

Review

THE CURRENT STATUS OF THE PHILIPPINE RUBIACEAE

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In its several issues on biodiversity, *National Geographic* (2002) has featured the plethora of life in the Philippine rainforests, much like the richness of the Amazon jungles. In the article by Vesilind (2002: 62), the Philippines is identified as one of the world's 25 biodiversity hotspots where "a cauldron of fauna and flora boils..." and one of the listed eight "hottest hotspots" in terms of numbers of endemics, endemic species/area ratios and habitat loss (Myers et al., 2000). With very thick canopies in the jungles often soaked in monsoon waters year in and out, the more than 7,100 islands of the Philippines have been a friendly habitat to thousands of classified and yet to be discovered plant species. With the introduction of new species posing as predators to the indigenous species, with the unabated deforestation and animal hunting, the Philippines is fast becoming a microcosm of the world at the throes of the quarternary, sixth mass extinction it has yet to witness (Morell, 1999: 43).

With the depressing threats of extinction at hand, scientists all over the world are racing against time in order to catalogue the species before they become prey to extinction, and devise ways to avert their loss and reproduce their kind. In the Philippines, it is even depressing to find out that many treatments on plant species warrant revision and updating, and an accurately published catalogue on the Flora of the Philippines has yet to materialize (Madulid, pers. comm.). It is in this light, therefore, that we decided to take part in the cataloguing of the Philippine's indigenous species.

Among families of higher plants, Rubiaceae (or coffee family) is the fourth largest in number comprising ca. 660 genera with approximately 13,000 species of trees, shrubs, herbs, and twiners (Robbrecht, 1988). Its main distribution lies in the tropics, where its members often dominate the understorey of forests. Even though the family comprises numerous plants of economic importance such as major crops (e.g., coffee, *Coffea* L.), medicine (e.g., quinine, *Cinchona* L.), and a number of ornamentals (e.g., *Gardenia* Ellis., *Ixora* L., *Mussaenda* Burm. ex L.), the family, because of its size, is still incompletely known and undertreated. Many of its genera need revision and the complexity of subfamilial and tribal classification remains unsettled (Robbrecht, 1988; Alejandro and Liede, 2003). This large family is second to Orchidaceae in the Malesiana region with ca. 150 genera and ca. 1,830 species. In the Philippines, Rubiaceae is represented with 63 genera

and 527 species in Merrill's (1923) *Enumeration of Philippine Flowering Plants*. However, Merrill's (1923) work has long been outdated by the studies and revisions that resulted in the reestablishment and/or segregation of a number of genera involving the Philippine Rubiaceae (e.g., Bremekamp, 1940a-b; Ridsdale, 1978a-c, 1982, 1996; Tirvengadam, 1983; Wong, 1984; Ali and Robbrecht, 1991).

A. The Philippine Rubiaceae

Rubiaceae has the largest number of indigenous species and four endemic genera (*Antherostele* Bremek., *Greeniopsis* Merr., *Sulitia* Merr., and *Villaria* Rolfe) among the Philippine dicotyledonous plants. Its species constitute the main component of the Philippine understorey plants. Since Merrill's (1923) monumental work, no updated account of the Philippine Rubiaceae has been done, and there has been no contribution of Rubiaceae for the Flora of the Philippines project (Madulid, pers. comm.). Because Merrill's (1923) work requires updating inclusive of generic descriptions essential to the understanding of Rubiaceae in the Philippines, it has become exigent to develop an automated databank under the DELTA system (DEscription Language for TAXonomy; Dallwitz et al., 1999). By doing so, the very first step towards a comprehensive treatment of the family for the island has been taken. The DELTA format is advantageous for a continuing project as large as the Philippine Rubiaceae because it is readily accessible and versatile enough to allow corrections and additions throughout the project.

Against a character list, generic descriptions of all the Philippine Rubiaceae genera are coded in DELTA format and translated into INTKEY database for interactive identification and information retrieval (Dallwitz et al., 1995, 2000). The descriptions combine mostly compiled data of Philippine Rubiaceae species, observations, and measurements on over 130 characters. Recently accepted classification (subfamily, tribes, and subtribes) and significant characters defined by Robbrecht (1988, 1993) are also integrated.

