

New Apparently Records of Thai *Macaranga* Thouars (Euphorbiaceae)

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ABSTRACT: *M. diepenhorstii*, *M. heynei* and *M. hullettii* were reported for the first time in Thailand, with full description and illustrations.

KEY WORDS.- Apparently, Thai, *Macaranga*

INTRODUCTION

The *Macaranga* is a genus of pioneer species, and is distributed in old world tropic. In Thailand genus *Macaranga* was reported by Airy Shaw (1972) recorded sixteen species and during fieldwork of taxonomic study in Thai *Macaranga* from 1997 to 1999 eighteen species and one subspecies were reported, and three new record of *Macaranga* were found in Peninsular Thailand. Three specimen of new record were

Recently record has found twenty-two species (reported without specieslist) (Whitmore, 2001). After that species of *Macaranga* that collected from Peninsular were the first

in Pflanzenreich iv: 337. 1914; Whitmore, in Mal. Nat. J. 20: 95, 96. 1967; Tree Fl. Mal. 2: 111. 1973; Kew Bull. 1981: 321.-*Mappa diepenhorstii* Miq., Fl. Ind. Bat. Suppl.: 457. 1861.

Medium trees up to 20 m tall, twig solid with reddish gum. Young leaves glabrous. Leaves alternate, petiole 15-25 cm long, blade coriaceous, broadly ovate 15-30 by 10-20 cm, apex caudate, base peltate, margin slightly dentate, lower surface tomentose and scattered with yellowish glands. Stipules persistent, broadly ovate 1-3 by 0.5-2 cm, acute. Inflorescence dioecious, paniculate, 6-20 cm long, axillary and on twig behind leaf, male cluster 10-20 flowers subtended by very thick floral bract, deltoid to ovate-rhombate 3-5 mm, base claw, dentate, inner part tomentose, sepal 2-3, valvate, stamen 2-3, anther 4 cells. Female flower 1, floral bract similar in male, sepal 4-6, cup shaped, ovary 2 carpels with sticky

1. *Macaranga diepenhorstii* (Miq.) Muell. Arg. in DC., Prodr 15: 998. 1866; Pax & Hoffmann

glands, style and stigma 2, green, subulate, 0.5-1 mm long. Friut yellowish, 2-locule, peduncle 0.5-1.5 cm, oblate 0.5-0.7 by 1-1.3 cm, verucose, cover with yellowish sticky glands. Seed black 3-4 mm, aril white.

Thailand.- PENINSULAR: Nakhon Si Thammarat, Trang, Krabi, Pattani, Narathiwat

Distribution.- Malesia, Java, Sumatra, Malacca

Ecology.- Commom along streams, on roadside in evergreen forest. Altitude 50-300 m. Flowering June-August, fruiting June

Vernacular.- Ma hang nam (มะฮังน้ำ)

2. *Macaranga heynei* I. M. Johnston in Contrib. Gray Herb. n.s. 68: 90 (August, 1923); Whitmore, Tree Fl. Mal. 2: 112. 1973.-*M. rubiginosa* Ridley, Kew Bull. 1923: 367; Fl. Mal. Penins. 3: 303. 1924.-*M. montana* (Heyne) Pax & Hoffmann in Planzenreich iv: 321. 1914.-*M. javanica* sensu Hook.f., Fl. Br. Ind. 5: 451. 1887; Corner, Wayside tree Malaya: 266. 1940. no (Bl.) Muell. Arg.-*M. javanica* var. *montana* (Hyne) Muell. Arg. in DC., Prodr 15: 1005. 1866.

