

Quick Inventory of Noteworthy Plants at Mantalingahan Range Palawan Island, Philippines

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Abstract

A quick floral inventory was conducted in the periphery of the forest in Mantalingahan Range to describe the composition, species richness and/or diversity and level of endemism of noteworthy plant species found therein.

Pre-identified sites in the four barangays of the four municipalities in Southern Palawan (Brgy. Pulot Interior, Sofronio Española; Brgy. Maasin, Brooke's Point; Brgy. Inogbong, Bataraza; and Brgy. Campong Ulay, Rizal) were surveyed following the Variable Transect Method for Rapid Assessment of Tropical Plant Communities.

The forest periphery of Mantalingahan Range is rich in diversified flora of at least 351 species distributed to 214 genera and 92 families. Species endemism is remarkably high at 57 species, 10 of which are only found in Palawan. The study sites contain a relatively high number of rare species with narrow habitat range. Economically important species are abundant while 14 vulnerable, 4 endangered and 5 critical plant species according to IUCN were encountered.

Although the method used in the survey was very rapid, the results demonstrate that Mantalingahan Range has high species richness with many endemic, rare and narrow range plant species. This mountain range can be considered, therefore as one of the most important sites in Palawan Corridor for conservation hence the best and strictest measures should be applied to prevent any degradation of such a rich genetic resource.

Keywords: biodiversity, Mantalingahan Range, Palawan, Philippines plants

INTRODUCTION

Palawan is botanically considered as one of the most diverse and rich islands in the Philippines. As a distinct plant geographic region in the country, Palawan harbors an estimated 3,000-3,500 flowering plant species mostly known to occur only in the island. Sharing a close floristic affinity with Borneo, its plant endemism is estimated to be about 15-20%, which is attributed to its geological, climatic, edaphic and biological features. The island has been described as among

the geographical landmarks with the highest species diversity per unit area and still relatively undisturbed compared to other parts of the country (Madullid, 1987 as cited in PTFPP, 1998).

Mt Mantalingahan in southern Palawan, the highest mountain in the island of c. 2,086 m above sea level, is a part of the Mantalingahan Range. The Mantalingahan Range includes an estimated 70,000 ha of montane mossy rainforest, with stunted forest on the exposed tops. There is lowland rainforest to the northwest on the coastal plain, such as around the Ilog-Ilog River in Rizal. To the southeast, the forest has been cleared up to 800 m on the slopes, although in some slopes, the forest still remains on the top of the flanking coastal ridge from about 400 m upwards.

Mantalingahan Range is given high conservation importance because its varied habitats harbor different organisms including some important wildlife, i.e. Philippine Cockatoo (*Cacatua haematuropygia*) and Palawan Striped Babbler (*Stachyris hyporammica*). This mountain is in fact one of the eleven Important Bird Areas (IBAs) in Palawan.

There is little recent information about the floristic composition of the mountain hence a quick survey was conducted to describe the vegetation composition of the periphery of the forest in the Mantalingahan Range, the species richness and/or diversity and level of endemism of the noteworthy plant species found therein.

METHODOLOGY

The Study Sites

The study sites were the 4 pre-identified areas in the periphery of Mantalingahan Range with lowland forest patches located in one barangay of each of the 4 municipalities in southern Palawan (Fig. 1). These were the following:

1. Bgy. Pulot Interior in the municipality of Sofronio Española
2. Bgy. Maasin in the municipality of Brooke's Point
3. Bgy. Inogbong in the municipality of Bataraza
4. Bgy. Campong Ulay in the municipality of Rizal

Habitat types of each study site, which include the riverine, ephemeral stream/gully, ridge, and lowland forests were selected based on the map and after the reconnaissance survey. At least 3 areas per habitat type were distributed at the periphery of the forest in each study site to ensure breadth of representation. In each selected habitat type, survey of flora was done while location coordinates were noted using a GPS device.

