

Full Paper

Vegetation of Doi Tung, Chiang Rai Province, Northern Thailand

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Abstract: The climate of Doi Tung, Chiang Rai Province, is monsoonal with three distinct seasons, viz. cool-dry, hot-dry, and rainy. The elevation ranges from c. 350-1525m and most of the bedrock is limestone and granite. Vegetation below c. 1000m is mostly deciduous, while above this it is evergreen. A mixed evergreen + deciduous facies is present on the limestone peaks (up to 1425m). Forest destruction as well as settlements are widespread, thus creating increasingly severe problems with water resources, soil quality and stability, and biodiversity. The planting on pine monocultures in deforested areas 20 years ago in upland granite areas has resulted in much environmental degradation which requires immediate rectification.

Keywords: Doi Tung, vegetation, deciduous, evergreen, hardwood forest

Introduction

Doi (Mt.) Tung (pronounced “dtung”) is a mountainous area situated in the northern part of Chiang Rai Province, northern Thailand at approximately 20° 20' N latitude, 99° 50' E longitude. The northern part of the mountain is in Mae Sai District, while the southern part is in Mae Fa Luang District. The area is under the jurisdiction of the Mae Fa Luang Foundation, Doi Tung Development Project, which was established in 1988 by HRH the late Princess Mother (1901-1995) who had a retreat there. This project is directed by MR Disnadda Diskul, former secretary to HRH the Princess Mother. The main objectives of the Doi Tung Development Project are the alleviation of poverty and assistance of the various hill tribe folk living in the area, environmental and natural resource conservation, sustainable

agricultural development, and reforestation. Prior to 1988 the entire area was a major centre of opium (*Papaver somniferum* L., Papaveraceae) production which caused the destruction of much of the natural forest cover there (Figure 1). Subsequent replanting with *Pinus kesiya* Roy. ex Gord. (Pinaceae, 3-needed pine) has covered most of the denuded slopes in the area. Various environmental problems created by planting monocultures of this inappropriate species are now becoming realized.

The Doi Tung Development Project includes an area of c. 150 km². There are 27 villages and, as of 2004, 10,741 people living in the project area. There are 7 ethnic groups present with Akha (c. 48%), Lahu (c. 16%), Tai Yai (c. 17%), Chinese (c. 9%), Lua (c. 5%), Thai (c. 2%), and Lisu (<1%)¹.



Figure 1. View east of Pah He (Abha) Village, cool season 1988. Uncontrolled and rampant forest destruction by hilltribe immigrants combined with their primitive agricultural practices resulted in widespread denuded and eroded land throughout northern Thailand. This picture, taken in late 1988-early 1989 of a granite ridge SE of Pah He (Akha) village, shows what much of Doi Tung was like prior to the establishment of the Doi Tung Development Project. The ridge is presently covered with a mixture of secondary growth and planted pine. Doi Nahng Nawn is visible in the upper left corner of the photo. Source: Doi Tung Development Project, Doi Tung, Chiang Rai.

The Doi Tung area has at least a thousand year history of human influence. In AD 911 (B.E. 1454), King Achutarat Yonoknakapahn with Pra (priest) Maha Kassapapera established a pagoda (stupa) just below the summit of Doi Tung at 1375 m elevation. This shrine is believed to contain the left clavicle and about 500 other relict pieces of the Lord Buddha, thus establishing the first pagoda in the Lanna kingdom. This pagoda was restored by Krubah (priest) Sivichai in 1927 (B.E. 2470) and was enclosed in a larger structure in 1973 (B.E. 2516). This pagoda is now called Wat (temple) Pra Taht Doi Dung and is a popular tourist attraction. Doi is a Thai word for mountain, while “tung” are long flags/banners on tall poles which indicate important Buddhist areas. They symbolize victory, brightness, luck, and good wishes. Apparently there were many “tung” on the summit area when the pagoda was established. Some of these “tung” are still found at the temple.

¹ Statistics from the Doi Tung Development Project, Doi Tung

Geology

The Doi Tung area is in the Pi Pahn (Nahng Nawn) range and consists of continuous Middle Permian limestone from the eastern lowlands of the mountain (450 m) to summit of Pah Hoong (*c.* 1425 m), which is slightly above Wat Pra Taht Doi Tung [1]. Adjacent to, north of, and of similar elevation as Pah Hoong are Doi Pah He and Doi Nahng Nawn—the later two having had much of their vegetation cleared by local hill tribe villagers. The valley between these two peaks is a major water catchment area for the east side of the mountain. Several upland tributaries eventually form Laeng and Dtone Fai Streams. This limestone was originally formed from calcareous deposits in the sea *c.* 250 million years ago, the sediment subsequently being lithified by pressure. There is also a shale deposit in the Pah Mee Cave area which is contiguous with the limestone. Shale is a sedimentary rock formed by compression and hardening of original deep water silt and mud deposits.

Doi Chang Moop² (*c.* 1525 m), situated west of Doi Tung along with the Royal Villa area (1000 m), consists of Middle-Upper Triassic granite [1] which was originally formed *c.* 200 million years ago from plutonic activity in the earth's crust. Metamorphic sandstone, similar in age as the limestone, is found in the Royal Villa area. This was originally sandstone formed from sea sediment which has been subsequently altered by heat and pressure, *i.e.* it has been metamorphosed.

The collision of the India plate with SE Asia beginning *c.* 50 million years ago has caused the gradual uplift of mountains in the region. Subsequent tectonics and erosion have resulted in the present geomorphology of the area.

Climate

The climate in northern Thailand has 3 distinct seasons. The cool-dry season is from November–February which is followed by a hot-dry period from March to May. The rainy season begins in May–June and ends in November. Climatic data, provided by the Doi Tung Development Project, has been recorded at 3 stations located at 550, 570, and 1200 m elevation. There is a distinct dry season from December to March during which there is little to no rain. The first rains are in April, but it is not until May that there is any regularity in rainfall. The highest amount of rainfall is during July–September. The average annual rainfall at 550 m is 1925 mm, 2100 mm at 750 m, and 2500 mm at 1200 m. Figure 2 shows the average monthly amounts of rainfall at all 3 elevations.

Temperatures are lowest from November to February with an average minimum at 500 m of 13° C in January–February and *c.* 21° C from June–August. At 750 m the lowest average temperature is 13° C in December and the highest is in April with 31° C. At 1200 m the temperatures are lower with November–January having average temperatures at *c.* 13° C and a peak in April of *c.* 23°C (Figures 3 & 4).

² Thai=kneeling elephant, in reference to a large, smooth, granite exposure on the summit which is envisioned to resemble this shape; *i.e.* Chang Moop shrine (1500 m).

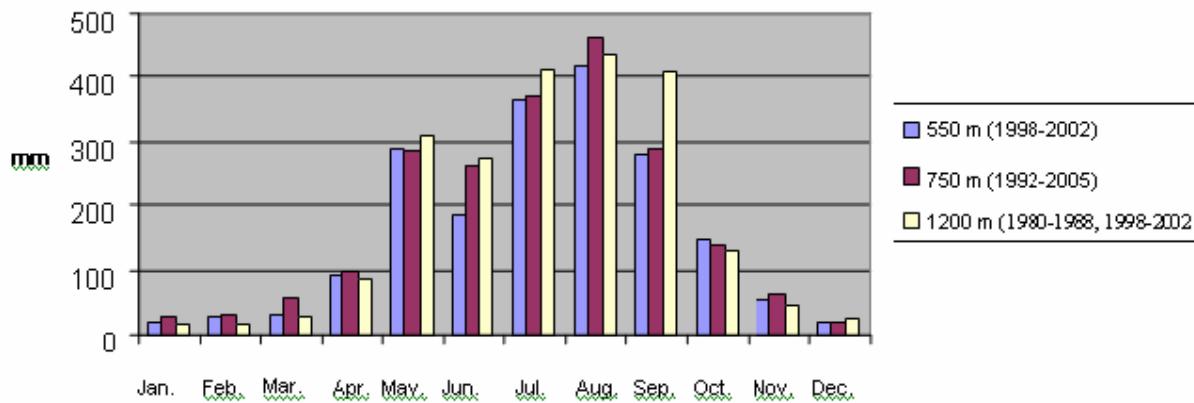


Figure 2. Average monthly rainfall (mm) at Doi Tung. Source: Doi Tung Development Project, Doi Tung, Chiang Rai, Graphics by Ricky Ward

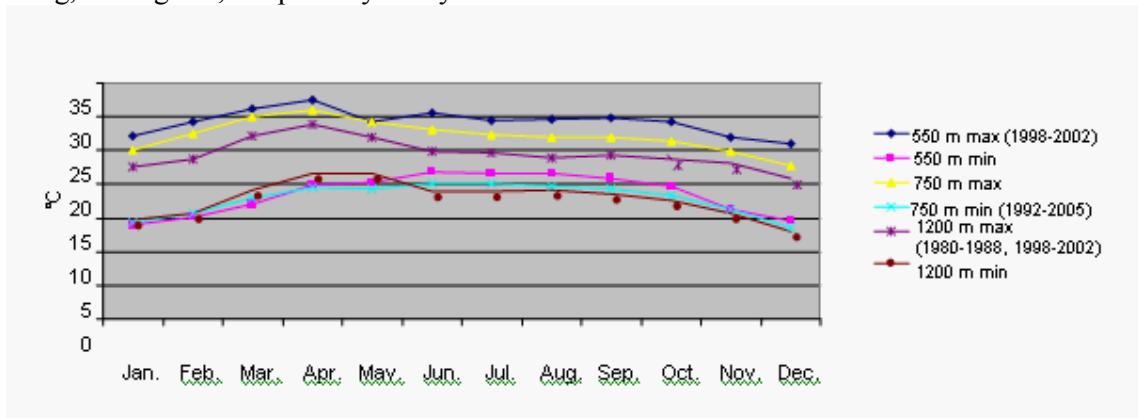


Figure 3. Average monthly temperatures (°C) at Doi Tung. Source: Doi Tung Development Project, Doi Tung, Chiang Rai, Graphics by Ricky Ward

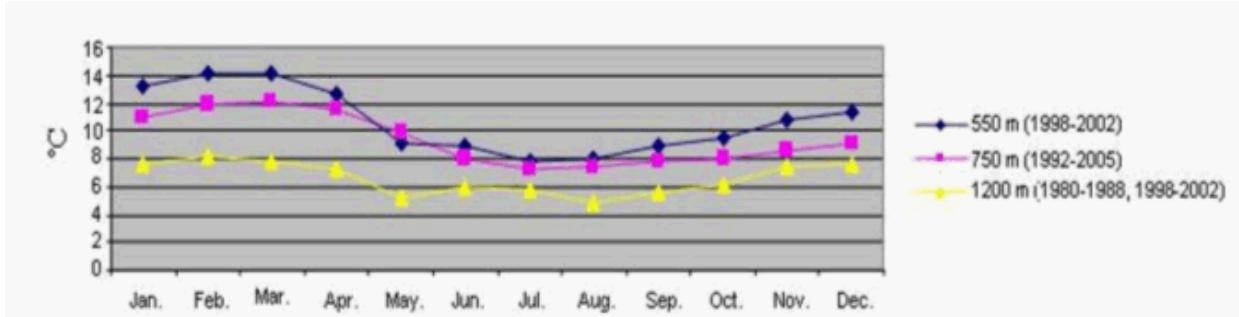


Figure 4. Average monthly diurnal temperature (°C) fluctuations at Doi Tung. Source: Doi Tung Development Project, Doi Tung, Chiang Rai, Graphics by Ricky Ward

Vegetation

The vegetation of Thailand, especially the north, is seasonal. There is a distinct dry period of various lengths ranging from 4-6 weeks in the south to several months in the north. The vegetation is greatly influenced by the amount and periodicity of rainfall. Seasonality, rainfall, elevation, and disturbance all directly influence vegetation while bedrock, especially limestone, can be a factor in floristics. Doi Tung has vegetation typical for the region and bedrocks, *i.e.* deciduous and evergreen. The basic system used to classify Thai vegetation follows my observations and analyses [2]. Lowland areas, 450-*c.*1000 m elevation, on both granite and limestone bedrocks, are deciduous and have often been severely degraded, frequently burned, and eroded.

These are deciduous, seasonal, hardwood forests, often with much bamboo (BB-DF), which are leafless from about December to April. More shaded and moist places, especially along permanent streams, often include evergreen species, *i.e.* mixed evergreen + deciduous, seasonal, hardwood forest (MXF). MXF is also found on the two limestone peaks at *c.* 1425 m. During the hottest and driest period from March-May, this MXF is manifest when the deciduousness of some species is obvious. The original vegetation of areas above 1000 m elevation was evergreen (EGF) and in some places with pine (EG-Pine), but rampant destruction by hill tribe people in the past century has eradicated much of this primary facies on both major bedrocks. The Doi Tung-Doi Chang Moop area has the most intact vegetation in the entire project area. After the first rains in May and June, all deciduous and MXF areas are green again. The particular phenologies of the species found in each forest type vary considerably. Flowers and fruits can be found in all areas throughout the year.

In general, the lowland and upland vegetation of Doi Tung is similar to that in Doi Chiang Dao Wildlife Sanctuary, Chiang Mai Province, *c.* 150 km SW of Doi Tung [3,4]. Both areas have granite and limestone bedrocks and within their corresponding elevations similar floras. The limestone of Doi Chiang Dao is continuous from 450-2175 m and granite rises west of this to *c.* 1550 m. The floras of the two areas are quite similar, including vast areas of degraded or destroyed forest caused by primitive hill tribe agricultural practices, frequent fires, domesticated cattle, hunting, and for Doi Chiang Dao totally ineffective protection and conservation of natural resources.

Lowland Deciduous Forests

From the plains at 450 m to *c.* 1000 m the vegetation is mostly deciduous during the dry season (November-May)—the peak of leaflessness being during the hottest and driest period of March and April. There are two basic kinds of deciduous forest, most of which have been obliterated by humans. Deciduous hardwood forest, once dominated by *Tectona grandis* L. f. (Verbenaceae, teak) is now absent. Other components of this formerly vast forest facies are: *Xylia xylocarpa* (Roxb.) Taub. var. *kerrii* (Craib & Hutch.) Niels. (Leguminosae, Mimosoideae), *Pterocarpus macrocarpus* Kurz (Leguminosae, Papilionoideae), *Afzelia xylocarpa* (Kurz) Craib and *Sindora siamensis* Teysm. ex Miq. var. *siamensis* (both Leguminosae, Caesalpinoideae)—all commercially valuable timber trees. The remnant of this once magnificent vegetation is a continuously degraded, burned, grazed, and eroded deciduous growth with much bamboo, especially *Dendrocalamus membranaceus* Munro, *D. nudus* Pilg., and *Bambusa tulda* Roxb. (all Gramineae, Bambusoideae). This kind of degraded deciduous forest is now a bamboo-deciduous, seasonal, hardwood forest (BB-DF). Many tree species which were

part of the original forest still remain as survivors of the botanical holocaust since they are not good for timber, firewood, or charcoal. *Lagerstroemia cochinchinensis* Pierre var. *ovalifolia* Furt. & Mont. and *L. tomentosa* Presl (Lythraceae), *Tetrameles nudiflora* R. Br. ex Benn. (Datiscaceae), *Spondias pinnata* (L. f.) Kurz (Anacardeaceae), and *Garuga pinnata* Roxb. (Burseraceae) are some common examples which can occasionally be found—often as isolated individuals. Deciduous trees of less stature which formed the understorey of the original forest persist in many places, especially in regenerating areas include: *Millettia brandisiana* Kurz, *Dalbergia lanceolaria* L. f., and *D. cultrata* Grah. ex Bth. (all Leguminosae, Papilionoideae); *Cratoxylum formosum* (Jack) Dyer ssp. *pruniflorum* Kurz) Gog. (Guttiferae, Hypericeae); *Colona floribunda* (Kurz) Craib, *C. flagrocarpa* (Cl.) Craib, and *Berrya moills* Wall. ex Kurz (all Tiliaceae); *Mitragyna rotundifolia* (Roxb.) O.K. (Rubiaceae), *Schleichera oleosa* (Lour.) Oken (Sapindaceae), *Phyllanthus columnaris* M. A. and *Falconeria insigne* Roy. (both Euphorbiaceae); *Vitex canescens* Kurz and *V. limoniifolia* Wall. ex Kurz (Verbenaceae), *Alstonia scholaris* (L.) R. Br. (Apocynaceae), and *Anogeissus acuminata* (Roxb. ex DC.) Guill. & Perr. (Combretaceae).

Woody climbers and scandent shrubs, previously common, are often scarce since suitable tree support is often lacking. Common examples are: *Ziziphus oenoplia* (L.) Mill. var. *oenoplia* (Rhamnaceae), *Harrisonia perforata* (Blanco) Merr. (Simaroubaceae), and *Acacia megaladena* Desv. var. *megaladena* (Leguminosae, Mimosoideae)—all of which are variously aculeate. *Cissus repens* Lmk. (Vitaceae), *Dalbergia volubilis* Roxb. (Leguminosae, Papilionoideae), and *Combretum latifolium* Bl. (Combretaceae) are some frequent inermous counterparts. Treelets and shrubs, forming the lowest woody level up to 5 m high, were also common and dense, but have been reduced in density and diversity because of exposure and degradation. *Helicteres elongata* Wall. ex Boj. and *H. isora* L. (Sterculiaceae), *Ellipelopsis cherreensis* (Pierre ex Fin. & Gagnep.) R. E. Fr. (Annonaceae), *Desmodium velutinum* (Willd.) DC. ssp. *velutinum* var. *velutinum*, *D. pulchellum* (L.) Bth., and *D. triangulare* (Retz.) Merr. (Leguminosae, Papilionoideae); and *Thespisia lampas* (Cav.) Dalz. & Gibbs. var. *lampas* (Malvaceae) are frequently encountered.

The herbaceous ground flora is usually absent during the dry months of November-May. After the first rains in May several deciduous herbs produce flowers before their leaves appear, e. g. *Hapaline benthamiana* Schott, *Amorphophallus krausei* Engl, and *A. paeonifolius* (Denn.) Nicol. (all Araceae); *Geodorum siamensis* Rol. ex Dow. and *Nervilia aragoana* Gaud. (both Orchidaceae); *Curcuma zedoaria* (Berg.) Rosc., *Globba nuda* Craib, and *Kaempferia rotunda* L. (all Zingiberaceae). By the peak of the rainy season in August-September, the ground is covered with vegetation, both annual and deciduous species. Some common dicots include: *Andrographis laxiflora* (Bl.) Lindau, *Barleria cristata* L. and *B. strigosa* Willd., and *Neuracanthus tetragonostachys* Nees ssp. *tetragonostachys* (all Acanthaceae); *Blumea mollis* (D. Don) Merr., *Eupatorium odoratum* L. and *Pluchea polygonata* (DC.) Gagnep. (all Compositae); *Torreya violacea* (Aza. ex Blanco) Pell. (Scrophulariaceae), *Sauvagesia quadrangularis* (Willd.) M. A. and *Phyllanthus virgatus* Forst. f. (both Euphorbiaceae).

Monocots are also common ground flora components and include: *Commelinopsis paludosa* Bl. and *Cyanotis cristata* (L.) D. Don (both Commelinaceae); *Globba schomburgkii* Hk.f. var. *schomburgkii*, *Kaempferia roscooeana* Wall., and *Zingiber kerrii* Craib (all Zingiberaceae); *Crinum wattii* Baker (Amaryllidaceae), and *Scleria terrestris* (L.) Fass. (Cyperaceae). Many Gramineae (grasses) are found in BB-DF and provide much fuel for the fires after they dry, none of which occur naturally, during the

dry season. *Apluda mutica* L., *Microstegium vagans* (Nees ex Steud.) A. Camus, *Oryza meyeriana* (Zoll. & Mor.) var. *granulata* (Watt) Duist., and *Themeda triandra* Forssk. are common representatives.

Pterodophytes (ferns and allies) are often found in BB-DF with *Selaginella ostenfeldii* Hieron. (Selaginellaceae), *Lygodium flexuosum* (L.) Sw. (Schizaeaceae, a vine), *Cheilanthes tenuifolia* (Burm. f.) Sw. (Parkeriaceae), and *Tectaria impressa* (Fee) Holtt. (Dryopteridaceae).

Many vines, both annual and deciduous, can be found in BB-DF. Dicot examples include *Zehneria wallichii* (Cl.) C. Jeff. (Cucurbitaceae), *Paederia pallida* Craib (Rubiaceae), *Ipomoea obscura* (L.) Ker-Gwal. and *Jacquemontia paniculata* (Burm. f.) Hall. f. var. *paniculata* (both Convolvulaceae). Some monocot vines are: *Smilax perfoliata* Lour. (Smilacaceae), *Dioscorea hispida* Denn. var. *mollissima* (Bl.) Pr. & Burk. (Dioscoreaceae), and *Stemonona burkillii* Prain (Stemonaceae).

Vascular epiphytes are much less common now because of habitat destruction and extraction for cultivation. *Hoya kerrii* Craib, *H. verticillata* (Vahl) G. Don var. *verticillata*, and *Dischidia major* (Vahl) Merr. (all Asclepiadaceae); *Cymbidium aloifolium* (L.) Sw., *Aerides flacata* Lindl., and *Dendrobium signatum* Rchb. f. (all Orchidaceae); *Drynaria bonii* C. Chr., *Platycerium wallichii* Hk. f., and *Pyrrosia adnascens* (Sw.) Ching (all Polypodiaceae) are some species which are now rare because of commercial exploitation.

Deciduous Dipterocarp-Oak, Seasonal, Hardwood Forest (DOF)

BB-DF areas that have been cleared, burned, farmed, grazed, and eroded usually do not regenerate into the original facies. The consequent loss of coppicing trees, depletion of soil fertility and structure, and absence of animals which distribute seeds of BB-DF species result in a different kind of forest regrowth which is essentially a fire-maintained, climax secondary growth. I have called this man-induced growth deciduous, dipterocarp-oak, seasonal, hardwood forest since it is dominated by Dipterocarpaceae and Fagaceae (oaks *et al.*) [1,3]. DOF is always of lower stature, has less diversity, poorer soil, and lower number of different species than BB-DF. BB-DF often reverts to DOF, but I have not seen the opposite occurring. I suspect that soil degradation is the main reason which DOF will not develop into BB-DF—at least as long as humans continue to subvert the environment.

Dipterocarpaceae trees are common with: *Dipterocarpus obtusifolius* Tiejsm. ex Miq. var. *obtusifolius*, *D. tuberculatus* Roxb. var. *tuberculatus*, *Shorea obtusa* Wall. ex Bl. and *S. siamensis* Miq. var. *siamensis*. Fagaceae include *Quercus kerrii* Craib var. *kerrii*, *Q. kingiana* Craib, *Q. aliena* Bl.; *Lithocarpus polystachyus* (A. DC.) Rehd., and *Castanopsis argyrophylla* King ex Hk. f.. DOF also includes many other trees which are usually found in BB-DF, viz. *Anneslea fragrans* Wall. (Theaceae), *Buchanania glabra* Wall. ex Hk. f., *B. lanzan* Spreng., *Gluta usitata* (Wall.) Hou, and *Lannea coromandelica* (Houtt.) Merr. (all Anacardiaceae); *Terminalia alata* Hey. ex Roth and *T. chebula* Retz. var. *chebula* (Combretaceae), *Eugenia cumini* (L.) Druce (Myrtaceae), *Dillenia parviflora* Griff. var. *kerrii* (Craib) Hoogl. (Dilleniaceae), and *Aporosa villosa* (Lindl.) Baill. (Euphorbiaceae).

Trees of lower stature include: *Tristania burmanica* (Griff.) Wils. & Wats. var. *rufescens* (Hance) Parn. & Lug. (Myrtaceae), *Craibiodendron stellatum* (Pierre) W.W. Sm. and *Vaccinium sprengelii* (D. Don) Sleum. (both Ericaceae); *Strychnos nuxvomica* L. (Loganiaceae); *Morinda tomentosa* Hey. ex Roth and *Wendlandia tinctoria* (Roxb.) DC. ssp. *floribunda* (Craib) Cow. (both Rubiaceae); *Antidesma acidum* Retz. and *Phyllanthus emblica* L. (both Euphorbiaceae).

Olax psittacorum (Willd.) Vahl (Olacaceae), *Spatholobus parviflorus* (Roxb.) O.K. (Leguminosae, Papilionoideae), *Aganosma marginata* (Roxb.) G. Don (Apocynaceae), *Celastrus paniculatus* Willd. (Celastraceae), and *Cansjera rheedii* J. F. Gmel. (Opiliaceae) are some common woody climbers in DOF. Shrubs and treelets include: *Grewia abutilifolia* Vent. ex Juss. (Tiliaceae); *Gardenia obtusifolia* Roxb. ex Kurz, *Pavetta fruticosa* L., *Catunaregam spathulifolia* Tirv., and *Meyna pubescens* (Kurz) Roby. (all Rubiaceae); *Blinkworthia lycioides* Choisy (Convolvulaceae); *Premna herbacea* Roxb. and *P. nana* Coll. & Hemsl. (Verbenaceae); *Breynia fruticosa* (L.) Hk. f. and *B. glauca* Craib (Euphorbiaceae). *Phoenix loureiroi* Kunth var. *loureiroi* (Palmae), with its characteristic pachycaulous habit, is occasionally found in DOF, often in burned places.

The herbaceous ground flora in DOF includes both annual and deciduous species. Some common annuals are: *Crotalaria alata* D. Don and *C. albida* Hey. ex Roth (Leguminosae, Papilionoideae), *Sonerila erecta* Jack (Melastomataceae); *Borreria brachystemma* (R. Br. ex Bth.) Valet., *Hedyotis pinifolia* Wall. ex G. Don, and *Knoxia corymbosa* Willd. (all Rubiaceae); *Striga asiatica* (L.) O.K. (Scrophulariaceae); *Cyperus flavidus* Retz. and *Rhynchospora rubra* (Lour.) Mak. (both Cyperaceae); *Aristida cumingiana* Trin. & Rupr., *Digitaria siamensis* Henr., and *Perotis indica* (L.) O.K. (all Gramineae). Deciduous herbs are also abundant in DOF. Some frequently seen species are: *Crotalaria neriifolia* Wall. ex Bth. and *Indigofera squalida* Prain (both Leguminosae, Papilionoideae); *Gynura pseudochina* (L.) DC. (Compositae), *Platostoma coloratum* (D. Don) A. J. Pat. (Labiate), *Hypoxis aurea* Lour. (Amaryllidaceae); *Cyperus niveus* Retz. and *Scleria kerrii* Turr. (both Cyperaceae); *Apluda mutica* L., *Arundinella setosa* Trin. var. *setosa*, *Heteropogon contortus* (L.) P. Beauv. ex Roem. & Schult., and *Eulalia siamensis* Bor (all Gramineae). *Adiantum zollingeri* Mett. ex Kuhn and *Chelone belangeri* (Bory) C. Chr. (both Parkeriaceae) are two common, deciduous pteridophytes found in DOF.

DOF vines are plentiful during the rainy season with *Dunbaria bella* Prain and *Grona grahamii* Bth. (both Leguminosae, Papilionoideae), *Gymnema griffithii* Craib (Asclepiadaceae), *Aristolochia kerrii* Craib (Aristolochiaceae), and *Stemona kerrii* Craib (Stemonaceae). The epiphytic and epilithic vascular flora is quite similar to that found in BB-DF and has also been similarly exploited and extirpated. As in less degraded and more intact BB-DF and DOF areas, there is usually an abundance of seedlings and saplings which are mostly destroyed or damaged by fire and cattle before the next rainy season.

Mixed Evergreen + Deciduous, Seasonal, Hardwood Forest (MXF)

In northern Thailand there is a distinct forest type situated above deciduous forests and below evergreen forest. In shale, metamorphic sandstone, and granite zones, such as Doi Sutep-Pui National Park, Chiang Mai Province, this MXF can be found from c. 600-1000 m elevation [5]. This MXF has often disappeared due to forest destruction, Doi Tung included. Limestone areas frequently have MXF at lower elevations, c. 450 m, up to the summit of Doi Chiang Dao (2175 m). This is also the situation on some of the riverine limestone on the east side of Doi Tung where MXF is found along the Pah He-Mae Gawk valley starting at c. 550 and on the summits Pah Hoong and Doi Pah He (both c. 1425 m). Other limestone areas, especially typically steep cliffs, have deciduous cover in the lowlands and evergreen facies above 1000 m.

MXF is best distinguished during the hot-dry season (March-May) when lowland deciduous forest are leafless and MXF areas partially so. Many MXF species, especially those epilithic on limestone, are only found in this habitat. Typical MXF trees on the limestone summits which are deciduous include:

Brassiopsis hainla (B.-H. ex D. Don) Seem. and *Schefflera pteleotii* Merr. (both Araliaceae), *Radermachera hainanensis* Merr. (Bignoniaceae), *Falconeria insigne* Roy. (Euphorbiaceae, also in BB-DF), *Acer chiangdaoensis* Santi. (Aceraceae); *Firmiana kerrii* (Craib) Kosterm. and *Sterculia villosa* Roxb. (both Sterculiaceae), and *Debgreasia wallichiana* (Wedd.) Wedd. ssp. *wallichiana* (Urticaceae). Evergreen counterparts are *Eriobotrya salwinensis* Hand.-Mazz. (Rosaceae), *Dicelostyles zizyphifolia* (Griff.) Phup. (Malvaceae), and *Buxus* sp. (Buxaceae). Most of these species are common on the summits of the two limestone peaks.

