

## A floristic study in Trusmadi-Sinua, Keningau, Sabah

J.B. Sugau\* & A.M. Andi Maryani

Forest Research Centre, Sabah Forestry Department, P.O. Box 1407, 90715 Sandakan, Sabah, Malaysia

\*Author for correspondence. Email: john.sugau@sabah.gov.my

**Abstract.** A floristic study was conducted as part of an expedition to Trusmadi-Sinua, Keningau, Sabah from 25th to 30th October 2011. Seven transect plots of 0.025 ha (5 m x 50 m) were established at different altitudes and forest conditions. All vascular plants and trees  $\geq 10$  cm diameter at breast height (dbh) were recorded from these plots. A total of 664 taxa of vascular plants was recorded from the expedition, 286 were new additional taxa for Trus Madi Forest Reserve (Class II) and Trusmadi Forest Reserve (Class I). Some of the most speciose families were Rubiaceae, Lauraceae, Myrtaceae, Fagaceae, Phyllanthaceae, Euphorbiaceae, Moraceae, Ericaceae, Meliaceae, Malvaceae, Melastomataceae, Annonaceae, Fabaceae, Dipterocarpaceae, Primulaceae, Pentaphragmaceae, Poaceae and Arecaceae. Among the largest genera were *Syzygium*, *Lithocarpus*, *Litsea*, *Ficus*, *Rhododendron*, *Aglaia*, *Garcinia*, *Shorea*, *Macaranga*, *Magnolia*. Importance value index (IVI) was calculated to determine tree species importance for each transect plot. Of the 664 taxa recorded, 134 taxa are endemic to Borneo, including 28 to the state of Sabah. During the study, two taxa, namely *Fagraea tuyukii* (Gentianaceae) and *Nepenthes macrophylla* (Nepenthaceae) were found to be endemic to Trusmadi Forest Reserve (FR). There were eight plant species listed as vulnerable (VU), five as endangered (EN) and another five as critically endangered (CR) according to the IUCN Red List.

**Keywords:** endemic flora, IUCN Red List, Mt Trus Madi, Trusmadi Forest Reserve

### INTRODUCTION

This paper reports on botanical inventories in the eastern portions of the Forest Management Unit 10 (FMU 10) or Trusmadi FR. FMU 10 covers an area of 75,804 ha of Trusmadi FR and Sungai Kiluyu FR, which is part of the larger Trus Madi Forest Reserve that extends over a total area of 175,897 ha.

Recent reports on the flora of Trusmadi FR could be found in Kulip (2006), as well as Andi Maryani *et al.* (2011), Julenah *et al.* (2011), Kulip & Lapongan (2011), Kulip (2011) and Sugau (2011), all in Rahim *et al.* (2011). Sugau (2011) recorded a total of 159 families, 405 genera, and 1,126 of vascular plant species. The checklist recognizes 10 species of lycophytes

(fern allies), 85 species of ferns, 15 species of gymnosperms and 1,016 species of angiosperms. There are also records of collection near Kg. Sinua in 1971 and 1987 by Madani and Dr Willem Meijer respectively.

A study was conducted to get more information on plant diversity and their conservation status, especially from the eastern part of the reserve. Tree species composition in different altitudes was also studied to determine the forest health. The additional information gathered could then be used for forest management purposes of the FMU 10.

## **MATERIALS & METHODS**

### **Study site**

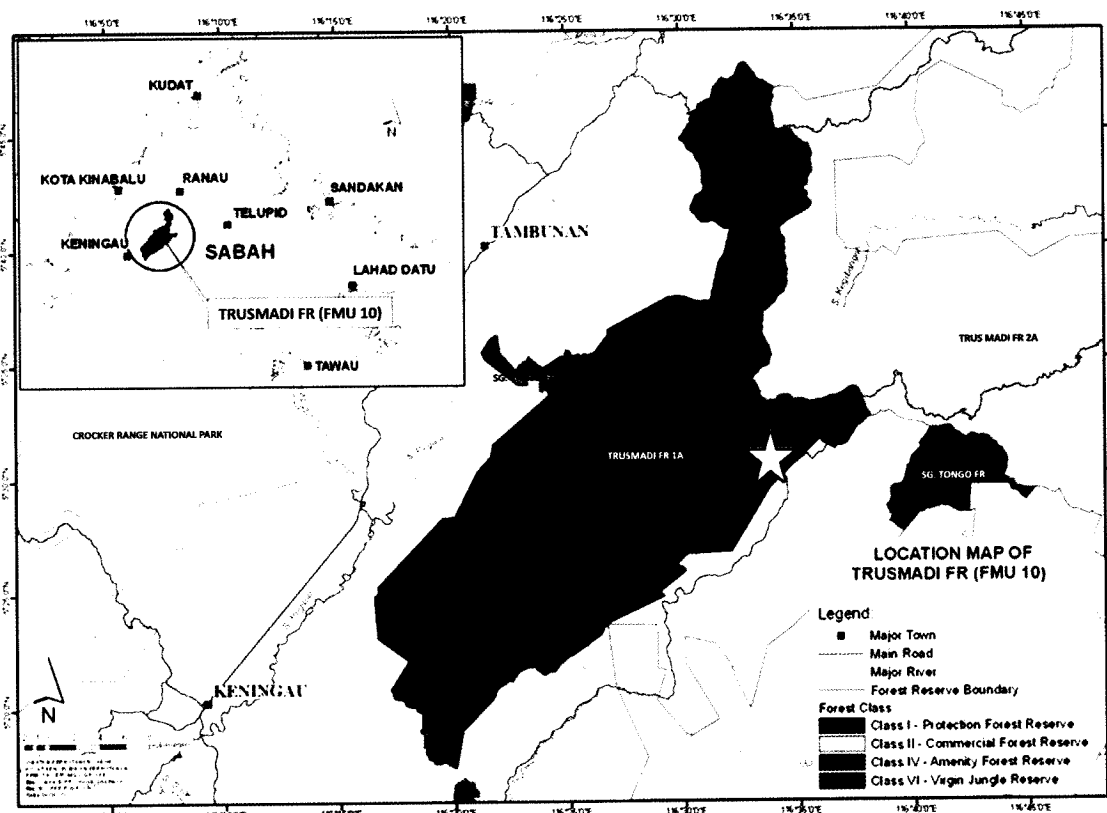
The study site, Trusmadi-Sinua (TMS) was along the trail about 12 km long from the expedition base camp (05° 30.219' N, 116° 34.402' E) at 2,200 f a.s.l. near Kg. Sinua to the summit (Figure 1). The first 6–7 km from the base camp was quite flat with slightly undulating and rolling terrain with signs of logged-over forests, reflecting past history of timber harvesting as recent as 10–15 years ago. Most of the forests in lower parts to about 4,000 f of TMS were disturbed except for the forests on ridges and steep slopes. However, it was slowly regenerating as there were some remnants of mother trees of the climax species. The slopes became steeper near the peaks. The highest peak was Mt Trus Madi at 2,642 m (8,668 f) above sea level. The climate was cool at the base camp to very cold between 16 and 8°C near the cloud zone and summit. The soils of Trusmadi FR were mainly of tertiary formation of mudstone, shale and argillite with subordinate beds of quartzite, sandstone, siltstone and limestone breccias (Acres 1972). Three forest types could be recognized along the trail: disturbed upland mixed dipterocarp forest near the base camp, lower montane forest, and upper montane forest.

### **Sampling and plant identification**

Prior to field survey, a satellite image of the area was obtained for planning purposes. This map was acquired from the Natural Forest Programme (GIS unit) of the Forest Research Centre (FRC), Sabah Forestry Department. With this map strategic areas of interest were determined. Field work was conducted from 25th to 30th October 2011.

All vascular plants and trees  $\geq 10$  cm diameter at breast height (dbh) were recorded from seven 0.025 ha (5 m x 50 m) transect plots (Table 1), which were established at different altitudes and forest conditions. Plant specimens with reproductive parts were collected (including voucher specimens) and deposited at the Sandakan Herbarium (SAN). Collecting and preserving plant specimens followed Bridson & Forman (1992). The common plant species were identified directly to species level in the field by means of their distinctive field characteristics. For those that could not be readily identified, voucher specimens were collected for subsequent determination

at SAN. The voucher specimen collections were oven-dried at 45–50°C for several days before determining their identities. All specimens were sorted according to morphospecies and attempted for identification to species level by cross-referencing with the existing specimens in the herbarium and related flora references (e.g. Soepadmo & Wong 1995, Soepadmo & Saw 2000, Soepadmo *et al.* 1996, 2002, 2004, 2007, 2011). Plant classification of the angiosperm group was based on Stevens (2001 onwards). These flora data were compiled with existing data derived from plant databases, e.g. Botanical Research and Herbarium Management System (BRAHMS) collected within the reserve. Relevant literature was also consulted to determine the conservation status of the plants.



**Figure 1.** Location map of Trusmadi FR (FMU 10). The expedition site, Trusmadi-Sinua (TMS) is marked with a white star.

### Data analysis

Importance value index (IVI) was calculated to determine species importance (Brower & Zar 1977). Importance value (IV) of each species for each transect plot was calculated as the average of relative density and relative dominance based on basal area.

Relative density =  $n_i/N$  ( $n_i$ : number of stems of the  $i$  th species;  $N$ : the total number of stems of all species)

Relative basal area =  $(\sum b_i)/B$  ( $B$ : total basal area of all species;  $b_i$ : total basal area of species  $i$ )

**Table 1.** Plot numbers and their corresponding geographical position points for the botanical sampling in Trusmadi-Sinua.

Plot	GPS reading (WGS 75)	Altitude (f)	Forest condition
1	05° 30.648'; 116° 34.120'	2,500	Disturbed upland mdf
2	05° 31.044'; 116° 33.806'	3,000	Undisturbed lower montane forest
3	05° 32.879'; 116° 31.837'	7,025	Undisturbed montane forest
4	05° 32.480'; 116° 32.310'	6,013	Undisturbed montane forest
5	05° 32.368'; 116° 32.820'	5,000	Undisturbed lower montane
6	05° 32.229'; 116° 33.095'	4,000	Lower montane, broken canopy
7	05° 30.458'; 116° 34.30'	2,285	Old secondary

## RESULTS & DISCUSSION

### Plant diversity

A total of 664 taxa was recorded from the expedition as in Table 2. There were 286 new additional taxa/species records for Trus Madi and Trusmadi FR [compared with the latest species list (Sugau 2011)].

**Table 2.** Number of plant groups from Trusmadi-Sinua, Sabah, Malaysia.

Plant group	No. of families	No. of taxa
Lycophytes	2	5
Ferns	19	51
Gymnosperms	3	7
Angiosperms:		
Monocotyledons	16	67
Dicotyledons	93	534
<b>Total</b>	<b>133</b>	<b>664</b>

Some of the most speciose families, with more than 10 taxa were Rubiaceae (42), Lauraceae (31), Myrtaceae (27), Fagaceae (22), Phyllanthaceae (21), Euphorbiaceae (19), Moraceae (18), Ericaceae (17), Meliaceae (17), Malvaceae (15), Melastomataceae (15), Annonaceae (14), Fabaceae (14), Dipterocarpaceae (13), Primulaceae (13), Pentaphragmaceae (12), Poaceae (12) and Araceae (11). Among the largest genera were *Syzygium*, *Lithocarpus*, *Litsea*, *Ficus*, *Rhododendron*, *Aglaia*, *Garcinia*, *Shorea*, *Macaranga*, *Magnolia* (Appendix 1).