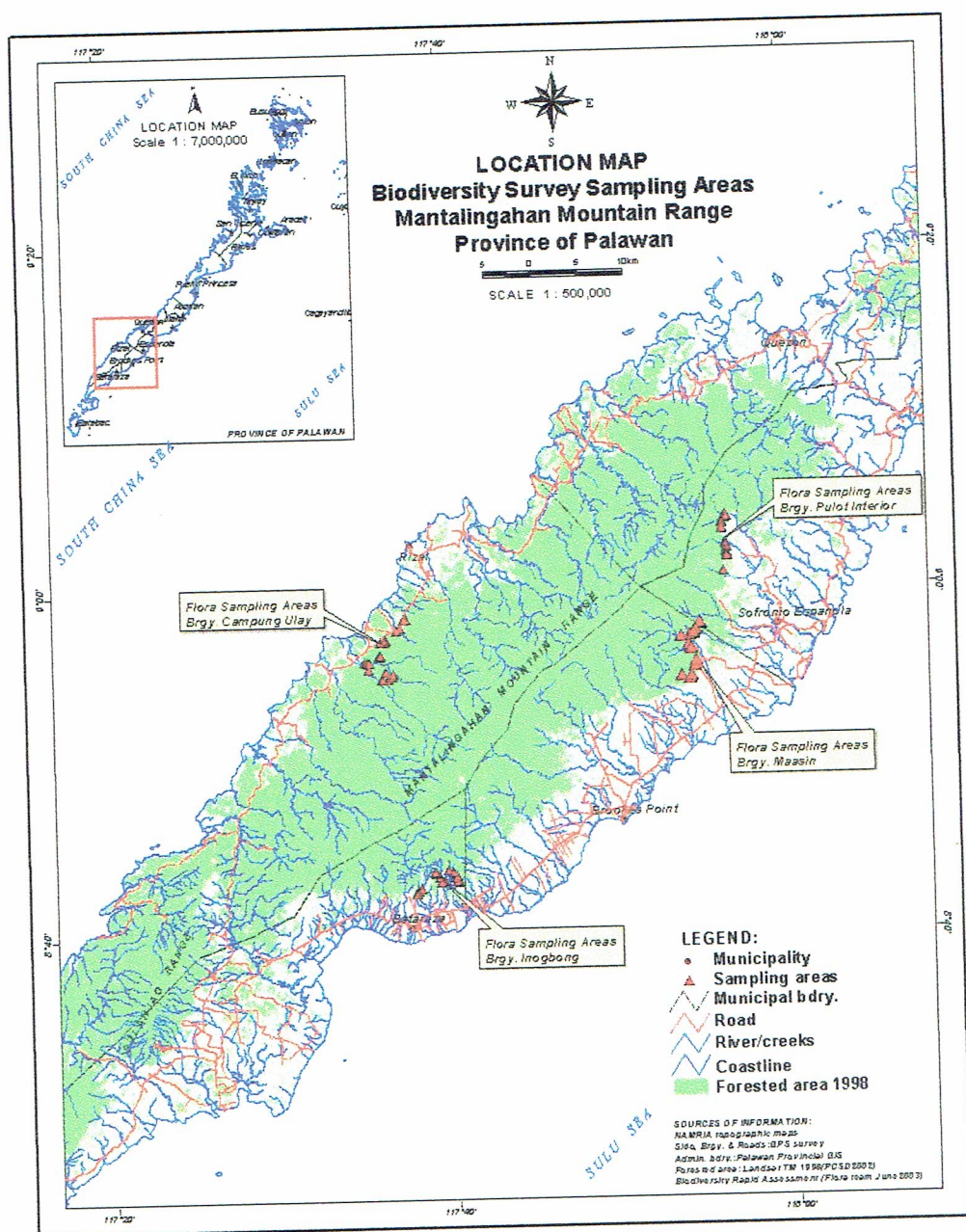


Figure 1. Map of Mantalingahan Range showing the study sites.