Deciduous treelets include *Brucea javanica* (L.) Merr. (Simaroubaceae), *Cipadessa baccifera* (Roth) Miq. (Meliaceae), and *Premna racemosa* Wall. ex Schauer (Verbenaceae). Some evergreen representatives are: *Capparis sabiifolia* Hk. f. & Th. (Capparaceae), *Glycosmis cochinchinensis* (Lour.) Pierre ex Engl. (Rutaceae); *Agapetes megacarpa* W.W. Sm., and *A. lobbii* Cl. (Ericaceae), *Myrsine semiserrata* Wall. (Myrsinaceae), and *Fagraea ceylanica* Thunb. (Loganiaceae), *Clematis fulvicoma* Rehd. & Wils. (Ranunculaceae), *Hiptage bullata* Craib (Malpighiaceae), and *Acacia megalandena* Desv. var. *garrettii* Niels. (Leguminosae, Mimosoideae) are some deciduous woody climbers. Some common evergreen vines/woody climbers include: *Tetrastigma cruciatum* Craib & Gagnep. (Vitaceae), *Secamone elliptica* R. Br. ssp. *elliptica* (Asclepiadaceae), and a presently unidentified species of *Thunbergia* (Acanthaceae)—all found in mostly open, rugged limestone areas.

The herbaceous summit flora is mostly different from that found in other places in the project area. Most of these species are confined to this open, very rugged, and occasionally burnt habitat. The basic vegetation is MXF and in disturbed areas it is EG/BB. *Dendrocalamus giganteus* (Wall.) Munro (Gramineae, Bambusoideae), the only bamboo found in this habitat, is very common. I have not found flowering material of this species. Almost all of these summit species are deciduous and include mainly epiphytes and epiliths, with a few geophytes which grow in thin, black soil.

Impatiens salangensis T. Shim. (Basalminaceae) and *Clerodendrum subscaposum* Hemsl. (Verbenaceae) are common annual herbs. Deciduous dicot epiliths include *Clematis fulvicoma* Rehd. & Wils. (Ranunculaceae, a vine), *Impatiens clavigera* Hk. f. and *I. kerriae* Craib (Basalminaceae), *Senecio scandens* B. -H. ex D. Don and *Vernonia attenuata* DC. (both Compositae), *Paraboea glabrisepala* Burtt and *Trisepalum prazeri* Burtt (both Gesneriaceae), *Argostemma verticillatum* Wall. (Rubiaceae), and *Peperomia tetraphylla* (Forst. f.) Hk. & Arn. (Piperaceae). Deciduous epilithic monocots are also common with: *Hedychium ellipticum* Ham. ex J.E. Sm. (Zingiberaceae) and many Orchidaceae, viz. *Coelogynne lactea* Rchb. f., *Eria bilobulata* Seid., *Habenaria furcifera* Lindl., and *Panisea uniflora* (Lindl.) Lindl. Epilithic pteridophytes are frequent with *Cheilanthes fragilis* Hk. (Parkeriaceae), *Asplenium interjectum* Christ (Aspleniaceae), and *Microsorum zippelii* (Bl.) Ching (Polypodiaceae).

Epiphytic herbs are numerous and include some species which are also epiliths. *Eria globulifera* Seid., *Pholidota articulata* Lindl., *Porpax lanii* Seid. (all Orchidaceae); *Araiostegia imbricata* Ching and *Davalloides membranulosum* (Wall. ex Hk.) Copel. (both Davalliaceae), and *Loxogramme involuta* (D. Don) Presl (Polypodiaceae) are common. In addition to these vascular plants there are many algae, fungi, lichens, and bryophytes on the woody vegetation and rocks.

Primary, Evergreen, Seasonal, Hardwood Forest (EGF)

EGF is present on both bedrocks from *c.* 1000-1525 m—the summit of Doi Chang Moop which is the highest point in the project area. Aside from MXF zones and the epilithic limestone flora, EGF is uniform throughout the area. The structure and composition of EGF is similar on both granite and limestone bedrocks. Thousands of years of soil development and floristic stabilization has resulted in this primary, climax vegetation. Unfortunately, much of the original EGF has been destroyed or degraded. The most intact area is on Doi Tung and the east side and valley below Doi Chang Moop. EGF in most of Mae Fa Luang and Mai Sai Districts as well as adjacent areas in Myanmar have been devastated. EGF is distinct because of its appearance with a continuous canopy 20-30 m high and similarly dense understorey and ground flora. Biodiversity is highest in EGF and, in contrast to deciduous forests, EGF cannot recover from fire, extensive grazing, and constant human exploitation.

Typical canopy trees include: *Schima wallichii* (DC.) Korth. (Theaceae), *Sarcosperma arboreum* Bth. (Sapotaceae), *Cinnamomum iners* Reinw. ex Bl. (Lauraceae), *Balakata baccata* (Roxb.) Ess. (Euphorbiaceae); and several Fagaceae, *e.g.* *Castanopsis armata* (Roxb.) Spach., *C. tribuloides* (Sm.) A. DC., and *Lithocarpus elegans* (Bl.) Hatus. ex Soep.. Some understorey trees are *Turpinia pomifera* (Roxb.) Wall. ex DC. (Staphyleaceae), *Semecarpus cochinchinensis* Engl. (Anacardiaceae), *Ormosia sumatrana* (Miq.) Prain (Leguminosae, Papilionoideae), *Heynea trijuga* Roxb. ex Sims (Meliaceae); *Phoebe lanceolata* (Wall. ex Nees) Nees (Lauraceae). *Baccaurea ramiflora* Lour. and *Bridelia glauca* Bl. (both Euphorbiaceae), and *Ficus annuata* Bl. (Moraceae).

Woody climbers are common with *Mucuna macrocarpa* Wall., *Dalbergia rimosa* Roxb., and *D. stipulacea* Roxb. (all Leguminosae, Papilionoideae); *Rourea minor* (Gaertn.) Leenh. ssp. *minor* (Connaraceae), and *Tetrastigma laoticum* Gagnep. (Vitaceae), with its distinctive, flat stems up to *c.* 15 cm diameter. *Leea indica* (Burm f.) Merr. (Leeaceae), *Melicope pteleifolia* (Champ. ex Bth.) T. Hart. (Rutaceae); *Psychotria monticola* Kurz var. *monticola* and *P. ophioxyloides* Wall. (Rubiaceae), *Maesa permollis* Kurz (Myrsinaceae), *Strobilanthes rex* Cl. (Acanthaceae), and *Antidesma sootepense* Craib (Euphorbiaceae) are some common treelets and shrubs found in shaded places.

The ground flora is mostly evergreen and in undisturbed places it is typically dense. Common representatives include: *Mycetia glandulosa* Craib and *Ophiorrhiza trichocarpon* Bl. var. *trichocarpon* (both Rubiaceae), *Lepidagathis incurva* Ham. ex D. Don (Acanthaceae), *Pollia hasskarlii* R. Rao (Commelinaceae), *Zingiber smilesianum* Craib (Zingiberaceae); and several pteridophytes, *e.g.* *Brainea insignis* (Hk.) J. Sm. (Blechnaceae) and *Thelypteris parastica* (L.) Fosb. (Thelypteridaceae). Seedlings and saplings also contribute to the density and diversity of the ground flora and understorey.

Upper water catchment valleys, ranging in elevation from 925-1352 m, include several ground flora species which are unique or most common to this habitat. The soil is typically moist, thick, and black on all bedrocks. *Musa itinerans* Chees. (Musaceae) and *Phrynium capitatum* Willd. (Marantaceae) are especially common and are good indicators of intact forest conditions. These areas are very important for overall forest stability and sustainability, and are very susceptible to environmental degradation. All of these water sources should have top conservation and protection priorities.

Weeds and Secondary Growth

After vegetation has been thinned or cleared leaving bare soil, primary invaders in the form of weeds (herbs) and secondary growth (woody species) rapidly colonise during the rainy season. The development of vegetation on vacant land depends on the degree and number of times an area has been denuded and/or burned. The fertility and quality of the soil plus its seed bank with seeds of primary invaders is directly related to the history of land abuse. Areas with one or intermittent clearance, i.e. swidden or slash and burn agricultural histories, rapidly regenerate into degraded forms of the original forest cover with coppices of many cut trees. Other areas, especially places that have been repeatedly farmed without fallow periods or with regrowth for only several years, are not able to readily restore forest cover since all vestiges of the original growth have been destroyed.

Weeds

Weeds grow rapidly on destroyed forested land and if these areas are not disturbed for several years a natural succession of permanent vegetation will develop. Weeds are very diverse and include mostly annual, often naturalized, species. Some examples of common annual alien dicots are: *Capparis ruditisperma* DC. and *C. viscosa* L. (Capparaceae), *Mimosa diplosticha* C. Wright ex Sauv. var. *diplosticha* and *M. pudica* L. (Leguminosae, Mimosoideae), *Aeschynomene americana* L. var. *americana* (Leguminosae, Papilionoideae); *Borreria laevis* (Lmk.) Griseb. and *Mitracarpus villosus* (Sw.) DC. (both Rubiaceae); *Ageratum conyzoides* L., *Eupatorium odoratum* L., and *Mikania cordata* (Burm. f.) B. L. Rob. (all Compositae); *Euphorbia heterophylla* L. and *E. hirta* L., *Phyllanthus amarus* Schum. & Thonn. and *P. urinaria* L. (all Euphorbiaceae). Native dicot weeds are also diverse and plentiful. *Portulaca oleracea* L. (Portulacaceae), *Drymaria diandra* Bl. (Caryophyllaceae), *Oxalis corniculata* L. (Oxalidaceae); *Glinus oppositifolius* (L.) A. DC. and *Mollugo pentaphylla* L. (both Aizoaceae), *Hedyotis cormbosa* (L.) Lmk. (Rubiaceae); *Blumea balsamifera* (L.) DC., *B. mollis* (D. Don) Merr., *Conyza sumatrensis* (Retz.) Walk., *Gynura nepalensis* DC., *Laggera pterodonta* (DC.) Sch. Bip. ex Oliv., and *Vernonia cinerea* (L.) Less. var. *cinerea* (all Compositae); *Lindernia crustacea* (L.) F. Muell. var. *crustacea* (Scrophulariaceae), and *Alternanthera sessilis* (L.) DC. var. *sessilis* (Amaranthaceae) are common examples.

Native monocot weeds include: *Commelina benghalensis* L. (Commelinaceae), *Dioscorea bulbifera* L. (Dioscoreaceae), a vine; *Cyperus cyperoides* (L.) O.K., *C. kyllingia* Endl., and *Fimbristylis dichotoma* (L.) Vahl ssp. *dichotoma* (all Cyperaceae); *Chloris barbata* Sw., *Digitaria setosa* Roth ex Roem. & Schult. var. *setigera*, *Eleusine indica* (L.) Gaertn., *Imperata cylindrica* (L.) P. Beauv. var. *major* (Nees) C. E. Hubb. ex Hubb. & Vaugh., *Phragmites vallatoria* (Pluk. ex L.) Veldk., and *Thysanolaena latifolia* (Roxb. ex Horn.) Honda (all Gramineae). *Pteridium aquilinum* (L.) Kuhn ssp. *aquilinum* var. *wightianum* (Ag.) Try. (Dennstaedtiaceae) is an aggressive fern which tolerates fire and forms dense growth which shades out succession. *Dicranopteris linearis* (Burm. f.) Underw. var. *linearis* (Gleicheniaceae), another evergreen pteridophyte, is commonly found on soil embankments and eroded places.

Secondary Growth

Some woody species also grow rapidly in open, abandoned, weedy places. These are fast-growing, short-lived species which are beneficial in providing initial canopy cover which is necessary for plant succession, erosion control, as well as providing food and refuges for animals. Some common trees are: *Anthocephalus chinensis* (Lmk.) A. Rich. ex Walp. (Rubiaceae), *Callicarpa arborea* Roxb. var. *arborea* (Verbenaceae), *Broussonetia papyrifera* (L.) Vent., *Ficus fistulosa* Reinw. ex Bl. and *F. hispida* L. f. var. *hispida* (all Moraceae); *Muntigia calabura* L. (Tiliaceae), which is naturalized; *Oroxylum indicum* (L.) Vent. (Bignoniaceae), and *Trema orientalis* (L.) Bl. (Ulmaceae). *Lantana camara* L. (Verbenaceae) and *Eupatorium adenophorum* Spreng. (Compositae), shrubs; and *Mimosa pigra* L. (Leguminosae, Mimosoideae), a treelet, are all naturalized and often form dense thickets which eliminate native species. *Melastoma malabathricum* L. ssp. *malabathricum* (Melatomataceae), a shrub or treelet, and *Rubus blepharoneurus* Card. (Rosaceae), scandent, both grow in open, disturbed places.

Pinus kesiya Roy. ex Gord. (Pinaceae), 3-needed Pine

This native species was formerly abundant in ridges above 1000 m on granite bedrock, but has been virtually eliminated by uncontrolled deforestation during the past century. It was used by the Royal Forest Department to cover many barren, deforested areas on Doi Tung as well as in may other places in northern Thailand. This species, albeit creating rapid regrowth, is totally unsuitable for several reasons. Natural areas with this species are in evergreen hardwood + pine forest, with pines never being more than half as much as the evergreen hardwoods. Dense monocultures of pine have resulted in a low (acidic) soil pH which has prevented other species from developing as well as slowing the decomposition of pine litter on the ground. This organic litter is a very serious fire problem in all places where pines have been planted. Consequent growth of these pine plantations, all without culling or maintenance, has also shaded out succession. As the pines mature there has also been an obvious decrease in biodiversity and water, combined with increases in erosion which has caused recent flash-flooding, landslides, and siltation of waterways.

The planting of pine trees on Doi Tung limestone has not been successful because of the inherent incompatibility of calcareous (basic) bedrock and acid-loving pines. This is a fundamental concept which any competent forester should have realized prior to making such a serious and wasteful replanting error. It is recommended that all pine areas on granite and metamorphic sandstone bedrocks on Doi Tung be thinned by at least 50% so that there is less shade and acidic biomass available. The ground litter must be removed so that the soil pH can be increased to a level similar to that found in natural EG + Pine areas in the region. Planting with native species found in EG + Pine forest should be done in accordance to the natural tree diversity in these forests. All pines on limestone should be removed and the slopes planted with native species found on nearby undisturbed forest.

Taxonomic notes

Doi Tung, because of its mainly granite and limestone bedrocks, broad elevation range of c. 450-*c.* 1500 m, diverse remnant vegetation, and specific habitats, such as the summit of Pah Hoong, is a very botanically rich area. In addition to many species which are either rare or poorly known, other species of special botanical interest have been collected there.

Sauropolis poomae Welz. & Chay. (Euphorbiaceae) was collected from Doi Tung on 1 March 1997 and described as a new species in 2001. Dr. Pranee Palee collected topotype material of this very rare species while collecting with me there. I have been able to collect four species which are new records for Thai flora--all from Pah Hoong. These include:

1. *Eriobotrya salwinensis* Hand.-Mazz. (Rosaceae), an evergreen treelet or tree up to 6 m tall [6]
2. *Wendlandia ternifolia* Cow. (Rubiaceae), an evergreen, epilithic treelet or slenderly scandent species 1 [6]
3. *Trisepalum prazeri* Burtt (Gesneriaceae), a deciduous, epilithic herb-shrub, and
4. *Premna subcapitata* Rehd. (Verbenaceae), a deciduous, epilithic shrub 1-1.5 m tall.

In addition I have also collected *Clerodendrum subscaposum* Hemsl. (Verbenaceae) on the summit of Pah Hoong. This species was reported by Leeratiwong, C. & P. Chantaranothai [7] as a new record for the Thai flora based on previous specimens from Doi Tung as well as Doi Chiang Dao. This is a deciduous herb which grows in exposed, rocky areas on the summit.

Sageretia cordifolia Tard. (Rhamnaceae), described in 1946 from material from Laos, is only known in Thailand from Doi Tung. I reported this species as a new record for the Thai flora [8]. CMU Herbarium now has 4 specimens of this species, all from the summit of Pah Hoong. It is an evergreen woody climber which flowers in September-October and fruits in November-December.

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Plants of Doi Tung

Notes

Habit:

t = tree s = shrub sc = scandent l = treelet v = vine cr = creeping wc = woody climber h = herb

Aped:

a = annual pe = perennial evergreen pd = perennial deciduous ped = perenninal evergreen + deciduous

Life mode:

aqu = aquatic	gro = ground	rhe = rheophyte	car = carnivorous	hyp = hyperparasite	sap = saprophyte
cul = cultivated	int = introduced/not native		str = strangler	epi = epiphyte	nat = naturalized
wee = weed	epl = epilithic		par = parasite		

Abundance:

- 0 = Probably extirpated
- 1 = Down to a few individuals, in danger of extirpation
- 2 = Rare
- 3 = Medium abundance
- 4 = Common, but not dominant
- 5 = Abundant

Habitat:

dof = deciduous dipterocarp+oak forest	do/pine = dipterocarp-oak+pine forest	bb/df = bamboo+deciduous forest
mxf = mixed evergreen+deciduous forest	egf = evergreen forest	eg/pine = evergreen with pine forest
eg/bb = evergreen with bamboo forest	da = disturbed areas, roadsides	sg = secondary growth

Bedrock:

gr = granite ls = limestone ss = sandstone

Table 1. List of plant species under phylum angiospermae surveyed at Doi Tung, Chiang Rai Province.

Species	Family	Habit	Aped	Life mode	Abun-dance	Habitat	Bed rock	Lower	Upper	Flowering	Fruiting	Leafing	Collected
									Elevation (m)				
<i>Abelmoschus moschatus</i> Medic. ssp. <i>moschatus</i> var. <i>moschatus</i>	Malvaceae	h	a	gro	2	da, sg	gr	1000	1200	oc		my-dc	
<i>Acacia megaladena</i> Desv. var. <i>garrettii</i> Niels.	Leguminosae, Mimosoideae	wc	pd	gro	3	rocks in mxsf cliffs	ls	1300	1425	ap-my	ja-fb	ap-ja	flowers , fruits
<i>Acalypha kerrii</i> Craib	Euphorbiaceae	s	pe	gro	3	rocks in mxsf, eg/bb	ls	1200	1400	my-jn		ap-dc	flowers
<i>Acer chiangdaoensis</i> Santi.	Aceraceae	t	pd	gro, epl	3	rocks in mxsf, egf cliffs	ls	1300	1425	my-jn	jl-fb	ja-nv	flowers, fruits
<i>Achyranthes aspera</i> L.	Amaranthaceae	h	a	gro, wee	3	da, sg	ls	400	700			my-dc	
<i>Achyranthes bidentata</i> Bl. var. <i>bidentata</i>	Amaranthaceae	h	a	gro, wee	3	egf, eg/bb	ls	1200	1375	sp-oc	nv-dc	my-dc	flowers
<i>Achyrospermum densiflorum</i> Bl.	Labiatae	h	a	gro	2	eg/bb	gr	1100	1250		nv-dc	my-dc	fruits
<i>Acrocarpus fraxinifolius</i> Wight ex Arn.	Leguminosae, Caesalpinoideae	t	pd	gro	3	rocks in egf, cliffs	gr,ls	1000	1400	ja-fb	ap	ap-nv	
<i>Actephila excelsa</i> (Dalz.) M. A. var. <i>excelsa</i>	Euphorbiaceae	t	pe	epl	2	rocks in egf	ls	1300	1375	ag-sp	oc-nv	ja-dc	fruits
<i>Actinodaphne henryi</i> Gamb.	Lauraceae	t	pe	gro	3	egf, eg/bb	gr, ls	925	1400	ja	my	ja-dc	
<i>Adenia penangiana</i> (Wall. ex G. Don) Wilde var. <i>parvifolia</i> (Pierre ex Gagnep.) Wilde	Passifloraceae	v	a	gro	2	da, sg	gr	1000	1150			my-dc	
<i>Adenosma indiana</i> (Lour.) Merr.	Scrophulariaceae	h	a	gro	3	eg/pine	gr	1250	1325	sp-oc	nv-dc	my-dc	flowers
<i>Aeginetia indica</i> Roxb.	Orobanchaceae	h	pd	gro, par	3	rocks in mxsf cliffs, egf	gr,ls	600	1500	sp	oc-dc	leafless	
<i>Aerva sanguilonenta</i> (L.) Bl.	Amaranthaceae	h	a	gro	3	rocks in egf cliffs	ls	1200	1400	ja-ap		ja-dc	flowers
<i>Aeschynanthus hildebrandii</i> Hemsl.	Gesneriaceae	h	pe	epi	2	egf, eg/bb	ls	1200	1400			ja-dc	
<i>Aeschynanthus macranthus</i> (Merr.) Pell.	Gesneriaceae	v	pe	epi	2	rocks in mxsf, eg/bb	gr,ls	1300	1425	jl-sp	dc-mr	ja-dc	flowers, fruits
<i>Aeschynomene americana</i> L.	Leguminosae, Papilionoideae	h	a	gro, int, nat, wee	3	da, sg	gr	400	1000	sp-oc	dc	my-dc	flowers
<i>Aesculus assamica</i> Griff.	Hippocastanaceae	t	pd	gro, cul	3	eg/pine da	ls	1300	1350	ap		fb-dc	flowers
<i>Afgekia fillipes</i> (Dunn) Gees.	Leguminosae, Papilionoideae	wc	pd	gro	3	egf	gr	1000	1500			fb -dc	
<i>Afzelia xylocarpa</i> (Kurz) Craib	Caesalpinoideae	t	pd	gro	2	bb/df	gr,ls	500	700			my-dc	
<i>Agalia</i>	Meliaceae	t	pe	gro	2	rocks in egf, cliffs	ls	1350	1375			ja-dc	

<i>Agalia elliptica</i> Bl.	Meliaceae	t	pe	gro	2	egf	ls	1200	1400		ja-fb	ja-dc	fruits
<i>Agapetes lobbii</i> Cl.	Ericaceae	l	pe	epl , gro	3	rocks in mxsf cliffs	ls	1375	1425	ja-fb		ja-dc	flowers
<i>Agapetes megacarpa</i> W.W. Sm.	Ericaceae	l	pe	epl	3	rocks in mxsf cliffs	ls	1375	1425	oc-fb	ap	ja-dc	flowers
<i>Ageratum conyzoides</i> L.	Compositae	h	a	gro, wee	3	da, sg	gr,ls,s s	400	1525	sp-fb	oc-fb	my-fb	
<i>Aglaia lawii</i> (Wight) Sald. ex Rama.	Meliaceae	t, l	pe	gro	3	mxsf, egf, eg/bb	ls	1200	1400	sp	ap-my	ja-dc	flowers, fruits
<i>Aglaia spectabilis</i> (Miq.) Jain & Benn.	Meliaceae	t	pe	gro	3	streams in egf, eg/bb	gr	1100	1300	jl-ag		ja-dc	flowers
<i>Aglaonema simplex</i> (Bl.) Bl.	Araceae	h	pe	gro, epl	3	rocks in egf, mxsf	ls,sh	550	1350	mr-ap	sp-dc	ja-dc	flowers
<i>Ajuga bracteosa</i> Wall. ex Bth.	Labiatae	h	a	gro	2	eg/bb, da		1100	1225	ja-fb	mr	ag-mr	flowers
<i>Alangium barbatum</i> (R.Br.) Baill. var. <i>barbatum</i>	Alangiaceae	l	pe	gro	2	egf	ls	1100	1400	ap	sp-oc	ja-dc	flowers, fruits
<i>Alangium chinense</i> (Lour.) Harms	Alangiaceae	t	pd	gro	3	eg/bb, da, sg	gr, ls	550	700		nv	my-fb	
<i>Alangium kurzii</i> Craib	Alangiaceae	t	pd	gro	3	egf, da	gr,ls	1000	1500	ap-my		ap-dc	flowers
<i>Albizia chinensis</i> (Osb.) Merr.	Leguminosae, Mimosoideae	t	pd	gro	3	da, sg, eb/bb	gr	1000	1525	ap-jn	dc-fb	mr-ja	flowers , fruits
<i>Albizia crassiramea</i> Lace	Leguminosae, Mimosoideae	t	pd	gro	3	da, sg	gr	800	1100	ag-sp		fb-dc	flowers
<i>Albizia lucidor</i> (Steud.) I. Niels.	Leguminosae, Mimosoideae	t	pe	gro	2	eg/bb	gr	1000	1250			ja-dc	
<i>Albizia odoratissima</i> (L. f.) Bth.	Leguminosae, Mimosoideae	t	pe	gro	3	egf ,da ,sg	gr	1000	1550	ap-my		ja-dc	flowers
<i>Alchornea rugosa</i> (Lour.) M. A. var. <i>rugosa</i>	Euphorbiaceae	t	pe	gro	3	rocks in mxsf, egf cliffs	ls	1200	1400	ja-fb		ja-dc	flowers♂,♀
<i>Alectra avensis</i> (Bth.) Merr.	Scrophulariaceae	h	a	gro	2	eg/pine, da	gr	1250	1325	oc-nv		my-dc	
<i>Allium chinense</i> G. Don	Liliaceae	h	a	gro, cul, int	2	da	gr	1000	1100	sp-oc		my-dc	flowers
<i>Allophylus cobbe</i> (L.) Raeus.	Sapindaceae	t,l	pe	gro	3	rocks in mxsf, egf, eg/bb	ls	1200	1400	jl-nv	oc-fb	ja-dc	flowers, fruits
<i>Alocasia macrorhizos</i> (L.) G. Don	Araceae	h	pe	gro	3	streams in egf, mxsf	gr, ls	550	1350	my		ja-dc	
<i>Alpinia malaccensis</i> (Burm.f.) Rosc.	Zingiberaceae	h	pe	gro	3	eg/bb, streams in egf	gr, ls	1100	1375	fb-my	mr-sp	ja-dc	flowers, fruits
<i>Alseodaphne</i>	Lauraceae	t	pe	gro	2	streams in egf, eg/bb	gr	1100	1300		jl-ag	ja-dc	fruits
<i>Alstonia scholaris</i> (L.) R.Br. var. <i>scholaris</i>	Apocynaceae	t	pd	gro	3	egf, da	gr	1000	1400	sp-oc		mr-dc	flowers
<i>Alternanthera sessilis</i> (L.) DC. var. <i>sessilis</i>	Amaranthaceae	h	pe	gro	3	streams in egf, wet areas in eg/bb	gr	900	1100	my-jn	jn-il	ja-dc	flowers

<i>Amalocalyx microlobus</i> Pierre ex Spire	Apocynaceae	v,wc	pe	gro	3	egf, eg/pine, da	gr	1000	1400	my-jl		ja-dc	flowers
<i>Amaranthus spinosus</i> L.	Amaranthaceae	h	a	gro, wee	3	da	gr	400	1150	dc-fb	ja-mr	sp-mr	flowers
<i>Amomum</i>	Zingiberaceae	h	pe	gro	3	streams in egf, eg/bb	gr	1100	1300		jl-ag	ja-dc	fruits
<i>Amomum (? uliginosum</i> Koen.)	Zingiberaceae	h	pe	gro	3	eg/bb, da	ls	550	1350			ja-dc	
<i>Amomum repoense</i> Pierre ex Gagnep.	Zingiberaceae	h	pe	gro	3	eg/bb, da	ls	1200	1350			ja-dc	fruits
<i>Amorphophallus</i>	Araceae	h	pd	gro	2	rocks in egf	ls	1300	1375		jl-ag	jn-dc	
<i>Amorphophallus yunnanensis</i> Engl.	Araceae	h	pd	gro	3	rocks in eg/bb	gr, ls	1200	1400	fb-mr (sp)	my-jl	jl-dc	flowers, fruits
<i>Anacolosa ilicooides</i> Mast.	Olacaceae	t	pe	gro	2	egf	gr, ls	1100	1350	jn-sp	mr-my	ja-dc	
<i>Anaphalis adnata</i> DC.	Compositae	h	a	gro	3	eg/pine, da, eg/bb	gr	1100	1325	oc-dc	nv-ja	my-ja	flowers, fruits
<i>Anaphalis margaritacea</i> (L.) Bth.	Compositae	h	a	gro	3	eg/pine, da	gr	1200	1325	sp-fb	oc-fb	my-fb	flowers
<i>Andrographis laxiflora</i> (Bl.) Lindau	Acanthaceae	h	a	gro, epl	2	rocks, streams, wet areas in eg/bb, cliffs	gr, ls	1200	1375	ag-oc		my-dc	
<i>Anneslea fragrans</i> Wall.	Theaceae	t	pe	gro	3	egf, eg/pine	gr	1200	1450			ja-dc	flowers
<i>Anogeissus acuminata</i> (Roxb. ex DC.) Guill. & Perr.	Combretaceae	t	pd	gro	3	bb/df, eg/bb	gr, ls	500	1100			my-dc	
<i>Antidesma acidum</i> Retz.	Euphorbiaceae	l	pd	gro	3	eg/bb, da	gr	1000	1400	my-jn		my-dc	flowers♀
<i>Antidesma bunius</i> (L.) Spreng. var. <i>bunius</i>	Euphorbiaceae	t	pe	gro	3	egf, eg/bb	gr, ls	1200	1500		ag-sp	ja-dc	fruits
<i>Antidesma montanum</i> Bl. var. <i>montanum</i>	Euphorbiaceae	t	pe	gro	3	egf, eg/bb	ls	1200	1350	ap		ja-dc	flowers♂
<i>Antidesma sootepense</i> Craib	Euphorbiaceae	t,l	pe	gro	3	egf, eg/bb	gr, ls	800	1300	my-ag	jl-dc		fruits ♂
<i>Aphanamixis polystachya</i> (Wall.) R.Parker	Meliaceae	t	pe	gro	3	egf, eg/bb	gr	1000	1400		ap-my	ja-dc	fruits
<i>Aphyllorchis montana</i> Rchb. f.	Orchidaceae	h	pe	gro, sap	2	eg/bb, da	gr	1200	1300	ag-sp	sp-oc	leafless	flowers, fruits
<i>Apluda mutica</i> L.	Gramineae	h	pe, pd	gro, wee	3	da, sg	gr, ls, sh, ss	800	1525	oc-dc	nv-ja	my-ja	flowers
<i>Aporosa octandra</i> (B.-H. ex D.Don) Vick. var. <i>octandra</i>	Euphorbiaceae	t	pd	gro	3	eg/bb, da	gr, ls	1200	1375		my-jn	my-dc	fruits
<i>Aporosa octandra</i> (B.-H. ex D.Don) Vick. var. <i>yunnanensis</i> (Pax & Hoffm.) Schot	Euphorbiaceae	t	pd	gro	3	egf	gr	1100	1450		my-jn	ap-dc	fruits
<i>Aporosa villosa</i> (Lindl.) Baill.	Euphorbiaceae	t	pd	gro	3	eg/bb, da, sg	gr	1000	1200	ja-fb		ap-ja	flowers♂
<i>Aporosa yunnanensis</i> (Pax & Hoff.) Metc.	Euphorbiaceae	t	pe	gro	3	egf, da, sg	gr	1100	1300	ja-fb		ja-dc	flowers♂
<i>Aquilaria crassna</i> Pierre ex Lec.	Thymelaeaceae	t	pd	gro	1	eg/bb	ls	1200	1250			fb-dc	
<i>Aralia thomsonii</i> Seem. ex Cl.	Araliaceae	l	pe	gro	3	egf, da, sg	gr, ls	1000	1450	my-jn	jl-ag	ja-dc	flowers, fruits