### Tree species abundance/ Dominance

The three most dominant trees (with the highest IVI) in each plot are shown in Table 3. Plots were chosen based on the best forest conditions for the respective altitudes.

**Table 3.** The three most dominant trees with the highest IVI in Plot 1 to Plot 7.

Plot	a.s.l.	Tree
1	2,500 f	<i>Ilex cissoidea</i> (Aquifoliaceae) <i>Vernonia arborea</i> (Asteraceae) <i>Dialium cf. indum</i> (Fabaceae)
2	3,000 f	<i>Parashorea malaanonan</i> (Dipterocarpaceae) <i>Pterospermum javanicum</i> (Malvaceae) <i>Pternandra</i> sp. (Melastomataceae)
3	7,025 f	<i>Quercus argentata</i> (Fagaceae) <i>Engelhardtia serrata</i> (Juglandaceae) <i>Castanopsis foxworthyi</i> (Fagaceae)
4	6,013 f	<i>Tristaniopsis bilocularis</i> (Myrtaceae) <i>Garcinia bancana</i> (Clusiaceae) <i>Tristaniopsis kinabaluensis</i> (Myrtaceae)
5	5,000 f	<i>Syzygium</i> sp.6 (Myrtaceae) <i>Garcinia forbesii</i> (Clusiaceae) <i>Tristaniopsis bilocularis</i> (Myrtaceae)
6	4,000 f	<i>Adinandra myrioneura</i> (Pentaphragmaceae) <i>Nephelium ramboutan-ake</i> (Sapindaceae) <i>Syzygium barringtonioides</i> (Myrtaceae)
7	2,285 f	<i>Macaranga pearsonii</i> (Euphorbiaceae) <i>Ilex cissoidea</i> (Aquifoliaceae) <i>Zanthoxylum myriacanthum</i> (Rutaceae)

### Endemism

Endemism is the ecological state of being unique to a defined geographic location, such as an island, nation or other defined zone, or habitat type; organisms that are indigenous to a place are not endemic to it if they are also found elsewhere. The extreme opposite of endemism is

cosmopolitan distribution. Endemics can easily become endangered or extinct if their restricted habitat changes, particularly but not only due to human actions, including the introduction of new organisms.

Of the 664 taxa recorded, 134 taxa are endemic to Borneo (indicated in bold in Appendix 1), including 28 to the state of Sabah (indicated in underlined bold in Appendix 1). During the study, two, namely *Fagraea tuyukii* (Gentianaceae) and *Nepenthes macrophylla* (Nepenthaceae) were found to be endemic to Trusmadi FR.

### **The IUCN Red List**

The IUCN Red List Categories and Criteria were designed for global taxon assessments. In this study, eight plant species are listed as vulnerable (VU), namely *Agathis lenticula*, *Aglaia laxiflora*, *Aquilaria malaccensis*, *Durio acutifolius*, *Gonystylus keithii*, *Melicope subunifoliolata*, *Pleiospermium longisepalum* and *Nepenthes lowii*; five endangered (EN), namely *Podocarpus laubensfelsii*, *Shorea argentifolia*, *Shorea faguetiana*, *Shorea leprosula* and *Shorea platyclados* and five critically endangered (CR), namely *Nepenthes macrophylla*, *Hopea nervosa*, *Hopea sangal*, *Parashorea malaanonan* and *Shorea johorensis* (Appendix 1).

### **ACKNOWLEDGEMENTS**

We thank the FMU 10 Management Planning Core Team, and Biodiversity Unit of the Forest Research Centre (FRC) for logistic preparation, also the supporting staff of Systematic Botany Section, FRC, for their hard work in the field, and porters from Kg. Sinua for help in transporting our subsistence and field equipment to the satellite camp.

### **REFERENCES**

- Acres, B.D. (1972). The ascent of Trusmadi. *Sabah Society Journal* 5: 365-370.
- Andi Maryani, A.M., Idris, M.S. & Gumbilil, M. (2011). Preliminary survey on ferns and lycophytes in north western part of Trus Madi Forest Reserve. (In) Rahim, S., Anuar, M. & Chey, V.K. (eds.), *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. Pp. 157-176.
- Bridson, D. & Forman, L. (eds.). (1992). *The herbarium handbook (revised edition)*. Royal Botanic Gardens, Kew, UK. 303 pp.

Brower, J.E. & Zar, J.H. (1977). *Field and laboratory methods of general ecology*. Wm. C. Brown Co. Publishers, Dubuque, Iowa. 194 pp.

Julenah, A.N., Indim, D., Mohamad Hafiz, A.T., Noor Azrin, A.R., Siti Sarayati, A.R., Lyena, W.Z.A., Kulip, J., Sugau, J.B., Ahmad Rohi, G., Aishah, A. & Ahmad Sazali, H. (2011). Simaroubaceae of Sabah: the next Tongkat Ali? (In) Rahim, S., Anuar, M. & Chey, V.K. (eds.), *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. Pp. 133-149.

Kulip, J. (2006). Plant diversity in Trus Madi. *Sepilok Bulletin* 4: 1-23.

Kulip, J. (2011). A preliminary survey on the present status of *Nepenthes x trusmadiensis* population and distribution in Mount Trus Madi (FMU 10). (In) Rahim, S., Anuar, M. & Chey, V.K. (eds.), *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. Pp. 115-122.

Kulip, J. & Lapongan, J. (2011). A survey on the medicinal plants in FMU 10: Tambunan and Keningau districts. (In) Rahim, S., Anuar, M. & Chey, V.K. (eds.), *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. Pp. 177-187.

Rahim, S., Anuar, M. & Chey, V.K. (eds.). (2011). *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. 235 pp.

Soepadmo, E. & Saw, L.G. (eds.). (2000). *Tree flora of Sabah and Sarawak. Vol. 3*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 511 pp.

Soepadmo, E. & Wong, K.M. (eds.). (1995). *Tree flora of Sabah and Sarawak Vol. 1*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 513 pp.

Soepadmo, E., Wong, K.M. & Saw, L.G. (eds.). (1996). *Tree flora of Sabah and Sarawak Vol. 2*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 443 pp.

Soepadmo, E., Saw, L.G. & Chung, R.C.K. (eds.). (2002). *Tree flora of Sabah and Sarawak Vol. 4*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 388 pp.

Soepadmo, E., Saw, L.G. & Chung, R.C.K. (eds.). (2004). *Tree flora of Sabah and Sarawak Vol. 5*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 528 pp.

Soepadmo, E., Saw, L.G., Chung, R.C.K. & Kiew, R. (eds.). (2007). *Tree flora of Sabah and Sarawak. Vol. 6*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 335 pp.

Soepadmo, E., Saw, L.G., Chung, R.C.K. & Kiew, R. (eds.). (2011). *Tree flora of Sabah and Sarawak. Vol. 7*. Sabah Forestry Department, Forest Research Institute Malaysia & Sarawak Forestry Department. 450 pp.

Stevens, P.F. (2001 onwards). *Angiosperm phylogeny website*. Missouri Botanical Garden.

Sugau, J.B. (2011). Preliminary checklist of vascular plants of Trus Madi Forest Reserve. (In) Rahim, S., Anuar, M. & Chey, V.K. (eds.), *Conservation of biodiversity in Trus Madi Forest Reserve*. Sabah Forestry Department, Sandakan. Pp. 71-93.



Appendix 1. List of vascular plants recorded from Trusmadi-Sinua.

Species	Family	H	IUCN Red List 2013
<b>LYCOPHYTES</b>			
<i>Huperzia phlegmaria</i> (L.) Rothm. ^	Lycopodiaceae	1	NE
<i>Lycopodiella cernua</i> (L.) Pic.Serm. ^	Lycopodiaceae	1	NE
<i>Selaginella argentea</i> (Wall. ex Hook. & Grev.) Spring	Selaginellaceae	1	NE
<i>Selaginella caulescens</i> (Wall. ex Hook. & Grev.) Spring	Selaginellaceae	1	NE
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	Selaginellaceae	1	NE
<b>FERNS</b>			
<i>Asplenium acutiusculum</i> Blume ^	Aspleniaceae	f	NE
<i>Asplenium nidus</i> L. ^	Aspleniaceae	f	NE
<i>Asplenium pellucidum</i> Lam.	Aspleniaceae	f	NE
<i>Diplazium cordifolium</i> Blume ^	Athyriaceae	f	NE
<i>Diplazium crenatoserratum</i> (Blume) T.Moore	Athyriaceae	f	NE
<i>Diplazium esculentum</i> (Retz.) Sw. ^	Athyriaceae	f	LC
<i>Blechnum orientale</i> L. ^	Blechnaceae	f	NE
<i>Stenochlaena palustris</i> (Burm.f.) Bedd.	Blechnaceae	f	NE
<i>Cibotium arachnoideum</i> (C.Chr.) Holttum ^	Cibotiaceae	f	NE
<i>Cyathea contaminans</i> (Wall. ex Hook.) Copel. ^	Cyatheaceae	f	NE
<i>Cyathea latebrosa</i> (Wall. ex Hook.) Copel. ^	Cyatheaceae	f	NE
<i>Cyathea polypoda</i> Baker	Cyatheaceae	f	NE
<i>Davallia denticulata</i> (Burm.f.) Mett. ex Kuhn	Davalliaceae	f	NE
<i>Dipteris conjugata</i> Reinw. ^	Dipteridaceae	f	NE
<b><i>Dipteris nieuwenhuisii</i> Christ</b>	Dipteridaceae	f	NE
<i>Polystichum prolificans</i> Alderw. ^	Dryopteridaceae	f	NE
<i>Dicranopteris curranii</i> Copel. ^	Gleicheniaceae	f	NE