The development of an interactive key for all genera provides a welcome tool for all concerned with forest conservation, management and utilization to identify easily the main components of the patch of forest under investigation and obtain further information on the species involved. It also ascertains the comparability of this study with other research efforts both on the Philippine Flora and on the Taxonomy and Systematics of Rubiaceae worldwide.

Moreover, Alejandro and Liede (2003) summarizes the revisions on the Rubiaceae of Philippines after Merrill (1923) and incorporates additional genera resulting from reestablishment or segregation of generic concepts. It validates the new names and combinations, and taxonomic position of all recognized Philippine Rubiaceae genera that affords researchers to keep track of various nomenclatural and taxonomic changes. Therefore, this study provides a more updated and comprehensive account of Philippine Rubiaceae.

B. Revisions and prospects in Philippine Rubiaceae

For an extensive treatment of the Philippine Rubiaceae, it has become inevitable to compile revisionary works involving Philippine Rubiaceae in order to identify name and rank changes since Merrill (1923). By doing so, the treatment will keep track of the various nomenclatural and taxonomic changes and identify the Philippine Rubiaceae genera still wanting revision.

A number of generic revisions involving endemic species of Philippine Rubiaceae are available: *Acranthera* (Bremekamp, 1947a), *Aidia* (Ridsdale, 1996), *Antirhea* (Chaw and Darwin, 1992), *Badusa* (Ridsdale, 1982; Soejarto et al., 1996), *Coelospermum* (Johansson, 1988), *Dolicholobium* (Jansen and Ridsdale, 1983), *Diplospora* (Ali and Robbrecht, 1991), *Discospermum* (Ali and Robbrecht, 1991), *Fagerlindia* (Ridsdale, 1985), *Knoxia* (Bhattacharjee and Deb, 1985), *Mitragyna* (Ridsdale, 1978a), *Myrmecodia* (Huxley and Jebb, 1993), *Myrmeconuclea* (Ridsdale, 1978c), *Myrmephytum* (Huxley and Jebb, 1991), *Mussaenda* (Jayaweera, 1964), *Nauclea* (Ridsdale, 1978c), *Neonauclea* (Ridsdale, 1978b, 1989), *Paederia* (Puff, 1991), *Pavetta* (Bremekamp, 1934), *Prismatomeris* (Ridley, 1939; Johansson, 1987), *Schradera* (Puff et al., 1998), *Scyphiphora* (Puff et al., 1993), *Sreblosa* (Bremekamp, 1947b), *Uncaria* (Ridsdale, 1978a), *Wendlandia* (Cowan, 1936). Colin Ridsdale, who worked for the Flora Malesiana project, made most of the revisions on Philippine Rubiaceae. His unpublished revisions to *Greeniopsis*, *Hymenodictyon*, *Oxyceros*, and *Rothmannia* are included in the list of Philippine Rubiaceae. Both *Oxyceros* and *Rothmannia* are new genera separated from the heterogenous assemblage of the now exclusively American *Randia* (Tirvengadam and Sastre, 1979; Ridsdale, 1996). Other new genera added to the Philippine Rubiaceae list are: *Aidia* (Ridsdale, 1996), *Antherostele* (Bremekamp, 1940a), *Ceriscoides* (Tirvengadam, 1983), *Ludekia* (Ridsdale, 1978c), *Metadina* (Ridsdale, 1978c), *Pertusadina* (Ridsdale, 1978c), *Sulitia* (Ridsdale, 1979), and *Tarrenoideae* (Tirvengadam and Sastre, 1979). Alejandro and Liede (2003) listed all new taxa and name changes in Philippine Rubiaceae species since Merrill (1923).

