

## Family 220. RHIZOPHORACEAE

### Revision:

Ding Hou. 1958. *Rhizophoraceae*. Flora Malesiana series 1, 5: 429-493.

### 1. *Bruguiera* Lamarck

**1. *Bruguiera cylindrica* (L.) Blume**, Enum. Pl. Jav. 1 (1828) 93; --Merr., Fl. Manila (1912) 348; EPFP 3 (1923) 147; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 467.

SE Asia, throughout Malesia to N Queensland. Mangrove swamps throughout the Philippines.

**2. *Bruguiera gymnorrhiza* (L.) Savigny** in Lam., Encycl. Method. Bot. 4 (1798) 696; --Merr., EPFP 3 (1923) 146, *pro syn.* *B. conjugata*. --Ding Hou, Fl. Males. ser. 1, 5 (1958) 461.

*Bruguiera conjugata* [*non Rhizophora conjugata* (L.) Merr.] auctt.

Tropical S & E Africa, Madagascar, Seychelles, Christmas Is, Sri Lanka, SE Asia, Ryukyu Isls, throughout Malesia, to Australia, Micronesia (Palau, Yap, Marshall Isls, etc.), and Polynesia (Samoa, Fiji). Mangrove swamps throughout the Philippines. Common.

**3. *Bruguiera parviflora* (Roxb.) Wight & Arn.** *ex* Griff., Trans. Med. Phys. Soc. Calc. 8 (1836) 10; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 464, Fig. 6a, 20, 21.

SE Asia, throughout Malesia to Melanesia (Vanuatu, Solomon Isls) and Australia (N Queensland and Northern Territory), introduced in Hawaii. Mangrove swamps throughout the Philippines.

**4. *Bruguiera sexangula* (Lour.) Poir.** in Lam., Encycl. Suppl. 4 (1816) 262; --Merr., EPFP 3 (1923) 147; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 463, Fig. 6b, 17m, 18, 23.

*Bruguiera eriopetala* Wight & Arn., Ann. Nat. Hist. 1 (1838) 368; --Merr., Fl. Manila (1912) 347.

Sri Lanka, SE Asia, throughout Malesia to New Britain and E New Guinea, introduced in Hawaii. Mangrove swamps throughout the Philippines.

### 2. *Carallia* Roxburgh

**1. *Carallia borneensis* Oliver** in Hook., Icon. Pl. (1896) t. 2459; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 484; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 484.

*Carallia mindanaensis* (Merr.) Merr., EPFP 3 (1923) 146; --*Sagittipetalum mindanaense* Merr., PJS 3 c (1908) Bot. 247. --Type:

*Sagittipetalum palawanense* Elmer, LPB 5 (1913) 1830. --Type:

Borneo (Sabah), Philippines, New Guinea (Irian Jaya). PALAWAN, MINDANAO. Low altitude primary forests.

**2. *Carallia brachiata* (Lour.) Merr.**, PJS 15 (1919) 249; EPFP 3 (1923) 146; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 485, Fig. 31-32.

Madagascar to Sri Lanka, India, Myanmar, Thailand, N Vietnam, S China (Guangdong), Hainan, Hongkong, throughout Malesia to New Britain, Solomon Isls, and N Australia. N LUZON to PALAWAN and MINDANAO. Chiefly in secondary forests at low and medium

altitudes, often common.

### 3. *Ceriops* Arnott

**1. *Ceriops decandra*** (Griff.) Theob., in F Mason, *Burmah*, ed. 3, 2 (1883) 480; --Mabberley in *Taxon* 34 (1985) 154; --Ding Hou, *Fl. Males. ser. 1, 5* (1958) 471, Fig. 24f-h.  
*Ceriops roxburghiana* Arn., *Ann. Nat. Hist.* 1 (1838) 363; --Merr., *EPFP* 3 (1923) 144.  
India, Myanmar, Thailand, S Vietnam, Peninsular Malaysia (E coast), Banka, Borneo, Philippines, Sulawesi, Java, Lesser Sunda Isls (Flores; Sumba), Moluccas (Seram), New Guinea, NE Australia (Queensland). LUZON to MINDANAO. Edges of mangrove swamps, but relatively rare, and much less common than *C. tagal*.

**2. *Ceriops tagal*** (Perr.) C Robinson., *PJS* 3 c (1908) Bot. 306; *EPFP* 3 (1923) 144; --Ding Hou, *Fl. Males. ser. 1, 5* (1958) 469, Fig. 24a-e, 25.  
E Africa, Madagascar, Seychelles, Sri Lanka, India, Andaman Isls, Thailand, Cambodia, S Vietnam, Taiwan, throughout Malesia to Micronesia (Carolines: Palau; Yap), Australia (Northern Territory; Queensland), Melanesia (?New Ireland, Solomon Isls, New Caledonia). Throughout the Philippines. Common.