IUCN Red List  
2013

Species	Family	H	IUCN Red List 2013
<i>Dicranopteris linearis</i> (Burm.f.) Underw. ^	Gleicheniaceae	f	NE
<i>Trichomanes contiguum</i> G.Forst. ^	Hymenophyllaceae	f	NE
<i>Didymochlaena truncatula</i> (Sw.) J.Sm. ^	Hypodematiaceae	f	LC
<i>Lindsaea parallelogramma</i> Alderw.	Lindsaeaceae	f	NE
<i>Sphenomeris chinensis</i> (L.) Maxon ^	Lindsaeaceae	f	NE
<i>Lygodium microphyllum</i> (Cav.) R.Br. ^	Lygodiaceae	f	NE
<i>Nephrolepis persicifolia</i> Christ	Nephrolepidaceae	f	NE
<i>Oleandra pistillaris</i> (Sw.) C.Chr. ^	Oleandraceae	f	NE
<i>Crypsinus trilobus</i> (Houtt.) Copel. ^	Polyodiaceae	f	NE
<i>Drynaria sparsisora</i> (Desv.) T.Moore	Polyodiaceae	f	NE
<i>Goniophlebium persicifolium</i> (Desv.) Bedd.	Polyodiaceae	f	NE
<i>Lepisorus longifolius</i> (Blume) Holttum ^	Polyodiaceae	f	NE
<i>Loxogramme avenia</i> C.Presl	Polyodiaceae	f	NE
<i>Polypodium tainiatum</i> Sw. ^	Polyodiaceae	f	NE
<i>Antrophyum callifolium</i> Blume ^	Pteridaceae	f	NE
<i>Pityrogramma calomelanos</i> (L.) Link ^	Pteridaceae	f	NE
<i>Pteris biaurita</i> L. ^	Pteridaceae	f	NE
<i>Pteris ensiformis</i> Burm.f.	Pteridaceae	f	NE
<i>Vittaria zosterifolia</i> Willd.	Pteridaceae	f	NE
<i>Pleocnemia conjugata</i> (Blume) C.Presl	Tectariaceae	f	NE
<i>Pleocnemia olivacea</i> (Copel.) Holttum	Tectariaceae	f	NE
<i>Tectaria angulata</i> (Willd.) Copel.	Tectariaceae	f	NE
<i>Tectaria beccariana</i> (Ces.) C.Chr.	Tectariaceae	f	NE
<i>Tectaria meyanthidis</i> (C.Presl) Copel.	Tectariaceae	f	NE
<i>Tectaria singaporiana</i> (Wall. ex Hook. & Grev.) Ching	Tectariaceae	f	NE
<i>Coryphopteris gymnopoda</i> var. <i>gymnopoda</i> (Baker) Holttum	Thelypteridaceae	f	NE

Species	Family	H	2013
<i>Cyclosorus aridus</i> (D.Don) Tagawa	Thelypteridaceae	f	NE
<i>Cyclosorus asperus</i> B.K.Nayar & S.Kaur	Thelypteridaceae	f	LC
<i>Cyclosorus heterocarpus</i> (Blume) Ching <sup>^</sup>	Thelypteridaceae	f	NE
<i>Cyclosorus perganduliferus</i> (Alderw.) Ching <sup>^</sup>	Thelypteridaceae	f	NE
<i>Cyclosorus polycarpus</i> (Blume) Holttum <sup>^</sup>	Thelypteridaceae	f	NE
<i>Cyclosorus truncatus</i> (Poir.) Farw. <sup>^</sup>	Thelypteridaceae	f	LC
<i>Thelypteris dayi</i> B.K.Nayar & S.Kaur <sup>^</sup>	Thelypteridaceae	f	LC
<i>Thelypteris urophylla</i> (Mett.) K.Iwats. var. <i>nitida</i> (Holttum) K.Iwatsuki <sup>^</sup>	Thelypteridaceae	f	NE
<b>GYMNOSPERMS</b>			
<i>Agathis lenticula</i> de Laub. <sup>^</sup>	Araucariaceae	t	VU
<i>Gnetum diminutum</i> Markgr. <sup>^</sup>	Gnetaceae	c	NT
<i>Dacrycarpus imbricatus</i> (Blume) de Laub. var. <i>patulus</i> de Laub. <sup>^</sup>	Podocarpaceae	t	NE
<i>Dacrydium xanthandrum</i> Pilg. <sup>^</sup>	Podocarpaceae	t	LC
<i>Falcatifolium faleiforme</i> (Parl.) de Laub. <sup>^</sup>	Podocarpaceae	t	LC
<i>Phyllocladus hypophyllum</i> Hook.f. <sup>^</sup>	Podocarpaceae	t	LC
<i>Podocarpus laubenselii</i> Tiong* <sup>^</sup>	Podocarpaceae	t	EN
<b>ANGIOSPERMS (MONOCOTYLEDONS)</b>			
<i>Pothos barberianus</i> Schott <sup>^</sup>	Araceae	h	NE
<i>Schismatoglottis trifasciata</i> Engl.	Araceae	h	NE
<i>Scindapsus coriaceus</i> Engl.	Araceae	h	NE
<i>Scindapsus pictus</i> Hassk.	Araceae	h	NE
<i>Areca kinabaluensis</i> Furtado <sup>^</sup>	Areaceae	pt	NE
<i>Areca minuta</i> Scheff. <sup>^</sup>	Areaceae	pt	NE
<i>Arenga undulatifolia</i> Becc.* <sup>^</sup>	Areaceae	pt	NE

IUCN Red List

Species	Family	H	2013
<i>Calamus caesiatus</i> Blume	Arecaceae	c	NE
<b><i>Calamus gonospermus</i> Becc.</b>	Arecaceae	c	NE
<b><i>Calamus zonatus</i> Becc.</b>	Arecaceae	c	NE
<b><i>Daemonorops elongata</i> Blume</b>	Arecaceae	c	NE
<i>Daemonorops sabut</i> Becc.^	Arecaceae	c	NE
<b><i>Daemonorops sparsiflora</i> Becc.</b>	Arecaceae	c	NE
<i>Licuala rubiginosa</i> Saw	Arecaceae	pt	NE
<i>Plectocomia mulleri</i> Blume	Arecaceae	c	NE
<i>Dracaena angustifolia</i> (Medik.) Roxb.^	Asparagaceae	s	NE
<i>Peltosanthus tetra</i> Andrews	Asparagaceae	h	NE
<i>Amischotolype griffithii</i> (C.B. Clarke) I.M. Turner^	Commelinaceae	h	NE
<i>Amischotolype mollissima</i> (Blume) Hassk.^	Commelinaceae	h	NE
<i>Cheilocostus globosus</i> (Blume) C.D. Specht^	Costaceae	h	NE
<i>Cheilocostus speciosus</i> (J.Koenig) C.D. Specht ^	Costaceae	h	NE
<i>Carex fusiformis</i> var. <i>fusiformis</i> Nees^	Cyperaceae	sd	NE
<i>Carex indica</i> var. <i>indica</i> L.	Cyperaceae	sd	NE
<i>Scleria ciliaris</i> Nees	Cyperaceae	sd	NE
<i>Scleria serobiculata</i> subsp. <i>serobiculata</i> Nees & Meyen	Cyperaceae	sd	NE
<i>Dioscorea flabellifolia</i> Prain & Burkill^	Dioscoreaceae	c	NE
<i>Hanguana malayana</i> (Jack) Merr.^	Hanguanaceae	s	LC
<i>Molineria latifolia</i> (Dryand. ex W.T.Aiton) Herb. ex Kurz^	Hypoxidaceae	s	NE
<i>Donax canifformis</i> (G.Forst.) K. Schum.^	Marantaceae	s	NE
<b><i>Phacelophrynium aurantium</i> Clausager &amp; Borchs.</b>	Marantaceae	s	NE
<i>Phrynium pubimerve</i> Blume^	Marantaceae	s	NE
<i>Arundina graminifolia</i> (D. Don) Hochr.*^	Orchidaceae	h	NE
<i>Ascidteria pseudocymbiformis</i> (J.J. Wood) J.J. Wood*	Orchidaceae	h	NE

IUCN Red List

Species	Family	H	2013
<i>Bromheadia finlaysoniana</i> (Lindl.) Miq.*	Orchidaceae	h	NE
<i>Coelogyne cuprea</i> var. <i>cuprea</i> H. Wendl. & Kraenzl.*	Orchidaceae	h	NE
<i>Coelogyne radioferens</i> Ames & C.Schweinf.*	Orchidaceae	h	NE
<i>Coelogyne rhabdobleuon</i> Schltr.*	Orchidaceae	h	NE
<i>Dendrochilum kingii</i> var. <i>kingii</i> (Hook.f.) J.J.Sm.*	Orchidaceae	h	NE
<i>Spathoglottis aurea</i> Lindl.*	Orchidaceae	h	NE
<i>Tainia scapigera</i> (Hook.f.) J.J.Sm.*	Orchidaceae	h	NE
<i>Trichotosia ferox</i> Blume*	Orchidaceae	h	NE
<i>Pandanus affinis</i> Kurz	Pandanaceae	s	NE
<i>Pandanus brevistylis</i> H.St.John ex B.C.Stone	Pandanaceae	s	NE
<i>Pandanus pectinatus</i> Martelli^	Pandanaceae	s	NE
<i>Axonopus compressus</i> (Sw.) P.Beauv.^	Poaceae	g	NE
<i>Bambusa multiplax</i> (Lour.) Raeusch. ex Schult.	Poaceae	g	NE
<i>Cenothea lappacea</i> (L.) Desv.	Poaceae	g	NE
<i>Dinochloa obclavata</i> S.Dransf.^	Poaceae	g	NE
<i>Dinochloa trichogona</i> S.Dransf.	Poaceae	g	NE
<i>Gigantochloa levis</i> (Blanco) Merr.	Poaceae	g	NE
<i>Imperata cylindrica</i> (L.) Raeusch.^	Poaceae	g	NE
<i>Mischanthus floridulus</i> (Labill.) Warb. ex K.Schum. & Lauterb.	Poaceae	g	NE
<i>Paspalum conjugatum</i> P.J.Bergius^	Poaceae	g	NE
<i>Paspalum paniculatum</i> L.	Poaceae	g	NE
<i>Scrotochloa urceolata</i> (Roxb.) Judz.	Poaceae	g	NE
<i>Thysanolaena maxima</i> (Roxb.) Kuntze^	Poaceae	g	NE
<i>Smilax woodii</i> Merr.^	Smilacaceae	c	NE
<i>Dianella ensifolia</i> (L.) DC.^	Xanthorrhoeaceae	s	NE
<i>Alpinia havilandii</i> K.Schum.*^	Zingiberaceae	h	NE

Species	Family	H	IUCN Red List 2013
<i>Alpinia ligulata</i> K.Schum.*^	Zingiberaceae	h	NE
<i>Alpinia nieuwenhuizii</i> Valetton*^	Zingiberaceae	h	NE
<i>Amomum laxisquamosum</i> K.Schum.*	Zingiberaceae	h	NE
<i>Etilingera elatior</i> (Jack) R.M.Sm.*^	Zingiberaceae	h	NE
<i>Globba atrosanguinea</i> var. <i>atrosanguinea</i> Teijsm. & Binn.*^	Zingiberaceae	h	NE
<i>Globba pendula</i> Roxb.*^	Zingiberaceae	h	NE
<i>Hedychium cylindricum</i> Ridl*^	Zingiberaceae	h	NE
<i>Plagiostachys</i> cf. <i>breviramosa</i> Cowley*	Zingiberaceae	h	NE
<b>ANGIOSPERMS (DICOTYLEDONS)</b>			
<i>Hydnocarpus woodii</i> Merr.^	Achariaceae	t	NE
<i>Saurauia ferox</i> Korth.^	Actinidiaceae	t	NE
<i>Viburnum clemensae</i> Kern^	Adoxaceae	t	NE
<i>Viburnum vernicosum</i> Gibbs	Adoxaceae	j	NE
<i>Camptosperma auriculatum</i> (Blume) Hook.f.^	Anacardiaceae	t	NE
<i>Dracontomelon dao</i> (Blanco) Merr. & Rolfe^	Anacardiaceae	t	NE
<i>Pentaspadon motleyi</i> Hook.f.^	Anacardiaceae	t	DD
<i>Artabotrys suaveolens</i> Blume^	Annonaceae	c	NE
<b><i>Fissistigma kinabaluense</i> (Stapf) Merrill</b>	Annonaceae	c	NE
<i>Fissistigma manubriatum</i> (Hook.f. & Thomson) Merrill	Annonaceae	c	NE
<b><i>Fissistigma multivenium</i> (Diels) Turner</b>	Annonaceae	c	NE
<i>Friesodielsia glauca</i> (Hook.f. & Thomson) van Steenis^	Annonaceae	c	NE
<b><i>Goniothalamus dolichocarpus</i> Merr.^</b>	Annonaceae	c	NE
<i>Mitrephora korthalsiana</i> Miq.^	Annonaceae	t	NE
<b><i>Orophea myriantha</i> Merr.^</b>	Annonaceae	t	NE
<i>Polyalthia hookeriana</i> King^	Annonaceae	t	LC