Meanwhile, three genera (*Praravinia*, *Tricalysia*, and *Urophyllum*) require meticulous reinvestigation. Bremekamp's (1940b) preliminary account on *Praravinia* and *Urophyllum*, both belonging to Urophyllaeae, Rubioideae, still make the endemic Philippine species lurk in anonymity to the present day. The Philippine *Tricalysia* species were all transferred to *Diplospora* (Coffeeae, Ixoroideae) leaving *Tricalysia* as an exclusively African genus (Ali and Robbrecht, 1991). However, generic position of some Philippine *Tricalysia* species remains to be checked.

As a whole, the endemic Philippine Rubiaceae species of more than 15 genera are wanting revision: *Argostemma*, *Gynochthodes*, *Hedyotis* (= *Exallage*), *Hydnophytum*, *Ixora*, *Lasianthus*, *Morinda*, *Oldenlandia*, *Ophiorrhiza*, *Plectronia*, *Psychotria*, *Psydrax*, *Randia* (generic position of some Philippine species remains

unsettled), *Tarenna*, *Timonius*, and *Villaria*. Most of these are species-rich genera with several endemic Philippine species.

C. Updated generic synopsis of the Philippine Rubiaceae

Recent evaluation for the Philippines resulted in a total of 80 genera (six of which are cultivated and four are endemic) or 12.1% of the Rubiaceae worldwide. The currently accepted three subfamilies of Rubiaceae (Cinchonoideae s. str.; Ixoroideae s. l., and Rubioideae) (Bremer, 1996) are all represented in the Philippines, Rubioideae having the largest number of genera. Of the 44 tribes recognized by Robbrecht (1988), the Philippine Rubiaceae represents 25 tribes.

The generic descriptions of all recognized Philippine Rubiaceae are coded in DELTA format (Dallwitz et al., 1999) and translated by the program into an interactive key (Dallwitz et al., 2000). The more than 130 characters include information on the type species, habit and morphology of both vegetative and reproductive parts, as well as breeding systems, particularly heterostyly (Bahadur, 1968, 1970), seed anatomy (Robbrecht, 1988), pollen structure (Robbrecht, 1988; Puff, 1993), chromosome base number and ploidy level (Kiehn, 1996), genus distribution, number of species with reference to the endemic Philippine species, and helpful references when available.

The user-friendly interactive key includes 120 characters; the reproductive parts (e.g., corolla aestivation types, fruit types) occupy the top list of best characters. Given that the treatment of Philippine Rubiaceae is a continuous project, the descriptions are continuously improved and revised in the database. Thus, new characters are added from time to time, and existing definitions are improved or rendered less inclusive as more accurate data become available. The characters and character states which are still undesirably inclusive or clumsy will be improved in due course. New images are added continuously for both characters and taxa. Against this background, an internet-accessible database has obvious advantages. Nevertheless, it represents the most updated generic synopsis of the Philippine Rubiaceae currently available on the Web at http://www.uni-bayreuth.de/departments/planta2/wgl/delta_ru/index.html.

In addition to the table lists of new taxa, name changes, and taxonomic positions of the Philippine Rubiaceae (Alejandro and Liede, 2003), all accepted Philippine Rubiaceae are listed on Table 1.

Table 1. Updated lists of the Philippine Rubiaceae: (++) endemic genera, (**) cultivated genera, (*) endemic species, (?) of uncertain position.

<i>Acranthera</i> Arn. ex Meisn. *	<i>A. bakeri</i> (Merr.) Ridsdale
<i>A. philippinensis</i> Merr.	<i>A. foveata</i> Ridsdale
<i>Aidia</i> Lour.	<i>A. pulcherrima</i> (Merr.) Ridsdale
<i>A. acuminata</i> (Blume) Wong	<i>A. racemosa</i> (Cav.) Tirveng.
<i>A. auriculata</i> (Wall.) Ridsdale [var. <i>auriculata</i>]	<i>Amaracarpus</i> Blume
	<i>A. apoensis</i> Elmer