### 4. *Gynotroches* Blume

**1. *Gynotroches axillaris*** Blume, *Ann. Mus. Bot. Lugd.-Bat.* 1 (1849) 127, t. 31; --Merr., *EPFP* 3 (1923) 144; --Ding Hou, *Fl. Males. ser. 1, 5* (1958) 488, Fig. 33.  
*Gynotroches parvifolia* Merr., *Govt. Lab. Publ. (Philipp.)* 35 (1906) 46; --Merr., *EPFP* 3 (1923) 144.  
*Gynotroches puberula* Merr., *PJS* 10 c (1915) Bot. 333; *EPFP* 3 (1923) 144.  
*Gynotroches lanceolata* Merr., *PJS* 11 c (1916) Bot. 21; *EPFP* 3 (1923) 144.  
S Myanmar (Upper Tenasserim) and S Thailand, throughout Malesia (except C to E Java and the Lesser Sunda Isls), Melanesia (Solomon Isls; New Britain), and Micronesia (Carolines: Tjaparna, Ponape). LUZON: Bataan, Laguna, Quezon, Camarines, Sorsogon, POLILLO, MINDORO, PANAY, LEYTE, SAMAR, MINDANAO, DINAGAT, BUCAS GRANDE. Lowland primary forests to mossy forests on exposed ridges.

### 5. *Kandelia* Wight & Arnott

**1. *Kandelia kandel*** (L.) Druce, *Bot. Exch. Club* (1914) 420; --Ding Hou, *Fl. Males. ser. 1, 5* (1958) 472, Fig. 26; --Primavera, et al. (2004). *Handb. Mangroves Philip.-Panay*, 50.  
Sri Lanka, India, Myanmar, Thailand, Vietnam, S China (Guangdong; Hongkong), Taiwan, Ryukyu Isls, S Japan (Kyushu), NE Sumatra, Peninsular Malaysia, W N Borneo. LUZON: Aurora (Baler and Casiguran Bay, Cozo). Muddy substrate along tidal creeks and rivers, associated with *Nypa fruticans* and *Sonneratia alba*.

### 6. *Pellacalyx* Korthals

**1. *Pellacalyx axillaris*** Korth., *Tijdschr. Nat. Gesch.* 3 (1836) 20, t.2; --Merr., *EPFP* 3 (1923) 148; --Ding Hou, *Fl. Males. ser. 1, 5* (1958) 493, Fig. 35f.  
Sumatra, Peninsular Malaysia, Borneo, Philippines. MINDANAO: Zamboanga. Low altitude forests.

**2. Pellacalyx lobbii** (JD Hook.) Schimp. in Engl. & Prantl, Nat. Pflanzenfam. 3, 7 (1893) 54; --  
Soejarto et al. 1995. Prelim. Checklist Fl. Pl. Palawan; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 491,  
Fig. 34.

Sumatra, Borneo, Philippines. PALAWAN: Pagdanan Range, based on *Soejarto & Fernando 7464* (A, F, PNH).

**3. Pellacalyx pustulatus** Merr., Govt. Lab. Publ. (Philipp.) 35 (1906) 47; EPFP 3 (1923) 148; --Ding  
Hou, Fl. Males. ser. 1, 5 (1958) 492. --Type:

Philippines, N Sulawesi. LUZON: Nueva Vizcaya, Bataan, Rizal, Laguna, Sorsogon,  
LEYTE, SAMAR, MINDANAO: Lanao, Davao. Primary forests from lowlands up to  
900m.

## 7. *Rhizophora* Linnaeus

**1. Rhizophora apiculata** Blume, Enum. Pl. Jav. 1 (1828) 91; --Ding Hou, Fl. Males. ser. 1, 5 (1958)  
452, Fig. 1, 7, 11, 12.

*Rhizophora candelaria* DC, Prodr. 3 (1828) 32; --Merr., EPFP 3 (1923) 145.

*Rhizophora conjugata* DC, Prodr. 3 (1828) 33; --Merr., Fl. Manila (1912) 347; EPFP 3 (1923) 145, *pro syn.*  
*R. candelaria*

Tropical SE Asia (also Sri Lanka), throughout Malesia to Micronesia (Marianas, Ponape,  
Guam, Yap), New Britain, Solomon Isls, Vanuatu. Mangrove swamps throughout the  
Philippines. Common.

**2. Rhizophora mucronata** Poir. in Lam., Tabl. Encycl. Meth. Bot. (text) 2 (1794) 517; Tabl. 1 (1797)  
t. 396, Fig. 2; --Merr., Fl. Manila (1912) 347; EPFP 3 (1923) 145; --Ding Hou, Fl. Males. ser. 1, 5  
(1958) 453; Addenda, Corrigenda & Emendanda, Fl. Males. ser. 1, 6 (1972) 966.

E Africa, Madagascar, Seychelles, Mauritius, SE Asia, Ryukyu Isls, throughout Malesia  
to N Australia, Melanesia (Fiji, Vanuatu, New Caledonia), Micronesia (Guam, Palau,  
Ponape, Ogiwal), Tonga. Introduced in Hawaii. Mangrove swamps throughout the  
Philippines.

**3. Rhizophora stylosa** Griff., Not. Pl. As. 4 (1854) 665; --Ding Hou, Fl. Males. ser. 1, 5 (1958) 456.  
*Rhizophora mucronata* var. *stylosa* Schimp., --Salvoza, Nat. Appl. Sc. Bull. Un. Philipp. 5 (1936) 218, t. 5  
Taiwan, Peninsular Malaysia, Java, Philippines, Sulawesi, Moluccas, New Guinea, to  
Melanesia (Solomon Isls, Fiji), New Britain, N Australia, Micronesia (Guam & Marshall  
Isls). Exclusively along sandy shores and coral terraces, facing the open sea.