Species	Family	H	2013
<i>Polyalthia igniflora</i> D.M.Johnson <sup>^</sup>	Annonaceae	t	NE
<i>Polyalthia lateriflora</i> (Blume) Kurz <sup>^</sup>	Annonaceae	t	NE
<i>Polyalthia rumphii</i> (Blume ex Hensch.) Merr.	Annonaceae	t	NE
<b><i>Woodiellantha sympetala</i> (Merr.) Rauschert<sup>^</sup></b>	Annonaceae	t	NE
<i>Xylophia fusca</i> Maingay ex Hooker & Thomson <sup>^</sup>	Annonaceae	t	NE
<i>Eryngium foetidum</i> L. <sup>^</sup>	Apiaceae	h	NE
<i>Alstonia angustifolia</i> Wall. ex A.DC. <sup>^</sup>	Apocynaceae	t	LC
<b><i>Alyxia reinwardtii</i> Blume<sup>^</sup></b>	Apocynaceae	c	NE
<i>Rauwolfia verticillata</i> (Lour.) Baill. <sup>^</sup>	Apocynaceae	t	NE
<i>Tabernaemontana rostrata</i> Wall. <sup>^</sup>	Apocynaceae	t	NE
<i>Ilex cissoidea</i> Loes. <sup>^</sup>	Aquifoliaceae	t	NE
<i>Ilex havilandii</i> Loes. <sup>^</sup>	Aquifoliaceae	t	NE
<i>Ilex wallichii</i> Hook.f. <sup>^</sup>	Aquifoliaceae	t	NE
<i>Dendropanax borneensis</i> (Philipson) Merr.	Araliaceae	t	NE
<i>Ageratum conyzoides</i> L. <sup>^</sup>	Asteraceae	s	NE
<i>Blumea balsamifera</i> (Linn.) DC. <sup>^</sup>	Asteraceae	s	NE
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob. <sup>^</sup>	Asteraceae	s	NE
<i>Elephantopus tomentosus</i> L. <sup>^</sup>	Asteraceae	s	NE
<i>Vernonia arborea</i> Buch.-Ham. <sup>^</sup>	Asteraceae	t	NE
<b><i>Begonia beryllae</i> Ridl.<sup>^</sup></b>	Begoniaceae	h	NE
<i>Canarium apertum</i> H.J.Lam <sup>^</sup>	Burseraceae	t	LC
<i>Canarium dichotomum</i> (Blume) Miq.	Burseraceae	t	NE
<i>Dacryodes incurvata</i> (Engl.) H.J.Lam <sup>^</sup>	Burseraceae	t	NE
<i>Dacryodes rugosa</i> (Blume) H.J.Lam <sup>^</sup>	Burseraceae	t	NE
indet.	Burseraceae	t	
<i>Santiria laevigata</i> Blume <sup>^</sup>	Burseraceae	t	NE

Species	Family	H	2013
<i>Calophyllum garcinioides</i> P.F.Stevens <sup>^</sup>	Calophyllaceae	t	NE
<i>Calophyllum venulosum</i> Miq. <sup>^</sup>	Calophyllaceae	t	NE
<i>Mesua borneensis</i> P.F.Stevens	Calophyllaceae	t	NE
<i>Lobelia borneensis</i> (Hemsl.) Moeliono <sup>^</sup>	Campanulaceae	s	NE
<i>Gironniera subaequalis</i> Planch. <sup>^</sup>	Cannabaceae	t	NE
<i>Trema tomentosa</i> (Roxb.) Hara <sup>^</sup>	Cannabaceae	t	NE
<i>Bhesa paniculata</i> Arn. <sup>^</sup>	Celastraceae	t	NE
<i>Celastrus monospermoides</i> Loes. <sup>^</sup>	Celastraceae	t	NE
<i>Euonymus castaneifolius</i> Ridl.	Celastraceae	t	NE
<i>Lophopetalum beccarianum</i> Pierre <sup>^</sup>	Celastraceae	t	NE
<i>Ascarina philippinensis</i> C.B.Rob.	Chloranthaceae	t	NE
<i>Chloranthus elatior</i> Link [Syn: <i>Chloranthus erectus</i> (Buch.-Ham.) Verdc.] <sup>^</sup>	Chloranthaceae	s	NE
<i>Sarcandra glabra</i> (Thunb.) Nakai <sup>^</sup>	Chloranthaceae	s	NE
<i>Parinari elmeri</i> Merr.	Chrysobalanaceae	t	NE
<i>Clethra longispicata</i> J.J.Sm. <sup>^</sup>	Clethraceae	t	NE
<b><i>Clethra pachyphylla</i> Merr.</b>	Clethraceae	t	NE
<i>Garcinia andersonii</i> Hook.f. ex T. Anderson	Clusiaceae	t	NE
<i>Garcinia bancana</i> Miq. <sup>^</sup>	Clusiaceae	t	NE
<i>Garcinia coriacea</i> Meijer <sup>^</sup>	Clusiaceae	t	NE
<i>Garcinia forbesii</i> King <sup>^</sup>	Clusiaceae	t	NE
<i>Garcinia penangiana</i> Pierre	Clusiaceae	t	NE
<i>Garcinia ramiflora</i> Meijer	Clusiaceae	t	NE
<i>Garcinia</i> sp.1	Clusiaceae	t	
<i>Garcinia</i> sp.2	Clusiaceae	t	
<i>Garcinia trianaii</i> Pierre <sup>^</sup>	Clusiaceae	t	NE
<b><i>Agelaea trinervis</i> (Llanos) Merr.<sup>^</sup></b>	Connaraceae	c	NE



Species	Family	H	2013
<i>Ellipanthus beccarii</i> Pierre	Connaraceae	c	NE
<i>Erycibe borneensis</i> (Merr.) Hoogland <sup>^</sup>	Convolvulaceae	t	NE
<i>Erycibe glomerata</i> Blume subsp. <i>angustifolia</i> (Hallier f.) Hoogland	Convolvulaceae	c	NE
<i>Jacquemontia tomentella</i> Hallier f. <sup>^</sup>	Convolvulaceae	c	NE
<i>Merremia borneensis</i> Merr. <sup>^</sup>	Convolvulaceae	c	NE
<i>Alangium javanicum</i> var. <i>javanicum</i> (Blume) Wangerin <sup>^</sup>	Cornaceae	t	LC
<i>Alangium javanicum</i> (Blume) Wangerin var. <i>meyeri</i> (Merr.) Berhaman	Cornaceae	t	LC
<i>Crypteronia griffithii</i> C.B. Clarke	Crypteroniaceae	t	NE
<i>Crypteronia paniculata</i> var. <i>paniculata</i> Blume <sup>^</sup>	Crypteroniaceae	t	NE
<i>Ctenolophon</i> cf. <i>parvifolius</i> Oliv. <sup>^</sup>	Ctenolophonaceae	t	NE
<i>Weinmannia fraxinea</i> (D. Don) Miq. <sup>^</sup>	Cunoniaceae	t	NE
<b><i>Daphniphyllum glaucescens</i> Blume subsp. <i>borneense</i> (Stapf) T.C.Huang<sup>^</sup></b>	Daphniphyllaceae	t	NE
<i>Dichapetalum gelonioides</i> (Roxb.) Engl. <sup>^</sup>	Dichapetalaceae	t	NE
<i>Dillenia borneensis</i> Hoogland <sup>^</sup>	Dilleniaceae	t	NE
<i>Tetracera korthalsii</i> Miq. <sup>^</sup>	Dilleniaceae	t	NE
<i>Tetracera scandens</i> (L.) Merr. <sup>^</sup>	Dilleniaceae	t	NE
<i>Perrottetia alpestris</i> (Blume) Loes. <sup>^</sup>	Dipentodontaceae	t	NE
<i>Hopea nervosa</i> King	Dipterocarpaceae	t	CR
<i>Hopea sangal</i> Korth.	Dipterocarpaceae	t	CR
<i>Parashorea malaanonan</i> (Blanco) Merr. <sup>^</sup>	Dipterocarpaceae	t	CR
<i>Shorea argentifolia</i> Symington	Dipterocarpaceae	t	EN
<i>Shorea faguetiana</i> F. Heim <sup>^</sup>	Dipterocarpaceae	t	EN
<i>Shorea johorensis</i> Foxw. <sup>^</sup>	Dipterocarpaceae	t	CR
<i>Shorea laevis</i> Ridl. <sup>^</sup>	Dipterocarpaceae	t	LC
<i>Shorea leprosula</i> Miq. <sup>^</sup>	Dipterocarpaceae	t	EN
<b><i>Shorea monicola</i> P.S.Ashton<sup>^</sup></b>	Dipterocarpaceae	t	NE