- A. longifolius* Elmer ?
- Antirhea** Comm. ex Juss.
A. attenuata (Elmer) Chaw
A. benguetensis (Elmer) Val.
A. caudata (M.E. Jansen) Chaw
A. edanoi Chaw, *A. foveolata* Chaw
A. hexasperma (Roxb.) Merr.
A. livida Elmer
A. microphylla (Bartl. ex DC.) Merr.
A. paxillata Chaw
A. philippinensis (Benth.) Rolfe
A. ramosii Chaw
A. tayabensis Chaw
A. ternata Chaw
- Antherostele** ++ Bremek.
A. banahaensis (Elmer) Bremek.
A. callophylla Bremek.
A. luzoniensis (Merr.) Bremek.
A. grandistipula (Merr.) Bremek.
- Argostemma** Wall*
A. arachnosum Merr.
**A. maquilingense* Elmer
**A. neesianum* Walp.
**A. quadripetalum* Elmer
**A. solaniflorum* Elmer
**A. stenophyllum* Merr.
**A. wallichii* Walp.
**A. pedicellatum* Elmer
**A. rupestrinum* Elmer
**A. umbellatum* Elmer
- Badusa** A. Gray [Excluded by Merrill (1923)]
B. palawanensis Ridsdale
**B. philippinensis* Val.
B. palauensis Val.
- Bikkia** Reinw. ex Blume
B. philippica (Cav.) S. Vidal
- Boholia** Merr. *
B. nematostylis Merr.
- Borreria** G. Mey.
B. hispida (L.) K. Schum.
- B. ocymoides* (Burm.f.) DC.
B. verticillata (L.) G. Mey
- Caelospermum** Blume (= *Coelospermum*)
C. volubile (Merr.) J.T. Johanss.
- Canthium** Lam.
C. confertum Korth.
C. diococcum (Gaertn.) Merr.
C. horridum Blume
- Ceriscoides** (Hook.f.) Tirveng.
C. curranii (Merr.) Tirveng.
- Chassalia** Comm. ex Poir.
C. curviflora (Wall.) Thw. [var. *ophioxylodes* (Wall.) Deb & Krishna]
- Cinchona**** L.
C. calisaya Wedell
C. officinalis L.
C. pubescens Vahl.
- Coffea**** L.
C. arabica L.
C. liberica Hiern
- Coptosapelta** Korth.
**C. olariformis* (Merr.) Elmer
- Cowiea** Wernham
**C. philippinensis* Merr.
- Damnacathus** Gaertn.
D. indicus Gaertn.
- Dentella** Forst. *D. repens* (L.) Forst.
- Diplospora** DC.
D. fasciculiflora (Elmer) Elmer
D. puberula (Merr.) Ali & Robbr.
D. sessilis Elmer [generic position to be determined]
D. tinagoensis (Elmer) Ali & Robbr.
- Discospermum** Dalz.
D. whitfordii (Elmer) Ali & Robbr.

Dolicholobium A. Gray

D. philippinense Trel.

Fagerlindia Tirveng.

F. emanuelssoniana Ridsdale

F. microcarpa (Bartl. ex DC.)
Ridsdale

Galium L.

G. gaudicahaudii DC.

**G. philippinense* Merr.

Gardenia Ellis

G. augusta (L.) Merr.

G. longiflora Vidal

G. pseudopsidium (Blanco) F. Vill.

G. segmenta Elmer

Geophila D. Don

G. herbacea (L.) K. Schum.

Greenea Wight & Arn.

G. hirsuta Elmer

Greeniopsis ++ Merr.

G. discolor Merr.

G. euphlebica Merr.

G. megalantha Merr.

G. multiflora (Elmer) Merr.

Guettarda L.

G. speciosa L.

Guettardella Champ. ex Benth.

G. caudata M.E. Jansen

G. chinensis Benth.

Gynochtodes <Blume>

**G. lenticellata* Rob.

**G. mindanaensis* Merr.

**G. nigra* Merr.

**G. philippinensis* Elmer

Hamelia** Jacq.

Hedyotis L.