<i>Archidendron clyperia</i> (Jack) Niels. ssp. <i>clypearia</i> var. <i>clypearia</i>	Leguminosae, Mimosoideae	t	pe	gro	3	da, sg	gr, ls	1000	1400			ja-dc	
<i>Ardisia attenuata</i> Wall.ex A. DC.	Myrsinaceae	l	pe	gro	2	rocks in mxsf, egf cliffs	ls	1400	1425	ja-dc		ja-dc	flowers
<i>Ardisia corymbifera</i> Mez var. <i>corymbifera</i>	Myrsinaceae	l	pe	gro	3	egf	gr,ls	1000	1375		oc-dc	ja-dc	fruits
<i>Arenga ? westerhousii</i> Griff.	Palmae	t	pe	gro, epl	2	rocks in egf	ls	1200	1350			ja-dc	
<i>Argostemma lobbii</i> Hk. f.	Rubiaceae	h	a	epl	3	rocks in egf, eg/bb	ls	1200	1400	ja ag		my-dc	flowers
<i>Argostemma verticillatum</i> Wall.	Rubiaceae	h	pd	epl	3	rocks in mxsf, eg/bb	ls	1200	1425	jn-jl	jl-ag	my-dc	flowers, fruits
<i>Argyreia aggregata</i> (Roxb.) Choisy	Convolvulaceae	wc	pd	gro	3	eg/bb, egf,da,sg	ls	1100	1500	oc-ja		my-dc	flowers
<i>Argyreia henryi</i> (Craib) Craib	Convolvulaceae	wc	pe	gro	3	da, sg	gr	1000	1200	oc-nv		ja-dc	flowers
<i>Argyreia wallichii</i> Choisy	Convolvulaceae	v	pd	gro	3	egf,da,sg	gr,ls	1000	1525	sp-oc	nv-dc	my-dc	flowers, fruits
<i>Aristolochia tagala</i> Cham.	Aristolochiaceae	v	pd	gro	3	da	ls	525	900			my-dc	
<i>Artemisia indica</i> Willd.	Compositae	h	pd	gro, wee	3	da, sg	gr,ls	1200	1525	sp-dc	nv-ja	my-dc	flowers
<i>Arthraxon lanceolatus</i> (Roxb.) Hochst. var. <i>lanceolatus</i>	Gramineae	h	a	epl	3	rocks in bb/df, cliffs	ls	400	600	sp-oc	nv	my-dc	flowers
<i>Arthraxon lancifolius</i> (Trin.) Hochst. var. <i>lanceolatus</i>	Gramineae	h	a	gro, epl	3	rocks in bb/df, egf, eg/bb, da,sg, cliffs	gr,ls	400	1400	sp-oc	nv-ja	my-dc	flowers, fruits
<i>Artocarpus thailandicus</i> C.C. Berg	Moraceae	t	pe	gro	3	egf, da	gr	1000	1500	my, da	my-jn	ja-dc	flowers, fruits
<i>Arundina graminifolia</i> (D.Don) Hochr.	Orchidaceae	h	pe	gro	2	da	gr	1000	1300	jl-oc		ja-dc	flowers
<i>Arundinella setosa</i> Trin. var. <i>setosa</i>	Gramineae	h	pd	gro	3	eg/pine, da, sg	gr	1200	1325	nv-dc	dc-ja	my-dc	
<i>Asparagus filicinus</i> Ham. ex D.Don	Liliaceae	h	pd	gro	3	egf, eg/bb	gr	900	1500	my		my-dc	flowers
<i>Aspidocarya uvifera</i> Hk. f. & Th.	Menispermaceae	v	pe	gro	2	streams in eg/bb	gr	1200	1300	my-jn		ja-dc	flowers♂
<i>Aspidopterys</i> (aff. <i>thorelii</i> Dop)	Malpighiaceae	wc	pe	gro	3	rocks in mxsf cliffs	ls	1375	1425	sp-oc	oc-nv	ja-dc	flowers
<i>Asystasiella neesiana</i> (Wall.) Lindau	Acanthaceae	h	pe	gro	3	streams in egf	gr,ls	1200	1350	oc- nv		ja-dc	flowers
<i>Baccaurea ramiflora</i> Lour.	Euphorbiaceae	t	pe	gro	3	mxsf	ls	600	1300	fb-mr	my-jn	ja-dc	flowers, fruits
<i>Balakata baccata</i> (Roxb.) Ess.	Euphorbiaceae	t	pe	gro	3	mxsf, streams in egf	ss, gr,ls	500	1100	fb-mr	jl	ja-dc	flowers, fruits
<i>Balanophora abbreviata</i> Bl.	Balanophoraceae	h	pd	gro, par	2	streams in egf, eg/bb, da	gr,ls	1125	1350	oc-nv	nv-dc	leafless	flowers♀♂
<i>Balanophora fungosa</i> J.R. & G. Forst. ssp. <i>indica</i> (Arn.) B. Han. var. <i>indica</i>	Balanophoraceae	h	pe	gro	2	egf	ls	1000	1400	dc-fb		leafless	

<i>Baliospermum calycinum</i> M. A.	Euphorbiaceae	I	pe	gro	2	egf, rocks in eg/bb	gr, ls	1200	1375	ag-sp	sp-oc	ja-dc	flowers♂, ♀, fruits
<i>Bambusa balcooa</i> Roxb.	Gramineae, Bambusoideae	h	pe	gro	3	streams in eg/bb cliffs	gr, ls	1100	1425	jl-ag	ag-sp	ja-dc	flowers
<i>Barleria strigosa</i> Willd.	Acanthaceae	h	pd	gro	3	bb/df, eg/bb	gr, ls	500	900	oc-nv		my-dc	
<i>Bauhinia ornata</i> Kurz var. <i>kerrii</i> (Gagnep.) K. & S.S. Lar.	Leguminosae, Cae salpinoideae	wc	pe	gro	3	egf, da	ss	900	1100	fb-mr		ja-dc	flowers
<i>Bauhinia variegata</i> L.	Leguminosae, Cae salpinoideae	t	pd	gro	3	eg/pine, eg/bb, bb/df	gr	650	1525	ja-fb		jn-fb	
<i>Begonia acetosella</i> Craib	Begoniaceae	h	pe	gro, rhe	3	streams in egf, wet areas	gr, ls	900	1500	mr-ap	mr-my	ja-dc	flowers, fruits
<i>Begonia cathcartii</i> Hk.f. ex Hk. f. & Th.	Begoniaceae	h	pe	gro, epl	3	mostly streams in egf, eg/bb, rarely cliffs in egf on ls	gr, ls	1200	1375	sp-dc	nv-ja	ja-dc	flowers, fruits
<i>Begonia putii</i> Craib	Begoniaceae	h	pd	epl	2	rocks in mxsf, egf cliffs	ls	600	1425	oc		jn-dc	flowers
<i>Begonia sect.Uniplacentales</i> Cl.	Begoniaceae	h	pd	epl	3	rocks and cliffs in mxsf	ls	550	1375	sp-nv	nv-dc	my-dc	flowers
<i>Beilschmiedia aff. intermedia</i> Allen	Lauraceae	t	pe	gro	2	egf, eg/bb	gr	1050	1200	my-jn		ja-dc	
<i>Berchemia floribunda</i> (Wall.) Wall. ex Brongn.	Rhamnaceae	wc	pe	gro	3	streams in egf, eb/bb	gr	1000	1300		fb-mr	ja-dc	fruits
<i>Betula alnoides</i> Ham. ex D.Don	Betulaceae	t	pd	gro	2	egf, eg/bb	gr	1100	1400	ja-fb	fb-mr	fb-dc	flowers♂
<i>Bidens pilosa</i> L.	Compositae	h	a	gro, wee	3	eg/pine, da, sg	gr	1000	1525	ag-oc	oc-nv	my-dc	
<i>Bischofia javanica</i> Bl.	Euphorbiaceae	t	pd	gro	2	streams in egf, eg/bb	gr	1000	1300	fb-mr	sp-nv	mr-fb	fruits
<i>Blumea balsamifera</i> (L.) DC.	Compositae	h	a	gro, wee	3	da, sg	gr	500	1500	ap-my	my-jn	ja-dc	flowers
<i>Blumea lacera</i> (Burm.f.) DC.	Compositae	h	a	gro	3	eg/bb	gr	1000	1500	ja-fb	fb-mr	jl-mr	flowers
<i>Blumea napifolia</i> DC.	Compositae	h	a	gro	3	eg/bb	gr	1000	1500	ja-fb	fb-mr	jn-mr	flowers
<i>Blumeopsis flava</i> (DC.) Gagnep.	Compositae	h	a	gro	3	egf, eg/bb da	gr	1000	1500	dc-ja	fb-mr	jn-mr	flowers
<i>Boehmeria aff.thailandica</i> Yaha.	Urticaceae	I,s	pe	gro	3	egf, da, sg	ls	1000	1100	oc-dc	ja-dc	ja-dc	fruits
<i>Boehmeria clidemiooides</i> Miq. var. <i>clidemiooides</i>	Urticaceae	s	pe	gro	3	mxsf, da	ls	1300	1400	ag-sp		ja-dc	flowers♀♂
<i>Boehmeria diffusa</i> Wedd.	Urticaceae	s, I	pe	gro	3	egf, eg/pine, da, sg	gr	1200	1525	sp-oc		ja-dc	flowers♂
<i>Boehmeria hamiltoniana</i> Wall. ex Wedd.	Urticaceae	wc,s	pe	epl	3	streams in egf	gr	1100	1300	ja-dc		ja-dc	flowers
<i>Boehmeria malabarica</i> Wall. ex Wedd.	Urticaceae	s	pe	gro,ep I	3	rocks in egf, mxsf	ls	550	1400	sp	fb-mr	ja-dc	flowers♂, fruits
<i>Boehmeria nivea</i> (L.) Gaud. var. <i>tenacissima</i> (Roxb.) Miq.	Urticaceae	t	pe	gro	3	streams in mxsf, da	ls	550	700		fb-mr	ja-dc	fruits
<i>Boehmeria penduliflora</i> Wedd. ex Long	Urticaceae	I	pe	gro	3	egf, da, sg	gr	600	900		oc-nv	ja-dc	fruits

<i>Boehmeria pilosiuscula</i> (Bl.) Hassk.	Urticaceae	h	pe	gro	3	egf,da,sg	gr,ls	1200	1425		sp-nv	ja-dc	fruits
<i>Boehmeria platyphylla</i> D.Don	Urticaceae	s,h	pe	gro	3	egf,eg/bb da	ls	600	1200	ag-oc	ja-dc	ja-dc	fruits
<i>Boehmeria zollingeriana</i> Wedd. var. <i>zollingeriana</i>	Urticaceae	s	pd	epl	3	eg/bb,da	ls	400	600	oc-nv		my-dc	flowers
<i>Boeica glandulosa</i> Burtt	Gesneriaceae	l	pe	gro	2	streams in egf	gr	1200	1350	sp	oc-nv	ja-dc	flowers, fruits
<i>Boenninghauseana albiflora</i> (Hk.) Roxb. ex Meissn.	Rutaceae	s	pd	epl	2	cliffs, rocks in egf	ls	1300	1400	oc	nv-dc	my-dc	flowers, fruits
<i>Bombax anceps</i> Pierre var. <i>anceps</i>	Bombacaceae	t	pd	gro	3	bb/df, eg/bb	gr	400	1000	ja-fb		my-dc	
<i>Borreria alata</i> (Aubl.) DC.	Rubiaceae	h	pe	gro, wee	3	da, sg	gr	900	1200			ja-dc	flowers
<i>Borreria laevis</i> (Lmk.) Griesb.	Rubiaceae	h	a	gro, wee	3	da, sg	gr, ls	1000	1375	sp-nv	nv-dc	my-dc	
<i>Borreria repens</i> DC.	Rubiaceae	h	a	gro	3	da,sg	gr	1000	1400	oc-nv	nv-dc	my-dc	flowers, fruits
<i>Bothriochloa bladhii</i> (Retz.) S. T. Blake	Gramineae	h	pd	gro, wee	3	da, sg	gr	1100	1525	sp-ja	oc-fb	my-fb	flowers
<i>Brassiopsis hainla</i> (B.-H. ex D. Don) Seem.	Araliaceae	t, l	pd	gro	3	rocks in mxsf cliffs	ls	1375	1425	nv-dc	ap	my-dc	flowers, fruits
<i>Breynia retusa</i> (Denn.) Alst.	Euphorbiaceae	l	pe	gro	3	egf, eg/bb	gr	1000	1500	ap-jl	jl-sp	ja-dc	flowers♂
<i>Bridelia glauca</i> Bl.	Euphorbiaceae	t	pe	gro	3	egf	gr	1000	1550	ap-my		ja-dc	flowers
<i>Bridelia stipularis</i> (L.) Bl.	Euphorbiaceae	sc, wc	pd	gro	3	da, sg	gr	900	1200	sp-oc	ja-mr	my-mr	flowers♂, fruits
<i>Bridelia tomentosa</i> Bl.	Euphorbiaceae	t,l	pe	gro	3	egf,da,sg	gr	1000	1200	oc-nv	nv-dc	ja-dc	fruits♂
<i>Broussonetia papyrifera</i> Vent.	Moraceae	t,l	pe	gro	3	da, sg	gr	1000	1400	my	my-jn	ja-dc	flowers, fruits
<i>Brucea javanica</i> (L.) Merr.	Simaroubaceae	l	pd	gro	3	rocks in mxsf cliffs	ls	1200	1425	fb-mr	sp-dc	mr-dc	flowers, fruits
<i>Buddleja asiatica</i> Lour.	Loganiaceae	l	pd	gro	3	da, sg	gr	500	1500	sp-fb		my-mr	flowers
<i>Bulbophyllum affine</i> Lindl.	Orchidaceae	h, cr	pe	epi	2	egf, eg/pine	gr	1200	1400	my		ja-dc	flowers
<i>Bulbophyllum pulchellum</i> Ridl.	Orchidaceae	h	pd	epi	2	rocks in mxsf, eg/bb cliffs	ls	1375	1425	sp-oc		my-dc	flowers
<i>Buxus</i>	Buxaceae	t	pe	gro	3	rocks in mxsf cliffs	ls	1400	1425		nv-dc	ja-dc	fruits
<i>Bytneria aspera</i> Colebr.	Sterculiaceae	wc	pe	gro	3	streams in mxsf, da	gr, ls	500	1500	oc-nv		ja-dc	flowers
<i>Cajanus goensis</i> Dalz.	Leguminosae, Papilionoideae	v	a	gro	3	egf , eg/pine sg	gr	600	1400	fb-mr		my-ap	flowers
<i>Calamus nambariensis</i> Becc.	Palmae	s	pe	gro	2	rocks in egf, eg/bb	ls	1200	1375			ja-dc	
<i>Calanthe labrosa</i> (Rchb. f.) Rchb. f.	Orchidaceae	h	pd	epi,epl	2	rocks in mxsf, egf	ls	1300	1425	oc-dc		my-nv	flowers
<i>Callerya atropurpurea</i> (Wall.) Schot	Leguminosae, Papilionoideae	t	pe	gro	2	egf, eg/bb	gr	1200	1300		ag-sp	ja-dc	
<i>Callicarpa arborea</i> Roxb. var. <i>arborea</i>	Verbenaceae	t	pe, pd	gro	3	egf, da ,sg	gr	1000	1500	mr-ap		ja-dc	flowers
<i>Calophyllum polyanthum</i> Wall ex Pl. & Tr.	Guttiferae	t	pe	gro	3	egf	gr	1100	1500			ja-dc	

<i>Calopogonium mucunoides</i> Desv.	Leguminosae, Papilionoideae	v	a	gro	3	da, sg	gr	900	1200	oc-nv	dc-ja	my-dc	fruits
<i>Camellia sinensis</i> (L.) O.K. var. <i>assamica</i> (Mast.) Kita.	Theaceae	l	pe	gro also cul	2	streams in egf	gr	1100	1400	oc		ja-dc	flowers
<i>Cannvalia ensiformis</i> (L.) A. DC.	Leguminosae, Papilionoideae	v	a	gro	3	da, sg	gr	1000	1200	oc-nv		my-ja	flowers
<i>Canthium parviflorum</i> Roxb.	Rubiaceae	l	pd	gro	3	egf, da, eg/bb,eg/pin e	gr, ls	1000	1550	(fb)ap-my	jn-sp	fb-dc	flowers, fruits
<i>Capillipedium parviflorum</i> (R. Br.) Stapf	Gramineae	h	pe	gro, wee	3	da, sg	gr, ls	1000	1525	sp-nv	oc-dc	ja-dc	flowers
<i>Capparis assamica</i> Hk.f. & Th.	Capparaceae	l	pe	gro	2	eg/bb	ls	1200	1300	ap		ja-dc	flowers
<i>Capparis sabifolia</i> Hk.f. & Th.	Capparaceae	l	pe	gro	3	rocks in mxsf, cliffs	ls	1350	1400	ap		ja-dc	flowers
<i>Carallia brachiata</i> (Lour.) Merr.	Rhizophoraceae	t	pe	gro	3	egf	gr, ls	1000	1500		ap-my	ja-dc	fruits
<i>Cardamine hirsuta</i> L.	Cruciferae	h	a	gro, wee	2	da, sg	ls	1300	1375	oc	nv	my-dc	flowers
<i>Carex baccans</i> Nees	Cyperaceae	h	pe	gro	3	da,sg	ls	1000	1400		ja-fb	ja-dc	fruits
<i>Carex phyllocaula</i> Nel.	Cyperaceae	h	pd	epl	2	rocks in egf, cliffs	ls	1300	1400	ag-sp	sp-oc	my-dc	fruits
<i>Careya arborea</i> Roxb.	Lecythidaceae	t	pd	gro	2	bb/df, eg/bb	gr	400	1500			my-dc	
<i>Carlemannia tetragona</i> Hk. f.	Caprifoliaceae	h	a	gro	2	streams in eg/bb, wet areas	gr	1200	1200	jl-ag	oc-nv	ap-dc	flowers, fruits
<i>Caryota maxima</i> Bl.	Palmae	t	pe	gro	2	egf, eg/bb	gr	1000	1100	ja-dc	ja-dc	ja-dc	
<i>Caryota mitis</i> Lour.	Palmae	l	pe	gro	2	streams in egf	gr	1000	1350			ja-dc	
<i>Casearia grewiifolia</i> Vent. var. <i>gelonioides</i> (Bl.) Sleum.	Flacourtiaceae	t	pe	gro	3	egf	gr	1000	1550	mr-ap		ja-dc	fruits
<i>Castanopsis acuminatissima</i> (Bl.) A. DC.	Fagaceae	t	pe	gro	3	egf, eg/bb,eg/pin e	gr	1200	1525	ja-fb	oc-nv	ja-dc	flowers♂, ♀, fruits
<i>Castanopsis argyrophylla</i> King ex Hk. f.	Fagaceae	t	pe	gro	3	egf	gr	900	1200	fb-ap		ja-dc	flowers
<i>Castanopsis armata</i> (Roxb.) Spach	Fagaceae	t	pe	gro	3	egf eg/bb	gr	1000	1500	nv-dc	sp-oc	ja-dc	flowers♂, ♀
<i>Castanopsis tribuloides</i> (Sm.) A. DC.	Fagaceae	t	pe	gro	3	egf	gr, ls	1000	1525	ap-my	oc	ja-dc	flowers♂, ♀, fruits
<i>Castanopsis diversifolia</i> (Kurz) King ex Hk. f.	Fagaceae	t	pe	gro	3	egf, eg/pine	gr	1100	1300	ja-fb		ja-dc	flowers♂
<i>Cayratia japonica</i> (Thunb.) Gagnep.	Vitaceae	v	pd	gro	3	mxsf streams, egf	ls	500	1425	jl-nv		my-dc	flowers
<i>Cayratia pedata</i> (Lour.) Juss.	Vitaceae	v	a	gro	2	rocks in mxsf, da, sg, eg/bb cliffs	ls	1200	1425	jl ag	sp-oc	my-dc	flowers
<i>Celastrus</i>	Celastraceae	wc	pe	gro	2	rocks in mxsf cliffs	ls	1400	1425		oc	ja-dc	fruits
<i>Centella asiatica</i> (L.) Urb.	Umbelliferae	h,cr	pe	gro	3	egf, da, sg	gr	900	1500		ja-dc		

<i>Chamaecrista leschenaultiana</i> (DC.) Deg.	Leguminosae, Cae salpinoideae	h	a	gro	3	eg/pine, da	gr	1200	1500	sp-oc		my-dc	flowers
<i>Chionanthus ramiflorus</i> Roxb.	Oleaceae	t	pe	gro	3	egf	ss	900	1100	fb-mr		ja-dc	flowers
<i>Chirita hamosa</i> Wall. ex R. Br.	Gesneriaceae	h	a	epl	4	rocks in bb/df, mxf cliffs	ls	400	700	sp-nv	oc-dc	my-dc	flowers
<i>Chisocheton cumingianus</i> (C.DC.) Harms	Meliaceae	t	pe	gro	2	egf, eg/bb	gr	1000	1100	jl-ag		ja-dc	flowers
<i>Chloranthus nervosus</i> Coll. & Hemsl.	Chloranthaceae	h	pd	gro	2	egf, eg/bb	gr, ls	1300	1400	my		my-dc	flowers
<i>Chloris pycnothrix</i> Trin.	Gramineae	h	a	gro, int, nat, wee	3	da, sg	gr, ls	900	1375	oc-dc	nv-ja	my-dc	flowers
<i>Choresthes lanceolata</i> (T. And.) B.Han.	Acanthaceae	h	pe	gro	2	rocks in eg/bb	ls	1200	1300		ap	ja-dc	fruits
<i>Chrysopogon aciculatus</i> (Retz.) Trin.	Gramineae	h	pe	gro, wee	3	da,sg	gr	1000	1525	jl-sp	ag-oc	ja-dc	
<i>Cinnamomum</i>	Lauraceae	t	pe	gro	2	streams in eg/bb	gr	1200	1250			ja-dc	
<i>Cinnamomum caudatum</i> Nees	Lauraceae	t	pe	gro	2	egf	gr, ls	1000	1300	my-jl		ja-dc	flowers
<i>Cinnamomum iners</i> Reinw. ex Bl.	Lauraceae	t	pe	gro	3	mxsf, egf	gr,ss	500	1100	ja-fb		ja-dc	flowers
<i>Cipadessa baccifera</i> (Roth) Miq.	Meliaceae	t,l	ped	gro,ep l	3	rocks and streams in mxsf, eg/bb cliffs	ls	450	1425	ap-oc (dc)	fb-oc	ja-dc ap- dc	flowers, fruits
<i>Cissus adnata</i> (Wall. ex Wight & Arn.) Roxb.	Vitaceae	wc	pe	gro	3	egf, eg/pine, sg	gr	1000	1200	jl ag		ja-dc	flowers
<i>Cissus convolvulacea</i> Pl.	Vitaceae	v	ped	gro	3	streams in egf	ls	600	800		fb-mr	ja-dc	fruits
<i>Cissus discolor</i> Bl. var. <i>discolor</i>	Vitaceae	v	pe	gro	3	egf, da, eg/bb, mxsf cliffs	gr, ls	550	1500	my-sp	oc-dc	ja-dc	flowers, fruits
<i>Clarkella nana</i> (Edgew.) Hk. f. var. <i>nana</i>	Rubiaceae	h	a	epl	2	rocks in mxsf, egf, eg/bb cliffs	ls	1375	1425	jl-sp	sp-oc	jn-dc	flowers, fruits
<i>Cleidion javanicum</i> Bl.	Euphorbiaceae	t	pe	gro	2	mxsf, egf	gr	500	900	fb-mr	jn	ja-dc	
<i>Cleisostoma racemiferum</i> (Lindl.) Garay	Orchidaceae	h	pe	epi	2	rocks in mxsf, eg/bb cliffs	ls	1300	1425	jl-ag		ja-dc	flowers
<i>Clematis eichleri</i> (Tam.) Tam.	Ranunculaceae	v	pd	gro	2	da,sg	gr	1000	1100	nv-dc		my-dc	flowers
<i>Clematis fulvicoma</i> Rehd. & Wils.	Ranunculaceae	wc, v	pd	epl, gro	3	rocks in mxsf cliffs	ls	1375	1425	sp-oc	oc-nv	my-dc	flowers, fruits
<i>Clematis thaimontana</i> Tam.	Ranunculaceae	v	pd	gro	2	streams in mxsf da sg	ls	700	800	ja-dc	fb	jn-fb	fruits
<i>Clerodendrum chinense</i> (Osb.) Mabb. var. <i>chinense</i>	Verbenaceae	l	pe	gro	3	mxsf, egf, da, sg	gr, ls	1000	1500	my-jn (oc)	oc-nv	ja-dc	flowers