IUCN Red List

Species	Family	H	2013
<i>Shorea parvifolia</i> Dyer <sup>^</sup>	Dipterocarpaceae	t	NE
<i>Shorea parvistipulata</i> F.Heim. <sup>^</sup>	Dipterocarpaceae	t	NE
<i>Shorea platyclados</i> Slooten ex Endert <sup>^</sup>	Dipterocarpaceae	t	EN
<i>Vatica umbonata</i> (Hook.f.) Burck	Dipterocarpaceae	t	LC
<i>Elaeocarpus acrantherus</i> Merr. <sup>^</sup>	Elaeocarpaceae	t	NE
<i>Elaeocarpus angustipes</i> Knuth <sup>^</sup>	Elaeocarpaceae	t	NE
<b><i>Elaeocarpus brunnescens</i> Knuth<sup>^</sup></b>	Elaeocarpaceae	t	NE
<i>Elaeocarpus floribundus</i> Blume <sup>^</sup>	Elaeocarpaceae	t	NE
<b><i>Elaeocarpus pachyophrys</i> Warb.<sup>^</sup></b>	Elaeocarpaceae	t	NE
<i>Elaeocarpus</i> sp.	Elaeocarpaceae	t	
<i>Elaeocarpus stipularis</i> Blume <sup>^</sup>	Elaeocarpaceae	t	NE
<i>Diplycosia cinnamomifolia</i> Stapf	Ericaceae	s	NE
<i>Diplycosia clementium</i> Sleumer <sup>^</sup>	Ericaceae	s	NE
<i>Diplycosia rufa</i> Stapf <sup>^</sup>	Ericaceae	s	NE
<i>Rhododendron bagobonum</i> H.F.Copel.*	Ericaceae	s	NE
<b><i>Rhododendron borneense</i> (J.J.Sm.) Argent, A.L.Lamb &amp; Phillipps*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron borneense</i> subsp. <u>villosum</u> (J.J.Sm.) Argent, A.L.Lamb &amp; Phillipps*<sup>^</sup></b>	Ericaceae	s	NE
<b>Phillips*<sup>^</sup></b>			
<b><i>Rhododendron crassifolium</i> Stapf*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron cuneifolium</i> Stapf*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron durionifolium</i> Becc.*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron fallacinum</i> Sleumer*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron himantodes</i> Sleumer*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron polyanthemum</i> Sleumer*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron rugosum</i> H.Low ex Hook.f.*<sup>^</sup></b>	Ericaceae	s	NE
<b><i>Rhododendron stenophyllum</i> Hook.f ex Stapf*<sup>^</sup></b>	Ericaceae	s	NE
<i>Vaccinium bancanum</i> Miq. var. <i>teminervium</i> J.J.Sm. <sup>^</sup>	Ericaceae	s	NE

Species	Family	H	IUCN Red List 2013
<i>Vaccinium claoxylon</i> J.J.Sm.^	Ericaceae	s	NE
<i>Vaccinium cordifolium</i> (M.Martens & Galeotti) Hemsl.^	Ericaceae	s	NE
<i>Polyosma cyanea</i> Elmer	Escalloniaceae	t	NE
<i>Polyosma integrifolia</i> Blume^	Escalloniaceae	t	NE
<i>Polyosma mutabilis</i> Blume^	Escalloniaceae	t	NE
<i>Polyosma pseudobracteosa</i> Schulze-Menz.	Escalloniaceae	t	NE
<i>Acalypha caturus</i> Blume^	Euphorbiaceae	t	NE
<i>Blumeodendron tokbrai</i> (Blume) Kurz^	Euphorbiaceae	t	NE
<i>Homalanthus populheus</i> (Geiseler) Pax^	Euphorbiaceae	t	NE
<i>Macaranga</i> cf. <i>lamellata</i> Whitmore	Euphorbiaceae	t	NE
<i>Macaranga formicarum</i> Pax & K.Hoffm.	Euphorbiaceae	t	NE
<i>Macaranga hypoleuca</i> (Rehb.f. & Zoll.) Müll.Arg.^	Euphorbiaceae	t	NE
<b><i>Macaranga kinabaluensis</i> Airy Shaw^</b>	Euphorbiaceae	t	NE
<b><i>Macaranga pearsonii</i> Merr.</b>	Euphorbiaceae	t	NE
<i>Macaranga tanarius</i> (L.) Müll.Arg.^	Euphorbiaceae	t	NE
<i>Macaranga triloba</i> (Thunb.) Müll.Arg.^	Euphorbiaceae	t	NE
<b><i>Macaranga winkleri</i> Pax &amp; K.Hoffm.</b>	Euphorbiaceae	t	NE
<i>Mallotus lackeyi</i> Elmer^	Euphorbiaceae	t	NE
<i>Mallotus mollissimus</i> (Geiseler) Airy Shaw^	Euphorbiaceae	t	NE
<i>Mallotus paniculatus</i> (Lam.) Müll.Arg.^	Euphorbiaceae	t	NE
<i>Mallotus penangensis</i> Müll.Arg.^	Euphorbiaceae	t	NE
<i>Mallotus philippinensis</i> (Lam.) Müll.Arg.^	Euphorbiaceae	t	NE
<i>Mallotus wrayi</i> King ex Hook.f.^	Euphorbiaceae	t	NE
<i>Neoscortechinia forbesii</i> (Hook.f.) S.Moore^	Euphorbiaceae	t	NE
<i>Pimelodendron griffithianum</i> (Müll.Arg.) Benth. ex Hook.f.^	Euphorbiaceae	t	NE
<i>Archidendron clypearia</i> (Jack) Nielsen^	Fabaceae	t	NE

Species	Family	H	2013
<i>Archidendron clypearia</i> (Jack) Nielsen var. <i>casai</i> (Blanco) Nielsen	Fabaceae	t	NE
<i>Crotalaria pallida</i> Aiton <sup>^</sup>	Fabaceae	s	NE
<i>Dalbergia junghuhnii</i> Benth.	Fabaceae	c	NE
<i>Dalbergia pinnata</i> (Lour.) Prain	Fabaceae	c	NE
<i>Dialium</i> cf. <i>indum</i> L.	Fabaceae	t	NE
<i>Fordia splendidissima</i> (Miq.) Buijssen <sup>^</sup>	Fabaceae	t	NE
<i>Fordia splendidissima</i> subsp. <i>splendidissima</i> (Miq.) Buijssen <sup>^</sup>	Fabaceae	t	NE
<i>Parkia javanica</i> (Lam.) Merr.	Fabaceae	t	NE
<i>Parkia speciosa</i> Hassk. <sup>^</sup>	Fabaceae	t	NE
<i>Spatholobus gyrocarpus</i> Benth. <sup>^</sup>	Fabaceae	c	LC
<i>Spatholobus macropterus</i> Miq.	Fabaceae	c	NE
<i>Spatholobus multiflorus</i> Wiriad. & Ridd.-Num.	Fabaceae	c	NE
<i>Spatholobus oblongifolius</i> Merr.	Fabaceae	c	NE
<b><i>Castanopsis clemensii</i> Soepadmo<sup>^</sup></b>	Fagaceae	t	NE
<i>Castanopsis foxworthyi</i> Schottky <sup>^</sup>	Fagaceae	t	NE
<i>Castanopsis psilophylla</i> Soepadmo	Fagaceae	t	NE
<i>Castanopsis</i> sp.	Fagaceae	t	
<i>Lithocarpus blumeanus</i> (Korth.) Rehder <sup>^</sup>	Fagaceae	t	NE
<b><i>Lithocarpus bullatus</i> Soepadmo<sup>^</sup></b>	Fagaceae	t	NE
<b><i>Lithocarpus</i> cf. <i>beccarianus</i> (Benth.) A.Camus</b>	Fagaceae	t	NE
<i>Lithocarpus</i> cf. <i>bennettii</i> (Miq.) Rehder	Fagaceae	t	NE
<i>Lithocarpus</i> cf. <i>leptogyne</i> (Korth.) Soepadmo <sup>^</sup>	Fagaceae	t	NE
<i>Lithocarpus</i> cf. <i>pseudokamsleri</i> A.Camus	Fagaceae	t	NE
<b><i>Lithocarpus confertus</i> Soepadmo<sup>^</sup></b>	Fagaceae	t	NE
<i>Lithocarpus conocarpus</i> (Oudem.) Rehder <sup>^</sup>	Fagaceae	t	NE
<b><i>Lithocarpus echinifer</i> (Merr.) A.Camus</b>	Fagaceae	t	NE

IUCN Red List

Species	Family	H	2013
<i>Lithocarpus elegans</i> (Blume) Hatus. ex Soepadmo <sup>^</sup>	Fagaceae	t	NE
<i>Lithocarpus encleisocarpus</i> (Korth.) A. Camus <sup>^</sup>	Fagaceae	t	NE
<i>Lithocarpus ewyckii</i> (Korth.) Rehder	Fagaceae	t	NE
<i>Lithocarpus nieuwenhuisii</i> (Seemen) A. Camus <sup>^</sup>	Fagaceae	t	NE
<i>Lithocarpus</i> sp.1	Fagaceae	t	
<i>Lithocarpus</i> sp.2	Fagaceae	t	
<i>Quercus argentata</i> Korth.	Fagaceae	t	NE
<i>Quercus gemelliflora</i> Blume <sup>^</sup>	Fagaceae	t	NE
<i>Quercus lineata</i> Blume <sup>^</sup>	Fagaceae	t	NE
<i>Fagraea cuspidata</i> Blume	Gentianaceae	t	NE
<b><u>Fagraea kinabaluensis</u></b> Wong & Sugau <sup>^</sup>	Gentianaceae	t	NE
<b><u>Fagraea spicata</u></b> Baker	Gentianaceae	t	NE
<b><u>Fagraea tuyukii</u></b> Wong & Sugau <sup>^+^</sup>	Gentianaceae	unknown	NE
<i>Aeschynanthus albidus</i> (Blume) Steud.	Gesneriaceae	c	NE
<i>Cyrtandra</i> cf. <i>pedicellata</i> B.L. Burt	Gesneriaceae	s	NE
<i>Dichroa febrifuga</i> Lour. <sup>^</sup>	Hydrangeaceae	s	NE
<i>Cratoxylum sumatranum</i> (Jack) Blume	Hypericaceae	t	NE
<i>Platea excelsa</i> Blume var. <i>borneensis</i> (Heine) Sleumer	Iacinaceae	t	NE
<i>Itea macrophylla</i> Wall. <sup>^</sup>	Iteaceae	t	NE
<i>Ixonanthes petiolaris</i> Blume <sup>^</sup>	Ixonanthaceae	t	NE
<i>Ixonanthes reticulata</i> Jack	Ixonanthaceae	t	NE
<i>Engelhardtia serrata</i> Blume	Juglandaceae	t	NE
<i>Callicarpa pentandra</i> Roxb. <sup>^</sup>	Lamiaceae	t	NE
<i>Clerodendrum</i> cf. <i>laevifolium</i> Blume	Lamiaceae	s	NE
<i>Gmelina uniflora</i> Stapf	Lamiaceae	t	NE
<i>Vitex vestita</i> Wall. ex Walp. <sup>^</sup>	Lamiaceae	t	NE