Sampling Method

The Variable Transect Method for Rapid Assessment of Tropical Plant Communities by Foster *et al.* (1995) was employed in this survey. This was done by walking down the middle of each habitat type and quickly registering the number of individuals of the identified plants. Major plant groups such as trees, ferns and their allies, palms, herbs and lianas were considered and identified up to the genus level but whenever possible, up to the species level. For uniformity, the sampling areas were defined by the extent by which 50 trees measuring 20 cm and above in diameter are accommodated.

Economically useful plant species found in the four sites were determined through interviews with local people and from available literatures.

RESULTS AND DISCUSSION

There were at least 351 plant species (trees, ferns and their allies, palms, herbs and lianas) distributed to at least 214 genera and 92 families encountered in Mantalingahan Range (Table 1). The predominant plant group is the flower-bearing plants while ferns and their allies have only 37 species. Considering that the method used in the assessment of flora was very rapid, the area surveyed was only a very small portion of the whole Mantalingahan Range, and the periphery of the forest is mostly disturbed, as it is accessible to human activities, results clearly demonstrated that Mantalingahan Range has a rich and diverse floral composition.

In the field surveys conducted in Mt Apo from 1988 to 1991, Zamora (1996) reported the presence of 555 species of plants. He added that high species diversity in Mt Apo is mainly due to the varied ecosystems in the area. The number of plant species (351) encountered in the selected periphery in Mantalingahan Range for about a month's survey is around 63% of the number of plant species encountered in Mt Apo which was surveyed for around three years. Likewise, this number is around 44% of the 800 plant species recorded in the St Paul Subterranean River National Park (SPSRNP) and vicinities (PTFPP, 1998). The intensive, quantitative survey in SPSRNP passed different habitats in the study area, thus the sample area is big enough to cover the different habitats in the park. On the other hand, Elliott *et al.* (1989) claimed that Doi Suthep-Pui National Park in Chiang Mai, Thailand rivals some tropical rainforest in terms of tree species richness having found 87 tree species per hectare. In the same forest Maxwell (1989) recorded 1,800 species of vascular plants for 2 years of collection. According to Maxwell (1988), Doi Suthep-Pui has a deciduous forest on the lower slopes (up to 850-950 m elevation) and an evergreen forest on the upper slopes. Mantalingahan Range has an estimated 70,000 ha of montane mossy rainforest and a lowland rainforest which provide various niches to support many different organisms. If detailed biodiversity studies will be conducted throughout Mantalingahan Range for a longer period of time, its biodiversity will probably surpass those tropical rainforests widely acknowledged as among the most

species-rich in the world including Sulawesi (Whitmore and Sidijasa, 1986), Papua New Guinea (Pajmans, 1970), Kalimantan and Sumatra (Kartawinata *et al.*, 1981). Mantalingahan Range is projected to represent a significant contribution to the known pool of Philippine and world biodiversities.

The study area is also rich in endemic plant species. At least 57 endemic species were recorded (Table 2), of which 10 can only be found in Palawan. Endemic life form is a taxon found only in a given geographic area; presumably having been evolved locally. Plants encountered, which are endemic to Palawan include *Licuala spinosa* Thunb., *Orania paraguayensis* Becc., *Protium connarifolium* (Perk.) Merr., *Ceuthostoma palawense* L.A.S. Johnson, *Dillenia luzoniensis* (Vidal) Mart. ex Jacks, *Glochidion dolichostylum* Merr., *Piper* sp., *Dinochloa palawanensis* S. Dransf., *Amomum palawanense* Elmer, and *Cinnamomum* sp. These 10 Palawan endemics are higher than those found in SPSRNP having 6 species only (PTFPP, 1998). Of these 10 species, 4 had narrow habitat range, i.e. *O. paraguayensis*, and *P. connarifolium*, which were found only on gullies; and *Piper* sp. and *Cinnamomum* sp. on ridges. Moreover, some of

Table 1. Plant families encountered in Mt Mantalingahan with number of genera and species.