**H. apoensis* Elmer

**H. asperrima* Merr.

**H. atropurpurea* Merr.

H. auricularia L.

**H. bambusetorum* Merr.

**H. banksii* Elmer

**H. bartlingii* Merr.

**H. benguetensis* Elmer

**H. brachyantha* Merr.

H. buruensis (Miq.) Val.

**H. cagayanensis* Merr.

**H. camarinensis* Merr.

**H. catanduanensis* Merr.

**H. caudata* Merr.

H. connata Wall.

H. costata (Roxb.) Kurz.

**H. diffusissima* Merr.

**H. elmeri* Merr.

**H. eucapitata* Merr.

**H. filifolia* Elmer

**H. gitingensis* Elmer

**H. humilis* Merr.

**H. kingiana* Elmer

**H. laxiflora* Merr.

**H. longipedunculata* Merr.

**H. luzoniensis* Merr.

**H. macgregorii* Merr.

**H. magallanensis* Elmer

**H. microphylla* Merr.

**H. montana* Merr.

**H. oligantha* Merr.

**H. perphisipida* Elmer

**H. phanerophlebia* Merr.

H. philippensis (Willd.) Merr. ex

Rob. [var. *meyeniana* (Walp.)

Merr.],

**H. pilosissima* Merr.

**H. pulgarensis* Elmer

**H. radicans* (DC.) Miq.

**H. ramosii* Merr.

H. rigida (Blume) Miq.

**H. scaberrima* Merr.

**H. sibuyanensis* Elmer

**H. simplex* Merr.

**H. subevenosa* Merr.

**H. subvelutina* Elmer

H. tenelliflora Blume

H. verticillata (L.) Lam.

**H. whiteheadii* Merr.

**H. yoderi* Elmer

Hydnophytum Jack.

**H. angustifolium* Merr.

**H. brachycladum* Merr.

H. formicarum Jack,

**H. intermedium* Elmer

**H. leytense* Merr.

**H. membranaceum* Merr.

**H. mindanaense* Elmer

**H. mindorensis* Merr.

**H. nitidum* Merr.

**H. orbiculatum* Elmer

**H. philippinense* Becc.

Hymenodictyon Wall.

H. orixense (Roxb.) Mabberly

Hypobathrum Blume

**H. glomeratum* (Bartl.) K.Schum.

**H. multibracteata* Elmer

**H. purpureum* (Elmer) Merr.

Ixora L.

**I. angustilimba* Merr.

**I. auriculata* Elmer

**I. bartlingii* Elmer

**I. bibracteata* Elmer

**I. capitulifera* Merr.

**I. chartaceae* Elmer

I. chinensis Lam.

I. coccinea L.

**I. confertiflora* Merr.

**I. crassifolia* Merr.

I. cumingiana Vid.

**I. ebracteolata* Merr.

I. finlaysoniana Wall.

I. fulgens Roxb.

**I. gigantifolia* Elmer

I. filipes Val. (*I. gracilipes* Merr.)

**I. ilocana* Merr.

**I. inaequifolia* Rob.

**I. intermedia* Elmer

**I. leucocarpa* Elmer

**I. leytensis* Elmer

**I. littoralis* Merr.

**I. longissima* Merr.

**I. longistipula* Merr.

**I. luzoniensis* Merr.

**I. macgregorii* Rob.

I. macrophylla Bartl.

**I. magnifica* Elmer

**I. mearnsii* Merr.

**I. mindanaensis* Merr.

**I. myriantha* Merr.

**I. oblongifolia* Elmer

**I. palawanensis* Merr.

I. philippinensis Merr.

**I. pilosa* Merr.

I. gigantifolia Elmer (*I. platyphilla* Merr.)

**I. propinqua* Merr.

I. rosea Wall.

I. salicifolia (Blume) DC.

**I. samarensis* Merr.

I. sparsiflora Elmer

**I. tenuipedunculata* Merr.

Knoxia L.

K. sumatrensis (Retz.) DC. var.
sumatrensis

Lasianthus Jack.

L. attenuatus Jack

**L. acuminatissimus* Merr.

L. clememtis Merr.

**L. cyaneus* Elmer

L. cyanocarpus Jack.

L. rigidus Miq.

**L. fordii* Hance [var. *microphyllus*,
var. *fordii*]

L. sikkimensis Hook.f.

L. verticillatus (Lour.) Merr.

**L. obliquinervis* Merr.

L. stipularis Blume

L. tashiroi Mats.

Ludekia Ridsd.

