

THREE NEW SPECIES OF *Hoya* (ASCLEPIADACEAE) FROM MYANMAR*

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Abstract *Hoya dichasoniana*, *H. kingdonwardii*, and *H. myanmarica*, all endemic to Myanmar, are described as new. A key to the ten Myanmar species of *Hoya* is given.

Key words Asclepiadaceae; *Hoya*; *H. dichasoniana*; *H. kingdonwardii*; *H. myanmarica*

Hoya is a genus of about 80~100 species, of which seven grow in Myanmar (Hara, 1966; Hooker, 1883; Rolfe, 1920; Tsiang, 1936). The three new species described below were discovered during my recent visit to Harvard University to prepare treatment of the Asclepiadaceae for the *Flora of China*.

KEY TO SPECIES OF HOYA OF MYANMAR

1. Leaves linear *H. linearis* Wall. ex D. Don

1. Leaves of other shapes.

2. Leaves approximate, often overlapping.

3. Petiole pubescent; flower 2 cm in diam.; corolla lobes shorter than or as long as tube, pubescent inside; pedicels 2 cm long *H. bella* Hooker

3. Petiole glabrous; flowers 1~1.5 cm in diam.; corolla lobes longer than tube, glabrous inside; pedicels 1 cm long.

4. All leaves opposite, base and apex acute; calyx without 5 basal glands inside *H. kingdonwardii* P. T. Li

4. At least some leaves in whorls of 3 or 4, base broadly cuneate or rounded, apex obtuse; calyx with basal glands inside *H. dickasoniana* P. T. Li

2. Leaves well spaced.

5. Flowers 4 cm in diam.

6. Stem, leaves, calyx, and corolla pubescent; leaves rounded at apex; petiole 1.5~2.5 cm long; peduncles 2.5~8 cm long; corolla lobes erect. *H. obtusifolia* Wight

6. Stem, leaves, calyx, and corolla glabrous; leaves acuminate at apex; petiole 0.2~0.3 cm long; peduncles 1.2~1.7 cm long; corolla lobes reflexed *H. myanmarica* P. T. Li

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5. Flowers 0.5~1 cm in diam.

7. Peduncles almost as leaves *H. parviflora* Wight

7. Peduncles shorter than leaves.

8. Corolla glabrous inside; corona scales stellate—patent *H. burmanica* Rolfe

8. Corolla pubescent inside; corona scales erect or nearly so.

9. Leaves ovate or elliptic—lanceolate, apex acute, margin flat.....

..... *H. micrantha* J. D. Hooker

9. Leaves broadly obovate or elliptic, apex obtuse, margin recurved

..... *H. esculenta* (Rumph.) Tsiang

Hoya dickasoniana P. T. Li, sp. nov. TYPE: Myanmar, Mogok, 1 800 m, April 1934, *F. G. Dickason* 3 032 (holotype, A).

Frutex epiphyticus; ramulis pubescentibus; folia opposita etiam 3—vel 4—verticillata, elliptica vel ovata, 9~19 mm×5~10 mm, basi late cuneata vel rotundata, apice obtusa, glabra; petiolo 1 mm longo; umbellae terminales, 3—6—florae; pedicelli 1 cm longi, pubescenti; segmentis calycinis oblongis, 2~2.5 mm×1 mm, pubescentibus; corolla alba, ca. 1.7 cm diam., tubo 4 mm longo, extus glabro, intus basi pubescenti, lobis ovato—deltatis, ca. 5 mm×5 mm; corona 5—lobata, carnosa, ovato—oblonga, ca. 2.5 mm longa, marginibus revolutis; polliniis oblongis, ca. 1 mm longis, erectis, margine pellucido.

Epiphytic shrubs. Branches pubescent, internodes shorter than leaves. Leaves approximate, overlapping, opposite and in whorls of 3 or 4, elliptic or ovate, 9~19 mm×5~10 mm, fleshy, glabrous, base broadly cuneate to rounded, apex obtuse; mid and lateral veins obscure; petiole 1 mm long. Umbels terminal, 3—6—flowered; peduncles 5 mm long, pubescent; pedicels 1 cm long, pubescent. Calyx with 5 basal glands inside; lobes oblong, 2~2.5 mm×1 mm, pubescent outside, glabrous inside. Corolla white, 1.7 cm in diam., fleshy; tube 4 mm long, glabrous outside, pubescent basally inside; lobes ovate—deltate, ca. 5 mm×5 mm, glabrous. Corona scales 5, fleshy, ovate—oblong, ca. 2.5 mm long, margin revolute, outer angle obtuse, inner angle acuminate and as high as the apical membrane of anthers. Pollinia oblong, ca. 1 mm long, erect, outer margin pellucid. Ovaries glabrous; stigma apex rostrate. Follicles not seen.

Hoya dickasoniana, which is so far known only from the type collection, is most closely related to *H. imbricata* Callery ex A. DC. It is readily distinguished by its opposite and whorled, elliptic or ovate leaves and pubescent branches, peduncles, and pedicels.