Species	Family	H	IUCN Red List 2013
<i>Actinodaphne glomerata</i> (Blume) Nees <sup>^</sup>	Lauraceae	t	NE
<i>Actinodaphne oleifolia</i> Gamble <sup>^</sup>	Lauraceae	t	NE
<i>Actinodaphne pruinosa</i> Nees <sup>^</sup>	Lauraceae	t	LC
<i>Beilschmiedia</i> cf. <i>lucidula</i> (Miq.) Kosterm.	Lauraceae	t	NE
<i>Beilschmiedia</i> cf. <i>maingayi</i> Hook.f.	Lauraceae	t	NE
<i>Beilschmiedia</i> sp.1	Lauraceae	t	
<i>Cinnamomum angustitepalum</i> Kosterm. <sup>^</sup>	Lauraceae	t	NE
<i>Cinnamomum corneri</i> Kosterm. <sup>^</sup>	Lauraceae	t	NE
<i>Cinnamomum</i> sp.1	Lauraceae	t	
<i>Cryptocarya acutifolia</i> H. W. Li	Lauraceae	t	NE
<i>Cryptocarya densiflora</i> Blume <sup>^</sup>	Lauraceae	t	NE
<i>Cryptocarya</i> sp.1	Lauraceae	t	
<i>Cryptocarya</i> sp.2	Lauraceae	t	
<i>Lindera bibracteata</i> Boerl. <sup>^</sup>	Lauraceae	t	NE
<i>Lindera</i> cf. <i>lucida</i> Boerl.	Lauraceae	t	NE
<i>Litsea accedens</i> (Blume) Boerl. <sup>^</sup>	Lauraceae	t	NE
<i>Litsea caulocarpa</i> Merr.	Lauraceae	t	NE
<i>Litsea</i> cf. <i>jaswirii</i> Ng	Lauraceae	t	NE
<i>Litsea</i> cf. <i>lanceifolia</i> (Nees) Hook.f. var. <i>grandifolia</i> (Stapf) Ng	Lauraceae	t	NE
<i>Litsea cubeba</i> (Lour.) Pers. <sup>^</sup>	Lauraceae	t	NE
<i>Litsea cylindrocarpa</i> Gamble <sup>^</sup>	Lauraceae	t	NE
<i>Litsea elliptica</i> Blume <sup>^</sup>	Lauraceae	t	NE
<i>Litsea garciae</i> Vidal <sup>^</sup>	Lauraceae	t	NE
<i>Litsea kinabaluensis</i> Kosterm.	Lauraceae	t	NE
<i>Litsea sessiliflora</i> Hook.f. <sup>^</sup>	Lauraceae	t	NE
<i>Litsea sessilis</i> Boerl. <sup>^</sup>	Lauraceae	t	NE

Species	Family	H	2013
<i>Liisea</i> sp.	Lauraceae	t	
<i>Liisea</i> sp.1	Lauraceae	t	
<i>Liisea tomentosa</i> B.Heyne ex Wall.	Lauraceae	t	NE
<i>Neolitsea zeylanica</i> (Nees & T.Nees) Merr. ^	Lauraceae	t	NE
<i>Phoebe macrophylla</i> Gamble ^	Lauraceae	t	NE
<i>Barringtonia curranii</i> Merr.	Lecythidaceae	t	NE
<b><i>Barringtonia lanceolata</i> (Ridl.) Payens ^</b>	Lecythidaceae	t	NE
<i>Planchonia valida</i> (Blume) Blume ^	Lecythidaceae	t	NE
<i>Macrosolen retusus</i> Blume	Loranthaceae	ep	NE
<i>Scurrula ferruginea</i> Danser ^	Loranthaceae	ep	NE
<i>Duabanga moluccana</i> Blume ^	Lythraceae	t	NE
<i>Magnolia candollei</i> (Blume) H.Keng var. <i>obovata</i> (Korth.) Noot. ^	Magnoliaceae	t	NE
<b><i>Magnolia carsonii</i> var. <i>carsonii</i> Dandy ex Noot.</b>	Magnoliaceae	t	NE
<b><i>Magnolia carsonii</i> Dandy ex Noot. var. <i>drymifolia</i> Noot.</b>	Magnoliaceae	t	NE
<i>Magnolia gigantifolia</i> (Miq.) Noot.	Magnoliaceae	t	NE
<i>Magnolia liliifera</i> (L.) Baill. ^	Magnoliaceae	t	NE
<i>Magnolia</i> sp.1	Magnoliaceae	t	
<i>Magnolia</i> sp.2	Magnoliaceae	t	
<i>Magnolia tsiampacca</i> (L.) Figlar & Noot. subsp. <i>mollis</i> (Dandy) Figlar & Noot. ^	Magnoliaceae	t	NE
<i>Coelostegia</i> cf. <i>montana</i> Sidiy.	Malvaceae	t	NE
<i>Commersonia barrtramia</i> (L.) Merr.	Malvaceae	t	NE
<i>Durio acutifolius</i> (Mast.) Kosterm. ^	Malvaceae	t	VU
<i>Durio oxyleanus</i> Griff.	Malvaceae	t	NE
<i>Heritiera elata</i> Ridl.	Malvaceae	t	NE
<i>Microcos antidesmifolia</i> var. <i>hirsuta</i> (King) Burret	Malvaceae	t	NE
<i>Neesia synandra</i> Mast.	Malvaceae	t	NE

Species	Family	H	2013
<i>Pentace laxiflora</i> Merr. <sup>^</sup>	Malvaceae	t	NE
<i>Pterospermum elongatum</i> Korth. <sup>^</sup>	Malvaceae	t	NE
<i>Pterospermum javanicum</i> Jungh.	Malvaceae	t	NE
<b><i>Pterospermum subpeltatum</i> Merr.</b>	Malvaceae	t	NE
<i>Scaphium macropodium</i> (Miq.) Beumee ex K. Heyne <sup>^</sup>	Malvaceae	t	LC
<i>Sterculia coccinea</i> var. <i>coccinea</i> Jack	Malvaceae	t	NE
<i>Sterculia rubiginosa</i> Zoll. ex Miq. <sup>^</sup>	Malvaceae	t	NE
<b><i>Sterculia stipulata</i> Korth.<sup>^</sup></b>	Malvaceae	t	NE
<i>Astronia cumingiana</i> S. Vidal <sup>^</sup>	Melastomataceae	t	NE
<i>C'lidemia hirta</i> (L.) D. Don <sup>^</sup>	Melastomataceae	s	NE
<i>Diplectria divaricata</i> Kuntze <sup>^</sup>	Melastomataceae	t	NE
<i>Dissochaeta bracteata</i> (Jack) Blume	Melastomataceae	c	NE
<i>Kibnesia azurea</i> DC. <sup>^</sup>	Melastomataceae	t	NE
<i>Kibnesia korthalsiana</i> Cogn. <sup>^</sup>	Melastomataceae	t	NE
<i>Kibnesia verrucolosa</i> Merr. <sup>^</sup>	Melastomataceae	t	NE
<i>Medinilla crassifolia</i> (Reinw. ex Blume) Lindl. <sup>^</sup>	Melastomataceae	s	NE
<i>Medinilla speciosa</i> (Reinw. ex Blume) Blume <sup>^</sup>	Melastomataceae	s	NE
<b><i>Medinilla stephanostegia</i> Stapf</b>	Melastomataceae	s	NE
<i>Melastoma malabathricum</i> L. <sup>^</sup>	Melastomataceae	s	NE
<i>Melastoma minahassae</i> Koord. ex Karst. Mey.	Melastomataceae	s	NE
<b><i>Plethiandra hookeri</i> Stapf<sup>^</sup></b>	Melastomataceae	t	NE
<i>Pternandra caerulescens</i> Jack <sup>^</sup>	Melastomataceae	t	NE
<i>Pternandra</i> sp.	Melastomataceae	t	NE
<i>Aglaia korthalsii</i> Miq. <sup>^</sup>	Meliaceae	t	NT
<b><i>Aglaia laxiflora</i> Miq.</b>	Meliaceae	t	VU
<i>Aglaia luzoniensis</i> (Vidal) Merr. & Rolfe <sup>^</sup>	Meliaceae	t	NT



IUCN Red List  
2013

Species	Family	H	IUCN Red List 2013
<i>Aglaia macrocarpa</i> (Miq.) Pannell	Meliaceae	t	NT
<i>Aglaia macrophylla</i> Teijsm. & Binn.	Meliaceae	t	NE
<i>Aglaia odoratissima</i> Blume	Meliaceae	t	LR
<i>Aglaia silvestris</i> (M.Roem.) Merr. ^	Meliaceae	t	NT
<i>Aglaia spectabilis</i> (Miq.) S.S.Jain & Bennet	Meliaceae	t	LC
<i>Aglaia tomentosa</i> subsp. <i>tomentosa</i> Teijsm. & Binn. ^	Meliaceae	t	LC
<i>Dysoxylum cauliflorum</i> Hiern ^	Meliaceae	t	NE
<i>Dysoxylum grande</i> Hiern	Meliaceae	t	NE
<i>Dysoxylum parasiticum</i> (Osbeck) Kosterm.	Meliaceae	t	NE
<i>Dysoxylum rigulosum</i> King ^	Meliaceae	t	NE
<i>Dysoxylum</i> sp.	Meliaceae	t	
<i>Heynea trijuga</i> Roxb. ex Sims	Meliaceae	t	NE
<i>Sandoricum koeijape</i> (Burm.f.) Merr.	Meliaceae	t	NE
<b><i>Walsura pachycaulon</i> Mabb. ex T.Clark</b>	Meliaceae	t	NE
<i>Coscinium fenestratum</i> (Goetgh.) Colebr. ^	Menispermaceae	c	NE
<i>Artocarpus elasticus</i> Reinw. ex Blume ^	Moraceae	t	NE
<i>Artocarpus excelsus</i> F.M.Jarrett	Moraceae	t	NE
<i>Artocarpus lanceifolius</i> Roxb. ^	Moraceae	t	NE
<b><i>Artocarpus odoratissimus</i> Blanco ^</b>	Moraceae	t	NE
<b><i>Artocarpus tamaran</i> Becc. ^</b>	Moraceae	t	NE
<i>Ficus annulata</i> Blume	Moraceae	t	NE
<i>Ficus aurita</i> Blume	Moraceae	t	NE
<i>Ficus beccarii</i> King ^	Moraceae	t	NE
<i>Ficus deltoidea</i> Jack ^	Moraceae	t	NE
<i>Ficus heteropleura</i> Blume	Moraceae	t	NE
<b><i>Ficus megaleia</i> Corner ^</b>	Moraceae	c	NE
	Moraceae	t	NE

## IUCN Red List

Species	Family	H	2013
<i>Ficus obscura</i> Blume <sup>^</sup>	Moraceae	t	NE
<i>Ficus punctata</i> Thunb. <sup>^</sup>	Moraceae	t	NE
<i>Ficus racemosa</i> L.	Moraceae	t	NE
<i>Ficus septica</i> Burm.f. <sup>^</sup>	Moraceae	t	NE
<i>Ficus setiflora</i> Stapf <sup>^</sup>	Moraceae	t	NE
<i>Ficus sinuata</i> Thunb.	Moraceae	t	NE
<i>Ficus variegata</i> Blume <sup>^</sup>	Moraceae	t	NE
<b><i>Horsfieldia carnosa</i> Warb.</b>	Myristicaceae	t	NE
<i>Horsfieldia grandis</i> (Hook.f.) Warb.	Myristicaceae	t	NE
<i>Horsfieldia</i> sp.	Myristicaceae	t	
<b><i>Knema elmerii</i> Merr.</b>	Myristicaceae	t	LC
<i>Knema latericia</i> Elmer <sup>^</sup>	Myristicaceae	t	NE
<i>Knema latifolia</i> Warb. <sup>^</sup>	Myristicaceae	t	LC
<i>Knema</i> sp.	Myristicaceae	t	
<i>Myristica maxima</i> Warb.	Myristicaceae	t	LC
<i>Myristica</i> sp.	Myristicaceae	t	
<i>Leptospermum javanicum</i> Blume <sup>^</sup>	Myrtaceae	t	NE
<i>Syzygium alcinae</i> (Merr.) Merr. & L.M.Perry <sup>^</sup>	Myrtaceae	t	NE
<i>Syzygium bankense</i> (Hassk.) Merr. & L.M.Perry <sup>^</sup>	Myrtaceae	t	NE
<b><i>Syzygium barringtonioides</i> (Ridl.) Masam.</b>	Myrtaceae	t	NE
<i>Syzygium</i> cf. <i>gratum</i> (Wight) S.N.Mitra	Myrtaceae	t	NE
<b><i>Syzygium</i> cf. <i>kinabaluense</i> (Stapf) Merr. &amp; L.M.Perry<sup>^</sup></b>	Myrtaceae	t	NE
<i>Syzygium</i> cf. <i>rostratum</i> (Blume) DC.	Myrtaceae	t	NE
<i>Syzygium hirtum</i> (Korth.) Merr. & L.M.Perry <sup>^</sup>	Myrtaceae	t	NE
<i>Syzygium incarnatum</i> (Elmer) Merr. & L.M.Perry	Myrtaceae	t	NE
<i>Syzygium perpuncticulatum</i> (Merr.) Merr. & L.M.Perry	Myrtaceae	t	NE