Family	No. of Genera	No. of Species	Family	No. of Genera	No. of Species	Family	No. of Genera	No. of Species
Acanthaceae	2	4	Dioscoreaceae	1	3	Myrtaceae	4	10
Actinidiaceae	1	1	Dipteridaceae	1	1	Nepenthaceae	1	2
Agavaceae	1	2	Dipterocarpaceae	4	7	Nyctaginaceae	1	1
Alangiaceae	1	2	Dryopteridaceae	1	2	Oleandraceae	1	2
Anacardiaceae	4	6	Ebenaceae	1	5	Orchidaceae	2	2
Annonaceae	4	4	Ehretiaceae	1	1	Pandanaceae	2	5
Apocynaceae	4	6	Euphorbiaceae	13	17	Parkeriaceae	1	4
Araceae	6	11	Fagaceae	1	1	Passifloraceae	1	1
Araliaceae	1	1	Flacourtiaceae	1	1	Piperaceae	1	1
Arecaceae	10	20	Flagellariaceae	1	1	Poaceae	5	6
Asclepiadaceae	3	6	Gesneriaceae	1	1	Polypodiaceae	3	3
Aspleniaceae	1	3	Gleicheniaceae	2	2	Pteridaceae	1	6
Asteraceae	1	1	Gnetaceae	1	1	Rhizophoraceae	1	1
Begoniaceae	1	2	Guttiferae	3	9	Rosaceae	1	2
Bignoniaceae	1	1	Hypoxidaceae	1	1	Rubiaceae	9	13
Blechnaceae	2	3	Lauraceae	5	8	Rutaceae	3	3
Bombacaceae	2	4	Lecythidaceae	2	3	Sapindaceae	4	10
Burseraceae	3	5	Leeaceae	1	1	Sapotaceae	4	7
Casuarinaceae	3	3	Leguminosae	11	12	Schizeaceae	1	2
Celastraceae	1	1	Liliaceae	1	1	Selaginellaceae	1	3
Combretaceae	1	3	Lindsaeaceae	1	1	Simaroubaceae	1	1
Commelinaceae	1	1	Loganiaceae	1	1	Sterculiaceae	5	8
Convolvulaceae	1	1	Lycopodiaceae	1	1	Symplocaceae	1	1
Cyatheaceae	1	1	Malvaceae	1	1	Thelypteridaceae	1	2
Cycadaceae	1	1	Marantaceae	1	2	Thymelaeaceae	1	1
Cyperaceae	1	4	Marattiaceae	1	1	Tiliaceae	3	4
Datiaceae	1	1	Melastomataceae	2	2	Ulmaceae	2	3
Davalliaceae	1	1	Meliaceae	9	13	Urticaceae	2	2
Dilleniaceae	1	1	Moraceae	3	18	Verneniaceae	4	5
Dennstaediaceae	2	2	Musaceae	1	1	Vittariaceae	1	1
			Myristicaceae	1	6	Zingiberaceae	7	12

these Palawan endemics are already rare. A rare life form is a taxon of low-density occurrence that could be threatened to extinction if the environment where it occurs worsens. These are the *O. paraguayensis*, *Cinnamomum* sp., *S. dolichostylum* and *P. connarifolium*. A particular species of *Nepenthes*, which is endemic to the Philippines, occurs only along some spots near Ilog-Ilog river in Campong Ulay, Rizal.

Of conservation interest are the 23 species listed by the International Union for the Conservation of Nature (IUCN) as threatened (14 spp. Vulnerable, 4 spp. Endangered, 5 spp. Critical) thrive in the periphery of the forest on some specific municipalities (Table 3). In addition, Mantalingahan Range contains 16 species, which are considered as commercial Philippine wood (Table 4). It also contains several plant species, which are economically useful (Table 5). Several species on rattan were encountered during the survey especially in the municipalities of Sofronio Española and Rizal. Rattans are very important raw

Table 2. Endemic plant species recorded in Mantalingahan Range.