L. bernardoi (Merr.) Ridsdale

Metadina Bakh.f.

M. trichotoma (Zoll. & Mor.) Bakh.f.

Mitragyna Korth.

M. speciosa (Korth) Havil.

M. diversifolia (Wall. ex G.Don)
Havil.

Morinda L.

**M. bartlingii* Elmer

M. bracteata Roxb.

M. celebica Miq.

M. citrifolia L.

**M. coriacea* Merr.

**M. nitida* Merr.

M. parvifolia Bartl.

**M. philippinensis* Elmer

**M. platyphylla* Merr.

M. tinctoria Roxb.

M. umbellata L.

Mussaenda Burm. ex. L.

**M. acuminatissima* Merr.

**M. albiflora* Merr.

**M. anisophylla* Vidal

**M. attenuifolia* Elmer

**M. benguetensis* Elmer

**M. chlorantha* Merr.

**M. grandifolia* Elmer

**M. lanata* C.B. Rob.

M. macrophylla Wall.

**M. magallanensis* Elmer

M. milleri Elmer

**M. multibracteata* Merr.

**M. nervosa* Elmer

**M. palawanensis* Merr.

**M. philippica* A. Rich.

**M. philippica* forma *aurorae* (Sulit)

**M. philippinensis* Merr.

**M. pinatubensis* Elmer

**M. scandens* Elmer

**M. setosa* Merr.

**M. vidalii* Elmer

M. macrophylla Wall. var.
brevipilosa Jayaw.

Mycetia Reinw.

M. javanica (Blume) Korth.

Myrmecodia Jack

M. tuberosa Jack

M. tuberosa Jack 'apoensis' C.R.
Huxley & Jebb

M. tuberosa Jack 'sibuyanensis'
C.R. Huxley & Jebb

Nauclea L.

N. orientalis (L.) L.

N. robinsonii Merr.

N. subdita (Korth.) Steud.

Neonauclea Merr.

N. bartlingii (DC.) Merr. [var.
bartlingii, var. *cumingiana*
(S.Vidal) Ridsdale]

N. calycina (DC.) Merr.

N. circumscissa Ridsdale

N. formicaria (Elmer) Merr.

N. glabra (Roxb.) Bakh.f. &
Ridsdale

N. jagorii Merr.

N. kentii Merr.

N. lanceolata (Blume) Merr.

[subsp. *lanceolata*, subsp.
gracilis (S.Vidal) Ridsdale]

N. media (Havil.) Merr.

N. pseudocalycina Ridsdale

N. puberula Merr.

N. reticulata (Havil.) Merr.

N. wenzelii Merr.

Oldenlandia L.

O. biflora L.

**O. brachyphylla* Merr.

**O. ciliata* Elmer

O. corymbosa L.

O. diffusa (Willd.) Roxb.

O. herbacea (L.) D.C.

O. horneriana Miq.

O. pterita (Blume) Miq.

**O. stenophylla* Merr.

Ophiorrhiza L.

- **O. acuminata* DC.
- **O. biflora* Elmer
- **O. caespitulosus* Elmer
- **O. curtiflora* Elmer
- **O. dolichophylla* Merr.
- **O. involucrata* Elmer
- **O. linearifolia* Merr.
- **O. macgregorii* Merr.
- O. mungos* L.
- **O. oblongifolia* DC.
- **O. oblongilimba* Merr.
- **O. ovata* Merr.
- **O. pubescens* Elmer
- **O. pubiflora* Merr.
- **O. pulgarensis* Elmer
- **O. tenuis* Merr.
- **O. undulata* Merr.
- **O. venosa* Merr.

Oxyceros Lour.

- O. bispinosa* (Griff.) Tirveng.

Paederia L.

- P. foetida* L.
- P. verticillata* Blume

Pavetta L.