Species	IUCN Red List	
	Family	H 2013
<i>Syzygium remotifolium</i> (Ridl.) Merr. & L.M.Perry	Myrtaceae	t NE
<i>Syzygium rostratum</i> (Blume) DC.	Myrtaceae	t NE
<i>Syzygium</i> sp.	Myrtaceae	t
<i>Syzygium</i> sp.1	Myrtaceae	t
<i>Syzygium</i> sp.2	Myrtaceae	t
<i>Syzygium</i> sp.3	Myrtaceae	t
<i>Syzygium</i> sp.4	Myrtaceae	t
<i>Syzygium</i> sp.5	Myrtaceae	t
<i>Syzygium</i> sp.6	Myrtaceae	t
<i>Syzygium</i> sp.7	Myrtaceae	t
<i>Syzygium</i> sp.8	Myrtaceae	t
<i>Tristaniopsis bilocularis</i> (Stapf) Peter G. Wilson & J.T. Waterh.^	Myrtaceae	t NE
<i>Tristaniopsis elliptica</i> (Stapf) Peter G. Wilson & J.T. Waterh.^	Myrtaceae	t NE
<i>Tristaniopsis kinabaluensis</i> P.S.Ashton	Myrtaceae	t NE
<i>Tristaniopsis</i> sp.	Myrtaceae	t
<i>Tristaniopsis whiteana</i> (Griff.) Peter G. Wilson & J.T. Waterh.^	Myrtaceae	t NE
<i>Xanthomyrtus flavida</i> (Stapf) Diels^	Myrtaceae	t NE
<i>Nepenthes lowii</i> Hook.f.*^	Nepenthaceae	s VU
<i>Nepenthes macrophylla</i> (Marabini) Jebb & Cheek*^+	Nepenthaceae	s CR
<i>Nepenthes stenophylla</i> Mast.*^	Nepenthaceae	s LC
<i>Nepenthes tentaculata</i> Hook.f.*^	Nepenthaceae	s LC
<i>Nepenthes veitchii</i> Hook.f.*^	Nepenthaceae	s NT
<i>Gomphia serrata</i> (Gaertn.) Kanis^	Ochnaceae	t LC
<i>Strombosia ceylanica</i> Gardner	Oleaceae	t NE
<i>Chionanthus curvicaulus</i> Kiew^	Oleaceae	t NE
<i>Chionanthus pluriflorus</i> (Knobl.) Kiew^	Oleaceae	t NE

## IUCN Red List

Species	Family	H	2013
<i>Chionanthus</i> sp.	Oleaceae	t	
<i>Myxopyrum coriaceum</i> Blume	Oleaceae	t	NE
<i>Olea</i> cf. <i>javanica</i> (Blume) Knobl.	Oleaceae	t	NE
<i>Galearia fulva</i> (Tul.) Miq. <sup>^</sup>	Pandaceae	t	NE
<i>Adenia macrophylla</i> (Blume) Koord.	Passifloraceae	c	NE
<i>Passiflora foetida</i> L. <sup>^</sup>	Passifloraceae	c	NE
<i>Wightia borneensis</i> Hook.f. <sup>^</sup>	Paulowniaceae	t	NE
<i>Adinandra clemensiae</i> Kobuski <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Adinandra collina</i> Kobuski <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Adinandra cordifolia</i> Ridl. <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Adinandra dumosa</i> Jack <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Adinandra excelsa</i> Korth. <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Adinandra myrionaura</i> Kobuski <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Ternstroemia aneura</i> Miq. <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Ternstroemia bancana</i> Miq.	Pentaphylacaceae	t	NE
<i>Ternstroemia beccarii</i> Stapf ex Ridl. <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Ternstroemia elongata</i> (Korth.) Korth.	Pentaphylacaceae	t	NE
<i>Ternstroemia lowii</i> Stapf <sup>^</sup>	Pentaphylacaceae	t	NE
<i>Ternstroemia</i> sp.	Pentaphylacaceae	t	
<i>Trigonopleura malayana</i> Hook.f.	Peraceae	t	NE
<i>Antidesma banguensis</i> Merr.	Phyllanthaceae	t	NE
<i>Antidesma ghaesembilla</i> Gaertn.	Phyllanthaceae	t	NE
<i>Antidesma hosei</i> Pax & K.Hoffm. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Antidesma tomentosum</i> Blume	Phyllanthaceae	t	NE
<i>Aporosa elmeri</i> Merr. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Aporosa grandistipula</i> Merr. <sup>^</sup>	Phyllanthaceae	t	NE

Species	Family	H	2013
<i>Aporosa lunata</i> (Miq.) Kurz <sup>^</sup>	Phyllanthaceae	t	NE
<i>Aporosa nitida</i> Merr. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Aporosa subcaudata</i> Merr. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Baccaurea lanceolata</i> (Miq.) Müll.Arg. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Baccaurea macrocarpa</i> (Miq.) Müll.Arg. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Baccaurea racemosa</i> (Reinw. ex Blume) Müll.Arg. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Baccaurea tetrandra</i> (Baill.) Müll.Arg. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Bischofia javanica</i> Blume <sup>^</sup>	Phyllanthaceae	t	NE
<i>Breynia coronata</i> Hook.f. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Bridelia penangiana</i> Hook.f.	Phyllanthaceae	t	NE
<i>Bridelia sosopodonica</i> Airy Shaw <sup>^</sup>	Phyllanthaceae	t	NE
<i>Glochidion lutescens</i> Blume <sup>^</sup>	Phyllanthaceae	t	NE
<i>Glochidion rubrum</i> Blume <sup>^</sup>	Phyllanthaceae	t	NE
<i>Glochidion</i> sp.	Phyllanthaceae	t	NE
<i>Phyllanthus niruri</i> L. <sup>^</sup>	Phyllanthaceae	t	NE
<i>Austroboxus</i> cf. <i>nitidus</i> Miq.	Picrodendraceae	t	NE
<i>Heckeria umbellata</i> (L.) Kunth <sup>^</sup>	Piperaceae	s	NE
<i>Piper muricatum</i> Blume	Piperaceae	c	NE
<b><i>Piper vestitum</i> C.DC.</b>	Piperaceae	c	NE
<i>Pittosporum ferrugineum</i> Aiton	Pittosporaceae	t	NE
<b><i>Brookea tomentosa</i> Benth.<sup>^</sup></b>	Plantaginaceae	t	NE
<b><i>Xanthophyllum</i> cf. <i>montanum</i> Meijden</b>	Polygalaceae	t	NE
<i>Xanthophyllum flavescens</i> Roxb. <sup>^</sup>	Polygalaceae	t	NE
<i>Xanthophyllum impressum</i> Meijden	Polygalaceae	t	NE
<i>Xanthophyllum pulchrum</i> King	Polygalaceae	t	NE
<i>Ardisia copelandii</i> Mez <sup>^</sup>	Primulaceae	t	NE

Species	Family	H	2013
<i>Ardisia forbesii</i> S.Moore <sup>^</sup>	Primulaceae	t	NE
<i>Ardisia oxyphylla</i> Wall. ex A.DC. <sup>^</sup>	Primulaceae	t	NE
<i>Ardisia pterocaulis</i> Miq.	Primulaceae	t	NE
<i>Ardisia pyramidalis</i> (Cav.) Pers.	Primulaceae	t	NE
<i>Ardisia ridleyi</i> King & Gamble <sup>^</sup>	Primulaceae	t	NE
<i>Ardisia scabrida</i> Mez	Primulaceae	t	NE
<i>Embelia dasythyrsa</i> Miq. <sup>^</sup>	Primulaceae	c	NE
<b><i>Embelia effusa</i> Mez</b>	Primulaceae	c	NE
<i>Embelia macrocarpa</i> King & Gamble	Primulaceae	c	NE
<b><i>Embelia phaeadenia</i> Staph</b>	Primulaceae	c	NE
<i>Maesa indica</i> (Roxb.) Wall <sup>^</sup>	Primulaceae	c	NE
<i>Marantodes pumilum</i> (Blume) Kuntze [Syn: <i>Labisia pumila</i> (Blume) Fern.-Vill.]	Primulaceae	s	NE
<i>Helicia obovata</i> Benn.	Proteaceae	t	NE
<i>Helicia robusta</i> var. <i>robusta</i> (Roxb.) R.Br. ex Blume <sup>^</sup>	Proteaceae	t	NE
<i>Drypetes longifolia</i> (Blume) Pax & K.Hoffm. <sup>^</sup>	Putranjivaceae	t	NE
<i>Drypetes</i> sp.	Putranjivaceae	t	NE
<i>Alphitonia excelsa</i> (Fenzl) Reissek ex Benth.	Rhamnaceae	t	NE
<i>Ventilago dichotoma</i> Merr.	Rhamnaceae	c	NE
<i>Ziziphus angustifolia</i> (Miq.) Hatus. ex Steenis	Rhamnaceae	t	NE
<b><i>Ziziphus borneensis</i> Merr.</b>	Rhamnaceae	c	NE
<i>Ziziphus horsfieldii</i> Miq.	Rhamnaceae	c	NE
<i>Pellacalyx axillaris</i> Korth. <sup>^</sup>	Rhizophoraceae	t	NE
<i>Primus arborea</i> (Blume) Kalkman var. <i>stipulacea</i> (King) Kalkman <sup>^</sup>	Rosaceae	t	NE
<i>Prunus</i> sp.	Rosaceae	t	NE
<i>Rubus angulosus</i> Focke	Rosaceae	c	NE
<i>Rubus fraxinifolius</i> Poir. <sup>^</sup>	Rosaceae	c	NE