Botanical Name	Local Name
<i>Alocasia zebrina</i> C. Koch & Hort. Usitch	Dital/Kamiliti/Digkatan
<i>Alstonia scholaris</i> (L.) R.Br.	Tagbak
<i>Amomum palawanense</i> Elmer	Dagang
<i>Anisoptera aurea</i> Foxw.	
<i>Anisoptera thurifera</i> (Blanco) Blume	
<i>Antidesma microcarpum</i> Elmer	Baro
<i>Artocarpus blancoi</i> (Elmer) Merr.	Antipolo/Tigep/Gudang
<i>Artocarpus nitidus</i> Trecul. spp. <i>nitidus</i>	Kukubi/Karasakas
<i>Calamus diepenhorstii</i> Miq.	Abuan
<i>Calamus merrillii</i> Booc.	Palasan
<i>Calamus ornatus</i> Blume ex Schult. f. var. <i>philippinensis</i> Becc.	Kalapi
<i>Canarium asperum</i> Benth.	Sahing/Saleng/Salong
<i>Caryota</i> sp.	Batbat
<i>Caryota</i> sp.	Pugahan bato
<i>Ceuthostoma palawanense</i> L.A.S. Johnson*	Parongpong
<i>Centrostemma multiflorum</i> Blume	
<i>Cinnamomum</i> sp.	Palawan cinnamon
<i>Codiaeum megalanthum</i> Merr.	Panagang
<i>Croton leiophyllus</i> Muel-Arg.	Limbutan
<i>Cyrtandra</i> sp.	Lupa
<i>Daemonorops mollis</i> (Blume) Merr.	Gatasan
<i>Dellinia luzoniensis</i> (Vidal) Mart. ex Dur et Jacks*	Malakatmon/Dilawan
<i>Dinochloa palawanensis</i> S. Dransf.*	Bikal
<i>Diospyros pilosanthera</i> Blanco	Bolong-eta/Angkukubi
<i>Dischidia platyphylla</i> Schltr.	
<i>Drypetes subcrenata</i> (Merr.) Pax & K. Hoffm.	Karing karing
<i>Ficus balete</i> Merr.	Kulban/Balete
<i>Garcinia binucao</i> (Blanco) Choisy	Taiyagang
<i>Glochidion camiguinense</i> Merr.	Bunot-bunot

Table 2. Endemic plant species recorded in Mantalingahan Range.

Botanical Name	Local Name
<i>Glochidion dolichostylum</i> Merr.*	Tabangaw
<i>Guioa acuminata</i> Radlk.	Pasi
<i>Guioa myriadenia</i> Radlk.	Ulas
<i>Hopea philippinensis</i> Dyer	Gisok
<i>Licuala spinosa</i> Thunb.*	
<i>Macaranga ovatifolia</i> Merr.	Indangan
<i>Mangifera monandra</i> Merr.	Malapaho
<i>Myristica philippensis</i> Lam.	Duguan/Mambabalud
<i>Oncosperma tigillarum</i> (Jack) Ridl.	Anibong
<i>Orania paraguensis</i> Becc.*	Uredas/Banga
<i>Palaquium foxworthyi</i> Merr.	Tagotoi
<i>Palaquium luzoniense</i> (Fernandez-Villar) Vidal	Nato/Tadkan/Natangan
<i>Palaquium</i> sp.	Nato you
<i>Piper</i> sp.*	
<i>Planchonella foxworthyi</i> (Elmer) Lam.	Alalud
<i>Planchonia spectabilis</i> Merr.	Basak
<i>Protium connarifolium</i> (Perk.) Merr.*	Maraup
<i>Schizostachyum lumampao</i> (Blanco) Merr.*	Buho
<i>Shorea astylosa</i> Foxw.	Yakal
<i>Shorea assamica</i> ssp. <i>philippinensis</i> (Brandis)	Manginsurod
<i>Terminalia calamansanai</i> (Blanco) Rolfe	Samburagat/Malakalumpit
<i>Toona calantas</i> Merr. & Rolfe	Kalantas
<i>Tricalysia</i> sp.	Kape gubat
<i>Tristanopsis decorticata</i> (Merr.) P.G. Witson & Waterh.	Malabayabas/Kayo/palawan/ Magpalawan