Medium tree 5-10 m tall, twig solid with reddish gum. Leaves alternate, petiole (2-) 5-12 cm long, blade coriaceous, ovate-oblong to ovate lanceolate, 5-16 by 2-8 cm, apex caudate or acuminate, base slightly peltate, margin sunentire, glaucous with white granular glands beneath. Stipule caduous, reddish-green, deltoid to ovate 1 by 0.5 cm, caudate, base oblique. Inflorescence dioecious, paniculate, axillary and on twig behind leaf 3-10 cm, male cluster 40-60 flowers subtended by floral bract, ovate rhombate 0.5-1.5 by 0.3-1 mm, caudate, deeply dentate with 1-2 glands, sepal 2-3, valvate, stamen 2-3, anther 4 cells. Female cluster 3-15 flower, floral bract similar to male, sepal 3-4, cup-shaped, ovary 2 car-

pels with sticky glands, style and stigma, reddish, 2-subulate, 1-1.5 mm long. Friut reddish-green, 2-locule, peduncle 2-8 mm, oblate 1-3.5 by 2.5-4 mm, smooth, cover with yellowish sticky glands. Seed black 1-3 mm, aril white.

Thailand.- PENINSULAR: Nakhon si Thammarat

Distribution.- : India, Malesia

Ecology.- In evergreen forest, on slope, roadside. Altitude 50-200 m. Flowering November fruiting December

Vernacular.- Ma hang lang fa (มะฮังหลังฟ้า)

3. *Macaranga hullettii* King ex. Hook.f., Fl. Br. Ind. 5: 452. 1887; Pax & Hoffmann in Planzenreich iv: 383. 1914; Whitmore, in Mal. Nat. J. 20: 94, 97. 1967; Tree Fl. Mal. 2: 107. 1973; Kew Bull. Addit. Ser. 4: 147. 1975; Kew Bull. 1981: 317.

Small to medium tree up to 15 m tall. Twig hollowed with ant inside. Young leaves reddish and tomentose. Leaves alternate, petiole 10-25 cm long, blade coriaceous, ovate 15-25 by 10-20 cm, apex caudate, base peltate, margin entire or with 3-5 lobed, subglabrous on both surface. Stipules recurved, caducous usually with 1-2 pair persistent at terminal, deltoid to cordate 0.8-1 cm, apex acute. Male inflorescence panicle, axillary 6-15 cm long, male cluster 50-80 flowers, floral bract ovate 1-1.5 by 0.5-1 cm, apex caudate, base claw, margin laciniate, sepal 3-4, valvate, tomentose, stamen 1, anther 3 celled. Female inflorescence compound dichacium 5-10 cm, female cluster 1-3 flowers, floral bract deltoid to oblate 0.5-1.5 by 0.4-0.6 cm, caudate, base claw, margin laciniate, sepal 4-6, cup-shaped, ovary 4-6 carpels with sticky gland, style and stigma yellowish-green 4-6, subulate 1-5 mm long. Fruit yellowish-green, 4-5 locules usually cluster at terminal, peduncle very short, oblate 0.5-1.5 by 0.9-1.5 cm,

with horns 0.2-0.8 cm long, covered with yellowish sticky gland, aril reddish.

Thailand .- PENINSULAR: Narathiwat

Distribution .- : Malesia to Sumatra

Ecology.- In evergreen forest, on roadside, along bystreams. Altitude 100-300 m. Flowering March-May, fruiting April-July

Vernacular.- Ma hang kliang (มะฮ้างเกลี้ยง)