IUCN Red List

Species	Family	H	2013
<i>Rubus glomeratus</i> Blume <sup>^</sup>	Rosaceae	c	NE
<b><i>Aidia borneensis</i> Ridsdale</b>	Rubiaceae	t	NE
<i>Canthium confertum</i> Korth. <sup>^</sup>	Rubiaceae	t	NE
<i>Diplospora malaccense</i> Hook.f.	Rubiaceae	t	NE
<i>Gaertnera junghuhniana</i> Miq.	Rubiaceae	t	NE
<i>Gaertnera vaginans</i> (DC.) Merr. <sup>^</sup>	Rubiaceae	t	NE
<i>Hedyotis capitellata</i> Wall. ex G. Don <sup>^</sup>	Rubiaceae	s	NE
<b><i>Ixora fucosa</i> Bremek.<sup>^</sup></b>	Rubiaceae	s	NE
<b><i>Ixora otophora</i> Bremek.</b>	Rubiaceae	s	NE
<i>Lasianthus borneensis</i> Merr.	Rubiaceae	s	NE
<i>Lasianthus inaequalis</i> Blume	Rubiaceae	s	NE
<b><i>Lasianthus kinabaluensis</i> Stapf</b>	Rubiaceae	s	NE
<b><i>Lasianthus polycarpus</i> Miq.<sup>^</sup></b>	Rubiaceae	s	NE
<i>Lasianthus stercorarius</i> Blume	Rubiaceae	s	NE
<b><i>Morinda elmeri</i> Merr.</b>	Rubiaceae	c	NE
<i>Myrmeconuclea sirigosa</i> (Korth.) Merr. <sup>^</sup>	Rubiaceae	s	NE
<i>Neolamarckia cadamba</i> (Roxb.) Bosser <sup>^</sup>	Rubiaceae	t	NE
<b><i>Neonauclea cf. artocarpoides</i> Ridsdale</b>	Rubiaceae	t	NE
<i>Neonauclea cf. orientalis</i> L.	Rubiaceae	t	NE
<i>Neonauclea cyrtopoda</i> (Miq.) Merr.	Rubiaceae	t	NE
<b><i>Neonauclea gigantea</i> (Valeton) Merr.<sup>^</sup></b>	Rubiaceae	t	NE
<b><i>Ophiorrhiza elmeri</i> Merr.</b>	Rubiaceae	s	NE
<i>Paederia cf. foetida</i> L.	Rubiaceae	c	NE
<i>Pavetta axillaris</i> Bremek.	Rubiaceae	s	NE
<b><i>Porterandia beamanii</i> Zahid<sup>^</sup></b>	Rubiaceae	t	NE
<b><i>Porterandia chanii</i> Zahid</b>	Rubiaceae	t	NE

Species	IUCN Red List	
	H	2013
<i>Pravinia suberosa</i> (Merr.) Bremek.ˆ	t	NE
<i>Prismatomeris beccariana</i> (Baill. ex K.Schum.) J.T.Johanss. <i>Rothmannia</i> sp.	t	NE
<i>Schradera montana</i> (Korth.) Puff, R.Buchner & Greimlnerˆ	t	
<i>Timonius borneensis</i> Valettonˆ	c	NE
<b><i>Timonius esherianus</i> W.W.Sm.</b>	t	NE
<i>Timonius flavescens</i> (Jacq.) Bakerˆ	t	NE
<b><i>Timonius lasianthoides</i> Valetton</b>	t	NE
<i>Uncaria barbata</i> Merr.	c	NE
<i>Uncaria lanosa</i> Wallich var. <i>ferrea</i> (Blume) Ridsdale [Syn: <i>Uncaria ferrea</i> (Blume) DC.]	c	NE
<i>Uncaria longiflora</i> (Poir.) Merr.	c	NE
<i>Urophyllum arboreum</i> (Reinw. ex Blume) Korth. (Syn: <i>Urophyllum glabrum</i> Jack ex Wall.)ˆ	t	NE
<i>Urophyllum hirsutum</i> (Wight) Hook.f.	t	NE
<b><i>Urophyllum leucocarpum</i> (Bremek.) Smedmark &amp; B.Bremer (Syn: <i>Pravinaria leucocarpa</i> Bremek.)</b>	t	NE
<b><i>Urophyllum nigricans</i> Wernham</b>	t	NE
<b><i>Urophyllum sandahanicum</i> (Bremek.) Smedmark &amp; B.Bremer (Syn: <i>Pletocarpidia sandahanica</i> Bremek.)ˆ</b>	t	NE
<i>Wendlandia dasythyrsa</i> Miq.	t	NE
<i>Clausena excavata</i> Burm.f.	t	NE
<i>Melicope glabra</i> (Blume) T.G.Hartleyˆ	t	NE
<b><i>Melicope subunifoliolata</i> (Stapf) T.G.Hartley</b>	t	NE
<b><i>Pleiospermium longisepalum</i> Swingle</b>	t	VU
<i>Tetractomia tetrandra</i> (Roxb.) Merr.	t	VU
<i>Zanthoxylum myriacanthum</i> Wall. ex Hook.f.	t	NE



Species	Family	H	IUCN Red List 2013
<i>Casearia grewifolia</i> Vent. ^	Salicaceae	t	NE
<i>Flacourtia rukam</i> Zoll. & Moritzi ^	Salicaceae	t	NE
<i>Dendrotrophe varians</i> (Blume) Miq. ^	Santalaceae	ep	NE
<i>Scleropyrum pentandrum</i> (Dennst.) Mabb. (Syn: <i>Scleropyrum wallichianum</i> Am.)	Santalaceae	t	NE
<i>Allophylus cobbe</i> (L.) Raeusch. (Syn: <i>Pometia pinnata</i> J.R.Forst. & G.Forst.)	Sapindaceae	t	NE
<i>Guioa bijuga</i> (Hiern) Radlk. ^	Sapindaceae	t	NE
<i>Guioa pleuropteris</i> (Blume) Radlk. ^	Sapindaceae	t	NE
<i>Lepisanthes amoena</i> (Hassk.) Leenh. ^	Sapindaceae	t	NE
<i>Lepisanthes fruticosa</i> (Roxb.) Leenh. ^	Sapindaceae	t	NE
<i>Nephelium lappaceum</i> L. ^	Sapindaceae	t	LC
<i>Nephelium ramboutan-ake</i> (Labill.) Leenh. ^	Sapindaceae	t	NE
<i>Nephelium</i> sp.	Sapindaceae	t	NE
<i>Paranephelium xestophyllum</i> Miq. ^	Sapindaceae	t	NE
indet.	Sapotaceae	t	
<b><i>Madhuca endertii</i> H.J.Lam</b>	Sapotaceae	t	NE
<i>Madhuca</i> sp.	Sapotaceae	t	
<i>Palaquium gutta</i> (Hook.) Baill.	Sapotaceae	t	NE
<i>Payena accuminata</i> (Blume) Pierre	Sapotaceae	t	NE
<b><i>Payena gigas</i> A.Bruggen ^</b>	Sapotaceae	t	NE
<i>Payena leerii</i> (Teijsm. & Binn.) Kurz ^	Sapotaceae	t	NE
<i>Kadsura marmorata</i> (Hend. & A.A.Hend.) A.C.Sm. ^	Sapotaceae	t	NE
<b><i>Scyphostegia borneensis</i> Stapf ^</b>	Schisandraceae	c	NE
<i>Bruinsmia syracoides</i> Boerl. & Koord ^	Scyphostegiaceae	t	NE
<i>Symplocos</i> cf. <i>anomala</i> Brand ^	Syracaceae	t	NE
<i>Symplocos fasciculata</i> Zoll. ^	Symplocaceae	t	NE
<i>Symplocos laeteviridis</i> var. <i>laeteviridis</i> Stapf ^	Symplocaceae	t	NE

## IUCN Red List

Species	Family	H	2013
<i>Symplocos tricoccata</i> Noot. ^	Symplocaceae	t	NE
<i>Camellia lanceolata</i> (Blume) Seem. ^	Theaceae	t	NE
<b><i>Pyrenaria serrata</i> Blume var. <i>macrocarpa</i> (Korth.) H.Keng ^</b>	Theaceae	t	NE
<b><i>Schima brevifolia</i> Baill. ex Stapf ^</b>	Theaceae	t	NE
<i>Schima monticola</i> Kurz	Theaceae	t	NE
<i>Schima wallichii</i> Choisy ^	Theaceae	t	NE
<i>Aquilaria malaccensis</i> Lam. ^	Thymelaeaceae	t	VU
<i>Gonystylus forbesii</i> Gilg ^	Thymelaeaceae	t	NE
<b><i>Gonystylus keithii</i> Airy Shaw</b>	Thymelaeaceae	t	VU
<i>Wikstroemia androsaemifolia</i> Decne.	Thymelaeaceae	s	NE
<i>Wikstroemia tenuiramis</i> Miq. ^	Thymelaeaceae	t	NE
<i>Aralidium pinnatifidum</i> (Jungh. & de Vriese) Miq. ^	Toricelliaceae	t	NE
<i>Debregeasia longifolia</i> (Burm.f.) Wedd. ^	Urticaceae	t	NE
<i>Debregeasia squamata</i> King ex Hook.f.	Urticaceae	t	NE
<i>Dendrocnide elliptica</i> (Merr.) Chew ^	Urticaceae	t	NE
<b><i>Elatostema penibukanense</i> Gibbs</b>	Urticaceae	h	NE
<i>Oreocnide trinervis</i> (Wedd.) Miq. ^	Urticaceae	s	NE
<i>Poikilospermum cordifolium</i> (Barg.-Petr.) Merr. ^	Urticaceae	c	NE
<b><i>Poikilospermum scabrinervium</i> (Barg.-Petr.) Merr.</b>	Urticaceae	c	NE
<i>Pouzolzia sanguinea</i> (Blume) Merr. ^	Urticaceae	s	NE
<i>Ampelocissus ochracea</i> (Merr.) Merr. ^	Vitaceae	c	NE
<i>Leea aculeata</i> Blume ex Spreng. ^	Vitaceae	t	NE
<i>Leea indica</i> (Burm.f.) Merr. ^	Vitaceae	t	NE
<i>Tetrastigma dubium</i> (Lawson) Planch. **	Vitaceae	c	NE
<i>Tetrastigma pedunculare</i> (Wallich ex Lawson) Planch. **	Vitaceae	c	NE
<i>Vitis cissooides</i> (Blume) Backer (Syn: <i>Pterisanthes cissooides</i> Blume)	Vitaceae	c	NE

Species	Family	H	IUCN Red List 2013
<i>Drimys piperita</i> Hook.f.^	Winteraceae	t	NE

**Notes:**

**Bold** = endemic to Borneo      **Underlined bold** = endemic to Sabah      **Underlined bold and (+)** = endemic to Trusmadi FR  
**H** = growth form or habit; c = climber, ep = epiphyte, f = fern, g = grass, h = herb, l = lycophyte, pt = palm tree, s = shrub, sd = sedge, t = tree  
**Marked with (^)** = previously recorded from Trusmadi FR  
**NE** = not evaluated; **DD** = data deficient; **LR** = lower risk; **LC** = least concern; **NT** = near threatened; **VU** = vulnerable; **EN** = endangered; **CR** = critically endangered  
**(\*)** = protected species; **(\*\*)** = totally protected species