*Endemic to Palawan

Source: Madulid (2002); Schulte (2002); Rojo (1999)

Table 3. Threatened plant species in Mantalingahan Range.*

Family	Scientific name	Local Name	
Anacardiaceae	<i>Mangifera altissima</i>	Manga-manga	Vulnerable
	<i>Mangifera monandra</i>	Malapaho	Endangered
Burseraceae	<i>Protium connarifolium</i>	Maraup	Vulnerable
Dilleniaceae	<i>Dillenia luzoniensis</i>	Malakatmon/Dilawan	Vulnerable
Dipterocarpaceae	<i>Anisoptera thurifera</i>	Apitong baboi	Critical
	<i>Dipterocarpus grandiflorus</i>	Apitong/Taruntung	Critical
	<i>Hopea plagata</i>	Laptongan/Yakal	Critical
	<i>Shorea astylosa</i>	Yakal	Critical
	<i>Shorea philippinensis</i>	Manginsurod	Critical
	<i>Diospyros pulgarensis</i>	Kanumay/Kamanita	Vulnerable
Ebenaceae	<i>Diospyros philippinensis</i>	Kamagong/Bantalinaw	Endangered
	<i>Neolitsea vidalii</i>	Puso-puso/Tarampusoan	Vulnerable
Lauraceae	<i>Intsia bijuga</i>	Ipil/Tigas	Vulnerable
Leguminosae	<i>Pterocarpus indicus</i>	Narra	Vulnerable
	<i>Aglaia cumingiana</i>	Alauhaw	Vulnerable
Meliaceae	<i>Sandoricum koetjape</i>	Santol/Apugan/Santol guba	Vulnerable
	<i>Artocarpus blancoi</i>	Antipolo/Tigep/Gudang	Vulnerable
Moraceae	<i>Myristica philippinensis</i>	Duguan/Mambabalud	Vulnerable
Myristicaceae	<i>Tristanopsis decorticata</i>	Malabayabas/Magpalawan	Vulnerable
Sapindaceae	<i>Guioa acuminata</i>	Pasi	Endangered
	<i>Guioa myriadenia</i>	Ulas	Endangered
Sapotaceae	<i>Palaquium luzoniense</i>	Nato/Tadkan/Natangan	Vulnerable
Verbenaceae	<i>Vitex parviflora</i>	Ablas	Vulnerable

*Based on IUCN Red List (2002)

Table 4. Commercial Philippine wood found in the periphery of Mt Mantalingahan.

Common Name	Botanical Name
Apitong	<i>Dipterocarpus grandiflorus</i> Blanco
Bolong-eta	<i>Diospyros pilosanthera</i> Blanco var. <i>pilosanthera</i> Bakh.
Ipil	<i>Intsia bijuga</i> (Colebr.) O. Kuntze
Kalantas	<i>Toona calantas</i> Merr. & Rolfe*
Kalumpit	<i>Terminalla microcarpa</i> Decne
Kamagong	<i>Diospyros philippinensis</i> A. DC
Malabayabas	<i>Tristaniopsis decorticata</i> (Merr.) P.G. Wilson & Waterh.*
Malugai	<i>Pometia pinnata</i> J.R. & G. Forst.
Manggasinoro	<i>Shorea assamica</i> ssp. <i>philippinensis</i> (Brandis)
Mararango	<i>Azadirachta excelsa</i> (Jack) Jacobs
Molave	<i>Vitex parviflora</i> Juss.
Narra	<i>Pterocarpus indicus</i> Willd forma <i>indicus</i> Rojo
Nato	<i>Palaquium luzoniense</i> (Fernandez-Villar) Vidal
Palosapis	<i>Anisoptera thurifera</i> (Bianco) Blume asp. <i>thurifera</i>
Yakal-saplungan	<i>Hopea plagata</i> (Blanco) Vidal
Yakal	<i>Shorea astylosa</i> Foxw

Source: Monsalud and Tamolang (1969)

Table 5. Some useful plant species encountered during the survey.