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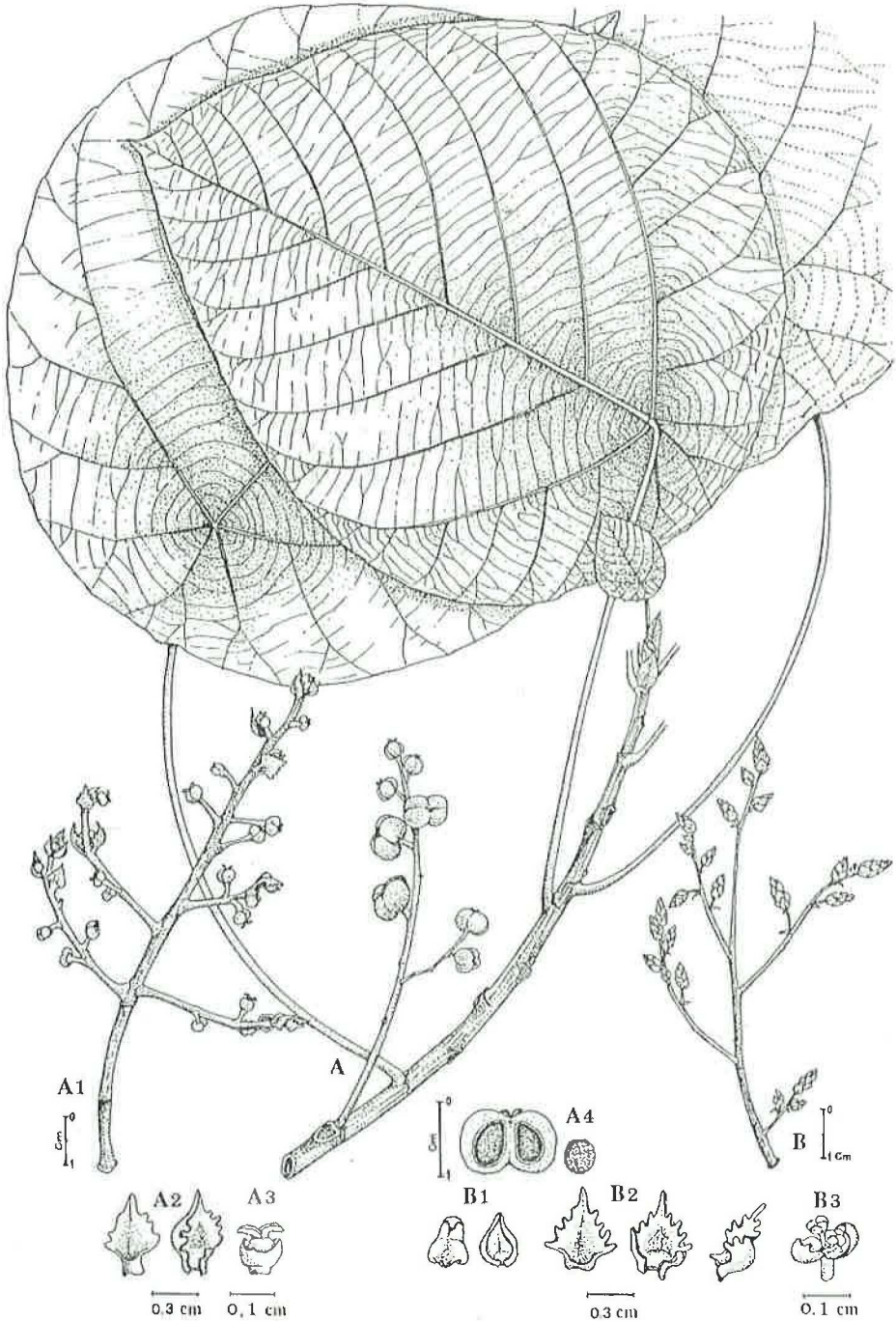


Figure 1 *M. diepenhorstii* (Miq.) Muell. Arg. A. fruiting branch; A1. female inflorescence; A2. floral bract; A3. female flower; A4. section of fruit and seed. B. male inflorescence; B1. rachis & rachilla bract; B2. floral bract; B3. male flower.