<i>Clerodendrum disparifoilum</i> Bl.	Verbenaceae	l,s	pe	gro	3	rocks in mxsf, egf, eg/bb	ls	500	1400	oc-nv		ja-dc	flowers
<i>Clerodendrum glandulosum</i> Colebr, ex Lindl.	Verbenaceae	l	pe	gro	3	da, sg	gr	1000	1400	sp-oc		ja-dc	
<i>Clerodendrum serratum</i> (L.) Moon var. <i>wallichii</i> Cl.	Verbenaceae	l	pe	gro	3	bb/df, eg/bb, dg, sg	gr,ls	500	1525	sp-oc	jl-ag	ja-dc	flowers
<i>Clerodendrum subscaposum</i> Hemsl.	Verbenaceae	h	a	gro, epl	3	rocks in egf, mxsf, eg/bb	ls	1375	1425	sp	oc-nv	my-dc	flowers, fruits
<i>Codonopsis javanica</i> (Bl.) Hk. f.	Campanulaceae	v	pe	gro	2	eg/pine, eg/bb	gr	1100	1350	sp-oc		ja-dc	flowers
<i>Coelogyne lactea</i> Rchb. f.	Orchidaceae	h	pe	epl	3	rocks in mxsf cliffs	ls	1200	1425	fb-mr		ja-dc	flowers
<i>Colebrookia oppositifolia</i> Sm.	Labiatae	s	pe	gro	3	mostly streams in mxsf, egf eg/pine	gr,ls	500	1300	ja-fb	fb-mr	ja-dc	flowers, fruits
<i>Colocasia fallax</i> Schott	Araceae	h	pd	epl	3	rocks in mxsf, egf, eg/bb, cliffs	gr,ls	500	1425	my		my-dc	flowers
<i>Colona flagrocarpa</i> (Cl.) Craib	Tiliaceae	t	pd	gro	3	eg/bb	gr	900	1400		ja fb	my-fb	fruits
<i>Colona floribunda</i> (Kurz) Craib	Tiliaceae	t	pd	gro	3	egf, da, sg	gr	600	1300	oc	nv-dc	my-dc	fruits
<i>Colquhounia elegans</i> Wall. var. <i>tenuiflora</i> Pr.	Labiatae	sc	pe	gro	2	rocks in mxsf, egf cliffs	ls	1200	1400	ja-fb		ja-dc	flowers
<i>Combretum griffithii</i> Heur. & M. A.	Combretaceae	wc	pd	epl	3	rocks in bb/df cliffs	ls	400	800			my-dc	
<i>Combretum latifolium</i> Bl.	Combretaceae	wc	pd	gro	3	mxsf, eb/bb, sg	sh	500	800	dc-ja		jn-fb	flowers
<i>Commelinopsis benghalensis</i> L.	Commelinaceae	h	a	gro, wee	3	da, sg	gr, ls	400	800	sp-oc		my-dc	
<i>Commelinopsis diffusa</i> Burm. f.	Commelinaceae	h	pe	gro	3	eg/pine, da	gr	1200	1500	sp-oc		ja-dc	flowers
<i>Commelinopsis paludosa</i> Bl.	Commelinaceae	h	pe	gro	3	mxsf, eg/bb, da	gr, ls	550	1400	sp-oc		ja-dc	flowers
<i>Congea rockii</i> Mold.	Verbenaceae	wc	pe	gro	2	rocks in eg/bb	ls	1100	1300	fb-mr	ap-my	ja-dc	fruits
<i>Congea tomentosa</i> Roxb. var. <i>tomentosa</i>	Verbenaceae	wc	pe	gro	3	eg/bb, da	gr	1000	1400	ja-fb		ja-dc	flowers
<i>Cordia</i>	Boraginaceae	t	pe	gro	2	da, sg	gr	1000	1100		oc-nv	ja-dc	fruits
<i>Cordia grandis</i> Roxb.	Boraginaceae	t	pe	gro	2	eg/pine, da, sg	gr	1200	1300		ja-mr	ja-dc	fruits
<i>Coriandrum sativum</i> L.	Umbelliferae	h	a	cul	3	da	gr	900	1100	oc-nv	nv-dc	my-dc	flowers
<i>Corymborkis veratrifolia</i> (Reinw.) Bl.	Orchidaceae	h	pe	gro	1	mxsf	sh	550	550			ja-dc	
<i>Costus globosus</i> Bl.	Zingiberaceae	h	pe	gro	2	streams in egf	gr, ls	1200	1350			ja-dc	
<i>Costus speciosum</i> (Koen.) J E. Sm.	Zingiberaceae	h	pd	gro	3	mxsf, eg/bb	gr, ls	1000	1525			my-dc	

<i>Craibiodendron stellatum</i> (Pierre) W.W. Sm.	Ericaceae	t	pe	gro	3	eg/pine	gr	1200	1450			ja-dc	
<i>Crassocephalum crepidioides</i> (Bth.) S. Moore	Compositae	h	a	gro, wee	3	da, sg	gr, ls	900	1525	ag-fb	sp-mr	jn-mr	
<i>Cratoxylum cochinchinense</i> (Lour.) Bl.	Guttiferae, Hypericeae	t	pd	gro	3	egf,da,sg	gr	1000	1300	ap-my	oc-dc	my-dc	flowers, fruits
<i>Cratoxylum formosum</i> (Jack) Dyer ssp. <i>pruniflorum</i> (Kurz) Gog.	Guttiferae, Hypericeae	t	pd	gro	3	eg/bb, da, sg	gr	500	1100	ap		my-dc	
<i>Crepidium acuminatum</i> (D.Don) Szl.	Orchidaceae	h	pd	epl	2	rocks in mxsf cliffs	ls	1375	1400	my-jn		ap-dc	flowers
<i>Crotalaria assamica</i> Bth.	Leguminosae, Papilionoideae	h	a	gro	3	bb/df, da, sg	gr	500	800	oc-nv		my-fb	
<i>Crotalaria bracteata</i> Roxb. ex DC.	Leguminosae, Papilionoideae	h	a	gro, wee	3	eg/bb, da, sg	gr	900	1500	sp-oc		my-fb	
<i>Crotalaria cytisoides</i> Roxb. ex DC.	Leguminosae, Papilionoideae	l	pd	gro	3	eg/pine, eg/bb	gr	1200	1325		nv-ja	my-ja	fruits
<i>Crotalaria kurzii</i> Baker ex Kurz	Leguminosae, Papilionoideae	h	a	gro	3	egf, eg/pine, eb/bb, da	gr	1200	1500	sp-oc		my-dc	flowers
<i>Crotalaria pallida</i> Ait.	Leguminosae, Papilionoideae	h	a	gro, wee	3	da, sg	gr	400	800	sp-oc		my-fb	
<i>Croton robustus</i> Kurz	Euphorbiaceae	t	pe	gro	3	eg/bb,egf,da ,sg	gr	1000	1500	nv-fb	fb-ap	ja-dc	flowers♂,♀, fruits
<i>Cruddasia insignis</i> Prain	Leguminosae, Papilionoideae	v	pe	gro	3	egf, eg/bb	gr	1100	1400	jl-sp		ja-dc	flowers
<i>Cryptocarya amygdalina</i> Nees	Lauraceae	t	pe	gro	3	egf, eg/bb	gr, ls	1100	1400	my	ap-my	ja-dc	fruits
<i>Curculigo capitulata</i> (Lour.) O.K.	Amaryllidaceae	h	pe	gro	3	streams in egf, eg/bb	gr,ls	1000	1350		ag-sp	ja-dc	fruits
<i>Curcuma</i>	Zingiberaceae	h	pd	gro	2	eg/bb	gr	1100	1350	my		my-dc	flowers
<i>Cyanotis cristata</i> (L.) D. Don	Commelinaceae	h	a	gro	3	rocks in mxsf, eg/bb cliffs	gr,ls	900	1425	jl-sp	sp-oc	my-dc	flowers
<i>Cyclea polypetala</i> Dunn	Menispermaceae	wc	pe	gro	3	egf, eg/bb	gr, ls	1000	1400	nv-mr	ap-my	ja-dc	fruits
<i>Cymbidium</i>	Orchidaceae	h	pe	epi	2	eg/bb	gr	1100	1300		oc	ja-dc	
<i>Cymbidium lancifolium</i> Hk.	Orchidaceae	h	pe	gro	2	eb/bb	gr	1200	1300	dc-ja	nv-ja	ja-dc	flowers, fruits
<i>Cyperus exaltatus</i> Retz.	Cyperaceae	h	pe	gro	3	streams in egf, ponds, wet areas	gr	900	1100	my-jn	jn-il	ja-dc	flowers
<i>Cyperus kyllingia</i> Endl.	Cyperaceae	h	a	gro, wee	3	eg/pine, da, sq	gr	1000	1525	ag-oc	oc-nv	my-dc	
<i>Cyperus laxus</i> Lmk. var. <i>laxus</i>	Cyperaceae	h	pe	gro, wee	3	mxsf, eg/bb, da	gr, ls	500	1350	ag-oc	sp-nv	ja-dc	flowers
<i>Cyperus phyllocaula</i> Nel.	Cyperaceae	h	pd	epl	2	rocks in egf cliffs	ls	1300	1400	ag-sp	sp-oc	my-dc	fruits
<i>Cyrtococcum accrescens</i> (Trin.) Stapf	Gramineae	h	a	gro	3	eg/pine, eg/bb, da	gr, ls	400	1500	sp-oc	oc-nv	my-dc	flowers
<i>Cyrtococcum oxyphyllum</i> (Steud.) Stapf	Gramineae	h	pe	gro		eg/bb, da	gr, ls	1100	1400	ag-sp	sp-oc	ja-dc	flowers
<i>Dalbergia cana</i> Grah. ex Kurz var. <i>cana</i>	Leguminosae, Papilionoideae	t	pd	gro	3	mxsf, egf	gr,ls	900	1350		my-jn	ap-dc	fruits

<i>Dalbergia cultrata</i> Grah. ex Bth.	Leguminosae, Papilionoideae	t	pd	gro	3	eg/pine da sg	gr, ls	800	1350	fb-mr		mr-dc	flowers
<i>Dalbergia lanceolaria</i> L.f. var. <i>lanceolaria</i>	Leguminosae, Papilionoideae	t	pd	gro	3	bb/df	gr	500	800	ap	jn	ap-dc	flowers
<i>Dalbergia ovata</i> Grah. ex Bth	Leguminosae, Papilionoideae	t	pe	gro	2	egf, eg/bb	gr	950	1350	ja-fb		ja-dc	flowers
<i>Dalbergia ramosa</i> Roxb.	Leguminosae, Papilionoideae	wc	pe	gro	3	egf, eg/bb	gr	1000	1500	my-jl		ja-dc	flowers
<i>Dalbergia stipulacea</i> Roxb.	Leguminosae, Papilionoideae	sc	pd	gro	3	egf,da	gr	1000	1500	ap-my	nv-dc	ja-dc	fruits
<i>Debreasia longifolia</i> (Burm. f.) Wedd.	Urticaceae	l	pe	gro	3	eg/bb, egf,da,sg	gr,ls	500	1500	sp-nv	nv-ja	ja-dc	flowers♀♂, fruits
<i>Debreasia wallichiana</i> (Wedd.) Wedd. ssp. <i>wallichiana</i>	Utricaceae	l,t	pd	gro	3	rocks in mxf, cliffs	ls	1250	1425	my	ag-sp	my-dc	flowers♀, fruits
<i>Dendrobium compactum</i> Rol. ex Hack.	Orchidaceae	h	pd	epi	2	rocks in mxf cliffs	ls	1400	1425	oc		my-dc	flowers
<i>Dendrocalamus giganteus</i> (Wall.) Munro	Gramineae, Bambusoideae	h	pe	gro	4	rocks in eg/bb	ls	1300	1425			ja-dc	
<i>Dendrocalamus hamiltonii</i> Nees & Arn. ex Munro	Gramineae, Bambusoideae	h	pe	gro	3	eg/bb	gr	1100	1300			ja-dc	
<i>Dendrocalamus membranaceus</i> Munro	Gramineae, Bambusoideae	h	pe	gro	4	eg/bb,da	gr	400	1500	nv-dc	ja-dc	ja-dc	flowers
<i>Dendrocalamus nudus</i> Pilg.	Gramineae, Bambusoideae	h	pe	gro	4	eg/bb,da	gr	900	1200	nv-fb	ja-mr	ja-dc	flowers
<i>Dendrocnide sinuata</i> (Bl.) Chew	Urticaceae	t	pe	gro	2	rocks in mxf cliffs, da	gr,ls	550	700	oc-nv	oc-nv	ja-dc	flowers♀, fruits
<i>Dendrophthoe kerrii</i> (Craib) Barl.	Loranthaceae	s	pe	epi, par	2	eg/bb	ls	1200	1425	nv-ja	fb-mr	ja-dc	flowers,fruits
<i>Derris tonkinensis</i> Gagnep.	Leguminosae, Papilionoideae	wc	pd	epl	3	rocks in bb/df cliffs	ls	400	800			my-dc	
<i>Desmodium heterocarpon</i> (L.) DC. ssp. <i>heterocarpon</i> var. <i>heterocarpon</i>	Leguminosae, Papilionoideae	h	pe	gro	3	bb/df, eg/pine, eg/bb	gr	700	1400	sp-nv	oc-dc	ja-dc	
<i>Desmodium laxiflorum</i> DC. ssp. <i>laxiflorum</i>	Leguminosae, Papilionoideae	h	pd	gro	3	bb/df, eg/bb	gr	1000	1400	oc-nv		my-ja	flowers
<i>Desmodium multiflorum</i> DC.	Leguminosae, Papilionoideae	l	pd	gro	3	eg/bb, da, sg	gr	1000	1400			ja-fb	my-fb
<i>Desmodium oblatum</i> Baker ex Kurz	Leguminosae, Papilionoideae	l	pd	gro	2	eg/bb	gr	1000	1300	oc-dc	dc-ja	jn-ja	fruits
<i>Desmodium repandum</i> (Vahl) DC.	Leguminosae, Papilionoideae	v	pe	gro	3	da, sg	gr	1000	1525	oc-nv	dc-ja	ja-dc	flowers, fruits
<i>Desmodium triflorum</i> (L.) DC.	Leguminosae, Papilionoideae	h	pe	gro, wee	3	eg/pine, eg/bb, da, sg	gr	700	1400	oc-dc	ja-fb	ja-dc	flowers
<i>Desmodium triquetrum</i> (L.) DC. ssp. <i>triquetrum</i>	Leguminosae, Papilionoideae	l	pe	gro	3	da, eg/bb	gr, ls	1000	1350	oc-nv	ja-dc	ja-dc	flowers
<i>Desmodium velutinum</i> (Willd.) DC. ssp. <i>velutinum</i> var. <i>velutinum</i>	Leguminosae, Papilionoideae	s	pe	gro	3	egf,da,sg	gr	1000	1400	oc-dc	ja-dc	ja-dc	flowers
<i>Desmos</i> (<i>Dasmaschalon</i> <i>yunnanense</i> (Hu) Ban)	Annonaceae	t,l	pe	gro	3	egf	ls	1200	1400		oc-nv	ja -dc	fruits

<i>Dianella ensifolia</i> (L.) DC.	Liliaceae	h	pe	gro	3	egf, eg/bb	gr	1000	1500		jl-sp	ja-dc	
<i>Dicellostyles zizyphifolia</i> (Griff.) Phup.	Malvaceae	t	pe	gro	3	rocks in mxf	ls	1300	1400		nv-dc	ja-dc	fruits
<i>Dichorisandra thyrsiflora</i> Mikan	Commelinaceae	h	pe	gro,cu l	3	egf	gr	1000	1000	ja-dc	ja-dc	ja-dc	flowers
<i>Dichroa febrifuga</i> Lour.	Saxifragaceae	l	pe	gro	2	streams in eg/bb, egf	gr,ls	1200	1400	my-jn		ja-dc	flowers
<i>Dichrocephala integrifolia</i> (Lmk.) DC.	Compositae	h	a	gro, wee	3	egf, da	gr, ls	1200	1375	ap-jn	my-jn	ap-dc	flowers
<i>Didymocarpus tristis</i> Craib	Gesneriaceae	h	pd	epl	2	streams, rocks in egf, eg/bb	gr,ls	1250	1400	jl-ag	sp-oc	jn-dc	flowers, fruits
<i>Dienia ophrydis</i> (Koen.) Orm. & Seid.	Orchidaceae	h	pd	gro	2	da	gr	1100	1350	jl-ag	sp-oc	my-dc	flowers
<i>Digitaria radicosa</i> (Presl) Miq.	Gramineae	h	a	gro, wee	3	da, sg	gr	1000	1300	sp-nv	oc-dc	my-dc	flowers
<i>Digitaria setigera</i> Roth ex Roem. & Schult. var. <i>setigera</i>	Gramineae	h	a	gro, wee	3	da, sg	gr	800	1200	sp-ja	oc-fb	jn-fb	flowers
<i>Dillenia parviflora</i> Griff. var. <i>kerrii</i> (Craib) Hoogl.	Dilleniaceae	t	pd	gro	3	egf, eg/bb, da	gr	1000	1500	ja	ap-jn	my-dc	fruits
<i>Dinetus racemosus</i> (Wall.) Sweet	Convolvulaceae	v	a	gro	3	egf,da,sg	ls	1100	1500	oc-nv		my-dc	flowers
<i>Dinochloa maclellandii</i> (Munro) Gamb.	Gramineae, Bambusoideae	h	pe	gro	4	egf, eg/bb, da, sg	gr	1100	1450			ja-dc	
<i>Dioscorea alata</i> L.	Dioscoreaceae	v	pd	gro, wee	3	da, sg	gr	800	1525	oc-nv		my-fb	flowers♂
<i>Dioscorea birmanica</i> Pr. & Burk.	Dioscoreaceae	v	pd	gro	3	rocks in mxsf, egf, eg/bb	ls	1300	1425	jl-sp		my-dc	flowers♂
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	v	pd	gro	3	da,sg	gr	1100	1525			jn-dc	
<i>Dioscorea glabra</i> Roxb. var. <i>glabra</i>	Dioscoreaceae	v	pe	gro	3	egf,da	gr	1000	1500	oc-nv		ja-dc	flowers♂
<i>Dioscorea hamiltonii</i> Hk. f.	Dioscoreaceae	v	pd	gro	3	da, sg		1200	1500	oc-nv	dc-fb	my-fb	flowers♂
<i>Dioscorea hispida</i> Denn. var. <i>mollissima</i> (Bl.) Pr. & Burk.	Dioscoreaceae	v	pd	gro	3	eg/bb, da,sg	gr,ls	900	1400	my-jn		my dc	flowers, imm. fruits
<i>Dioscorea pentaphylla</i> L. var. <i>communis</i> Pr. & Burk.	Dioscoreaceae	v	pd	gro, wee	3	da,sg	gr	1000	1525	oc		jn-dc	flowers♂♀
<i>Dioscorea prazeri</i> Pr. & Burk.	Dioscoreaceae	v	pd	gro	3	egf, da	gr	1200	1350	sp-oc		my-dc	flowers♂
<i>Dioscorea rockii</i> Pr. & Burk.	Dioscoreaceae	v	pd	gro	3	rocks in mxsf, eg/bb cliffs	ls	1300	1425	jl-ag		my-dc	flowers♂
<i>Diospyros lotus</i> L.	Ebenaceae	t	pe	cul, int	2	egf	gr	1400	1400	fb-mr		ja-dc	native to Japan
<i>Diospyros martabanica</i> Cl.	Ebenaceae	t	pe	gro	3	egf	ls	1100	1400	fb-mr		ja-dc	flowers
<i>Diospyros winitii</i> Flet.	Ebenaceae	t	pe	gro	3	egf, eg/bb	ls	1200	1375	ap	ap	ja-dc	flowers♂, fruits
<i>Disporopsis longifolia</i> Craib	Liliaceae	h	pd	gro	2	eg/bb	gr	1000	1400	my-jn		ap-dc	flowers
<i>Disporum calcaratum</i> Wall. ex G. Don	Liliaceae	h	pd	gro	2	eg/pine, da, sg	gr	1000	1500			my-dc	

<i>Docynia indica</i> (Wall.) Decne.	Rosaceae	t	pe	gro, cul, int	2	egf, da	gr	1100	1350			ja-dc	
<i>Dolichos trilobus</i> L.	Leguminosae, Papilionoideae	v	a	gro	2	mxf, da, sg	gr, ls	1000	1450	ja-fb		jn-ap	flowers
<i>Dracaena angustifolia</i> Roxb.	Agavaceae	l	pe	gro	2	rocks in egf, mxf	gr,ls, sh	500	1400		oc-nv	ja-dc	
<i>Dracaena loureiri</i> Gagnep.	Agavaceae	pe	pe	epl	2	rocks in egf, mxf cliffs	ls	500	1300			ja-dc	
<i>Drymaria diandra</i> Bl.	Caryophyllaceae	h	a	gro, wee	3	eg/pine, da, sg	gr	1100	1525	ag-fb	sp-fb	my-fb	flowers
<i>Duabanga grandiflora</i> (Roxb. ex DC.) Walp.	Sonneratiaceae	t	pe	gro	3	eg/bb, egf	gr, ls	1000	1375	fb-ap		ja-dc	flowers
<i>Echinochloa colona</i> (L.) Link	Gramineae	h	pe	aqu, gro	3	ponds in bb/df	ls	400	600	ag-oc	sp-nv	ja-dc	flowers
<i>Echinochloa stagnina</i> (Retz.) P. Beauv.	Gramineae	h	pe	gro, wee	3	da, sg	gr, ls	1200	1525	sp-dc	oc-ja	ja-dc	flowers
<i>Elaeagnus conferta</i> Roxb.	Elaeagnaceae	wc	pe	gro also cul	2	streams in eg/bb	gr	1000	1250	sp-oc	oc-nv	ja-dc	flowers
<i>Elaeocarpus floribundus</i> Bl. var. <i>floribundus</i>	Elaeocarpaceae	t	pe	gro	3	eg/bb, egf	gr,ls	1000	1400	my	sp-oc	ja-dc	flowers, fruits
<i>Elaeocarpus stipularis</i> Bl.	Elaeocarpaceae	t	pe	gro	3	egf, eg/bb	gr,ls	900	1400	my-jn	sp-oc	ja-dc	flowers, fruits
<i>Elatostema cyrtandraefolium</i> (Zoll. & Mor.) Miq.	Urticaceae	h	a	gro,ep l	3	rocks in mxf, egf	ls	1300	1425		sp-oc	my-dc	fruits
<i>Elatostema monandrum</i> (Ham. ex D. Don) Hara	Urticaceae	h	pd	epl	3	rocks in mxf, egf, eg/bb	ls	1300	1425	jn-jl	jl-ag	jn-dc	fruits
<i>Elatostema salviniooides</i> W. T. Wang	Urticaceae	h	pd	epl	2	rocks in mxf, eg/bb cliffs	ls	575	1375	ag-sp		my-dc	flowers
<i>Elatostemma lineolatum</i> Wight var. <i>majus</i> Wedd.	Urticaceae	h	pe	gro, epl	2	streams, wet areas in egf	gr,ls	1200	1350		nv-ja	ja-dc	fruits
<i>Elephantopus scaber</i> L. ssp. <i>scaber</i> var. <i>scaber</i>	Compositae	h	pe	gro, wee	3	da, sg	gr, ls	800	1500	sp-oc	nv	ja-dc	flowers
<i>Eleusine indica</i> (L.) Gaertn.	Gramineae	h	pe	gro, wee	3	da	gr,ls	500	1525	jn-nv	jl-dc	ja-dc	
<i>Elsholtzia blanda</i> H. Keng	Labiatae	h	pd	gro	2	eg/pine	gr	1200	1325	nv-dc		my-ja	flowers
<i>Embelia sessiflora</i> Kurz	Myrsinaceae	wc	pd	gro	3	eg/bb egf, da, sg	gr	650	1500	ap-my	jl	my-mr	flowers, imm. fruits
<i>Engelhardia serrata</i> Bl. var. <i>serrata</i>	Juglandaceae	t	pd	gro	3	eg/pine, sg, egf, eg/bb	gr	1000	1500	ja-fb	mr-ap	ja-nv	flowers♀
<i>Engelhardia spicata</i> Lechen. ex Bl. var. <i>integra</i> (Kurz) Mann.	Jugladaceae	t	pd	gro	3	eg/bb, da	ls	1000	1350	fb-mr	mr-ap	ap-fb	
<i>Engelhardia spicata</i> Lesch. ex Bl. var. <i>spicata</i>	Juglandaceae	t	pd	gro	3	eg/pine sg	gr	700	1400	ja fb	fb-mr	mr-dc	fruits
<i>Entada rheedii</i> Spreng. (ssp. <i>rheedii</i>)	Leguminosae, Mimosoideae	wc	pd	gro	3	egf	gr	900	1500		ja-ap	fb -dc	

<i>Epigynum cochinchinensis</i> (Pierre) Midd.	Apocynaceae	wc	pe	gro	3	streams in mxf	ls	550	700	ag-sp		ja-dc	flowers
<i>Epithema carnosum</i> Bth.	Gesneriaceae	h	pd	epl	2	rocks, streams in egf	gr, ls	1100	1350	ag-sp	sp-oc	my-dc	flowers, fruits
<i>Eranthemum tetragonum</i> Wall. ex Nees ssp. <i>tetragonum</i>	Acanthaceae	h	pe	gro	3	egf, eg/pine, eg/bb	gr	550	1450	dc-fb		ja-dc	flowers
<i>Eria bilobulata</i> Seid.	Orchidaceae	h	pd	epi, epl	3	rocks in mxf, eg/bb cliffs	ls	1300	1425	jl-ag	oc	my-dc	flowers
<i>Eria globulifera</i> Seid.	Orchidaceae	h	pd	epi	3	rocks in mxf, eg/bb cliffs	ls	1300	1425	jl-ag	oc	my-dc	flowers
<i>Eriobotrya salwinensis</i> Hand.-Mazz.	Rosaceae	t	pe	gro	3	rocks in mxf cliffs	ls	1375	1425	nv-dc	fb	ja-dc	flowers, fruits
<i>Eriolaena candollei</i> Wall.	Sterculiaceae	t	pd	gro	3	egf, eg/pine, da, sg	gr	1200	1500		dc-fb	jn-fb	fruits
<i>Erythrina stricta</i> Roxb.	Leguminosae, Papilionoideae	t	pd	gro	3	mxsf, da	ls, gr	1200	1400	ap		jn-dc	flowers
<i>Erythrina subumbrans</i> (Hassk.) Merr.	Leguminosae, Papilionoideae	t	pe	gro	3	streams in egf, eg/bb	gr, ls	550	1400	ja-fb		ja-dc	flowers
<i>Erythropalum scandens</i> Bl.	Olacaceae	wc	pe	gro	3	streams in mxf	ls	550	800	ag-sp		ja-dc	flowers
<i>Etlingera littoralis</i> (Kon.) Gise.	Zingiberaceae	h	pe	gro	3	streams, wet areas in mxf, egf	gr, ls	550	1300	ap-jn	oc-nv	ja-dc	flowers
<i>Eugenia albiflora</i> Duth. ex Kurz	Myrtaceae	t	pe	gro	3	eg/bb, eg/pine	gr					ja-dc	
<i>Eugenia formosa</i> Wall.	Myrtaceae	t	pe	gro	3	streams in mxf	gr, ls	500	700		ag-sp	ja-dc	
<i>Eugenia fruticosa</i> (DC.) Roxb.	Myrtaceae	t	pe	gro	3	egf, eg/bb, da, sg	gr	900	1500	ap-my		ja-dc	flowers
<i>Eugenia megacarpa</i> Craib	Myrtaceae	t	pe	gro	3	egf	ls	1100	1400	ja-fb		ja-dc	flowers
<i>Eulophia spectabilis</i> (Denn.) Sur.	Orchidaceae	h	pd	gro	2	da, sg	gr	1100	1300	my		jn-dc	
<i>Euonymus cochinchinensis</i> Pierre	Celastraceae	l	pe	gro	3	egf	ls	1000	1400	fb-mr	oc-nv	ja-dc	fruits
<i>Euonymus laxiflora</i> Champ. ex Bth.	Celastraceae	s	pe	gro	2	rocks in egf cliffs	ls	1300	1375	jl-sp	oc-nv	ja-dc	fruits
<i>Euonymus sootepensis</i> Craib	Celastraceae	cr,v, wc	pe	gro	3	egf	ls	1100	1425	fb-mr	oc-nv	ja-dc	flowers, fruits
<i>Eupatorium adenophorum</i> Spreng.	Compositae	h	pe	gro, int, we	4	da, sg	gr	600	1525	mr-ap	ap-my	ja-dc	
<i>Eupatorium doichangensis</i> H. Koy	Compositae	h	a	gro	2	bb/df, da	gr	1100	1200	ja-fb	mr	ag-dc	flowers
<i>Eupatorium odoratum</i> L.	Compositae	h	pe	gro, nat, w ee	4	da, sg	gr, ls	400	1525	nv-dc	ja-fb	ja-dc	
<i>Euphorbia thymifolia</i> L.	Euphorbiaceae	h	a	gro, wee	3	da	gr, ls	425	800	ag-nv	oc-dc	my-dc	fruits
<i>Eurya acuminata</i> DC. var. <i>wallichiana</i> Dyer	Theaceae	t	pe	gro	3	da, sg in egf	gr	1000	1500	nv-dc	ja-fb	ja-dc	flowers, fruits