Species	Economic Uses
<i>Alangium meyeri</i> Meir.	Firewood, round timber
All rattan species	Furniture, rope, handicraft
<i>Alstonia macrophylla</i> Wall. ex DC	lumber, round timber
<i>Antidesma microcarpum</i> Elmer	lumber
<i>Artocarpus nitidus</i> Trecul. ssp. <i>nitidus</i>	round timber
<i>Barringtonia balabacensis</i> Merr.	medicine (wound)
<i>Dehaasia cairocan</i> (Vidal) C.K. Allen	lumber
<i>Buchanania arborescens</i> (Blume) Blume	lumber for jealousy, lumber
<i>Callophylum blancoi</i> Planchon et Triana	round timber
<i>Canarium asperum</i> Benth.	Round timber
<i>Canadum hirsutum</i> Wilid. sap. <i>hirsutum</i> var. <i>hirsutum</i> forma <i>scabrum</i> (Blume) Leenh.	alternative fuel for lighting
<i>Casuarina equisetifolia</i> L.	lumber
<i>Casuarina sumatrana</i>	firewood
<i>Ceuthostoma palawanense</i> L.A.S. Johnson	ornamental
<i>Chisocheton cumingianus</i> (C.DC.) Harms.	ornamental
<i>Cinnamomum iners</i> Reinw.	lumber
<i>Cratoxylum</i> sp.	round timber, firewood
<i>Croton leiophyllus</i> Muell.-Arg.	lumber, post
<i>Cyathea</i> sp.	Round timber, firewood
<i>Diospyros multiflora</i> Blanco	ornamental
<i>Diospyros philippinensis</i> A.DC	medicinal (wound and itch)
<i>Diospyros pilosanthera</i> Blanco	medicinal
	post, pole timber

Table 5. Cont'd.

<i>Dipterocarpus grandiflorus</i> Blanco	flooring
<i>Dracaena</i> sp.	ornamental
<i>Durio</i> spp.	food for man/animals
<i>Litchi chinensis</i> Sonn. ssp. <i>philippinensis</i> (Radik.) Leenh.	firewood
<i>Ficus balete</i> Merr.	pole timber, medicinal
<i>Ficus variegata</i> Blume	bark for G-string, timber
<i>Garcinia binucao</i> (Blanco) Choisy	post
<i>Garuga floribunda</i> Decne.	lumber
<i>Gnetom gnemon</i>	food
<i>Grewia eriocarpa</i> Juss.	lumber
<i>Guioa acuminata</i> Radlk.	edible fruit
<i>Hopea philippinensis</i> Dyer	firewood
<i>Hopea plagata</i> (Blanco) Vidal	round timber
<i>Kokoona ochracea</i>	bark excellent fuel
<i>Licuala spinosa</i>	ornamental
<i>Leucosyke ovalifolia</i> C.B. Rob.	fence post
<i>Litsea philippinensis</i> Merr.	lumber (round post)
<i>Mangifera monandra</i> Merr.	food for man and animals
<i>Morinda citrifolia</i> L.	firewood
Most Aracea species	firewood
<i>Myristica philippinensis</i>	lumber
<i>Myristica</i> sp.	pole timber
<i>Myristica</i> sp.	medicinal
<i>N. ramboutan-ake</i> (Labill.) Leenh.	Lumber, post, fruit edible
<i>Nephelium</i> sp.	fruits edible
<i>Octomeles sumatrana</i> Miq.	fruits eaten by bats
	flower source of nectar
<i>Oncosperma tigillarium</i>	flooring
<i>Pangium edule</i> Reinw. ex. Blume	fruits eaten (like coconut)
<i>Palaquium luzoniense</i> (Fernandez-Villlar) Vidal	lumber, pole timber
<i>Parkia roxburghii</i> G. Don	lumber, round timber
<i>Pisonia umbellitera</i> (J.R. & G. Fost.) Seem.	for paste (maya)
<i>Pongamia pinnata</i> (L.) Meer.	lumber, medicinal (scratch)
<i>Pouteria macrantha</i> (Merr.) Baehni	round timber
<i>Radermachera biternata</i> Merr.	lampong
<i>Sandoricum koejape</i>	food, for boat, lumber
<i>Semecapus cuneiformis</i> Blanco	food for man and animals
<i>Sterculia oblongata</i> R. Br.	round timber
<i>Symplocos villarii</i> Vidal	firewood
<i>Syzygium costulatum</i> (C.B. Rob.) Merr.	lumber
<i>Syzygium hutchinsonii</i> (Merr.) Merr.	lumber
<i>Syzygium</i> spp.	lumber
<i>Syzygium vaccinioides</i> (Elm.) Merr.	pole timber
<i>Syzygium xanthophyllum</i> (C.B. Rob.) Merr.	lumber
<i>Tarenna bakeri</i> (Mar.) Brem.	lumber
<i>Terminalia calamansanai</i> (Blanco) Rolfe	lumber, pole timber
	for making guitar handle