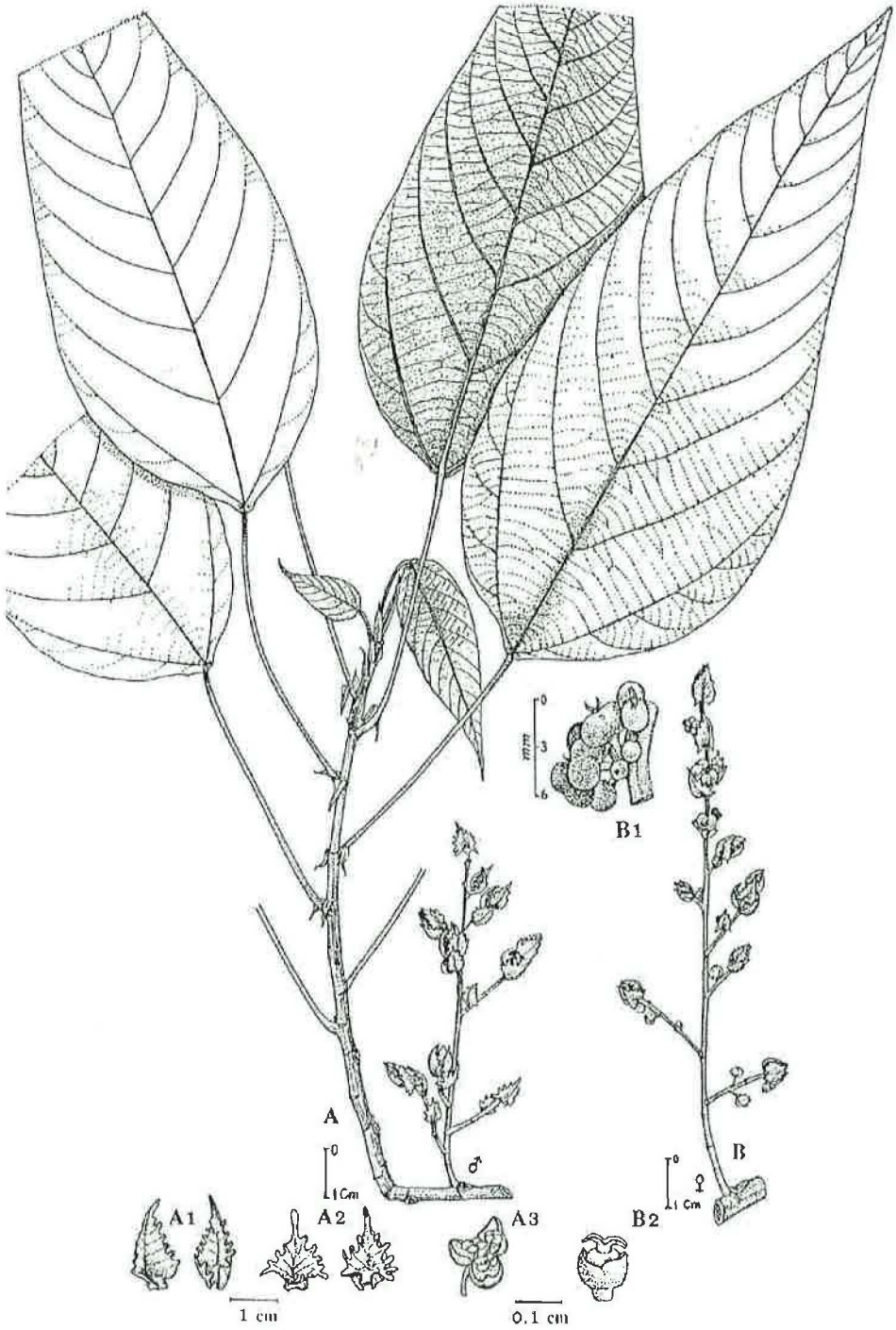


Figure 2 *M. heynei* I. M. Johnston A. male branch; A1. rachilla bract A2. floral bract; A3. male flower. B. female inflorescence; B1. fruit cluster; B2. female flower.