Hoya kingdonwardii P. T. Li, sp. nov. TYPE: Myanmar, Triaingle, 1300 m, 14

July 1953, F. Kingdon Ward 21152 (holotype, A).

Frutex epiphyticus, ramis pubescentibus; folia opposita, succulenta, elliptica, 1~1.7 cm×0.5~1 cm, utrinque acuta, glabra; petiolo 1 mm longo; umbellae axillares, 2~2.5 cm longae; pedicellis 1 cm longis; calyce eglanduloso, segmentis oblongis ca. 3 mm×1 mm, pubescentibus; corolla ca. 1.4 cm diametro, tubo ca. 2 mm longo, intus basi pubescenti, lobis ovato-deltatis, ca. 5 mm×5 mm, glabris; corona segmentis oblongis, ca. 2 mm longis, stellato-patentibus, marginibus revolutis; polliniis oblongis ca. 0.8 mm longis, margine externo pellucido, caudiculis brevibus, retinaculo elliptico.

Epiphytic shrubs. Stem terete, branches pubescent. Leaves opposite, fleshy, elliptic, 1~1.7 cm×0.5~1 cm, glabrous, base and apex acute; mid and lateral veins obscure; petiole flattened, 1 mm long. Umbels axillary, 2~2.5 cm long, 3- or 4-flowered; peduncles 7~10 mm long, pubescent; pedicels ca. 1 cm long, pubescent. Calyx not glandular inside; lobes oblong, ca. 3 mm×1 mm, pubescent outside. Corolla ca. 1.4 cm in diam.; tube ca. 2 mm long, pubescent basally inside, lobes ovate-deltate, ca. 5 mm×5 mm, glabrous; corona scales 5, fleshy, oblong, ca. 2 mm long, stellate-patent, margin revolute, outer angle obtuse, inner angle acuminate and as high as apical membrane of anthers. Pollinia oblong, ca. 0.8 mm long, outer margin pellucid, caudicle short, retinaculum small. Ovaries ovate, glabrous. Follicles not seen.

Hoya Kingdonwardii differs from the related *H. bella* Hooker in having smaller corolla (1.4 cm in diam.) with a tube shorter than lobes and pubescent basally inside.

Hoya myanmarica P. T. Li, sp. nov. TYPE: Myanmar, Triangle, 1500 m, 21 July 1953, F. Kingdon Ward 21190 (holotype, A).

Frutex epiphyticus; folia opposita, succulenta, oblonga, 4.5~16 cm×1~3.3 cm, basi cuneata vel rotundata, apice acuminata; petiolo 2~3 mm longo, apice 2-vel 3-glandulifero; umbellae terminales, 6~8 cm longae; pedicellis 2~4.5 cm longis; segmentis calycinis lanceolatis vel lineari-lanceolatis, 5~7 mm×1~1.5 mm; corolla membranacea, ca. 4 cm diam., tubo 6~7 mm longo, lobis lanceolatis 2~2.3 cm×0.7~0.9 cm, reflexis; corona segmentis carnosis, erectis, 6 mm longis, marginibus revolutis; polliniis solitariis, erectis, oblongis, ca. 1 mm longis, caudiculis brevibus, retinaculo elliptico.

Epiphytic glabrous shrubs. Stem terete. Leaves opposite, fleshy, oblong, 4.5~16 cm×1~3.3 cm, base cuneate or rounded, apex acuminate; mid and lateral veins slightly elevated abaxially, lateral veins 5 or 6 pairs, anastomosing before margin; petiole 2~3 mm long, apex with 2 or 3 glands. Cymes terminal, 6~8 cm long, 3- or

4-flowered; peduncles 1.2 ~ 1.7 cm long; pedicels 2 ~ 4.5 cm long. Calyx lobes lanceolate or linear-lanceolate, 5 ~ 7 mm × 1 ~ 1.5 mm. Corolla membranous, about 4 cm in diam; distinctly veined; tube 6 ~ 7 mm long; lobes lanceolate, 2 ~ 2.3 cm × 0.7 ~ 0.9 cm, reflexed; corona scales 5, fleshy, erect, ca. 6 mm long, margin revolute, outer angle truncate, inner angle acute and as high as apical membrane of anthers. Pollinia oblong, ca. 1 mm long, base attenuate, margin pellucid, caudicle short, retinaculum elliptic. Ovaries oblong lanceolate, glabrous; stigma apex conical. Follicles not seen.

Hoya myanmarica is easily distinguished by its oblong, acuminate leaves and membranous, distinctly veined corolla. In habit it is very similar to *H. obtusifolia* Wight, from which it differs by being glabrous and by its petioles 2 ~ 3 mm long, peduncles 1.2 ~ 1.7 cm long, and reflexed corolla.

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缅甸萝藦科球兰属植物三新种

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摘要 本文进行了缅甸萝藦科球兰属植物分类学研究,发现3个新种,它们是:轮对叶球兰、无腺球兰、缅甸球兰。现连同缅甸球兰属10个种检索给予报道。

关键词 萝藦科; 球兰属; 轮对叶球兰; 无腺球兰; 缅甸球兰

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