

SHORT COMMUNICATION

Miscellaneous notes on the genus *Paris*

The senior author has published extensively on the genus *Paris* in Chinese (Li Heng, 1984, 1986; Li Heng et al., 1988). The present notes form a precursor to a longer paper in which her views will be made available in English, based on extensive field knowledge of the genus in China, now extended to a study of the large herbarium and living collections in Edinburgh.

Li Heng (1984) has given (in Chinese) the reasons for maintaining *Paris* as a genus in the broad sense, rather than splitting it into the genera *Paris*, *Kinugasa* and *Daiswa* as recommended by Takhtajan (1983). Briefly, the correlation of Takhtajan's characters of rhizome type (thick vs. slender), fruit type (dehiscent vs. indehiscent) and seed coat (sarcotestal or not) breaks down in some Chinese species; moreover the nature of the seed coat and/or its covering is more variable than he suggests. Takhtajan characterized *Daiswa* as having thick rhizomes, loculicidally dehiscent capsules and seed coat a juicy, scarlet sarcotesta. However in *D. tibetica* (Franch.) Takht., which has a thick rhizome and dehiscent capsule, the black seeds are half covered by a fleshy red aril developed from the funicle. In *D. forrestii* Takht. the rhizome is thick, but the fruit is an indehiscent berry (as in *Paris* s.str.) and the seeds are brown, with a small, lateral, spongy aril developed from the funicle. It thus seems best to maintain the genus *Paris* in the traditional sense and to recognize *Daiswa* at subgeneric rank:

Subgenus *Daiswa* (Raf.) H. Li in Act. Bot. Yunnan. 6: 356 (1984).

This necessitates the following new combination:

***Paris birmanica* (Takht.) H. Li & Noltie, comb. nov.**

Syn.: *Daiswa birmanica* Takht. in Brittonia 35: 259; fig. 2 (1983). Type: Burma, Maymyo [wrongly cited as Maymego] Plateau, 3500ft, 22 vi 1913, *Lace* 6233 [wrongly cited as 6223] (holo. E, iso. K); the photograph is of the Kew specimen.

The distinctive features of this species are:

Leaves 6–7, membranous, oblong to elliptic, 18–20 × 6–10cm, petiole 4–6cm. *Petals* drying reddish brown, 7.5–11cm, distinctly clawed, the upper half narrowly elliptic to lanceolate, 3–4mm wide, lower half filiform, less than 0.5mm wide. *Stamens* 15 or 18, 3 × as many as sepals (petals), filaments short (0.6–1cm), free portion of connective short (2–3mm).

Other specimens seen. BURMA. S Shan States: Keng Tung, 5500ft, iv 1909, *MacGregor* 704 (E); Maymyo, 3400ft, 6 viii 1912, *Lace* 5872 (E, K); Pagau-jwa-eo, Maymyo Plateau, 3500ft, 10 vi 1925, *Forest Botanist's Collection* 1637 (K); Upper Burma [locality illegible], 4000ft, v 1888, *Collett* 807 (K).

Distribution. Endemic to Burma (Myanmar).

In Li Heng et al.'s most recent phylogenetic arrangement of species (1988) this species would follow *P. cronquistii*.

Notes on other taxa:

***P. polyphylla* Sm. var. *yunnanensis* (Franch.) Hand.-Mazz. f. *velutina* H. Li & Noltie, forma nov.**

Proxima *P. polyphyllae* Sm. var. *yunnanensis* (Franch.) Hand.-Mazz., a qua differt foliis subtus dense velutinus et staminibus biseriatis.

Type: Yunnan: Diqing Prefecture, between Xia Geza and Wengshui, 28°07'40"N, 99°45'16"E, 3120m, 26 v 1993, *KEG* (Alden et al.) 304 (holo. E).

Stem 29cm, purple below, green above. *Leaves* 6–7, oblong-elliptic, cuspidate, base truncate to very slightly cordate, dark green above, densely velvety-hairy beneath, 6.5–8.5 × 3–3.7cm; petioles 1.8cm, purple, pubescent. *Pedicel* 7–8cm, green; sepals (5–)7, 4.3 × 1–1.4cm, acuminate, lime-green. *Petals* (5–)7, narrowly oblong, narrowed to base and to subacute apex, 5.5–6 × 0.4–0.5cm, yellow-green. *Stamens* (10–)14 (2 × number of petals), filaments 5mm, purple; anthers (8–)12mm, orange, free portion of connective short (c.0.5mm), pollen yellow-green. *Ovary* dark blackish purple, stigmas (5–)7.

Other specimen seen. CHINA. Sichuan, stream running into Jinlong River, c.15km S of Jinlong, 2800m, 26 ix 1991, *SICH* [Simmons, Erskine, Howick & McNamara] 638 (K).

P. polyphylla var. *pubescens* Hand.-Mazz., which is similar in its pubescence, differs mainly in its filiform petals.

The type of this extremely attractive and garden-worthy form grew among shrubs on heavily grazed, grassy slopes with *Ligularia langkongensis* (Franch.) Hand.-Mazz.

Lectotypification of *Paris yunnanensis*:

***P. yunnanensis* Franch.** in Mém. Soc. Philom. Centen. (Paris) 24: 290 (1888).
Lectotype (selected here): *Delavay* 3020B, au col de [illegible], le 2 juin 1887 (P).

The type cover has two sheets, recently numbered 3020 A and B. Unfortunately the field tickets seem to have become switched, since the one bearing the original number 3020 and the locality mentioned in the protologue is not the specimen described; rather it is the one mentioned in the note following the protologue as being atypical in having the petals modified into leaves. However, it is this specimen that has been given the number 3020A and has had a TYPE sticker attached. We therefore here designate the other specimen (bearing the same collecting date), *Delavay* 3020B, as the lectotype, as it closely fits the description, despite the fact that it appears to have had the wrong field-ticket attached.

The type is a very distinct plant in its large size, wide leaves, wide petals and long anthers (locules c.1.5cm), but in view of the extreme plasticity and polymorphism found in the genus, Handel-Mazzetti was certainly correct in reducing it to a variety

of *P. polyphylla*. While some Yunnan specimens approach var. *yunnanensis*, many from Yunnan are best referred to var. *polyphylla*.

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