- P. barnesii* Elmer
- P. basilanensis* Bremek.
- P. brachyantha* Merr.
- P. cumingii* Bremek.
- P. dolichostyla* Merr.
- P. elmeri* Merr.
- P. indica* L.
- P. luzonica* Bremek.
- P. mindanaensis* Bremek.
- P. membranacea* Blanco
- P. parvifolia* Vidal
- P. phanerophlebia* Merr.
- P. subferruginea* Merr.
- P. williamsii* Merr.

Pentas** Benth

Pertusadina Ridsdale

- P. multifolia* (Havil.) Ridsdale

Pleiocarpidia K. Schum.

- P. lanaensis* Merr.

Posoqueria** Aubl.

Praravinia Korth.

- P. acuminata* (Merr.) Bremek.
- P. affinis* (Merr.) Bremek.
- P. everettii* Merr.
- P. glabra* (Merr.) Bremek.
- P. loheri* (Merr.) Bremek.
- P. longistipula* (Merr.) Bremek.
- P. lucbanensis* (Elmer) Bremek.
- P. microphylla* (Merr.) Bremek.
- P. mimica* (Merr.) Bremek.
- P. mindanaensis* (Elmer) Bremek.
- P. multinervia* (Merr.) Bremek.
- P. negrosensis* (Merr.) Bremek.
- P. panayensis* (Merr.) Bremek.
- P. pubescens* (Quisumb. & Merr.) Bremek.
- P. quadribacteolata* (Merr.) Bremek.
- P. sablanensis* (Elmer) Bremek.
- P. stenophylla* (Merr.) Bremek.
- P. triflora* (Quisumb. & Merr.) Bremek.
- P. viridescens* (Elmer) Bremek.

Prismatomeris Thw.

- P. brachypus* Ridl.
- P. obtusifolia* Merr.
- P. tetrandia* (Roxb.) K. Schum. subsp.
tetrandia J.T. Johanns.
- P. tetrandia* (Roxb.) K. Schum. var.
philippinensis Ridl.

Psychotria L.

- **P. acuminatissima* Elmer
- **P. alvarezii* Merr.
- **P. amaracarpoides* Merr.
- **P. amplissima* Merr.
- **P. arborescens* Elmer
- **P. balabacensis* Merr.

- *P. banahaensis* Elmer
**P. bataanensis* Elmer
**P. bontocensis* Merr.
**P. cadigensis* Merr.
**P. cagayanensis* Merr.
**P. camarinensis* Merr.
**P. capizensis* Merr.
**P. cardiophylla* Merr.
**P. castanea* Merr.
**P. cephalophora* Merr.
**P. chasaloides* Merr.
**P. cordatula* Merr.
**P. crispipila* Merr.
**P. cuernosensis* Elmer
**P. depauperata* Merr.
**P. diffusa* Merr. [var. *agusanensis* (Elmer) Merr., var. *cervina* Merr.]
**P. edanoi* Merr.
**P. elliptifolia* Elmer
**P. elliptilimba* Merr.
**P. epiphytica* Elmer
**P. euphlesia* Merr.
**P. fasciculiflora* Merr.
**P. fenicis* Merr.
**P. fusca* Merr.
**P. gitingensis* Elmer
**P. gracilipes* Merr.
**P. heteromera* Merr.
**P. ilocana* Merr.
**P. isarogensis* (Merr.)
**P. iwahigensis* Elmer
**P. ixoroides* Bartl. ex DC.
**P. lagunensis* Merr.
**P. lanaensis* Merr.
**P. lancilimba* Merr.
P. leptothyrsa Miq.
**P. lianoides* Elmer
**P. linearis* Bartl. ex DC.
**P. loheri* Elmer
**P. longipedicellata* Elmer
**P. longipetiolata* Merr.
**P. lucida* Merr.
**P. luconiensis* (Cham. & Schlecht.) F.-Vill.
**P. macgregorii* Merr.
**P. magnifolia* Merr.
P. malayana Jack.
**P. manillensis* Bartl. ex DC.
**P. mearnsii* Merr.
**P. membranifolia* Bartl. ex DC. [var. *elmeri* Merr.]
**P. microphylla* Elmer
**P. mindanaensis* Merr.
**P. mindorensis* Elmer
**P. nagapatensis* Merr.
**P. negrosensis* Elmer
**P. nitens* Merr.
**P. obscurinervia* Merr.
**P. ovalis* Elmer
**P. palawanensis* Elmer
**P. pallidifolia* Merr.
**P. paloensis* Elmer
**P. panayensis* Merr.
**P. papillata* Merr.
**P. pauciflora* Bartl. ex DC.
**P. paucinervia* Merr.
**P. phanerophlebia* Merr.
**P. pilosella* Elmer,
**P. pinnatinervia* Elmer
**P. piperi* Merr.
**P. plumeriaefolia* Elmer
**P. propinqua* Merr.
**P. pygmaea* Merr.
**P. pyramidata* Elmer
**P. radicans* Merr.
**P. ramosii* Merr.
**P. ramosissima* Elmer
**P. repens* Elmer
**P. rigidaefolia* (Elmer) Merr.
**P. rizalensis* Merr.
**P. rubiginosa* Elmer
**P. samarensis* Merr.
**P. sarcocarpa* Merr.
**P. scaberula* Merr.
**P. sibuyanensis* Elmer
**P. similis* Elmer
**P. subalpina* Elmer
**P. subsessiliflora* Elmer

