CM DBH)

AVERAGE HEIGHT

SEEDLING COUNT

AVERAGE HEIGHT REMARKS

20

1.5 cm

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 5
Transect No. 3

Coordinates:
N: 10°44'45.491"N
E: 119°27'35.372"E

Date: March 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Rennie Tenolite and Richard Valones
Vegetation type:Moderate
Weather: Sunny

Time:1:55 pm

QUADRAT NO. TREE NO. SPECIES

SAPLING COUNT (<5 CM DBH)

AVERAGE HEIGHT

SEEDLING COUNT

AVERAGE HEIGHT REMARKS

1

30 cm

Location: Sitio Ilaran, Bgy. Bato, Taytay, Palawan
Plot No: 3

Quadrat No. 7
Transect No. 3

Coordinates:
N: 10°44'46.658"N
E: 119°27'40.169"E

Date: March 9, 2023
Observer: Ricardo Tandoc, Maria Lilibeth Arojo, Rennie Tenolite and Richard Valones
Vegetation type:Moderate
Weather: Sunny

Time:2:18 pm

QUADRAT NO. TREE NO. SPECIES

SAPLING COUNT (<5 CM DBH)

AVERAGE HEIGHT

SEEDLING COUNT

AVERAGE HEIGHT REMARKS

1

95 cm

8

Broguiera cylindrica