<i>Eurycolea gracilis</i> Prain	Labiatae	s,l	pe	gro	3	mxsf, egf, da	gr , ls	1100	1425	nv-fb	ja-mr	ja-dc	flowers, fruits
<i>Exacum pteranthum</i> Wall. ex Griseb.	Gentianaceae	h	a	gro	3	eg/pine	gr	1250	1325	sp-oc	nv	my-dc	flowers
<i>Fagerlinidia</i>	Rubiaceae	t, l	pe	gro	2	streams in egf	gr, ls	1200	1300	ap	ja-fb	ja-dc	flowers, fruits
<i>Fagopyrum cymosum</i> (Trev.) Meisn.	Polygonaceae	h	pd	gro	3	egf, da	gr	1000	1400	oc-nv		my-ja	flowers
<i>Fagraea celiianica</i> Thunb.	Loganiaceae	s	pe	epl	2	rocks in mxsf cliffs	ls	600	1400		nv-ap	ja-dc	fruits
<i>Falconeria insigne</i> Roy.	Euphorbiaceae	t	pd	gro	2	rocks, cliffs in mxsf	ls	1200	1425	ja-fb		jn-dc	flowers♂
<i>Fernandoa adenophylla</i> (Wall. ex G. Don) Steen.	Bignoniaceae	t	pd	gro	3	da, sg	gr	500	1100	jl-ag		ja-fb my-dc	flowers
<i>Ficus</i>	Moraceae	t,s	pe	epl	2	cliffs in bb/df, egf	ls	400	1300	dc-fb	dc-fb	ja-dc	flowers
<i>Ficus annulata</i> Bl.	Moraceae	t	pe	str, epl	3	mxsf, egf	gr, ls	600	1400	ap-sp	ap-sp	ja-dc	flowers, fruits
<i>Ficus anserina</i> (Corn.) Berg	Moraceae	wc	pd	epl	3	rocks in bb/df cliffs	ls	400	800			my-dc	
<i>Ficus auriculata</i> Lour.	Moraceae	t	pe	gro	3	da, streams in egf, wet areas in eg/bb	gr	900	1500	dc-ag	mr-sp	ja-dc often changing lvs in dc	flowers
<i>Ficus cyrtophylla</i> Wall. ex Miq.	Moraceae	l	pe	gro, epl	2	streams in egf, mxsf	ls	550	1350	ap-sp	ap-sp	ja-dc	flowers, fruits
<i>Ficus fistulosa</i> Reinw. ex Bl.	Moraceae	t	pe	gro	3	egf, da	gr	1000	1525	ja-dc	ja-dc	ja-dc	flowers
<i>Ficus glaberrima</i> Bl. var. <i>glaberrima</i>	Moraceae	t, l	pe	epl	2	rocks , cliffs	ls	1300	1425	nv-dc	nv-dc	ja-dc	
<i>Ficus hirta</i> Vahl var. <i>hirta</i>	Moraceae	l	pe	gro	3	da, sg, egf	gr,ls	1000	1400	jn-sp	jl-oc	ja-dc	flowers, fruits
<i>Ficus hirta</i> Vahl var. <i>roxburghii</i> (Miq.) King	Moraceae	t	pe	gro	3	egf	gr,ls	1000	1400	ap-my	ap-my	ja-dc	flowers, fruits
<i>Ficus hispida</i> L. f. var. <i>hispida</i>	Moraceae	t	pe	gro	3	da, sg	gr	400	1500	ja-dc	ja-dc	ja-dc	
<i>Ficus kurzii</i> King	Moraceae	t	pe	epi	3	rocks in egf	ls	1200	1500	ag-nv	ag-nv	ja-dc	flowers, fruits
<i>Ficus semicordata</i> B.-H. ex J.E. Sm. var. <i>semicordata</i>	Moraceae	t	pe	gro	3	egf, eg/bb, da, mxsf, sg	gr, ls	550	1525	ja-dc	ja-dc	ja-dc	
<i>Ficus subincisa</i> Ham. ex J.E. Sm. var. <i>subincisa</i>	Moraceae	t,l	pe	gro	3	egf,da, sg	gr, ls	1200	1400	ja-dc	ja-dc	ja-dc	flowers
<i>Ficus subpisocarpa</i> Gagnep. ssp. <i>pubipoda</i> C.C. Berg	Moraceae	t	pd	gro	3	egf	gr	1000	1450	jl-ag	sp-oc	mr-ja	flowers
<i>Ficus variegata</i> Bl. var. <i>variegata</i>	Moraceae	t	pd	gro	2	streams in egf, eg/bb	gr	1000	1200			my-fb	
<i>Firmiana colorata</i> (Roxb.) R. Br.	Sterculiaceae	t	pd	gro	3	rocks, cliffs	gr, ls	1000	1425	ja-mr	mr-ap	jn-dc	flowers, leaves
<i>Firmiana kerrii</i> (Craib) Kosterm.	Sterculiaceae	l	pd	gro	2	rocks in mxsf cliffs	ls	1350	1425	ja-fb	ap	jn-dc	flowers, leaves
<i>Fissistigma oblongum</i> (Craib) Merr.	Annonaceae	wc	pe	gro	2	egf, eg/pine	gr	900	1100			ja-dc	
<i>Flacourtie indica</i> (Burm.f.) Merr.	Flacourtiaceae	t	pe	gro	3	egf, da,sg	gr	900	1500		jl-ag	ja-dc	fruits
<i>Flemingia sootepensis</i> Craib	Leguminosae, Papilionoideae	l	pe	gro	3	mxsf, eg/bb, da, sg	gr, ls	550	1400		ja-fb	ja-dc	fruits

<i>Fluggea virosa</i> (Roxb. ex Willd.) Voigt	Euphorbiaceae	s, l	pd	gro	3	rocks in mxsf, eg/bb,da	gr, ls	525	1425	jl-sp	sp-oc	my-dc	flowers♂, fruits
<i>Galium punduanum</i> Wall. ex Craib	Rubiaceae	h	a	epl	2	rocks in egf cliffs	ls	1300	1400	oc-nv	dc	my-dc	flowers
<i>Garcinia cowa</i> Roxb.	Guttiferae	t	pe	gro	3	mxsf, egf, eg/bb	gr,ls	1200	1375	ap	sp	ja-dc	flowers♀
<i>Garcinia propinqua</i> Craib	Guttiferae	t	pe	gro	3	rocks in egf, eg/bb cliffs	ls	1350	1375	my-jn		ja-dc	flowers♂
<i>Garcinia xanthochymus</i> Hk. f. ex T. And.	Guttiera	t	pe	gro, epl	3	bb/df, eg/bb	gr,ls, sh	500	900			ja-dc	
<i>Gardenia sootepensis</i> Hutch.	Rubiaceae	t	pd	gro	3	bb/df, eg/bb	gr	900	1100	ap		my-dc	flowers
<i>Garuga pinnata</i> Roxb.	Burseraceae	t	pd	gro	3	eg/bb, da, sg	ls	500	1350			my-dc	
<i>Gigantochloa apus</i> (Schult.) Kurz	Gramineae, Bambusoideae	h	pe	gro	3	bb/df, eg/bb	gr, ls	500	1500			ja-dc	
<i>Girardinia hibiscifolia</i> Miq.	Urticaceae	h	a	gro	3	egf,da	ls	1150	1500	oc-nv	nv-dc	my-dc	flowers
<i>Globba clarkei</i> Baker	Zingiberaceae	h	pd	gro	3	rocks in mxsf, egf	gr,ls	600	1400	jl-sp	oc-nv	my-dc	flowers
<i>Globba schomburgkii</i> Hk. f. var. <i>schomburgkii</i>	Zingiberaceae	h	pd	gro	3	egf, eg/bb	gr	1000	1300	jl-ag		my-dc	flowers
<i>Glochidion eriocarpum</i> Champ.	Euphorbiaceae	l	pe	gro	3	egf, eg/pine	gr	1200	1400		ja-fb	ja-dc	fruits
<i>Glochidion oblatum</i> Hk. f.	Euphorbiaceae	t	pe	gro	2	eg/bb	gr	1100	1400		jl-ag	ja-dc	fruits
<i>Glochidion rubrum</i> Bl.	Euphorbiaceae	t	pe	gro	3	da, sg	gr	1000	1500		ja-fb	ja-dc	fruits
<i>Glochidion sphaerogynum</i> (M. A.) Kurz	Euphorbiaceae	t	pe	gro	3	eg/bb, da, sg	gr	1000	1400	ja-fb	dc-ja	ja-dc	flowers, fruits
<i>Glycosmis cochinchinensis</i> (Lour.) Pierre ex Engl.	Rutaceae	l	pe	gro	3	rocks in mxsf	ls	1200	1425	ja-fb	ag	ja-dc	flowers
<i>Glyptopetalum sclerocarpum</i> Kurz	Celastraceae	l	pe	gro	2	egf	ls	1100	1375	ap-my	oc-nv	ja-dc	flowers, fruits
<i>Gmelina arborea</i> Roxb.	Verbenaceae	t	pd	gro	3	da/sg, bb/df, eg/bb	gr	500	1500			my-dc	
<i>Gomphogyne heterosperma</i> (Wall.) Kurz	Cucurbitaceae	v	a	gro	3	cliffs, rocks in mxsf, eg/bb, bb/df	ls	400	1425	sp-oc		my-dc	flowers♂
<i>Gomphostemma crinitum</i> Wall. ex Bth.	Labiatae	h	a	gro	2	streams in mxsf	ls	650	700	oc		my-dc	
<i>Gomphostemma lucidum</i> Wall. ex Bth.	Labiatae	h	pe	gro	2	rocks in eg/bb	ls	1350	1375	ag		ja-dc	
<i>Gomphostemma strobilinum</i> Wall. ex Bth. var. <i>viridis</i> (Wall. ex Bth.) Hk. f.	Labiatae	h	pe	gro	2	mxsf, eg/bb	gr,ls	1300	1425	sp		ja-dc	flowers
<i>Gomphostemma wallichii</i> Pr.	Labiatae	h	pd	gro	2	streams in egf, eg/bb	gr	1000	1300	oc-nv		my-fb	flowers
<i>Goniothalamus cheliensis</i> Hu	Annonaceae	t, l	pe	gro	2	streams, wet areas in egf	gr, ls		1325			ja-dc	
<i>Gouania javanica</i> Miq.	Rhamnaceae	wc	pd	gro	3	rocks in mxsf cliffs	ls	1400	1425	sp	nv-dc	my-dc	flowers, fruits

<i>Grewia lacei</i> Drum. & Craib	Tiliaceae	s	pd	gro	3	eg/bb, da	ls	1000	1400	sp-oc		my-dc	flowers
<i>Gynostemma pentaphyllum</i> (Thunb.) Mak.	Cucurbitaceae	v	a	gro	3	egf, da	gr, ls	1200	1375	my-jn		my-dc	flowers♂
<i>Gynura longifolia</i> Kerr	Compositae	v	pd	gro	2	streams in egf, eg/bb	gr	1100	1300	fb		jn-mr	
<i>Gynura nepalensis</i> DC.	Compositae	h	a	gro	3	da, weed	gr, ls	600	1525	sp-jl	nv-ag	oc-sp	flowers, fruits
<i>Habenaria furcifera</i> Lindl.	Orchidaceae		pd	epl	3	rocks in mxf, eg/bb cliffs	ls	1400	1425	jl-ag		my-dc	flowers
<i>Habenaria malintana</i> (Blanco) Merr.	Orchidaceae	h	pd	gro	2	bb/df, eg/bb	gr	850	1400	oc		my-dc	flowers
<i>Harpullia arborea</i> (Blanco) Radlk.	Sapindaceae	t	pd	gro	3	streams in mxf	ls	500	900	ja-fb		fb-dc	flowers
<i>Hedychium ellipticum</i> Ham. ex J.E. Sm.	Zingiberaceae	h	pd	epl	3	rocks in mxf, eg/bb cliffs	ls	1375	1425	jl-ag	sp	my-dc	flowers, fruits
<i>Hedychium gardnerianum</i> Rosc.	Zingiberaceae	h	pd	gro	3	egf, eg/pine, da	gr	1100	1500	sp-oc		my-dc	flowers
<i>Hedyotis coronaria</i> (Kurz) Craib	Rubiaceae	h	pd	gro	2	mxsf, eg/bb	gr	800	1300	jl-ag		my-dc	
<i>Hedyotis corymbosa</i> (L.) Lmk.	Rubiaceae	h	a	gro, wee	3	da, sg	gr	400	1200	sp-oc	oc-nv	ja-dc	flowers
<i>Hedyotis elegans</i> Wall. ex Kurz	Rubiaceae	h	pe	gro	3	eg/bb	gr	1000	1300		dc-ja	ja-dc	fruits
<i>Hedyotis scandens</i> Roxb.	Rubiaceae	v,h	pe	gro	3	wet areas egf, da	gr, ls	950	1150	oc-nv		ja-dc	flowers
<i>Helicia formosana</i> Hemsl. var. <i>oblanceolata</i> Sleum.	Proteaceae	t	pe	gro	2	egf, eg/bb	gr	1000	1400	ap-my	fb-mr	ja-dc	
<i>Helicia nilagirica</i> Bedd.	Proteaceae	t	pe	gro	3	egf	gr	1200	1500	ap		ja-dc	flowers
<i>Helicopis terminalis</i> (Kurz) Sleum.	Proteaceae	t	pe	gro	2	egf, eg/bb	gr	1000	1400	ap-my	dc-fb	ja-dc	
<i>Helicteres elongata</i> Wall. ex Boj	Sterculiaceae	s,l	pd	gro	3	eg/bb	gr	1000	1400	my-jn		ap-dc	flowers
<i>Helixanthera parasitica</i> Lour.	Loranthaceae	s	pe	epi, par	3	egf, eg/pine	gr	1000	1500	ap-my		ja-dc	flowers
<i>Hemipilia calophylla</i> Par. & Rchb. f.	Orchidaceae	h	pd	epl	1	rocks in mxf, eg/bb	ls	1350	1425	jl-ag		my-dc	flowers
<i>Heracleum barmanicum</i> Kurz	Umbelliferae	h	pd	gro	3	rocks in mxf, eg/bb cliffs	ls	1375	1425	sp-nv	oc-nv	jl-dc	flowers
<i>Heriteria macrophylla</i> Wall. ex Kurz	Sterculiaceae	t	pe	gro	2	eg/bb, egf	ls	1200	1400	mr-ap		ja-dc	seedling, flowers
<i>Heteropanax fragrans</i> (Roxb. ex DC.) Seem.	Araliaceae	l	pd	gro	2	da, sg	gr	900	1300			my-dc	
<i>Heterostemma siamica</i> Craib	Asclepiadaceae	v	pe	gro	3	mxsf, da	ls	500	800	oc-nv		ja-dc	flowers
<i>Heynea trijuga</i> Roxb. ex Sims	Meliaceae	t	pe	gro	2	egf	gr	900	1200		nv-dc	ja-dc	fruits
<i>Hibiscus macrophyllus</i> Roxb. ex Horn.	Malvaceae	t	pe	gro	3	egf, da, sg	gr, ls	900	1400	mr-ap		ja-dc	
<i>Hiptage bullata</i> Craib	Malpighiaceae	sc	pe	gro	3	rocks in mxf cliffs	ls	1300	1400	ap-my		ja-dc	flowers
<i>Homalium ceylanicum</i> (Gardn.) Bth.	Flacourtiaceae	t	pd	gro	2	egf, eg/bb	gr	1000	1200	jl-ag		my-fb	flowers

<i>Hopea odorata</i> Roxb. var. <i>odorata</i>	Dipterocarpaceae	t	pe	gro	2	egf	ss	900	1000	fb-mr		ja-dc	flowers
<i>Horsfieldia amygdalina</i> (Wall.) Warb. var. <i>macrocarpa</i> Wilde	Myristicaceae	t	pe	gro	2	egf	gr	1000	1000		ap	ja-dc	fruits
<i>Houttuynia cordata</i> Thunb.	Saururaceae	h	pe	gro	3	streams in egf, wet areas in da	gr	800	1500	(dc) ap-my		ja-dc	flowers
<i>Hovenia dulcis</i> Thunb.	Rhamnaceae	t	pd	gro	2	egf, streams in eg/bb	gr	1200	1400			my-dc	
<i>Hoya kerrii</i> Craib	Asclepiadaceae	v	pe	epl	2	rocks in bb/df cliffs	ls	400	600			ja-dc	
<i>Hoya thomsonii</i> Hk. f.	Asclepiadaceae	v	pe	epi, epl	2	rocks in egf	gr	1300	1400		nv-ja	ja-dc	fruits
<i>Hunteria zeylanica</i> (Retz.) Gard. ex Thw.	Apocynaceae	t	pe	gro	3	rocks in egf, cliffs	ls	1200	1375	my	ap-my	ap-dc	flowers, fruits
<i>Hydrocotyle javanica</i> Pont. ex Thunb.	Umbelliferae	h	pe	gro, cr	3	mostly wet areas in egf, da, eg/bb	gr, ls	1100	1400	jn-sp	jl-nv	ja-dc	flowers, fruits
<i>Hydrocotyle sibthorpioides</i> Lmk.	Umbelliferae	h	a	gro, wee	3	da, sg	gr	900	1500		ap-oc	my-dc	fruits
<i>Hydrolea zeylanica</i> (L.) Vahl	Hydrophyllaceae	h	a	gro	3	wet areas in da		800	1100	ap-my	ap-jn	mr-oc	flowers, fruits
<i>Hymenodictyon orixense</i> (Denn.) Mabb.	Rubiaceae	t	pe	gro	2	rocks in mxf, eg/bb	ls	1000	1425			my-dc	
<i>Hypericum henryi</i> H. Lev. & Van. ssp. <i>hancockii</i> H. Rob.	Guttiferae, Hypericeae	s	pe	epl	2	rocks in egf, cliffs	ls	1300	1400	oc	dc-fb	ja-dc	fruits
<i>Hypericum japonicum</i> Thunb. ex Murr.	Guttiferae, Hypericeae	h	a	gro	3	wet areas in da, egf	gr	900	1050	ap-my	ap-my	my-dc	flowers, fruits
<i>Ichnocarpus polyanthus</i> (Bl.) P.I. Forst.	Apocynaceae	wc	pe	gro	3	egf	gr	1000	1525	ap-my		ja-dc	flowers
<i>Ilex umbellulata</i> (Wall.) Loesn.	Aquifoliaceae	t	pe	gro	3	egf	gr, ls	1000	1400		jl	ja-dc	fruits
<i>Impatiens clavigera</i> Hk. f.	Balsaminaceae	h	pe	gro	3	streams, wet areas in egf	gr, ls	1200	1350	oc-nv	nv-dc	ja-dc	flowers
<i>Impatiens kerriae</i> Craib	Balsaminaceae	h	pd	epl	3	rocks in mxf cliffs	ls	1375	1425	my-nv	nv-dc	my-dc	flowers
<i>Impatiens salangensis</i> T. Shim.	Balsaminaceae	h	a	epl	3	rocks in mxf	ls	1400	1425	jl-dc	sp-ja	my-dc	flowers
<i>Impatiens viciaeflora</i> Hk.f.	Balsaminaceae	h	a	gro	3	egf, eg/bb	gr	1000	1525	ag-dc	sp-dc	my-dc	
<i>Imperata cylindrica</i> (L.) P. Beauv. var. <i>major</i> (Nees) C.E. Hubb. ex Hubb. & Vaugh.	Gramineae	h	pe	gro, wee	4	da, sg	gr, ls	500	1525	oc		ja-dc	
<i>Inula cappa</i> (Ham. ex D.Don) DC. forma cappa	Compositae	h	pd	gro	3	eg/bb, sg	gr, ls	900	1500	nv-dc	ja-dc	my-dc	flowers
<i>Inula nervosa</i> Wall. ex DC.	Compositae	h	a	epl	2	rocks in mxf, egf cliffs	ls	1200	1400	ja-fb	mr	jn-mr	flowers
<i>Inula wissmanniana</i> Hand.-Mazz.	Compositae	h	pd	gro	2	rocks in eg/pine, eg/bb cliffs	gr	1200	1425	dc-fb	mr	my-mr	flowers
<i>Iodes cirrhosa</i> Turcz.	Icacinaceae	wc	pe	gro	2	egf, da, sg	gr	1000	1200		jl	ja-dc	fruits

<i>Ischaemum</i>	Gramineae	h	pd	epl	2	rocks in egf cliffs	ls	1300	1400	oc-nv	dc	my-dc	flowers
<i>Isodon coetsa</i> (B. -H. ex D. Don) Kudo	Labiatae	s,h	pd	gro	2	eg/bb, da	ls	1200	1400	dc-ja		jl-fb	flowers
<i>Isodon lophanthoides</i> (B. -H. ex D. Don) Hara var. <i>lophanthoides</i>	Labiatae	h	a	gro	2	eg/bb	gr	1100	1400	sp-oc	nv-dc	my-dc	fruits
<i>Ixora</i>	Rubiaceae	sc	pe	gro	2	streams in mxf	ls	550	600		sp	ja-dc	fruits
<i>Ixora cibdela</i> Craib	Rubiaceae	l	pe	gro	3	egf, eg/bb	gr	900	1100		oc-nv	ja-dc	
<i>Ixora rugosula</i> Wall. ex Hk. f.	Rubiaceae	l, wc	pe	gro	2	eg/bb	ls	1275	1350	ap		ja-dc	flowers
<i>Jasminum dispermum</i> Wall. ssp. <i>forrestianum</i> (Kob.) P.S. Green	Oleaceae	s	pe	gro	2	rocks in egf	ls	1200	1400		ja dc	ja-dc	friuts
<i>Jasminum funale</i> Decne. ssp. <i>funale</i>	Oleaceae	wc	pe	gro	3	rocks in mxf cliffs	ls	1375	1425	ag-sp		ja-dc	flowers
<i>Jasminum nervosum</i> Lour.	Oleaceae	v	pe	gro	3	rocks in mxf, eg/bb	ls	1200	1400	my	my-jn	ja-dc	flowers
<i>Justicia helferi</i> Cl.	Acanthaceae	h	pe	gro	2	streams in mxf, egf eg/pine, eg/bb, da,	ls	600	1300	ja-fb		ja-dc	flowers
<i>Justicia procumbens</i> L.	Acanthaceae	h	a	gro	3	sg	gr	900	1525	sp-dc		my-dc	flowers
<i>Justicia quadrifaria</i> (Wall. ex Nees) T. And.	Acanthaceae	h	pe	gro		streams in egf, eg/bb	gr	1000	1300	sp-fb	nv-mr	ja-dc	flowers
<i>Knema lenta</i> Warb.	Myristicaceae	t	pe	gro	3	egf, eg/bb	gr	1000	1300			ja-dc	
<i>Knema tenuinervia</i> Wilde ssp. <i>setosa</i> Wilde	Myristicaceae	t	pe	gro	2	mxsf, eb/bb	gr	500	700			ja-dc	
<i>Kydia calycina</i> Roxb.	Malvaceae	t	pd	gro	3	da sg	gr	1100	1500	oc-nv		my-dc	flowers
<i>Lactuca parishii</i> Craib ex Hoss.	Compositae	h	pd	gro	3	eg/pine, eg/bb, da, sg	gr	1100	1400	ja-fb	fb-mr	jn-ap	flowers
<i>Lagerstroemia tomentosa</i> Presl	Lythraceae	t	pd	gro	3	bb/df, egf	gr	900	1100	ap	oc-nv	ap-dc	flowers
<i>Lagerstroemia villosa</i> Wall. ex Kurz	Lythraceae	t	pd	gro	3	da, sg	gr	900	1500		oc-nv	my-fb	fruits
<i>Laggera alata</i> (D. Don) Sch. Bip. ex Oliv.	Compositae	h	a	gro, wee	3	da, sg	gr	1100	1525			my-dc	
<i>Laggera pterodonta</i> (DC.) Sch. Bip ex Oliv.	Compositae	h	a	gro, wee	3	da	gr	600	1250			ag-mr	
<i>Lantana camara</i> L.	Verbenaceae	s, l	pe	gro, int, nat, wee	2	da, sg	gr, ls	1100	1400	ag-oc		ja-dc	
<i>Laportea interrupta</i> (L.) Chew	Urticaceae	h	a	gro, epl, wee	3	mxsf, egf, da	gr,ls	500	1025	ag-oc	sp-nv	my-dc	flowers, fruits
<i>Laportea violacea</i> Gagnep.	Urticaceae	h	a	gro	3	egf,da,sg	ls	1200	1400	oc-nv	nv-dc	my-dc	flowers
<i>Leea indica</i> (Burm.f.) Merr.	Leeaceae	s,l	pe	gro	3	egf, eg/bb	gr,ls	500	1500	my-il	ag-sp	ja-dc	flowers, fruits
<i>Lepidagathis incurva</i> Ham. ex D.Don	Acanthaceae	h	pe	gro	3	rocks in mxf, bb/df, eg/pine	gr, ls	400	1500	dc-mr		ja-dc	flowers

<i>Lespedeza parviflora</i> Kurz	Leguminosae, Papilionoideae	I	pe	gro	3	eg/bb, da, sg	gr	1000	1500	nv-ja	ja-fb	ja-dc	fruits
<i>Lespedeza sulcata</i> (Schindl.) Craib	Leguminosae, Papilioideae	I	pd	gro	3	rocks in mxf cliffs	ls	1100	1425	fb		my-ja	
<i>Leucaena leucocephala</i> (Lmk.) De Wit	Leguminosae, Mimosoideae	t, I	pe	gro, int, nat, wee	3	da, sg	gr	400	700			ja-dc	
<i>Leucas decendentata</i> (Willd.) J.Sm.	Labiatae	h	a	epl	3	egf da	ls	1200	1400	oc-nv		my-dc	flowers
<i>Lindenbergia indica</i> (L.) Vat.	Scrophulariaceae	h	a	epl, gro	3	bb/df, mxf,da	ls	400	700	oc-nv	nv-dc	my-dc	flowers
<i>Liparis olivacea</i> Lindl.	Orchidaceae	h	pd	gro	3	bb/df,eg/bb	gr	1100	1300	jl-ag		my-dc	flowers
<i>Liparis tenuis</i> Rol. ex Dow.	Orchidaceae	h	pd	epi	2	rocks in mxsf, eg/bb cliffs	ls	1350	1425	jl-ag		my-dc	flowers
<i>Liparis viridiflora</i> (Bl.) Lindl.	Orchidaceae	h	pe	epi, epl	3	rocks in mxsf cliffs	ls	1375	1425	ag-sp	oc	ja-dc	flowers
<i>Lithocarpus elegans</i> (B.) Hatus. ex Soep.	Fagaceae	t	pe	gro	3	egf	gr	1000	1500		sp-oc	ja-dc	fruits
<i>Lithocarpus polystachyus</i> (Wall. ex A. DC.) Rehd.	Fagaceae	t	pe	gro	2	egf, eg/pine	gr	1200	1525	♂oc, ♀dc-ja	jl-ag	ja-dc	flowers♂, ♀, fruits
<i>Lithocarpus quiriculatus</i> (Hick. & A. Camus) Baun.	Fagaceae	t	pe	gro	3	egf	gr	1000	1400		sp-oc	ja-dc	fruits
<i>Lithocarpus truncatus</i> (King ex Hk. f.) Rehd. & Wils.	Fagaceae	t	pe	gro	2	eg/pine	gr	1250	1325		ag-sp	ja-dc	
<i>Litsea</i>	Lauraceae	t	pe	gro	3	egf, eg/bb	gr	1200	1500			ja-dc	
<i>Litsea cubeba</i> (Lour.) Pers. var. <i>cubeba</i>	Lauraceae	t	pe	gro	3	da, sg	gr	1000	1300	ja-fb		ja-dc	flowers
<i>Litsea garrettii</i> Gamb.	Lauraceae	I	pe	gro	3	egf, eg/bb	gr, ls	1100	1300	ap		ja-dc	flowers
<i>Litsea glutinosa</i> (Lour.) C. B. Rob. var. <i>glutinosa</i>	Lauraceae	t	pe	gro	3	eg/pine	gr	1100	1350	ap		ja-dc	flowers♂
<i>Litsea semecarpifolia</i> Wall. ex Nees	Lauraceae	t	pe	gro	3	eb/bb	gr	1100	1500	ja-fb		ja-dc	
<i>Litsea umbellata</i> (Lour.) Merr.	Lauraceae	t	pe	gro	3	egf	gr	1000	1350	jl-sp		ja-dc	flowers
<i>Litsea zeylanica</i> (Nees) Nees	Lauraceae	t	pe	gro	3	streams in egf	gr, ls	1200	1350	nv-ja		ja-dc	
<i>Lobelia alsinoides</i> Lmk.	Campanulaceae	h	a	gro	3	eg/bb,da,sg, eg/pine	gr	1000	1325	oc	nv	my-dc	flowers
<i>Lobelia zeylanica</i> L.	Campanulaceae	h, cr	pe	gro	3	da in egf, eg/bb	gr, ls	1000	1500	jn-oc	jl-dc	ja-dc	flowers, fruits
<i>Lophatherum gracile</i> Brongn. var. <i>gracile</i>	Graimeae	h	pd	gro	3	eg/bb, da	gr	1100	1300	sp-oc	oc-nv	my-dc	flowers
<i>Lysionotus serratus</i> D.Don	Gesneriaceae	h	pd	epi, epl	3	rocks in egf, da, cliffs	ls	1375	1400	jl-sp	sp-oc	my-dc	flowers, fruits
<i>Macaranga denticulata</i> (Bl.) M. A.	Euphorbiaceae	t	pe	gro	3	egf, da, sg	gr	500	1500		my-jn	ja-dc	fruits
<i>Macaranga kurzii</i> (O.K.) Pax & Hoffm.	Euphorbiaceae	I	pe	gro	3	da, sg	gr	1100	1350	jn-ag	jl-sp	ja-dc	flowers♀, fruits