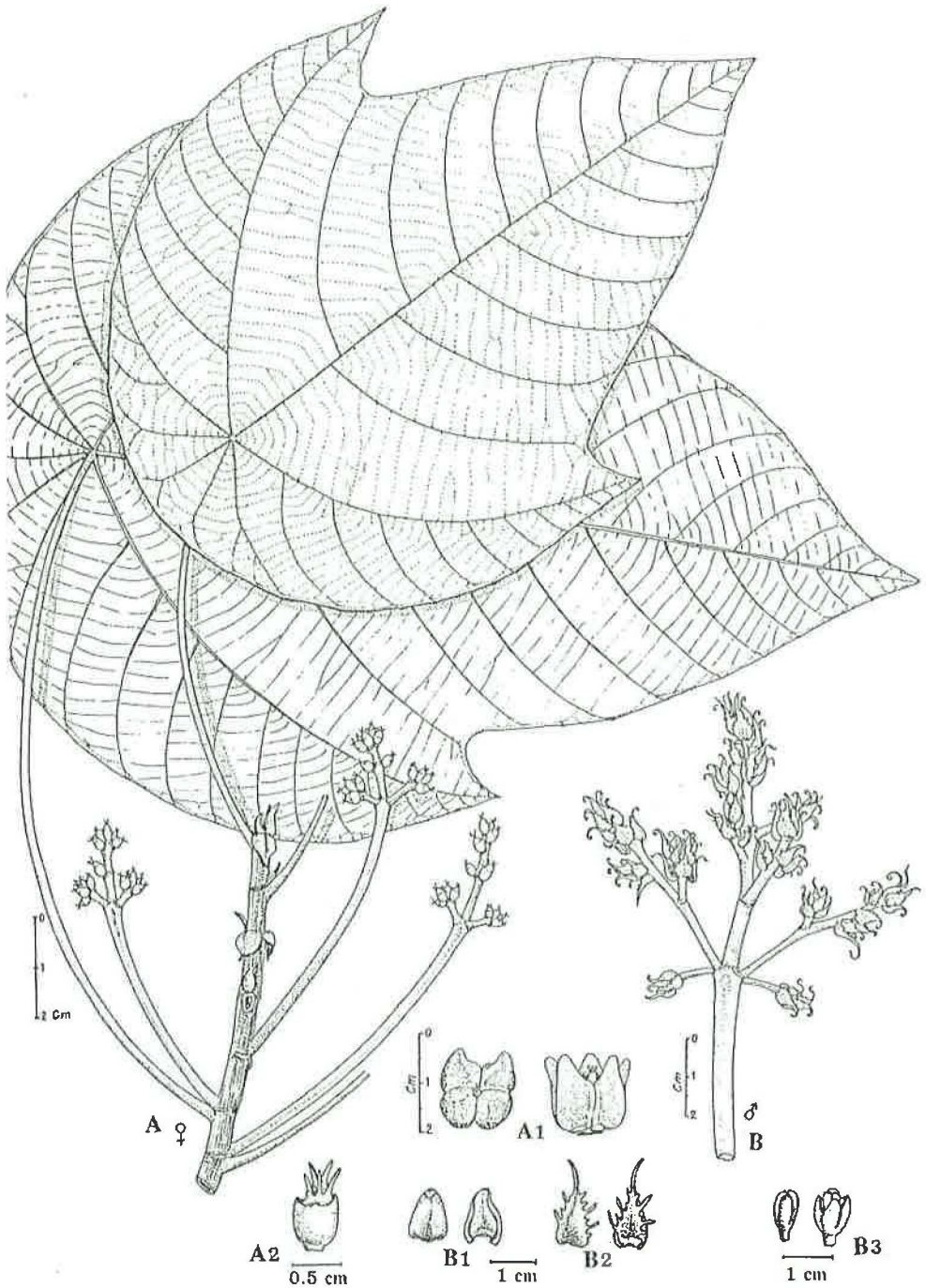


Figure 3 *M. hullettii* King ex. Hook.f. A. female branch; A1. fruits; A2. female flower. B. male inflorescence; B1. rachis & rachilla bract; B2. floral bract; B3. male flower.