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

**Atchara Teerawatananong**¹  **Sumon Masuthon**²  **Kongkanda Chayamarit**³  **Suwit Sangtongpround**⁴

¹ Thailand Natural History Museum, National Science Museum, Pathumthani 12120, Thailand.
² Department of Botany, Faculty of Science, Kasetsart University, Bangkok 10900, Thailand
³ Forest Herbarium, Royal Forest Department, Bangkok 10900, Thailand
⁴ Department of Forest Biology, Faculty of Forestry, Kasetsart University, Bangkok 10900, Thailand

**Abstract:** *M. diepenhorstii* *M. heynei* and *M. hultetii* 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 species list) (Whitmore, 2001). After that species of *Macaranga* that collected from Peninsular were the first


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
glands, style and stigma 2, green, subulate, 0.5-1 mm long. Fruit yellowish, 2-locule, peduncle 0.5-1.5 cm, oblate 0.5-0.7 by 1-1.3 cm, verrucose, 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.** - Common along streams, on roadside in evergreen forest. Altitude 50-300 m. Flowering June-August, fruiting June

**Vernacular.** - Ma hang nam (ม้าหางน้ำ)


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 sumentiae, glaucous with white granular glands beneath. Stipule caduus, 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-


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 lobes, 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 1.5 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 ovate 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 0.9-15 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 (ม้าหางคลาน)

**ACKNOWLEDGEMENTS**

This work was supported by the TRF/BiOTEC Special Program for Biodiversity Research and Training grant BRT 540055. We would like to acknowledge the head and staff of forestry guards of nation park, wildlife sanctuaries and arboretum for collecting permission and sincere help. We also indebted to the directors and curators of BK, BKF, CMU, KU and PSU for specimens rechecking.

**LITERATURE CITED**


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. hulletti King ex. Hook.f. A. female branch; A1. fruuits; A2. female flower. B. male inflorescence; B1. rachis & rachilla bract; B2. floral bract; B3. male flower.