<i>Macaranga siamensis</i> S. J. Davies	Euphorbiaceae	t	pe	gro	3	da, sg	gr	600	900			ja-dc	
<i>Machilus bombycinia</i> King ex Hk. f.	Lauraceae	t	pe	gro	2	egf	gr	1100	1500	ja-fb		ja-dc	flowes
<i>Maclura fruticosa</i> (Roxb.) Corn.	Moraceae	wc	pe	gro	3	egf, eg/pine	ls	1200	1400	sp-oc		ja-dc	flowers♂
<i>Macropanax dispermus</i> (Bl.) O.K.	Araliaceae	t	pe	gro	3	egf	gr	1000	1400	ag-oc	dc-ja	ja-dc	flowers, fruits
<i>Maesa montana</i> A. DC.	Myrsinaceae	s,l	pe	gro	3	egf, eg/pine da,sg, eg/bb	gr	1000	1500	ja-fb	my-jn	ja-dc	flowers, fruits
<i>Maesa permollis</i> Kurz	Myrsinaceae	l	pe	gro	3	egf, streams in mxf	gr,ls	600	1500	ja-fb	ap-my	ja-dc	flowers, fruits
<i>Maesa ramentacea</i> (Roxb.) A. DC.	Myrsinaceae	t	pe	gro	3	da, sg	gr	950	1400	oc-fb		ja-dc	flowers
<i>Magnolia liliifera</i> (L.) Baill. var. <i>obovata</i> (Korth.) Gov.	Magnoliaceae	t	pe	gro	3	streams in mxf, egf	gr, ls	550	1300	mr-my		ja-dc	flowers
<i>Mallotus</i>	Euphorbiaceae	t	pe	gro	2	egf	gr,ls	1300	1375		jl-oc	ja-dc	fruits
<i>Mallotus cuneatus</i> Ridl.	Euphorbiaceae	l	pe	gro	2	rocks in egf, mxf,eg/bb cliffs	ls	600	1375	sp	sp-oc	ja-dc	fruits
<i>Mallotus mollissimus</i> (Geisel.) A.S.	Euphorbiaceae	t	pd	gro	2	egf	gr	1000	1100	ap-my	jl	mr-fb	flowers♂, fruits
<i>Mallotus paniculatus</i> (Lmk.) M. A.	Euphorbiaceae	t, l	pe	gro	3	da,sg	gr	900	1525			ja-dc	
<i>Mallotus philippensis</i> (Lmk.) M. A.	Euphorbiaceae	t	pe	gro	3	da,sg, streams in mxf,eg/bb	gr,ls	600	1500	oc-nv	ja-mr	ja-dc	flowers♂, fruits
<i>Mallotus tetracoccus</i> (Roxb.) Kurz	Euphorbiaceae	t	pe	gro	3	egf, eg/bb	gr	1000	1200	my		ja-dc	flowers♂
<i>Mammea</i>	Guttiferae	t	pe	gro	3	mxf, egf	ls	425	1400		my-jn	ja-dc	fruits
<i>Mangifera caloneura</i> Kurz	Anacardiaceae	t	pe	gro	2	streams in mxf, eg/bb	gr	550	1100	fb		ja-dc	
<i>Maoutia puya</i> (Wall. ex Hk.) Wedd.	Urticaceae	h,l	pd	gro	2	bb/df,da,sg	gr	1000	1525	jl-ag	sp-oc	my-dc	flowers♂, fruits
<i>Markhamia stipulata</i> (Wall.) Seem. ex K. Sch. var. <i>kerrii</i> Sprague	Bignoniaceae	t	pd	gro	3	egf, eg/bb, da, sg	gr, ls	1000	1400	dc-ja	mr-ap	fb-my	
<i>Marsdenia ?glabra</i> Cost.	Asclepiadaceae	v	pe	gro	2	rocks in egf cliffs	ls	1300	1375			ja-dc	
<i>Marsdenia calcicola</i> Kerr	Asclepiadaceae	v	pe	gro	2	rocks in eg/bb, cliffs	ls	1200	1375	ap	sp-oc	ja-dc	flowers
<i>Maytenus (Gymnosporia) stylosa</i> Pierre var. <i>rectispinosa</i> Craib)	Celastraceae	sc	pe	gro	3	rocks in mxf	ls	1300	1375	my		ja-dc	flowers
<i>Melastoma malabathricum</i> L. ssp. <i>malabathricum</i>	Melastomataceae	t, l	pe	gro	3	egf, da ,sg	gr	1000	1525	ja-my		ja-dc	flowers
<i>Melia toonsenden</i> Sieb. & Zucc.	Meliaceae	t	pd	gro	3	bb/df, eg/bb	gr, ls	500	1300		oc-fb	my-dc	
<i>Melicope pteleifolia</i> (Champ. ex Bth.) T.Hart.	Rutaceae	l,s	pe	gro	3	egf, da, sg	gr, ls	1100	1500	mr-ap	jn-jl	ja-dc	flowers, fruits
<i>Melicope viticina</i> (Wall. ex Kurz) T. Hart.	Rutaceae	s	pe	gro	2	eg/bb	gr	1100	1400		my-jn	ja-dc	fruits
<i>Melinus repens</i> (Willd.) Zizka	Gramineae	h	a	gro, int, nat, wee	3	da, sg	gr	400	700	sp-oc	sp-oc	my-dc	

<i>Meliosma pinnata</i> (Roxb.) ssp. <i>barbulata</i> (Cufod.) Beus. ex Welz. var. <i>barbulata</i>	Sabiaceae	t	pe	gro	3	egf	gr	1000	1550	ap-my		ja-dc	flowers
<i>Meliosma simplicifolia</i> (Roxb.) Walp. ssp. <i>fordii</i> (Hemsl. ex Forb. & Hemsl.) Beus.	Sabiaceae	t	pe	gro	2	eg/bb, egf	ls	1200	1375			ja-dc	
<i>Melocanna baccifera</i> (Roxb.) Kurz	Gramineae, Bambusoideae	h	pe	gro	2	streams in mxf, eg/bb	gr	1000	1300			ja-dc	
<i>Melodinus cochinchinensis</i> (Lour.) Merr.	Apocynaceae	wc	pe	gro	3	egf	ls	1200	1350	ap		ja-dc	flowers
<i>Memecylon umbellatum</i> Burm.f.	Melastomataceae	l	pe	gro	2	rocks in mxf, eg/bb	ls	1200	1425	jl-ag		ja-dc	flowers
<i>Merremia umbellata</i> (L.) Hall. f. ssp. <i>orientalis</i> (Hall. f.) Oost.	Convolvulaceae	v	a	gro	3	egf,da,sg	ss	800	1100	fb-mr		jn-ap	flowers
<i>Merremia vitifolia</i> (Burm. f.) Hall. f.	Convolvulaceae	v	a	gro, wee	3	da	gr, ls	500	1525	ja-fb		jn-ap	flowers
<i>Michelia baillonii</i> Pierre	Magnoliaceae	t	pd	gro	3	egf, eg/bb	gr	1000	1300	my-jn	ap-my	my-dc	flowers, fruits
<i>Michelia champaca</i> L. var. <i>champaca</i>	Magnoliaceae	t	pe	gro	2	egf	gr	1000	1400	ap-my	my-jn	ja-dc	fruits
<i>Microcos paniculata</i> L.	Tiliaceae	t	pe	gro	3	eg/bb, da, sg	gr, ls	500	900			ja-dc	
<i>Micromelum hirsutum</i> Oliv.	Rutaceae	t	pe	gro	3	egf, eg/bb	gr,ls	1100	1500	ja-fb	mr-ap	ja-dc	flowers, fruits
<i>Micromelum minutum</i> (Forst. f.) Wight & Arn.	Rutaceae	l,s	pe	gro	3	rocks in egf , mxf, cliffs, eg/bb	gr,ls	1000	1500	oc-mr	dc-jl	ja-dc	flowers
<i>Microstegium vagans</i> (Nees ex Steud.) A. Camus	Gramineae	h	pe	gro, wee	4	da, sg	gr, ls	450	1500	dc-ja	ja-fb	ja-dc	flowers
<i>Microtropis discolor</i> (Wall.) Wall. ex Arn.	Celastraceae	l	pe	gro	2-3	streams in egf	gr,ls	1100	1325	fb-mr	oc-nv	ja-dc	flowers, fruits
<i>Miliusa cuneata</i> Craib	Annonaceae	l	pe	gro	2	streams in egf	ls	1200	1400	my-nv	nv	ja-dc	flowers
<i>Miliusa thorelli</i> Fin. & Gagnep.	Annonaceae	l	pe	gro	2	streams in bb/df, mxf	gr	500	700	oc		ja-dc	flowers
<i>Millettia pachycarpa</i> Bth.	Leguminosae, Papilionoideae	wc	pd	gro	3	egf, eb/bb	gr	1100	1500			my-fb	
<i>Mimosa diplostichia</i> C. Wrigt ex Sauv. var. <i>diplostichia</i>	Leguminosae, Mimosoideae	v	a	gro, int, nat, wee	3	da, sg	gr	400	1500	sp-oc		my-dc	
<i>Mimosa pigra</i> L.	Leguminosae, Mimosoideae	h	pe	gro, int, wee	3	da, sg	gr	400	1525	jl-sp		ja-dc	
<i>Mischocarpus pentapetalus</i> (Roxb.) Radlk.	Sapindaceae	t	pe	gro	3	egf	gr	1000	1500	ja-mr	my	ja-dc	flowers, fruits
<i>Mitracarpus villosus</i> (Sw.) DC.	Rubiaceae	h	a	gro, int, nat, wee	3	da, sg	gr	900	1500	sp-oc	nv	my-dc	
<i>Mitragyna rotundifolia</i> (Roxb.) O.K.	Rubiaceae	t	pd	gro	3	da, sg	gr	900	1200	sp-oc		ap-fb	flowers

<i>Mitraphora wangii</i> Hu	Annonaceae	t	pe	gro	3	egf	ls	1200	1425	(dc) fb-mr	jl-sp	ja-dc	flowers, fruits
<i>Mnesithea striata</i> (Nees ex Steud.) Kon. & Sos.	Gramineae	h	pd	gro	3	da	gr	1000	1300	ag-oc	oc-nv	my-ja	flowers
<i>Mormordica charantia</i> L.	Cucurbitaceae	v	a	gro, wee	3	da	gr, ls	400	700	ag-oc	oc-nv	my-dc	flowers, fruits
<i>Morus macroura</i> Miq.	Moraceae	t	pd	gro	3	egf, eg/pine	gr	1000	1400	fb-mr	ap	fb-dc	flowers, fruits
<i>Mucuna bracteata</i> A. DC.	Leguminosae, Papilionoideae	v	pe	gro	3	eg/bb, da, sg	gr	1000	1500	ja-fb		ja-dc	flowers
<i>Mucuna interrupta</i> Gagnep.	Leguminosae, Papilionoideae	wc	pe	gro	3	mx, da, sg	ls	1200	1375	ap-sp	sp-oc	ja-dc	flowers, fruits
<i>Murdannia nudiflora</i> (L.) Bren.	Commelinaceae	h	a	gro, wee	3	egf, da, sg	gr	900	1300	sp-nv	oc-dc	my-dc	flowers
<i>Musa itinerans</i> Chees.	Musaceae	h	pe	gro	3	streams, wet areas in egf, eg/bb	gr, ls	950	1375	ag-oc		ja-dc	
<i>Mussaenda dehiscens</i> Craib	Rubiaceae	t	pe	gro	2	egf, eg/bb, da	gr	1000	1200	my-jl		ja-dc	flowers
<i>Mussaenda parva</i> Wall. ex G. Don	Rubiaceae	l	pd	gro	3	rocks in mx, eg/bb cliffs	ls	1200	1425	jl-sp		my-dc	flowers
<i>Mussaenda sanderiana</i> Ridl.	Rubiaceae	wc	pe	gro	3	egf, eg/pine, eg/bb, da, sg	gr	1000	1500	dc-ap		ja-dc	flowers
<i>Mycetia glandulosa</i> Craib	Rubiaceae	h	pe	gro	3	egf	gr, ls	1000	1500	ap-my	ap-my	ja-dc	flowers
<i>Mycetia gracilis</i> Craib	Rubiaceae	l	pe	gro	3	streams in mx, egf	gr, ls	600	1350	oc-nv	ja-fb	ja-dc	flowers, fruits
<i>Myrsine semiserrata</i> Wall.	Myrsinaceae	l	pe	gro	2	rocks in mx, cliffs	ls	1200	1425	ja-fb		ja-dc	flowers♀
<i>Nelsonia canescens</i> (Lmk.) Spreng.	Acanthaceae	h	pe	gro	3	egf, eg/bb, da	gr	900	1100	mr-ap	ap-my	ja-dc	flowers, fruits
<i>Nephelium hypolecum</i> Kurz	Sapindaceae	t	pe	gro	3	egf, eg/bb	gr	950	1200	ja-fb		ja-dc	flowers
<i>Nervilia aragoana</i> Gaud.	Orchidaceae	h	pd	gro	2	mx, eg/bb	ls	1200	1350			jn-dc	leaves
<i>Nervilia crociformis</i> (Zoll. & Mor.) Seid.	Orchidaceae	h	pd	gro	2	bb/df, eg/bb	gr	1100	1300			my-dc	leaves
<i>Oberonia</i>	Orchidaceae	h	pe	epi	2	rocks in eg/bb, mx, cliffs	ls	1200	1425		fb-mr	ja-dc	
<i>Oenanthe javancia</i> (Bl.) DC.	Umbelliferae	h	a	gro	2	streams in egf, eb/bb	gr	600	1475	dc-ja		jn-mr	flowers
<i>Olea rosea</i> Craib	Oleaceae	t, l	pe	gro	2	da, sg	gr	1000	1100		oc-nv	ja-dc	fruits
<i>Ophiopogon longifolius</i> Decne.	Liliaceae	h	pe	gro	3	egf, eg/bb	ls	1200	1400	my-sp	dc-ja	ja-dc	flowers, fruits
<i>Ophiorrhiza aff. nutans</i> Cl. ex Hk. f.	Rubiaceae	h	pe	gro	2	egf	gr, ls	1100	1375	ap-jl	jn-ag	ja-dc	flowers, fruits
<i>Ophiorrhiza pseudofasciculata</i> Schan.	Rubiaceae	h	a	gro	3	eg/bb	gr	1200	1350	ag-sp	sp-oc	my-dc	flowers, fruits
<i>Ophiorrhiza trichocarpon</i> Bl. var. <i>trichocarpon</i>	Rubiaceae	h	pe	gro	3	egf, eg/bb	gr	1000	1400	my-jl	jn-ag	ja-dc	flowers
<i>Ophiorrhiziphyllo macrobotrys</i> Kurz	Acanthaceae	h	pe	gro	2	egf	gr	1100	1400	ja-mr		ja-dc	flowers

<i>Oplismenus burmannii</i> (Retz.) P. Beauv.	Gramineae	h	pe	gro, wee	3	da, sg	gr	800	1500	oc-ja	nv-fb	ja-dc	flowers
<i>Oplismenus compositus</i> (L.) P. Beauv.	Gramineae	h	a	gro	3	da in eg/pine, eg/bb	gr, ls	400	1500	sp-oc	oc-nv	my-dc	flowers
<i>Oreocnide rubescens</i> (Bl.) Miq.	Urticaceae	t,l	pe	gro	3	streams in eg/pine, egf, mxsf	gr,ls	600	1400	fb -ap	sp-dc	ja-dc	fruits
<i>Ormosia sumatrana</i> (Miq.) Prain	Leguminosae, Papilionoideae	t	pe	gro	2	egf,eg/bb	gr	1050	1250		oc-nv	ja-dc	fruits
<i>Ornithoboea wildeana</i> Craib	Gesneriaceae	h	pd	epl	3	rocks in mxsf cliffs	ls	425	625	oc-nv		my-dc	flowers
<i>Ornithochilus difformis</i> (Wall. ex Lindl.) Schltr.	Orchidaceae	h	pe	epi	2	egf, eg/bb	gr	1100	1400	jl-ag		ja-dc	flowers
<i>Orophea polycarpa</i> A.DC.	Annonaceae	l	pe	gro	3	streams in mxsf	ls	600	800	ja-fb		ja-dc	flowers
<i>Osbeckia stellata</i> Ham. ex Ker-Gawl. var. <i>crinita</i> (Bth. ex Naud.) C. Han.	Melastomataceae	s	pe	gro	3	eg/bb, egf,da,sg	gr, ls	1100	1500	sp-dc	ja	ja-dc	flowers
<i>Ostodes paniculata</i> Bl.	Euphorbiaceae	t	pe	gro	3	streams in mxsf, egf, eg/bb	gr, ls	600	1350		ag-sp	ja-dc	fruits
<i>Oxalis corniculata</i> L.	Oxalidaceae	h	a	gro, wee	3	eg/bb,da, sg	gr,ls	1200	1400	(fb) my-oc	jn-nv	ap-dc	flowers, fruits
<i>Paederia pallida</i> Craib	Rubiaceae	v	a	gro	3	rocks in mxsf,egf,da cliffs	gr,ls	1100	1500	sp-oc	nv-dc	my-dc	flowers, fruits
<i>Palaquium garrettii</i> Flet.	Sapotaceae	t	pe	gro	2	egf	gr	1000	1400	sp-oc		ja-dc	flowers
<i>Pandanus sect. Rykia</i> (de Vr.) Kurz	Pandanaceae	l	pe	gro	2	rocks in egf, cliffs	ls	1300	1375			ja-dc	
<i>Pandanus sect. Rykia</i> (de Vr.) Kurz	Pandanaceae	l	pe	gro	2	streams in bb/df, mxsf	gr	500	600			ja-dc	
<i>Panicum brevifolium</i> L.	Gramineae	h	a	gro, wee	3	da, sg	gr	900	1200	sp-oc	oc-nv	my-dc	flowers
<i>Panicum maximum</i> Jacq.	Gramineae	h	pe	gro	3	da, sg	gr	500	1100	sp-oc	oc-nv	ja-dc	
<i>Panicum notatum</i> Retz.	Gramineae	h	pe	gro	3	egf, eg/bb	gr	1000	1450	my-jl	my-jl	ja-dc	flowers
<i>Panisea uniflora</i> (Lindl.) Lindl.	Orchidaceae	h	pe	epi	4	rocks in egf, mxsf cliffs	ls	1300	1425	ap	ap-my	ja-dc	flowers, fruits
<i>Paphiopedilum charlesworthii</i> (Rol.) Pfitz.	Orchidaceae	h	pe	epl	0,1	rocks in mxsf, eg/bb cliffs	ls	1200	1425			ja-dc	
<i>Parabaena sagittata</i> Miers ex Hk. f. & Th.	Menispermaceae	v	pe	gro	3	rocks in mxsf, streams in egf, eg/bb	ls	500	1400	my-jn	sp-nv	ja-dc	flowers, fruits
<i>Paraboea glabrisepala</i> Burtt	Gesneriaceae	h	pd	epl	3	rocks in egf, mxsf cliffs	ls	1200	1425	ag-oc	oc-nv	jn-dc	flowers, fruits
<i>Paraboea kerrii</i> (Craib) Burtt	Gesneriaceae	s,h	pe	gro	2	egf	ls	1050	1250		nv-dc	ja-dc	fruits

<i>Paris polyphylla</i> J. E. Sm.	Liliaceae	h	pd	gro	2	rocks in egf cliffs		1200	1375		sp	jn-dc	
<i>Parthenocissus semicordata</i> (Wall.) Pl.	Vitaceae	wc	pe	gro	2	rocks in mxsf cliffs	ls	1200	1425	sp	ja-dc	ja-dc	fruits
<i>Paspalum conjugatum</i> Berg.	Gramineae	h	a	gro, wee	3	da	gr, ls	1100	1525	ag-oc	sp-nv	my-dc	
<i>Pavetta tomentosa</i> Roxb. ex Sm. var. <i>tomentosa</i>	Rubiaceae	l	pd	gro	3	egf, eg/bb	gr	900	1400	my	nv	my-dc	flowers, fruits
<i>Peliosanthes teta</i> Andr. ssp. <i>humilis</i> (Andr.) Jess.	Liliaceae	h	pd	gro	2	rocks, streams in egf	gr, ls	1000	1325			ja-dc	
<i>Pennisetum purpureum</i> Schumach.	Gramineae	h	pd	gro, wee	3	da, sg	gr	800	1500	nv-ja	dc-fb	jn-fb	flowers
<i>Peperomia pellucida</i> (L.) H. B. K.	Piperaceae	h	a	gro, epl, nat	3	rocks in mxsf cliffs, da in egf	gr, ls	500	1200	ag-oc	sp-nv	my-dc	flowers
<i>Peperomia tetraphylla</i> (Forst.f.) Hk. & Arn.	Piperaceae	h	pe	epl, epi	3	rocks in egf, mxsf cliffs	gr, ls	1200	1500	ag-sp	sp-nv	ja-dc	flowers, fruits
<i>Pericampylus glaucus</i> (Lmk.) Merr.	Menispermaceae	v	pe	gro	3	egf, da	gr	1100	1400	mr-ap	jl-ag	ja-dc	flowers♀ fruits
<i>Perilla frutescens</i> (L.) Britt.	Labiatae	h	a	cul	2	egf	gr	1050	1500		nv-dc	my-dc	fruits
<i>Peristylus constrictus</i> (Lindl.) Lindl.	Orchidaceae	h	pd	gro	2	eg/bb	gr	1250	1400	my		my-dc	flowers
<i>Petrocosmea</i>	Gesneriaceae	h	pd	epl	2	rocks in egf, cliffs	ls	1300	1400	sp	oc-nv	jn-dc	flowers, fruits
<i>Peucedanum siamicum</i> Craib	Umbelliferae	h	pd	gro	2	da, sg	gr	1500	1525	sp-oc		my-dc	flowers
<i>Phaulopsis dorsiflora</i> (Retz.) Sant.	Acanthaceae	h	pe	gro	3	egf, mxsf, eg/bb, da, sg	gr	400	1400	dc-fb		ja-dc	flowers
<i>Phlogacanthus curviflorus</i> (Wall.) Nees var. <i>curviflorus</i>	Acanthaceae	s, l	pe	gro	2	streams in egf, eg/bb	gr	1000	1300	nv-fb	dc-mr	ja-dc	flowers, fruits
<i>Phoebe lanceolata</i> (Wall. ex Nees) Nees	Lauraceae	t, l	pe	gro	3	egf, eg/bb	gr, ls	1000	1400	ap-my	oc	ja-dc	flowers, fruits
<i>Phoebe pallida</i> (Nees) Nees	Lauraceae	t	pe	gro	3	egf	gr	1000	1200	jl-ag		ja-dc	flowers, imm. fruits
<i>Phoebe paniculata</i> Nees	Lauraceae	t	pd	gro	3	egf	gr	1300	1500	fb-mr		ja-dc	flowers
<i>Pholidota articulata</i> Lindl.	Orchidaceae	h	pd	epi	3	rocks in mxsf, cliff	ls	1300	1425			jn-dc	
<i>Pholidota bracteata</i> (D. Don) Seid.	Orchidaceae	h	pd	epi, epl	3	rocks in mxsf, egf, eg/bb cliffs	ls	1200	1425		oc-ja	my-dc	fruits
<i>Phragmites vallatoria</i> (Pluk. ex L.) Veldk.	Gramineae	h	pe	gro, wee	4	da	gr, ls	500	1525	oc-dc	nv-ja	ja-dc	
<i>Phrynum capitatum</i> Willd.	Marantaceae	h	pe	gro	4	streams in egf	gr, ls	925	1350			ja-dc	
<i>Phylacium majus</i> Coll. & Hemsl.	Leguminosae, Papilionoideae	v	pe	gro	2	bb/df, eb/bb	gr	950	1200	oc	ja-fb	ja-dc	flowers, fruits
<i>Phyllanthus debilis</i> Klein ex Willd.	Euphorbiaceae	h	a, pd	gro	3	eg/pine, eg/bb, da, egf cliffs	gr, ls	1100	1400	sp-fb	oc-fb	jn-fb	flowers, fruits

<i>Phyllanthus emblica</i> L.	Euphorbiaceae	t	pd	gro	3	eg/pine, eg/bb, da, sg	gr	1100	1400		sp-fb	my-dc	
<i>Phyllanthus reticulatus</i> Poir.	Euphorbiaceae	sc	pd	gro	3	streams in bb/df, mxf, da	ls	500	700		sp-oc	my-dc	fruits
<i>Phyllanthus urinaria</i> L.	Euphorbiaceae	h	a	gro, wee	3	da	gr, ls	500	1375	ag-oc	sp-nv	my-dc	flowers, fruits
<i>Picrasma javanica</i> Bl.	Simaroubaceae	t, l	pe	gro	3	streams in mxf, egf	ls	500	1300	ap-nv	ag-sp	ja-dc	flowers
<i>Pilea microphylla</i> (L.) Liebm.	Urticaceae	h	pe	epl, nat	3	egf, eg/bb, da	gr,ls	400	1500	ag-oc	sp-nv	ja-dc	flowers
<i>Pilea stipulosa</i> Miq.	Urticaceae	h	a	epl	3	rocks in mxf, eg/bb	ls	500	1425	jl-ag	sp	my-dc	flowers♂, fruits
<i>Pilea trinervia</i> Wight	Urticaceae	h	pe	gro,ep l	3	streams in eg/bb, rocks in mxf, egf	gr, ls	1100	1475	my-sp		ja-dc	flowers♂
<i>Piper boehmeriaefolium</i> (Wall.ex Miq.) C.DC.	Piperaceae	s	pe	gro	3	rocks in egf	ls	1100	1400	fb-mr		ja-dc	flowers
<i>Piper brevicaule</i> D.DC.	Piperaceae	v	pe	gro	3	egf	ls	1200	1375		my-jn	ja-dc	fruits
<i>Piper umbellatum</i> L. var. <i>glabrius</i> (Miq.) DC.	Piperaceae	s, l	pe	gro	2	egf	gr	700	950	ag-sp	sp-oc	ja-dc	flowers
<i>Plantago major</i> L.	Plantaginaceae	h	pe	gro, wee	3	egf, da, sg	gr,ls	1200	1500	my-sp	jn-sp	ja-dc	flowers
<i>Platostoma hispidum</i> (L.) Pat.	Labiatae	h	a	gro, wee	3	da, sg	gr	1000	1200	sp-oc	nv	my-dc	flowers
<i>Platostoma intermedium</i> Pat.	Labiatae	h	pd	epl	2	rocks in egf cliffs	ls	1300	1400	oc-dc	dc-ja	my-dc	flowers
<i>Plectranthus bracteatus</i> (Dunn) Sud.	Labiatae	h	a	epl	3	rocks in mxf, eg/bb	ls	1200	1425	sp-oc	nv-dc	my-dc	flowers, fruits
<i>Pogostemon purpurascens</i> Dalz.	Labiatae	l	pe	gro	3	egf eg/pine sg	gr	1100	1400	ja-fb		ja-dc	flowers
<i>Pollia haskarlii</i> R. Rao	Commelinaceae	h	pe	gro	3	streams in egf, mxf, eg/bb	gr,ls	500	1400	my-sp	sp-fb	ja-dc	flowers, fruits
<i>Polygala persicariifolia</i> DC.	Polygalaceae	h	a	gro	3	eg/pine, eg/bb, da	ls	1200	1400	sp-oc	oc-nv	my-dc	flowers
<i>Polygala umbonata</i> Craib	Polygalaceae	h	a	gro, epl	2	rocks, cliffs, mxf, eg/bb	ls	1300	1425	ag-dc	sp-ja	my-ja	flowers
<i>Polygonatum kingianum</i> Coll. & Hemsl.	Liliaceae	h	pd	gro	2	egf,eg/bb cliffs	ls	1375	1425	ap-my	sp-oc	ap-nv	flowers, fruits
<i>Polygonum chinense</i> L. var. <i>chinense</i>	Polygonaceae	h	pe	gro	3	mx, egf, da, s g	gr,ls	500	1500	sp-fb	nv-mr	ja-dc	flowers, fruits
<i>Polygonum chinense</i> L. var. <i>hispidum</i> Hk. f.	Polygonaceae	h	pe	gro	3	streams in egf, da	gr	1000	1200	nv-dc	ja-dc	ja-dc	flowers
<i>Polygonum nepalense</i> Meisn.	Polygonaceae	h	a	gro, wee	2	da in egf, eg/pine	gr, ls	1400	1500	ag-oc	sp-nv	my-dc	flowers, fruits
<i>Polygonum odoratum</i> Lour.	Polygonaceae	h	pe	gro	3	streams and wet areas in egf, eg/bb	gr	1100	1300	ja-dc	ja-dc	ja-dc	flowers, fruits