- **P. tayabensis* Elmer
- **P. tricarpa* Merr.
- **P. urdanentensis* Elmer
- **P. vanoverberghii* Merr.
- **P. velutina* Elmer
- **P. versicolor* Elmer
- **P. voluta* Elmer
- **P. weberi* Merr.
- **P. wenzelii* Merr.
- **P. yatesii* Merr.

Rondeletia **L.

Rothmannia Thunb.

- R. graciliflora* (Merr.) Ridsdale
- R. lagunensis* (Merr.) Ridsdale
- R. leytenensis* Ridsdale
- R. Merr.ii* (Elmer) Ridsdale

Rubia L.

- R. cordifolia* L.

Saprosma Blume

- **S. philippinense* Elmer

Schradera Vahl. (*Lucinaea* DC.)

- S. monocephala* (Merr.) Puff, Buchner & Greimler
- S. elmeri* Puff, Buchner & Greimler

Scyphiphora Gaertn.f.

- S. hydrophyllacea* Gaertn.f.

Spermacoce L.

- S. hispida* L.
- S. ocymoides* Burm.f.
- S. verticillata* L.

Streblosa Korth.

- **S. palawanensis* Bremek. [var. *Merr.i* Bremek., var. *elmeri* Bremek.]

- S. axilliflora* Merr. [var. *angustifolia* Bremek., var. *latifolia* Bremek., var. *laxiflora* Bremek.]

Sulitia ++ Merr.

- **Sulitia obscurinervia* (Merr.) Ridsdale

Tarenna Gaertn.

- T. bakeri* (Merr.) Bremek.
- T. luzoniensis* (D. Vidal) Bremek.
- T. meyeri* (Elmer) Bremek.
- T. multinervia* (Merr.) Bremek.
- T. pubescens* (Bartl.) Bremek.

Villaria ++ Rolfe

- **V. acutifolia* (Elmer) Merr.
- **V. glomerata* (Bartl. ex DC.) Mulyan. & Ridsdale
- **V. odorata* (Blanco) Merr.
- **V. philippinensis* Rolfe
- **V. rolfei* Vidal

Wendlandia Bartl. ex DC.

- W. brachyantha* Merr.
- W. luzoniensis* DC. [var. *membranifolia* (Elmer) Cowan, var. *williamsii* (Merr.) Cowan]
- W. nervosa* Merr.
- W. philippinensis* Cowan
- W. syringoides* Cowan
- W. sibuyanensis* Cowan
- W. warburgii* Merr.

Xanthophytum Reinw. ex Blume

- X. ferrugineum* (DC.) Merr.
 - X. fruticulosum* Blume
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