

New Records of *Leguminosae* for Flora of Myanmar

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Summary: As a result of our expeditions to Myanmar, we report five new records of *Leguminosae* for Flora of Myanmar, viz., two native taxa, *Crotalaria medicaginea* Lam. var. *luxurians* (Benth.) Baker and *Stylosanthes fruticosa* (Retz.) Alston, and three naturalized taxa, *Aeschynomene americana* L., *Macroptilium atropurpureum* (Moc. & Sessé ex DC.) Urb. and *S. humilis* Kunth. *Macroptilium* (Benth.) Urb. and *Stylosanthes* Sw. are new generic records. They are reported with their morphological descriptions, ecological notes and photos.

Myanmar is the largest country in the Indochina Peninsula sharing borders with Bangladesh, India, China, Laos and Thailand. With its wealth of plant diversity, Myanmar is one of the most botanically fascinating countries in the world (Tanaka 2005).

The first legume specimen was collected from Myanmar in 1807 (K000760763) (Zhu and Zhang 2019). After that, many studies were published (Baker 1876, Kurz 1877, Kress et al. 2003, Kumar and Sane 2003). Though some unrecorded legumes have been reported recently (Iokawa et al. 2003, Chaudhary and Khan 2005, Nemoto et al. 2010, Nemoto and Murata 2013, Zhang and Zhu 2019), Myanmar's legume diversity still requires more intensive exploration.

During our expeditions to Myanmar in 2018 and 2019, we found four new record species,

Aeschynomene americana L., *Macroptilium atropurpureum* (Moc. & Sessé ex DC.) Urb., *Stylosanthes fruticosa* (Retz.) Alston and *S. humilis* Kunth; and one new record variety *Crotalaria medicaginea* Lam. var. *luxurians* (Benth.) Baker. Among these, *A. americana*, *M. atropurpureum* and *S. humilis* are naturalized species. Their descriptions are provided here with some photos.

Aeschynomene americana L., Sp. Pl. 2: 713 (1753); Kumar & Sane, Leg. S. Asia: 130 (2003); Zhu & al., Leg. China: 93 (2007); Sa & Salinas, Fl. China 10: 132 (2010). [Fig. 1A–E]
Hippocrepis mimulosa Noronha in Verh. Batav. Genootsch. Kunsten 5(4): 18 (1790), nom. inval.

Aeschynomene glandulosa Poir. ex Lam., Encycl. Suppl. 4(1): 76 (1816).

Aeschynomene guayaquilensis G. Don, Gen. Hist. 2: 284 (1832).

Aeschynomene mexicana Biroli ex Colla, Herb. Pedem. 2: 195 (1834).

Aeschynomene tricholoma Standl. & Steyerl. in Publ. Field Mus. Nat. Hist., Bot. Ser. 23(1): 10 (1943).

Aeschynomene americana var. *glandulosa* (Poir. ex Lam.) Rudd in Contr. U.S. Natl. Herb. 32(1): 26 (1955).

Herbs or subshrubs, 1–1.7 m tall. Stems erect, covered with tubercular-based hairs.

Ecological notes: Under secondary forests or along roadsides.

Distribution: China, Myanmar, Afghanistan, India, Nepal, Pakistan, Sri Lanka.

Specimens examined: **MYANMAR**. Magway Region, between Thee Kong and Laung She, 21°43'N, 94°8'42"E, alt. 408 m, 26 Nov. 2018, X. Y. Zhu & R. P. Zhang M10683 (PE, RAF, HITBC); near Saw Town, around Gnar Thin Village, 21°12'24"N, 94°9'4"E, alt. 430 m, 27 Nov. 2018, X. Y. Zhu & R. P. Zhang M10758 (PE).

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References

- Baker J. G. 1876. *Leguminosae*. In: Hooker J. D. (ed.), *Flora of British India* 2: 56–306. L. Reeve & Co, London.
- Chaudhary B. and Khan Z. H. 2005. *Astragalus khasianus* Benth. ex Bunge (*Leguminosae*), a new record for Myanmar. *J. Jpn. Bot.* 80(1): 52–56.
- Iokawa Y., Nemoto T. and Ohashi H. 2003. *Uraria poilanei* Dy Phon (*Leguminosae*), new to Myanmar. *J. Jpn. Bot.* 78(6): 355–356.
- Kress W. J., de Filippis R. A., Farr E. and Kyi D. Y. Y. 2003. A checklist of the trees, shrubs, herbs, and climbers of Myanmar. *Contributions from the United States National Herbarium* 45: 1–590.
- Kumar S. and Sane P. V. 2003. *Legumes of South Asia*. The Royal Botanic Gardens, Kew.
- Kurz S. 1877. *Leguminosae*. In: *Forest flora of British Burma (Ranunculaceae to Cornaceae)* 1: 330–431. Office of the Superintendent of Government Printing, Calcutta.
- Nemoto T., Iokawa Y. and Murata J. 2010. *Eleiotis sororia* (L.) DC. (*Leguminosae*), new to Myanmar. *J. Jpn. Bot.* 85(5): 303–312.
- Nemoto T. and Murata J. 2013. A new record of *Desmodiastrum parviflorum* (*Leguminosae*) from Myanmar. *J. Jpn. Bot.* 88: 21–29.
- Tanaka N. 2005. Plant inventory research: Contributions to the Flora of Myanmar. *Acta Phytotax. Geobot.* 56(1): 21–26.
- Zhang R. P. and Zhu X. Y. 2019. A new record of *Indigofera cordifolia* (*Leguminosae*) from Myanmar. *J. Jpn. Bot.* 94(3): 187–189.
- Zhu X. Y. and Zhang R. P. 2019. Hunting for legumes of Myanmar. *Man and the Biosphere* 117: 30–32 (in Chinese).
- R.-P. Zhang^{a,b}, S.-R. Zhang^{a,c}, J.-X. Wang^{a,b}, X.-Y. Zhu^{a,c}:
ミャンマー産マメ科植物の新記録
2018–2019年のミャンマー調査によって、5種のマメ科植物を新しく記録した。その内訳は、自生の *Crotalaria medicaginea* Lam. var. *luxurians* (Benth.) Baker と *Stylosanthes fruticosa* (Retz.) Alston, *S. humilis* Kunth, 帰化の *Aeschynomene americana* L. と *Macroptilium atropurpureum* (Moc. & Sessé ex DC.) Urb. である。このうち *Macroptilium* (Benth.) Urb. と *Stylosanthes* Sw. は属
- としてミャンマーから初めての報告となる。ここでは上記の5種について、ミャンマー産の標本に基づいて形態的特徴の記載を行い、生態的な特徴と写真を付した。
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