<i>Polygonum persicaria</i> L.	Polygonaceae	h	a	gro, wee	3	da, sg	gr, ls	900	1400	mr-my	mr-my	ap-dc	flowers
<i>Polygonum plebeium</i> R.Br.	Polygonaceae	h	a	gro, wee	3	da, sg	gr	900	1100	mr-my		ap-dc	flowers
<i>Pometia pinnata</i> J.R. & G.Forst.	Sapindaceae	t	pd	gro	2	streams in mxf, egf	gr, ls	550	1250			mr-dc	
<i>Porpax lanii</i> Seid.	Orchidaceae	h	pd	epi	3	mxf,egf,eg/b b	ls	1300	1425	jl-ag		my-dc	flowers
<i>Pothos chinensis</i> (Raf.) Merr.	Araceae	v	pe	epi, epl	3	streams, wet areas in egf, mxf, eg/bb	gr, ls	550	1325	ag-sp		ja-dc	flowers
<i>Pottia laxiflora</i> (Bl.) O.K.	Apocynaceae	v	pe	gro	3	egf, da, sg	gr	900	1100	my-jn		ja-dc	flowers
<i>Pouzoulzia hirta</i> Hassk.	Urticaceae	h	a	gro, wee	3	egf, da	gr	600	1325	ag-sp	oc-nv	my-dc	flowers
<i>Prema flavescens</i> Ham. ex Cl. var. <i>flavescens</i>	Verbenaceae	s	pd	epl	2	eg/pine, eg/bb	gr	1200	1275			my-dc	
<i>Premna fulva</i> Craib	Verbenaceae	wc	pd	gro	3	egf, eg/bb	gr, ls	1100	1350		my-jn	ja-ap jn- dc	
<i>Premna latifolia</i> Roxb.var. <i>latifolia</i>	Verbenaceae	wc	pe	gro	3	egf	gr	1000	1500	ap-my		ja-dc	flowers
<i>Premna racemosa</i> Wall. ex Schauer	Verbenaceae	l	pd	gro	3	rocks,cliffs in mxf	ls	1300	1425	mr-ap		ap-dc	flowers
<i>Premna subcapitata</i> Rehd.	Verbenaceae	s	pd	epl	3	rocks in mxf, eg/bb cliffs	ls	1375	1425	jl-sp	sp-oc	my-dc	flowers
<i>Protium serratum</i> (Wall. ex Colebr.) Engl.	Burseraceae	t	pe	gro	3	egf	gr	1000	1400		jl-ag	ja-dc	fruits
<i>Prunus cerasoides</i> Ham. ex D.Don	Rosaceae	t	pd	gro, cul	3	da, sg	gr, ls	1000	1375	ja-fb		ap-oc	flowers
<i>Pseuderanthemum latifolium</i> (Vahl) B. Han.	Acanthaceae	s,l	pe	epl,gr o	3	rocks, streams in mxf, egf	gr, ls	400	1200	oc-fb	dc-mr	ja-dc	flowers
<i>Pseudodissochaeta septentrionalis</i> (W.W.Sm.) Nayar	Melastomataceae	t, l	pe	gro	3	egf, eg/bb	gr	1000	1350	jl-ag	nv-dc	ja-dc	flowers, fruits
<i>Pseudodracontium</i>	Araceae	h	pd	gro	2	rocks in mxf, eg/bb cliffs	ls	1375	1425			my-oc	
<i>Pseudoechinolaena polystachya</i> (H.B.K.) Stapf	Gramineae	h	a	gro	3	egf,da,sg	gr,ls	550	1525	oc-nv	nv-dc	my-dc	flowers
<i>Psidium guajava</i> L.	Myrtaceae	l	pe	gro,cu l,int,n at	3	da, sg	gr	1000	1300	my-jn		ja-dc	flowers
<i>Psychotria monticola</i> Kurz var. <i>monticola</i>	Rubiaceae	l,s	pe	gro	3	egf	gr, ls	1000	1500	ap-my		ja-dc	flowers
<i>Psychotria ophioxylloides</i> Wall.	Rubiaceae	l	pe	gro	3	egf	gr, ls	1000	1500	ap-my		ja-dc	flowers
<i>Psychotria winitii</i> Craib	Rubiaceae	h	pe	gro	3	egf	ls	1000	1400		oc-nv	ja-dc	fruits
<i>Pterospermum grande</i> Craib	Sterculiaceae	t	pe	gro	2	da	gr, ls	1250	1375	my		ja-dc	flowers
<i>Pterospermum grandiflorum</i> Craib	Sterculiaceae	t	pe	gro	3	streams in mxf, egf	ls	550	1000			ja-dc	

<i>Pterospermum semisagittatum</i> B.-H. ex Roxb.	Sterculiaceae	t	pe	gro	2	eg/bb	gr	800	1000	my		ja-dc	flowers
<i>Pueraria alopecuroides</i> Craib	Leguminosae, Papilionoideae	v	a	gro	3	da, sg	gr, ls	400	1525	ja-fb		jl-my	flowers
<i>Pueraria montana</i> (Lour.) Merr. var. <i>chinense</i> (Ohwi) Maes. & Alm.	Leguminosae, Papilionoideae	v	pe	gro	2	da, sg	gr	900	1225	sp-oc		ja-dc	flowers
<i>Pueraria rigens</i> Craib	Leguminosae, Papilionoideae	wc	pe	gro	3	egf, eg/pine	gr	1100	1450		dc-fb	ja-dc	fruits
<i>Pyrenaria garrettiana</i> Craib	Theaceae	t	pe	gro	3	egf	gr	1100	1400		jn-jl	ja-dc	
<i>Quercus semiserrata</i> Roxb.	Fagaceae	t	pe	gro	3	egf, eg/pine	gr	1100	1400	ja	sp-oc	ja-dc	fruits
<i>Quisqualis indica</i> L. var. <i>indica</i>	Combretaceae	wc	pe	gro	3	da, sg	gr	500	1150	ap-my	sp-oc	ja-dc	flowers, imm. fruits
<i>Radermachera hainanensis</i> Merr.	Bignoniaceae	t	pd	gro	3	rocks in mxsf cliffs	ls	1375	1425	ap		ap-dc	flowers
<i>Radermachera ignea</i> (Kurz) Steen.	Bignoniaceae	t, l	pe	gro	2	rocks in bb/df cliffs	ls	450	600	sp-oc		my-dc	
<i>Rapanea yunnanensis</i> Mez	Mysinaceae	t	pe	gro	2	eg/bb	gr	1100	1300		sp-oc	ja-dc	fruits
<i>Rauvolfia verticillata</i> (L.) Baill.	Apocynaceae	l	pe	gro	2	egf, da	gr	1200	1400	mr-ap		ja-dc	flowers
<i>Reinwardtia indica</i> Dum.	Linaceae	h	pd	gro	3	egf, eg/bb da	gr, ls	1100	1500	nv-dc (fb)	ja-fb	ja-dc	flowers, fruits
<i>Rhaphidophora decursiva</i> Schott	Araceae	v, cr	pe	epi, epl	3	mxsf, egf, eg/bb	gr, ls, sh	525	1400	sp-oc		ja-dc	flowers
<i>Rhaphidophora gigantea</i> (Schott) Ridl.	Araceae	v, cr	pe	epl	3	rocks in egf, mxsf cliffs	ls	500	1375	ag	fb	ja-dc	
<i>Rhaphidophora hookeri</i> Schott	Araceae	v, cr	pe	epi, epl	3	streams in eg/bb, rocks in mxsf, egf	gr, ls	550	1375	sp	my-jn	ja-dc	flowers, fruits
<i>Rhinanthus calcaratus</i> Nees	Acanthaceae	l	pe	gro	3	streams in mxsf	ls	700	800	ja-fb		ja-dc	flowers
<i>Rhopalephora scaberrimum</i> (Bl.) Faden	Commelinaceae	h	pe	gro	3	eg/pine, eg/bb	gr	1200	1375	ag-oc		ja-dc	flowers
<i>Rhus</i>	Anacardiaceae	l, t	pd	gro	3	rocks in mxsf cliffs	ls	1400	1425	jl-sp	oc-nv	jn-dc	flowers, fruits
<i>Rhus chinensis</i> Mill.	Anacardiaceae	l	pd	gro	3	da sg	gr	900	1400	jl-oc	oc-nv	my-dc	fruits
<i>Rhus rhoetoides</i> Craib	Anacardiaceae	t	pd, pe	gro	3	egf	gr	1000	1300	ap	oc-nv	ja-dc	flowers♂, fruits
<i>Rhynchoglossum obliquum</i> Bl.	Gesneriaceae	h	a	epl, gro	3	rocks in mxsf cliffs, eg/bb, eg/pine	gr, ls	400	1500	sp-nv	nv-dc	my dc	flowers
<i>Rhynchotechum obovatum</i> (Griff.) Burtt	Gesneriaceae	l	pe	gro	3	streams in eg/bb, egf	gr	1150	1400	my-jn	oc	ja-dc	flowers, fruits
<i>Rinorea ? macrophylla</i> (Decne.) O.K.	Violaceae	l	pe	gro	2	steams in mxsf	ls	550	650	ag-sp	sp-oc	ja-dc	flowers, imm fruits
<i>Rorippa indica</i> (L.) Hiern	Cruciferae	h	a	epl	2	rocks in eg/pine	gr	1450	1500	ag	sp-oc	jn-nv	fruits
<i>Rourea minor</i> (Gaertn.) Leenh. ssp. <i>minor</i>	Connaraceae	wc	pe	gro	3	egf, eg/bb	gr	1000	1400		ap-my	ja-dc	fruits
<i>Rubus blepharoneurus</i> Card.	Rosaceae	sc	pe	gro	3	egf	gr, ls	1100	1500	ap-my	ap-my	ja-dc	flowers, fruits
<i>Rubus dielsianus</i> Focke	Rosaceae	v	a	gro	2	eg/bb	gr	1100	1250			jn-mr	

<i>Rubus ellipticus</i> J.E. Sm. forma <i>obcordatus</i> Franch.	Rosaceae	v	pe	gro	3	eg/bb, da	gr	1200	1525	dc-ja	fb-mr	ja-dc	
<i>Rungia parviflora</i> (Retz.) Nees var. <i>parviflora</i>	Acanthaceae	h	a	gro	3	bb/df, eg/bb,da	gr	900	1300	sp-fb	nv-fb	my-fb	flowers
<i>Rungia rivicola</i> Craib	Acanthaceae	h	pe	gro	3	rocks in egf	ls	1100	1400	fb-mr		ja-dc	flowers
<i>Sabia limoniacea</i> Wall. ex Hk.f. & Th..	Sabiaceae	wc	pe	gro	2	egf	ls	1200	1400	ja-fb		ja-dc	flowers
<i>Saccharum arundinaceum</i> Retz.	Gramineae	h	pe	gro, wee	3	da, sg	gr,ls	500	1525	sp-dc	nv-ja	ja-dc	flowers
<i>Saccharum spontaneum</i> L.	Gramineae	h	pe	gro, wee	3	da, sg	gr, ls	400	1525	sp-dc	nv-ja	ja-dc	flowers
<i>Sacciolepis indica</i> (L.) A. Chase	Gramineae	h	a	gro, wee	3	da, sg	gr	900	1525	sp-dc	nv-ja	my-dc	flowers
<i>Sageretia cordifolia</i> Tard.	Rhamnaceae	wc	pd	gro	3	rocks in mxsf cliffs	ls	1375	1425	sp-oc	nv-dc	my-dc	flowers, fruits
<i>Salix tetrasperma</i> Roxb.	Salicaceae	t	pd	gro	2	streams in egf, eg/bb	gr	1000	1500	sp-oc	dc-nv	oc-sp	flowers♂
<i>Salomonia cantoniensis</i> Lour.	Polygonaceae	h	a	gro	3	egf, eg/pine, da	gr	1000	1400	sp-nv	oc-dc	my-dc	flowers
<i>Salvia riparia</i> Kunth	Labiatae	h	pe	gro, wee	3	da, sg	gr	900	1300	oc-fb	nv-mr	ja-dc	flowers
<i>Sambucus javanica</i> Reinw. ex Bl. ssp. <i>javanica</i>	Caprifoliaceae	s,l	pe	gro	3	eg/bb, egf, da, sg	gr,ls	1000	1525	jl-sp	sp-oc	ja-dc	fruits
<i>Sapindus rarak</i> DC.	Sapindaceae	t	pd	gro	2	egf, eg/bb	ls	1000	1375			my-dc	
<i>Sapria himalayana</i> Griff.	Rafflesiaceae	h	pd	gro, par	1	egf, eg/bb	ls	1350	1350	ja-fb		leafless	
<i>Saprosma consimile</i> Kurz	Rubiaceae	l	pe	gro	3	rocks in mxsf, egf	ls	1200	1400	my		ja-dc	flowers
<i>Sarcosperma arboreum</i> Bth.	Sapotaceae	t	pe	gro	3	egf	gr	1000	1550	ja-fb	ap-my	ja-dc	flowers, fruits
<i>Sauraia nepaulensis</i> DC.	Saurauiaeae	t	pe	gro	3	egf,da,sg	gr,ls	1100	1400	my-jn		ja-dc	flowers
<i>Sauraia roxburghii</i> Wall.	Saurauiaeae	t	pe	gro	3	egf eg/pine eg/bb	gr	1000	1500	ja-dc	ja-dc	ja-dc	flowers
<i>Sauropolis macranthus</i> Hassk.	Euphorbiaceae	l	pe	gro	2	rocks in egf,eg/bb cliffs	ls	1300	1400	my-jn	sp	ja-dc	flowers♂,♀, fruits
<i>Sauropolis poomeae</i> Welz. & Chay.	Euphorbiaceae	h	pe	epl	2	rocks in egf cliffs	ls	1250	1400	oc-mr	oc-nv	ja-dc	flowers, fruits
<i>Schefflera bengalensis</i> Gamb.	Araliaceae	s	pe	epi, epl	3	egf	gr,ls	1000	1500	ap-my	my	ja-dc	flowers, fruits
<i>Schefflera pteletii</i> Merr.	Araliaceae	t ,l, s	pd	epl	3	rocks in mxsf	ls	650	1400	ja-fb	fb-ap	my-ap	flowers, fruits
<i>Schefflera pueckleri</i> (C. Koch) Frod.	Araliaceae	s	pe	epi	2	rocks in egf, cliffs	ls	1300	1375	jn-jl		ja-dc	
<i>Schima wallichii</i> (DC.) Korth.	Theaceae	t	pe	gro	4	egf	gr	700	1525	ap-my	dc-mr	ja-dc often changing lvs dc-ja	flowers, fruits
<i>Schizachyrium brevifolium</i> (Sw.) Nees	Gramineae	h	a	gro	3	da,sg	gr	1000	1400	nv-dc	nv-dc	jn-dc	flowers, fruits
<i>Scirpus juncoides</i> Roxb.	Cyperaceae	h	pe	gro	3	wet areas in da, sg	gr	800	1100	mr-my	mr-my	ja-dc	flowers

<i>Scleropyrum pentandrum</i> (Denn.) Mabb.	Santalaceae	t	pe	gro	2	rocks in egf, eb/bb	ls	1200	1400		jl-ag	ja-dc	fruits
<i>Scoparia dulcis</i> L.	Scrophulariaceae	h	a	gro, int, nat, wee	3	da, sg	gr	400	1500	sp-nv	oc-dc	my-dc	
<i>Scurrula ferruginea</i> (Jack) Dans.	Loranthaceae	s	pe	epi, par	3	da, sg	gr	900	1525	jl-sp		ja-dc	flowers
<i>Secamone elliptica</i> R.Br. ssp. <i>elliptica</i>	Asclepiadaceae	v,wc	pe	gro	3	rocks in egf/bb mxf cliffs	ls	1300	1425	ap-my	oc-nv	ja-dc	flowers, fruits
<i>Semecarpus cochinchinensis</i> Engl.	Anacardiaceae	t	pe	gro	3	mxf, egf	gr, ls	525	1500	dc-mr	ap	ja-dc	flowers
<i>Senecio scandens</i> B.-H. ex D. Don	Compositae	sc	pd	gro	2	rocks in egf cliffs	ls	1400	1425	ja-fb	fb-mr	my-mr	flowers, fruits
<i>Sericocalyx quadrifarius</i> (Wall. ex Nees) Brem.	Acanthaceae	h	pe	gro	3	eg/bb	gr	1000	1400	dc-ja		ja-dc	flowers
<i>Setaria palmifolia</i> (Koen.) Stapf var. <i>palmifolia</i>	Gramineae	h	pe	gro	3	da	gr, ls	1000	1525	ag-fb	sp-fb	ja-dc	flowers
<i>Setaria parviflora</i> (Poir.) Kerg.	Gramineae	h	a	gro, wee	3	eg/bb, da, sg	gr	1000	1525	sp-oc	oc-nv	my-dc	flowers
<i>Shorea roxburghii</i> G. Don	Dipterocarpaceae	t	pd	gro	2	bb/df, eg/bb	gr	750	1100	fb		my-fb	
<i>Shuteria hirsuta</i> Baker	Leguminosae, Papilionoideae	v	pe	gro	3	egf,da,sg	gr	1000	1300	nv-dc		ja-dc	flowers
<i>Shuteria involucrata</i> (Wall.) Wight & Arn. var. <i>involucrata</i>	Leguminosae, Papilionoideae	v	pd	gro	3	egf,da,sg, eg/pine	gr	1100	1500	oc-nv	dc-ja	ja-dc	flowers, fruits
<i>Shuteria vestita</i> Wight & Arn.	Leguminosae, Papilionoideae	v	a	gro	2	eg/bb	gr	1100	1300	dc-ja		my-fb	flowers
<i>Sida rhombifolia</i> L. ssp. <i>rhombifolia</i>	Malvaceae	h	pe	gro, wee	3	da, sg	gr, ls	400	1500	sp-fb	ja-mr	ja-dc	flowers
<i>Smilax corbularia</i> Kunth ssp. <i>corbularia</i>	Smilacaceae	v	pe	gro	3	egf,eg/bb,da,sg	gr	1000	1450	jn		ja-dc	flowers
<i>Smilax lanceifolia</i> Roxb.	Smilacaceae	v	pe	gro	3	egf	gr, ls	1000	1500	ja-fb	jl-ag	ja-dc	flowers, fruits
<i>Smilax ovalifolia</i> Roxb.	Smilacaceae	v	pe	gro	3	egf, eg/bb	gr	800	1200			ja-dc	
<i>Smilax perfoliata</i> Lour.	Smilacaceae	v	pe	gro	3	da,sg,eg/bb, egf	gr	1000	1525		ap-jn	ja-dc	fruits
<i>Solanum aculeatissimum</i> Jacq.	Solanaceae	h	a	gro,na t	3	eg/bb,da,sg	gr	1100	1400	my-jn		ap-dc	flowers
<i>Solanum barbisetum</i> Nees	Solanaceae	h	pd	gro	3	eg/bb, da	gr	1100	1400	my-jn		ap-dc	flowers
<i>Solanum macrodon</i> Wall. ex Nees	Solanaceae	h	a	gro	3	mxf, eg/bb	gr, ls	600	1400	my-sp	sp-oc	ap-dc	flowers
<i>Solanum verbascifolium</i> L.	Solanaceae	l	pe	gro	3	da	gr, ls	500	700	ag-oc	sp-nv	ja-dc	
<i>Solema heterophylla</i> Lour. ssp. <i>heterophylla</i>	Cucurbitaceae	v	a	gro	2	eg/bb, da, sg	gr	1000	1200			my-dc	
<i>Sonchus wightianus</i> DC. ssp. <i>wightianus</i>	Compositae	h	pe	gro, wee	3	weed, eg/pine, da, sg	gr	900	1525	ja-fb	fb-mr	ja-dc	
<i>Sonerila erecta</i> Jack	Melastomataceae	h	a	gro	3	egf, eg/bb da	gr	1125	1500	oc-nv	nv-dc	my-dc	flowers

<i>Sophora velutina</i> Lindl.	Leguminosae, Papilionoideae	I	pe	gro	2	bb/df, mxr,cliffs	ls	1400	1425		nv-dc	ja-dc	fruits
<i>Spilanthes paniculata</i> Wall. ex DC.	Compositae	h	a	gro, wee	3	eg/pine, da, sg	gr,ls	1000	1525	sp-fb	nv-mr	my-mr	flowers
<i>Spondias axillaris</i> Roxb.	Anacardiaceae	t	pd	gro	3	egf	gr, ls	1100	1400	ja-fb	sp-oc	mr-dc	flowers♂
<i>Stauranthera grandiflora</i> Bth.	Gesneriaceae	h	pe	epl	2	rocks, streams in egf	gr, ls	1200	1325	ag-sp		ja-dc	
<i>Stephania elegans</i> Hk.f. & Th.	Menispermaceae	v	a	gro	3	rocks in egf, mxr cliffs	ls	1300	1425	oc	oc-nv	my-dc	fruits♂
<i>Stephania japonica</i> (Thunb.) Miers var. <i>discolor</i> (Bl.) For.	Menispermaceae	v	a	gro	3	egf, eg/bb, da	gr	1000	1300	my-ag		my-dc	flowers♂
<i>Stephania oblonga</i> Craib	Menispermaceae	wc	pd	epl	3	rocks in mxr, eg/bb cliffs	ls	1200	1400	ap		my-dc	flowers♂
<i>Sterculia balanghas</i> L.	Sterculiaceae	t	pd	gro	3	egf, eg/pine	gr	1000	1500			fb-dc	
<i>Sterculia guttata</i> Roxb.	Sterculiaceae	I	pd	gro	2	rocks in mxr	ls	1300	1425	fb-mr		mr-nv	flowers
<i>Sterculia lanceolata</i> Cav. var. <i>lanceolata</i>	Sterculiaceae	I	pe	gro	3	egf, mxr	ls	550	1350	sp-nv	my-sp	ja-dc	flowers, fruits
<i>Sterculia lanceolata</i> Cav. var. <i>principis</i> (Gagnep.) Pheng.	Sterculiaceae	I	pe	gro	3	egf, eg/bb, bb/df	gr	1000	1400		my-jn	ja-dc	fruits
<i>Sterculia pexa</i> Pierre	Sterculiaceae	t	pd	gro	3	mxr,da,sg	gr, ls	400	750	ja	fb-mr	my-dc	
<i>Sterculia villosa</i> Roxb.	Sterculiaceae	t	pd	gro	3	rocks in mxr, bb/df cliffs	ls	600	1425	ja-fb		ap-dc	flowers
<i>Stereospermum colais</i> (B.-H.ex Dill.) Mabb.	Bignoniaceae	t	pd	gro	3	egf	gr	1100	1500	ap	ja-mr	ap-fb	flowers
<i>Streblus ilicifolius</i> (Vidal) Corn.	Moraceae	I	pe	gro	3	rocks in mxr cliffs	ls	400	700			ja-dc	
<i>Streptocalyx juventas</i> (Lour.) Merr.	Asclepiadaceae	v	pe	gro	3	eg/bb da	gr	1000	1450	my-ja		ja-dc	flowers
<i>Strobilanthes erectus</i> Cl. ex Hoss.	Acanthaceae	I	pe	gro	3	rocks in egf, mxr cliffs	ls	1200	1425	oc-nv		ja-dc	flowers
<i>Strobilanthes rex</i> Cl.	Acanthaceae	I, s	pe	gro	3	egf	gr, ls	1000	1425	ja-fb		ja-dc	flowers
<i>Strobilanthes speciosus</i> Bl.	Acanthaceae	I	pe	gro	4	rocks in egf streams in egf, eg/bb	ls	1200	1400	oc-nv		ja-dc	flowers
<i>Strobilanthes viscidus</i> Im.	Acanthaceae	h	pe	gro	2	egf,	gr	1100	1250			ja-dc	
<i>Styrax benzoides</i> Craib	Styracaceae	t	pe	gro	3	eb/bb,da,sg	gr	1000	1500	my-jn	oc-nv	ja-dc	flowers, fruits
<i>Sumbaviopsis albicans</i> (Bl.) J.J. Sm.	Euphorbiaceae	t	pe	gro	3	rocks, streams in mxr	ls	500	700			ja-dc	
<i>Symplocos hookeri</i> Cl.	Symplocaceae	t	pe	gro	2	streams, wet areas in egf	gr		1325	oc-nv	ag-sp	ja-dc	
<i>Symplocos macrophylla</i> Wall. ex DC. ssp. <i>sulcata</i> (Kurz) Noot. var. <i>sulcata</i>	Symplocaceae	t	pe	gro	3	egf, eg/bb	gr	1000	1500		mr-ap	ja-dc	

<i>Synedrella nodiflora</i> (L.) Gaertn.	Compositae	h	a	gro, wee	3	da, sg	gr,ls, sh	500	1500	oc-dc	nv-ja	my-fb	
<i>Tabernaemontana bovina</i> Lour.	Apocynaceae	l	pe	gro	3	egf, eg/bb	gr, ls	1100	1425	my	nv-dc	ja-dc	flowers, fruits
<i>Tacca chantrieri</i> Andre	Taccaceae	h	pe	gro	2	egf	ls	1200	1350			ja-dc	
<i>Tarenna elliptica</i> Craib var. <i>elliptica</i>	Rubiaceae	l,s	pe	gro	3	streams in egf, rocks in mxsf	gr,ls	1100	1400	jn	oc-nv	ja-dc	flowers, fruits
<i>Tarenna vanprukii</i> Craib var. <i>vanprukii</i>	Rubiaceae	t,l	pe	gro	3	rocks in mxsf, cliffs	ls	1300	1425	fb-mr	oc-dc	ja-dc	
<i>Tarennoidea wallichii</i> (Hk, f.) Tirv. & Sastre	Rubiaceae	t	pe	gro	2	egf, eg/bb	gr	1200	1400			ja-dc	
<i>Tephrosia kerrii</i> Drum. & Craib	Leguminosae, Papilionoideae	l	pe	gro	3	eg/bb, da, sg	gr	1000	1300		ja-fb	ja-dc	fruits
<i>Ternstroemia gymnanthera</i> (Wight & Arn.) Bedd.	Theaceae	t	pe	gro	3	egf, eg/pine	gr	1200	1400	my	oc	ja-dc	flowers, fruits
<i>Tetradium glabrifolium</i> (Champ.ex Bth.) T.Hart.	Rutaceae	t,s	pe	gro	3	egf, da	gr,ls	1000	1375	my-jl	jl-oc	ja-dc	flowers♂♀, fruits
<i>Tetrastigma cruciatum</i> Craib & Gagnep.	Vitaceae	wc	pe	epl,gr o	3	streams in bb/df, mxsf cliffs	ls	500	1425	fb-ap	nv	ja-dc	flowers♀
<i>Tetrastigma garrettii</i> Gagnep.	Vitaceae	v	pe	gro	3	streams in egf, eg/bb	gr, ls	1000	1300	dc-ja	my-jn	ja-dc	flowers♀, fruits
<i>Tetrastigma laoticum</i> Gagnep.	Vitaceae	wc	pe	gro	2	eg/bb	gr, ls	1200	1350	ap	ag	ja-dc	flowers♀
<i>Tetrastigma quadrangulum</i> Gagnep & Craib	Vitaceae	wc	pe	gro	2	mxsf, eg/bb	sh	500	700	oc		ja-dc	flowers♀
<i>Thaia saprophytica</i> Seid.	Orchidaceae	h	pd	gro, epl	2	rocks in egf	ls	1300	1375	oc		jn-nv	flowers
<i>Themeda triandra</i> Forssk.	Gramineae	h	pe	gro, wee	3	da, sg	gr, ls	500	1525	sp-oc	oc-nv	ja-dc	flowers
<i>Thespesia lampas</i> (Cav.) Dalz. & Gibs. var. <i>lampas</i>	Malvaceae	l	pd	gro	2	eg/bb, da, sg	gr	525	1200	oc		my-dc	
<i>Thladiantha cordifolia</i> (Bl.) Cogn.	Cucurbitaceae	v	a	gro	2	egf eg/pine da sg	gr	1350	1525	ja-dc	oc-nv	my-mr	flowers, fruits
<i>Thladiantha hookeri</i> Cl.	Cucurbitaceae	v	a	gro	2	eg/bb, da, sg	gr	1100	1300	my		my-dc	flowers♂
<i>Thunbergia</i>	Acanthaceae	wc	pe	gro	3	rocks in mxsf cliffs, egf, eg/pine	gr,ls	1350	1525	oc-dc	mr	ja-dc	flowers
<i>Thunbergia coccinea</i> Wall.	Acanthaceae	wc	pe	gro	3	streams in egf, eg/bb, da	gr	1100	1500	nv-dc		ja-dc	flowers
<i>Thunbergia grandiflora</i> Roxb.	Acanthaceae	v	pe	gro	3	eg/bb, da	gr	800	1500	ja-fb		ja-dc	flowers
<i>Thunbergia laurifolia</i> Lindl.	Acanthaceae	wc	pe	gro	3	da, sg		500	1500	nv-fb		ja-dc	
<i>Thunbergia similis</i> Craib	Acanthaceae	v	pd	gro	3	bb/df, eg/bb	gr	1000	1300	oc-nv		my-dc	flowers
<i>Thysanolaena latifolia</i> (Roxb. ex Horn.) Honda	Gramineae	h	pe	gro, wee	3	da,sg	gr, ls	500	1525			ja-dc	
<i>Tinomiscium petiolar</i> Hk. f. & Th.	Menispermaceae	wc	pe	gro	2	streams in egf, eg/bb	gr	1000	1200	my-jn	sp-oc	ja-dc	