Table 5. Cont'd.

<i>Terminalia foetidissima</i> Griffith	lumber
<i>Terminalia microcarpa</i> Decne	lumber, firewood
<i>Trema cannabina</i> Lour.	pole timber, fiber
<i>Trichospermum discolor</i> Elmer	flooring, fiber
<i>Trichospermum eriopodum</i> (Turcz.) Merr.	fiber
<i>Trigonostemon angustifolius</i> Merr.	pole, timber
<i>Turraea pubescens</i> Hell.	bangka
<i>Willughbeia sarawacensis</i>	food for man and animals

materials for handicraft and furniture-making industry, The Pala'wan tribe is also dependent of rattan for ties when they build their shelter. Economically important fruit trees, *i.e.* 2 species of *Artocarpus*, 5 species of *Nephelium*, a species of *Garcinia*, *Persea* and *Durio*, *Mangifera monandra* and tabo (*Willughbeia sarawacensis*) were also recorded in the area. Accordingly, these plants are important sources of food to the Pala'wan tribe especially during lean months. In addition, *Koompasia excelsa* (Becc.) Taub. is an important nesting place of important native birds like blue-naped parrots, talking mynah and Philippine cockatoo.

According to Madulid (2002), the plants of Palawan constitute one of the highest genetic resources in the country, which include high quality timber trees and other forest products such as rattan, gums and resins, fiber, wild fruits and vegetables, food plants, medicinal plants and plants for ornamental and industrial uses.

During the survey, *Dipterocarpus grandiflorus* is the most abundant tree species encountered in the periphery of Mantalingahan Range, except in Inogbong, Bataraza. The abundance of this species in most sampling sites tells that the lowland rainforests therein are Dipterocarp forests based on the 6 forest types adopted by DENR. The Philippines was in fact the number one supplier of lumber to Japan in the 1970s. The dwindling of dipterocarp forest in the Philippines is in fact due to logging of these species. Aside from *D. grandiflorus*, 15 other commercial Philippine-wood tree species are found in the mountain.

Even if the method used in assessing the flora on the periphery of Mantalingahan Range is very rapid, the results demonstrate that the mountain range is rich in flora with many endemic, rare, narrow range species, and many economically important plant species.

This mountain can be considered, therefore as one of the most important site in Palawan corridor for conservation so the best and strictest measures should be applied to prevent any degradation of such a rich genetic resource.

LITERATURE CITED

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