KEW BULLETIN VOL. 64: 579–580 (2009)

Notes on *Mucuna* (Leguminosae: Phaseoleae) in Thailand

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Summary. The fruit of *Mucuna thailandica* is described for the first time. Information on flower colour and inflorescence architecture of *M. oligoplax* is amended. A white colour variant of *M. revoluta* is recorded.

Key Words. colour variant, fruit, inflorescence, Leguminosae, *Mucuna*, Thailand.

Work on *Mucuna* for the *Flora of Thailand* (Wilmot-Dear in prep.) has provided the opportunity to examine further duplicates of collections already seen and material collected since the revision of Indochinese and Thai species (Wilmot-Dear 1992), providing additional information on fruit, flower colour and differences between taxa.

Mucuna thailandica *Niyomdham & Wilmot-Dear in Wilmot-Dear* (1992: 211).

Eight new collections of *Mucuna thailandica* (previously known from only two, flowering specimens) provided three fruiting specimens and clarified flowering and vegetative differences between this species and *M. macrocarpa* Wall. *M. thailandica* is easily distinguished in flower but it is almost identical to *M. macrocarpa* in fruit and not always distinct vegetatively. Differences are summarised in key form below.

ADDITIONAL MATERIAL SEEN. THAILAND. N2, Chiang Mai: Doi Inthanon, *Konta, Phengklai et al.* 4238 (BKF), *Koyama et al.* 44203 (BKF), *Nagamasu* T.50092 (BKF), *Niyomdham et al.* 5266 (BKF) & 5287 (BKF), *Phengklai et al.* 11001 (BKF) &11026 (BKF), *Pooma* 1394 (BKF), *Smitinand* 90 – 93 (BKF).

CONSERVATION STATUS. Apparently rare, known so far only from the type locality, but its habitat (montane forest 1000 – 2400 m) is not currently endangered. Therefore Least Concern (LC).

Key to *Mucuna macrocarpa* and *M. thailandica*

1a. Wings and keel purple, standard pale or whitish; standard and wings with margin ciliate around apex; wings ≤ 6 cm long, keel ≤ 7 cm long. Leaflets often distinctly hairy even when mature, length/width ratio of terminal leaflet and ratio of abaxial to adaxial halves of lateral leaflets c. 2: 1; fruits ≤ 45 cm, mostly < 40 cm long, often markedly constricted between seeds ..... **M. macrocarpa**

1b. All petals greenish white without ciliate apex; wings 7 – 7.5 cm long, keel 7.5 – 8.5 cm long. Leaflets always soon glabrescent, terminal leaflet relatively wider, laterals less markedly asymmetrical, length/width ratio of terminal leaflet and ratio of abaxial to adaxial halves of laterals 1.5 – 1.75:1; fruit (but note that only 3 collections seen) longer, 45 – 60 cm, not or only slightly constricted between seeds ..... **M. thailandica**

Mucuna oligoplax *Niyomdham & Wilmot-Dear in Wilmot-Dear* (1993: 29).

Mucuna oligoplax was previously known only from the type collection (Song Khla, Nathawee, Khao Nan Kaung Nat. Park, *Larsen et al.* 42455). Flowers were said to be "white tinged purple or green", but a second collection and more detailed label data for the type clarifies this as standard pale greenish or brownish purple, wing purple with darker veins and keel "whitish purple". Pedicels are less uniform than previously stated, giving the inflorescence an indistinctly "pseudumbellate" appearance; in gross morphology it is thus intermediate between *M. gigantea* and *M. monosperma* which both also have oblong few-seeded fruits. Both species differ from *M. oligoplax* in their shorter flower-parts with flowering pedicels respectively < 2 cm and c. 1 cm long (rather than mostly 2.5 – 3.5 cm), wing-petals respectively ≤ 4 cm and ≤ 4.5 cm long (rather than c. 5 cm) and lowest calyx lobes 2 – 3 mm long (rather than 6 – 8 mm). *M. gigantea* resembles *M. oligoplax* in fruit shape and inflorescence architecture, differing in

Accepted for publication April 2009.

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a much more markedly "pseudumbellate" inflorescence with more slender main axis, no purple in the corolla and a complete absence of lamellae on the fruit. *M. monosperma* resembles *M. oligoplax* in having red brown pubescence on its stems and leaves, a short main inflorescence axis, purple flowers and lamellate fruit; it differs in uniformly dark purple petals, numerous and well-developed fruit-lamellae, and often smaller leaflets (the terminal one 7 – 14 rather than 12 – 14 cm long).

ADDITIONAL MATERIAL SEEN. THAILAND. PEN71, Trang: "Yan Dta Khao Dist.", 16 Dec. 1995, *Mauric* 41 (BKF).

CONSERVATION STATUS. Apparently rare, known so far only from two collections in Trang and Songkhla provinces in disturbed areas in evergreen rainforest. Vulnerable (VU); possibly endangered (EN).

Mucuna revoluta *Wilmot-Dear* (1992: 222).

Mucuna revoluta is vegetatively almost identical to three other lamellate-fruited species *M. stenoplax*, *M. hainanensis* and *M. interrupta*, but is easily distinguished from these (and most others) by its distinctive extremely short (0.1 – 0.2 mm rather than at least 0.4 mm long) velvety spreading (rather than ± adpressed) indumentum on inflorescence axis, pedicels and calyx. Its flowers are usually pinkish or brownish purple, but two white-flowered collections with this distinctive indumentum have been seen and are assumed to be merely a colour variant. This species is therefore not always distinguishable on flower colour alone from the (always white-flowered) sympatric species *M. interrupta*.

WHITE-FLOWERED COLLECTIONS. THAILAND. N2, Chiang Mai: *Maxwell* 89.532 (GH, L, MO); N3, Chiang Rai: *Smitinand* 1664 (BKF, L). Material of this latter collection from L (lacking the diagnostic pedicels and inflorescence axis) was previously seen by Wilmot-Dear (1992: 244) where the number was misprinted as 1669 and this collection was there referred to as being closest to *Mucuna hainanensis* but outside its distributional range.

CONSERVATION STATUS. Widely distributed in varied habitats through most of Thailand, Indochina and into China (SW Yunnan). Apparently rather uncommon, being known from rather few localities and only c. 30 collections. Data Deficient (DD).

References

Wilmot-Dear, C. M. (1992). A revision of *Mucuna* (Leguminosae: Phaseoleae) in Thailand, Indochina and the Malay Peninsula. *Kew Bull.* 47: 203 – 245.

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