<i>Tirpitzia bilocularis</i> Suks. & K. Lar.	Linaceae	h	pd	gro	2	rocks in mxf, da cliffs	ls	1200	1300	ag-sp	ja-fb	jn-fb	flowers
<i>Tithonia diversifolia</i> (Hemsl.) A. Gray	Compositae	h	pe	gro, int, wee	3	da, sg	gr	550	1525	oc-dc		ja-dc	
<i>Toddalia asiatica</i> (L.) Lmk.	Rutaceae	wc	pe	gro	3	egf eg/bb	gr	1000	1400		ap-my	ja-dc	fruits
<i>Torenia pierreana</i> Bon.	Scrophulariaceae	h	a	gro	3	egf, eb/bb	gr	1100	1400	jl-oc	sp-nv	my-dc	flowers
<i>Torenia violacea</i> (Aza. ex Blanco) Penn.	Scrophulariaceae	h	a	gro	3	egf, eg/bb, da	gr, ls	1000	1500	sp-oc	nv-dc	ap-dc	flowers
<i>Toxocarpus aff. wightianus</i> Hk. & Arn.	Asclepiadaceae	v	pe	gro	3	mxsf, egf, da	ls	1250	1400	my-jn		ja-dc	flowers
<i>Trema orientalis</i> (L.) Bl.	Ulmaceae	t	pe	gro	3	da, sg	gr, ls	500	1200	oc	dc	ja-dc	flowers♂
<i>Trevesia palmata</i> (DC.) Vis.	Araliaceae	l	pe	gro	3	mxsf, egf	gr, ls	550	1500	fb-mr		ja-dc	
<i>Trichosanthes kerrii</i> Craib	Cucurbitaceae	v	a	gro	2	cliffs in bb/df, mxsf	ls	1200	1350	my-oc	my-jn	ap-dc	flowers♂, fruits
<i>Trichosanthes ovigera</i> Bl.	Cucurbitaceae	v	a	gro	3	da, sg	gr	1000	1500	sp-nv		my-dc	flowers♂
<i>Trichosanthes pubera</i> Bl. spp. <i>rubriflos</i> (Thor. ex Cay.) Duy. & Prue. var. <i>rubriflos</i>	Cucurbitaceae	v	a	gro	3	bb/df, egf, eg/bb, da	gr, ls	400	1525	jn-oc	sp-oc	my-dc	flowers, fruits
<i>Trichotosia dasypylla</i> (Par. & Rchb. f.) Krzl.	Orchidaceae	h	pe	epi	3	eg/pine	gr	1200	1375			ja-dc	
<i>Tridynamia spectabilis</i> (Kurz) Stap.	Convolvulaceae	v	a	gro	3	mxsf, da, sg	ls	450	600	fb-mr	mr-ap	jn-ap	flowers
<i>Trigonostemon thyrsoides</i> Stapf	Euphorbiaceae	l	pe	gro	2	rocks in eg/bb, cliffs	ls	1250	1300	ap		ja-dc	flowers♀
<i>Trisepalum prazeri</i> Burtt	Gesneriaceae	s	pd	epl	3	rocks in mxsf cliffs	ls	1400	1425	ag-oc	nv-dc	ja-dc	flowers, fruits
<i>Tristaniopsis burmanica</i> (Griff.) Wils. & Wat. var. <i>rufescens</i> (Hance) Parn. & Lug.	Myrtaceae	t,l	pe	gro	2	eg/pine	gr	1250	1300	ja-fb		ja-dc	flowers
<i>Triumfetta annua</i> L.	Tiliaceae	h	a	gro, wee	3	da	gr, ls	1000	1500	sp-nv	nv-dc	my-dc	flowers
<i>Triumfetta pilosa</i> Roth	Tiliaceae	h	a	gro	3	eg/bb, da	gr	1000	1525	sp-nv	ja-fb	ag-fb	fruits
<i>Triumfetta rhomboidea</i> L.	Tiliaceae	h	a	gro, wee	3	da, sg	gr, ls, sh, ss	500	900		nv-dc	my-dc	
<i>Tupistra albiflora</i> K. Lar.	Liliaceae	h	pe	gro	2	egf	ls	1300	1400	oc-nv		ja-dc	flowers
<i>Turpinia pomifera</i> (Roxb.) Wall. ex DC.	Staphyleaceae	t	pe	gro	3	egf	gr, ls	900	1500	fb-mr	jn-oc	ja-dc	flowers, fruits
<i>Ulmus lancaeifolia</i> Roxb. ex Wall.	Ulmaceae	t	pe	gro	3	rocks in egf cliffs	ls	1250	1400	sp-oc		ja-dc	flowers
<i>Uncaria macrophylla</i> Wall.	Rubiaceae	wc	pe	gro	3	streams in egf, eg/bb	gr	900	1300	sp-oc	nv-ja	ja-dc	
<i>Uraria poilanei</i> Dy Phon	Leguminosae, Papilionoideae	s	pe	gro	2	egf, da, sg	gr	1050	1250	nv-dc		ja-dc	flowers
<i>Urena lobata</i> L. ssp. <i>lobata</i> var. <i>lobata</i>	Malvaceae	h	a	gro, wee	3	da, sg	gr, ls, sh, ss	500	1500	oc-dc	nv-fb	my-dc	

<i>Urochloa ruziziensis</i> (Germ. & Evr.) Morr. & Zul.	Gramineae	h	pe	gro, int, nat, wee	3	da, sg rocks in eg/pine, egf cliffs	gr	800	1200	oc-ja	nv-fb	ja-dc	flowers
<i>Utricularia striatula</i> Sm.	Lentibulariaceae	h	a	epl	2	eg/pine	gr, ls	1500	1500	ag-sp	sp-oc	jn-oc	
<i>Vaccinium sprengelii</i> (D. Don) Sleum.	Ericaceae	t, l	pe	gro	3	eg/pine	gr	1200	1450	ja-fb		ja-dc	flowers
<i>Verbena officinalis</i> L.	Verbenaceae	h	a	gro, w ee	3	da, sg	gr	1100	1300	jn-fb	jl-mr	my-mr	flowers, fruits
<i>Vernonia attenuata</i> DC.	Compositae	l	pd	gro, epl	3	rocks in eg/bb, mxf cliffs	ls	1250	1425	oc-nv	nv-dc	my-dc	flowers
<i>Vernonia cinerea</i> (L.) Less. var. <i>cinerea</i>	Compositae	h	a	gro, wee	3	da, sg	gr, ls, sh, ss	800	1500	nv-ja	dc-fb	my-fb	
<i>Vernonia divergens</i> (DC.) Edgew.	Compositae	h	pd	gro	3	egf eg/pine da sg	gr, ls	1200	1500	nv-dc	ja-fb	my-fb	flowers, fruits
<i>Vernonia parishill</i> Hk.f.	Compositae	l	pe	gro	3	egf		1100	1500	mr-ap	ap-my	ja-dc	fruits
<i>Vernonia sutevensis</i> Craib	Compositae	h	pe	gro	3	eg/bb	gr	1000	1500	ja-fb	fb-mr	ja-dc	flowers
<i>Viburnum odoratissimum</i> Ker	Caprifoliaceae	sc	pe	gro	3	rocks in mxf cliffs	ls	1375	1425	dc-ja		ja-dc	flowers
<i>Viburnum garrettii</i> Craib	Caprifoliaceae	s, l	pe	gro	2	streams in egf, eg/bb	gr	1000	1100	jn-jl	oc	ja-dc	fruits
<i>Vigna radiata</i> (L.) Wilcz. var. <i>sublobata</i> (Roxb.) Verdc.	Leguminosae, Papilionoideae	v	a	gro	3	egf, da	gr	900	1100	oc-nv		my-dc	flowers
<i>Vitex canescens</i> Kurz	Verbenaceae	t	pd	gro	3	bb/df	gr	400	1100			my-dc	
<i>Vitex peduncularis</i> Wall. ex Schauer	Verbenaceae	t	pd	gro	3	bb/df, egf	gr	800	1100	ap-my		mr-nv	flowers
<i>Vitex quinata</i> (Lour.) Will. var. <i>puberula</i> (Lam) Mold.	Verbenaceae	t	pe	gro	3	mx, egf	gr, ls	600	1500	ap	sp	ja-dc	flowers, fruits
<i>Wallichia siamensis</i> Becc.	Palmae	l	pe	gro	3	egf	gr, ls	1200	1375	sp-oc		ja-dc	flowers
<i>Wendlandia ternifolia</i> Cow.	Rubiaceae	l	pe	epl	2	rocks in egf, cliffs	ls	1200	1400	dc-fb	fb	ja-dc	flowers, fruits
<i>Wendlandia tinctoria</i> (Roxb.) DC. ssp. <i>orientalis</i> (Craib) Cow.	Rubiaceae	t, l	pe	gro	3	egf, eg/pine, sg	gr	1000	1500	ja-fb		ja-dc	flowers, fruits
<i>Xanthophyllum virens</i> Roxb.	Polygalaceae	t	pe	gro	2	egf, eg/bb	gr	1100	1200	mr-ap	ja-ag	ja-dc	
<i>Xyris lobii</i> Rend.	Xyridaceae	h	pd	gro	2	eg/pine	gr	1250	1325	sp-oc	nv-dc	my-dc	flowers
<i>Youngia japonica</i> (L.) DC.	Compositae	h	a	gro, wee	3	eg/bb, da, eg/pine	gr, ls	500	1500	ag-dc	sp-ja	my-dc	flowers
<i>Zanthoxylum oxyphyllum</i> Edgew.	Rutaceae	wc	pe	gro	3	egf	ls	1200	1350	ja		ja-dc	
<i>Zehneria bodinieri</i> (Lev.) Wilde & Duy.	Cucurbitaceae	v	a	gro	3	egf, da	gr, ls	900	1500	oc-nv	nv-dc	my-dc	flowers♂♀, fruits
<i>Zehneria tenuispica</i> Wilde & Duy.	Cucurbitaceae	v	a	gro	3	da, rocks and cliffs mx, egf	gr, ls	1000	1425	sp-nv	nv-dc	my-dc	flowers♂♀, fruits
<i>Zingiber aff. integrum</i> Tong	Zingiberaceae	h	pd	gro	3	mx, da	ls	1300	1375	ag-sp	oc-nv	my-dc	flowers, imm. fruits

<i>Zingiber bradleyanum</i> Craib	Zingiberaceae	h	pe	gro	3	streams in egf, eg/bb	gr	1100	1300		nv	ja-dc	
<i>Zingiber kerrii</i> Craib	Zingiberaceae	h	pd	gro	2	bb/df, eg/bb	gr	1000	1300	jl-ag	oc-nv	my-dc	
<i>Zingiber smilesianum</i> Craib	Zingiberaceae	h	pd	gro	3	egf	gr, ls	1000	1400	jl-ag	oc-nv	my-dc	fruits
<i>Ziziphus incurva</i> Roxb.	Rhamnaceae	t	pe	gro	3	egf	ls	1200	1400	my-sp	oc-nv	ja-dc	
<i>Ziziphus ?attopensis</i> Pierre	Rhamnaceae	wc	pe	gro	3	mx, eg/bb	gr	500	700			ja-dc	
<i>Ziziphus oenoplia</i> (L.) Mill. var. <i>oenophila</i>	Rhamnaceae	wc	pd	gro	3	eg/bb, da, sg	gr	600	1150	mr-ap	oc-nv	my-fb	
?	Orchidaceae	h	pd	epl	2	rocks in egf cliffs	ls	1300	1400		oc-nv	jn-nv	fruits

Table 2. List of plant species under phylum gymnospermae surveyed at Doi Tung, Chiang Rai Province.

Species	Family	Habit	Aped	Life mode	Abundance	Habitat	Bedrock	Lower	Upper	Flowering	Fruiting	Leafing	Collected
								Elevation (m)		Months			
<i>Cephalotaxus griffithii</i> Hk. f.	Cephalotaxaceae	t	pe	gro	2	egf	ls	1375	1400		jl-dc	ja-dc	fruits
<i>Pinus kesiya</i> Roy. ex Gord.	Pinaceae	t	pe	gro also cul	2	eg/pine	gr	1200	1500	fb-mr		ja-dc	

Table 3. List of plant species under phylum pteridophyta surveyed at Doi Tung, Chiang Rai Province.

Species	Family	Habit	Aped	Life mode	Abun- dance	Habitat	Bedrock	Lower	Upper	Flowering	Fruiting	Leafing	Collected
								Elevation (m)		Months			
<i>Adiantum philippense</i> L.	Parkeriaceae	h	pd	gro, epl	3	mx, egf, eg/bb	gr, ls	500	1250	sp-dc	sp-dc	my-dc	sori
<i>Adiantum zollingeri</i> Mett. ex Kuhn	Parkeriaceae	h	pd	epl	3	rocks in bb/df, mx, eg/bb cliffs	gr, ls	500	1500	ag-oc	ag-oc	my-dc	sori
<i>Aglaomorpha coronans</i> (Wall. ex Mett.) Copel.	Polypodiaceae	h	pe	epi	2	eg/bb	ls	1100	1325			ja-dc	
<i>Angiopteris evecta</i> (Forst.) Hoffm.	Marattiaceae	h	pe	gro	3	streams in egf, eg/bb	gr	1100	1400	ja-dc	ja-dc	ja-dc	sori
<i>Aniscocampium cumingianum</i> Presl	Athyriaceae	h	pd	gro	3	bb/df, eg/bb	gr, ls	550	1100	sp-nv	sp-nv		sori
<i>Araiostegia imbricata</i> Ching	Davalliaceae	h	pd	epi	3	rocks in mx, eg/bb cliffs	ls	1300	1425	jl-sp	jl-sp	my-dc	sori
<i>Asplenium cheilosorum</i> Kunze ex Mett.	Aspleniaceae	h	pe	epl	3	rocks and streams in egf	gr	1100	1325	nv-fb	nv-fb	ja-dc	sori

<i>Asplenium grevillei</i> Wall. ex Hk. & Grev.	Aspleniaceae	h	pe	epl	3	rocks in eg/bb, mxf, cliffs	ls	1300	1400	sp-nv	sp-nv	ja-dc	sori
<i>Asplenium interjectum</i> Christ	Aspleniaceae	h	pd	gro	3	rocks in egf, eg/bb cliffs	ls	1300	1425	jl-sp	jl-sp	my-dc	sori
<i>Asplenium obscurum</i> Bl.	Aspleniaceae	h	pe	epl	2	streams in eg/bb	gr	1050	1200	ja-dc	ja-dc	ja-dc	
<i>Athyrium anisopterum</i> Christ	Athyriaceae	h	pd	gro	3	bb/df, eg/bb	gr	1000	1400	jl-sp		my-dc	sori
<i>Blechnum orientale</i> L.	Blechnaceae	h	pe	gro	3	streams in egf, wet areas in eg/bb	gr	500	1500	jn-nv	jn-nv	ja-dc	sori
<i>Blechnum orientale</i> L.	Dryopteridaceae	h	pe	gro	3	streams in egf	gr, ls	1100	1300	dc-fb	dc-fb	ja-dc	sori
<i>Bolbitis sinensis</i> (Bak.) K. Iw. var. <i>sinensis</i>	Lomariopsidaceae	h	pe	epl	3	streams, wet areas in egf	gr, ls	900	1350	nv-ja	nv-ja	ja-dc	sori
<i>Bolbitis virens</i> (Wall. ex Hk. & Grev.) Schott var. <i>virens</i>	Lomariopsidaceae	h	pe	epl	2	rocks, streams in egf	gr, ls	1000	1325			ja-dc	
<i>Brainea insignis</i> (Hk.) J. Sm.	Blechnaceae	h, l	pe	gro	3	egf, eg/pine	gr	1200	1450			ja-dc	sori
<i>Brainea insignis</i> (Hk.) J. Sm.	Dryopteridaceae	h	pe	gro	3	eg/bb, da	gr	1100	1400	nv-dc	nv-dc	ja-dc	sori
<i>Cheilanthes fragilis</i> Hk.	Parkeriaceae	h	pd	epl	3	rock in mxf, eg/bb cliffs	ls	1300	1425	jl-ag		my-dc	sori
<i>Cheilanthes pseudoargentea</i> (S.K.Wu) K. Iw.	Parkeriaceae	h	pd	gro	3	rocks in mxf, cliffs	ls	1375	1400	fb-ap	fb-ap	jn-ap	sori
<i>Cibotium barometz</i> (L.) J. Sm.	Dicksoniaceae	h	pe	gro	3	egf, da	ls	1200	1500	sp-oc	sp-oc	ja-dc	sori
<i>Davallia trichomanoides</i> Bl. var. <i>lorranii</i> (Hance) Holtt.	Davalliaceae	h	pd	epi	3	egf	gr	1000	1300	jl-sp		my-dc	sori
<i>Davallodes membranulosum</i> (Wall. ex Hk.) Copel.	Davalliaceae	h	pd	epi, epl	3	rocks in bb/df, mxf, cliffs	ls	1300	1425	jl-sp	jl-sp	my-dc	sori
<i>Dicranopteris curranii</i> Copel.	Gleicheniaceae	h	pe	gro	3	da	gr	1200	1350	jl-sp		ja-dc	sori
<i>Dicranopteris linearis</i> (Burm. f.) Underw. var. <i>linearis</i>	Gleicheniaceae	h	pe	gro	3	da	gr	600	1525	jn-sp		ja-dc	sori
<i>Diplazium esculentum</i> (Retz.) Sw.	Athyriaceae	h	pe	gro	3	streams in bb/df, wet areas in eg/bb	gr	700	1150	ja-fb	ja-fb	ja-dc	sori
<i>Diplazium muricatum</i> (Mett.) v. A. v. Ros.	Athyriaceae	h	pe	gro	3	rocks in egf, eg/bb	ls	1125	1400	oc-nv	oc-nv	ja-dc	sori
<i>Drymoglossum piloselloides</i> (L.) Presl var. <i>piloselloides</i>	Polypodiaceae	h, cr	pe	epi, epl	3	rocks in mxf, egf	ls	1100	1400	ag-oc	ag-oc	ja-dc	sori
<i>Drynaria propinqua</i> (Wall. ex Mett.) J. Sm. ex Bedd.	Polypodiaceae	h	pd	epi	2	egf, eg/bb	gr, ls	1000	1500	jl-sp	jl-sp	my-ja	sori
<i>Drynaria rigidula</i> (Sw.) Bedd.	Polypodiaceae	h	pd	epi	3	eg/bb	gr	1000	1400	my-jl	my-jl	my-dc	sori
<i>Dryopteris cochleata</i> (D. Don) C. Chr.	Dryopteridaceae	h	pe	gro	3	eg/bb, da	gr	1100	1400	nv-dc	nv-dc	ja-dc	sori
<i>Equisetum debile</i> Roxb. ex Vauch.	Equisetaceae	h	pe	gro	2	wet areas in bb/df	gr, ls	400	800			ja-dc	
<i>Hymenophyllum polyanthos</i> (Sw.) Sw.	Hymenophyllaceae	h	pe	epi	2	egf	ls	1200	1375	sp-nv	sp-nv		sori
<i>Lepisorus nudus</i> (Hk.) Ching	Polypodiaceae	h	pe	epi	3	egf, eg/pine	gr, ls	1200	1525	ag-oc	ag-oc	ja-dc	sori
<i>Leptochilus ellipticus</i> (Thunb.) Noot.	Polypodiaceae	h	pe	gro	2	streams in egf, eg/bb	gr, ls	1100	1350	ag-oc	ag-oc	ja-dc	sori

<i>Leucostegia immersa</i> Presl	Davalliaceae	h	pd	epi, epl	3	rocks in mxf, eg/bb cliffs	gr, ls	1300	1425	jl-sp	jl-sp	my-dc	sori
<i>Loxogramme involuta</i> (D. Don) Presl	Polypodiaceae	h	pe	epi, epl	3	rocks in mxf cliffs	ls	1300	1425	sp-nv	sp-nv	ja-dc	sori
<i>Lycopodium cernuum</i> L.	Lycopodiaceae	h	pe	gro	3	egf,da,sg	gr	600	1300	ja-dc	ja-dc	ja-dc	strobili
<i>Lygodium flexuosum</i> (L.) Sw.	Schizaeaceae	v	pd	gro	3	eg/bb, da	gr	500	1500	sp-oc	sp-oc	my-dc	sori
<i>Microlepia speluncae</i> (L.) Moore	Dennstaedtiaceae	h	pe	gro	3	eg/bb, da	gr	1200	1500	ja-dc	ja-dc	ja-dc	sori
						rocks and streams in egf, mxf, eg/bb cliffs							
<i>Microsorum zippelii</i> (Bl.) Ching	Polypodiaceae	h	pd	epi, epl	3	eg/pine, eg/bb	gr,ls	1000	1425	sp-ja	sp-ja	jn-fb	sori
<i>Oleandra undulata</i> (Willd.) Ching	Oleandraceae	h	pd	gro	3	gro,	gr	1100	1400	ag-oc	ag-oc	my-dc	sori
<i>Ophioglossum petiolatum</i> Hk.	Ophioglossaceae	h	pd	epi	2	egf, da	gr, ls	950	1375	jn-oc	jn-oc	my-dc	sori
<i>Phymatosorus lucidus</i> (Roxb.) P.S.	Polypodiaceae	h	pe	epl	3	rocks in mxf cliffs	ls	1200	1425	dc-ap	dc-ap	ja-dc	sori
<i>Pityrogramma calomelanos</i> (L.) Link	Parkeriaceae	h	pe	gro	2	egf,da,sg	gr	1100	1200	oc-dc	oc-dc	ja-dc	sori
<i>Platycerium wallichii</i> Hk.	Polypodiaceae	h	pd	epi	2	dof, eg/bb	gr	500	1050	ag-oc	ag-oc	jn-dc	
<i>Polypodium mamneiense</i> H.Christ	Polypodiaceae	h	pd	epi, epl	3	egf	ls	1100	1400	jl-sp	jl-sp	jn-dc	sori
<i>Polystichum lindsaeifolium</i> Scort. ex Ridl.	Dryopteridaceae	h	pe	epl	3	mxsf, egf	ls	1300	1425	sp-nv	sp-nv	ja-dc	sori
<i>Pteridium aquilinum</i> (L.) Kuhn ssp. <i>aquilinum</i> var. <i>wightianum</i> (Ag.) Tyr.	Dennstaedtiaceae	h	pe	gro	4	da, sg	gr, ls	1000	1525			ja-dc	
<i>Pteridrys cnemidaria</i> (Christ) C. Chr. & Ching	Dryopteridaceae	h	pe	gro	2	streams in mxsf	sh	500	700	nv-ja	nv-ja	ja-dc	sori
<i>Pteris biaurita</i> L.	Pteridaceae	h	pe	gro	3	mxsf, da	gr, ls	500	1500	sp-oc	sp-oc	ja-dc	
<i>Pteris longipes</i> D. Don	Pteridaceae	h	pe	gro	2	streams in egf	gr, ls	1200	1350			ja-dc	
<i>Pteris subquinata</i> Wall. ex Ag.	Pteridaceae	h	pd	epl	3	rocks in egf cliffs	ls	1200	1400	sp-nv	sp-nv		sori
<i>Pteris venusta</i> O. K.	Pteridaceae	h	pe	gro	2	eg/bb, da	ls	1100	1350	ag-oc	ag-oc	ja-dc	
<i>Pyrrrosia lingua</i> (Thunb.) Far. var. <i>heteractis</i> (Mett. ex Kuhn) Hoven.	Polypodiaceae	h	pe	gro, epl	3	rocks in mxsf cliffs	ls	500	1425	sp-dc	sp-dc	ja-dc	sori
<i>Pyrrrosia porosa</i> (Wall. ex Presl) Hoven. var. <i>tonkinensis</i> (Gies.) Hoven.	Polypodiaceae	h	pe	gro, epi, epl	3	rocks in mxsf, egf cliffs	gr, ls	1200	1425	sp-dc	sp-dc	ja-dc	sori
<i>Selaginella helferi</i> Warb.	Selaginellaceae	v, h	a	gro	3	eg/bb, da	gr	500	1150	oc-fb	oc-fb	my-ja	sporangia
<i>Selaginella involvens</i> (Sw.) Spr.	Selaginellaceae	h	pd	epi,epl	3	rock in mxsf, eg/bb	ls	1300	1425	jl-sp	jl-sp	my-dc	sporangia
<i>Selaginella kurzii</i> Bak.	Selaginellaceae	h	a	epl	3	rocks in bb/df cliffs	ls	400	800	sp-oc	sp-oc	jn-dc	sporangia
<i>Selaginella minutifolia</i> Spr.	Selaginellaceae	h	a	gro	3	eg/bb	ls	1100	1300	oc-nv	oc-nv	my-nv	sporangia
<i>Selaginella roxburghii</i> (Hk. & Grev.) Spr. var. <i>roxburghii</i>	Selaginellaceae	h	a	epl	3	rocks in mxsf, egf, eg/bb cliffs	ls	1300	1400	sp-nv	sp-nv	my-dc	sporangia
<i>Selaginella tenuifolia</i> Spr.	Selaginellaceae	h	a	gro	3	egf, da	gr	900	1450	sp-nv	sp-nv	my-dc	sporangia
<i>Sphenomeris chinensis</i> (L.) Maxon var. <i>chinensis</i>	Lindsaeaceae	h	pe	gro	3	egf,da	gr	1100	1400	ja-dc	ja-dc	ja-dc	sori

<i>Tectaria decurrents</i> (Presl) Copel.	Dryopteridaceae	h	pe	gro	3	streams in egf	gr, ls	1100	1300	dc-fb	dc-fb	ja-dc	sori
<i>Tectaria herpetocaulos</i> Holtt.	Dryopteridaceae	h	pe	gro	3	egf, eg/bb	gr, ls	550	1375	sp-nv	sp-nv	ja-dc	sori
<i>Thelypteris nudata</i> (Roxb.) Mort. var. <i>nudata</i>	Thelypteridaceae	h	pe	gro	3	mostly streams, wet areas in eg/bb, egf	gr, ls	1100	1500	jl-oc	jl-oc	ja-dc	sori
<i>Thelypteris parasitica</i> (L.) Fosb.	Thelypteridaceae	h	pe	gro	3	egf,da,sg	gr	1100	1500	ja-dc	ja-dc	ja-dc	sori
<i>Thelypteris subelata</i> (Bak.) K. Iw.	Thelypteridaceae	h	pe	gro	3	egf,eg/bb	ls	1125	1400	sp-nv	sp-nv	ja-dc	sori
<i>Thelypteris terminans</i> (Hk.) Tag. & K. Iw.	Thelypteridaceae	h	pe	gro	3	eg/bb	gr,ls	800	1250	ag-dc	ag-dc	ja-dc	sori
<i>Thelypteris truncate</i> (Poir.) K. Iw.	Thelypteridaceae	h	pe	gro	2	streams in egf, eg/bb	gr	1000	1200	ja-dc	ja-dc	ja-dc	sori
<i>Woodwardia japonica</i> (L. f.) Sm.	Blechnaceae	h	pe	gro	2,3	eg/bb, egf	gr, ls	1100	1400	jl-dc	jl-dc	ja-dc	sori

Table 4. Lis of plant species under phylum bryophyta surveyed at Doi Tung, Chiang Rai Province.

Species	Family	Habit	Aped	Life mode	Abundance	Habitat	Bed rock	Lower	Upper	Flowering	Fruiting	Leafing	Collected
								Elevation (m)		Months			
<i>Brachymenium</i>	Bryaceae	h	pe	epl	3	rocks in eg/pine	gr	1450	1525	sp-oc	sp-oc	ja-dc	capsules
<i>Brachymenium nepalense</i> Hk.	Bryaceae	h	pe	epi	3	eg/pine	gr	1450	1525	sp-oc	sp-oc	ja-dc	capsules
<i>Dumontiera hirsuta</i> (Sw.) Nees	Marchantiaceae	h	pe	epl	3	rocks, streams in egf, eg/bb	gr	1100	1200	oc-nv	oc-nv	ja-dc	sporophyte
<i>Entodon macropodus</i> (Medw.) Mitt.	Entodontaceae	h	pe	epl	3	rocks in egf, mxf	ls	1300	1425	sp-oc	sp-oc	ja-dc	capsules
<i>Entodon plicatus</i> C. Muell.	Entodontaceae	h	pe	epi	3	rocks in egf, eb/bb	ls	1200	1400	sp-nv	sp-nv	ja-dc	capsules
<i>Fissidens nobilis</i> Griff.	Fissidentaceae	h	pe	epl	2	rocks, streams wet areas in egf	gr, ls	1200	1325			ja-dc	
<i>Hyophila involuta</i> (Hk.) Jaeg.	Pottiaceae	h	pe	epl	3	rocks in eg/pine	gr	1450	1525	sp-oc	sp-oc	ja-dc	capsules
<i>Hypopterygium flavolimbatum</i> Mull. & Hal.	Hypotergiaceae	h	pe	epl	3	rocks in egf, cliffs	ls	1200	1400			ja-dc	
<i>Leucobryum aduncum</i> Dozy & Molk. var. <i>scalare</i> (C. Muell. ex Fleisch.) A. Eddy	Leucobryaceae	h	pe	epi	3	eg/bb	gr	1100	1400	jl-nv	jl-nv	ja-dc	capsules
<i>Meteoriopsis squarrosa</i> (Hk.) Fleish. var. <i>squarrosa</i>	Meteoriaceae	h	pe	epi, epl	4	rocks, cliffs	ls	1200	1425			ja-dc	
<i>Papillaria semitorta</i> (C. Muell.) Jaeg.	Meteoriaceae	h	pe	epi	4	rocks in mxf, cliffs	ls	1300	1425			ja-dc	
<i>Phaeoceros laevis</i> (L.) Prosk.	Anthocerotaceae	h	pe	gro	2	eg/bb	gr	1100	1500	sp-oc	sp-oc	ja-dc	sporophyte
<i>Plagiommium succulentum</i> (Mitt.) Kop.	Mniaceae	h	pe	epl	3	rocks in mxf, egf, cliffs	ls	1200	1400			ja-dc	
<i>Pogonatum neesii</i> (C. Muell.) Dozy	Polytrichaceae	h	pe	gro	4	eg/bb	gr	1100	1400	oc-nv	oc-nv	ja-dc	capsules
<i>Racopilum orthocarpum</i> Wils. ex	Racopiliaceae	h	pe	epi	3	egf	gr, ls	1100	1400	my-ag	my-ag	ja-dc	capsules

Mitt.													
<i>Rhodobryum giganteum</i> (Schwaegr.) Par.	Bryaceae	h	pe	epl	3	rocks in eg/bb, cliffs	ls	1200	1425	ag-oc	ag-oc	ja-dc	
<i>Rhytidium</i>	Rhitiadiaceae	h	pe	epi	3	eg/pine	gr	1450	1525	sp-oc	sp-oc	ja-dc	capsules
<i>Stereophyllum</i>	Plagiotheciaceae	h	pe	epi	3	egf, eg/pine	gr	900	1200	jl-sp	jl-sp	ja-dc	capsules
<i>Thuidium orientale</i> Mitt. ex Dix.	Thuidiaceae	h	pe	epi	3	mxf, egf, cliffs	ls	1200	1400			ja-dc	