# *Dolichorhynchus* is United with *Douepea* (Brassicaceae)

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ABSTRACT. The monotypic *Dolichorhynchus* is reduced to the synonymy of *Douepea*. The new combination *Douepea arabica* is proposed.

*Key words:* Brassicaceae, *Dolichorhynchus*, *Douepea*.

During work on the Brassicaceae (Cruciferae) account for Kubitzki's *Families and Genera of Vascular Plants*, it became evident that the generic limits of several closely related pairs of genera are based on fine differences in character states of little taxonomic value. A case in point are the monotypic genera *Dolichorhynchus* Hedge & Kit Tan (Saudi Arabia) and *Douepea* Cambessèdes (Pakistan). Hedge and Tan provided a detailed description of *Dolichorhynchus* and indicated (1987: 200) that "Despite the very great geographical separation of *Douepea* and the new genus . . ., the two genera are quite similar in facies and share several morphological similarities." In fact, our critical comparison of *Dolichorhynchus arabicus* Hedge & Kit Tan and *Douepea tortuosa* Cambessèdes shows that the two species are basically indistinguishable in being suffrutescent, glabrous, and glaucous perennials with oblong-elliptic, short-petiolate, lower cauline leaves, semi-amplexicaul upper leaves, subequal, erect, oblong to oblong-lanceolate sepals, oblong to lingulate petals undifferentiated into blade and claw, well-developed median nectar glands, narrowly oblong, basally sagittate, apiculate anthers, 20- to 30-ovulate ovaries, strongly 2-lobed stigmas with distinctly decurrent lobes, linear-cylindric siliques, rigid valves, ellipsoid seeds ca. 2 mm long, and conduplicate cotyledons.

The only significant differences that we can detect between these two species are the presence in *Dolichorhynchus arabicus* of white flowers and well-developed styles 2–2.5 cm long. By contrast, *Douepea tortuosa* has pink to violet petals and short styles ca. 0.5 cm long. Hedge and Tan (1987) indicated that the seeds of *Dolichorhynchus arabicus* are more than 2 mm long and those of *Douepea tortuosa* are less than 1 mm long. However, all the material of *Douepea tortuosa* that we and Jafri (1973) examined have seeds ca. 2 mm long. In our opinion, the above differences between the two species do not justify their placement in independent genera, and the similarities between them clearly support their treatment in the same genus. In fact, genera such as *Brassica* L. (ca. 40 spp.), *Sinapis* L. (7 spp.), *Raphanus* L. (3 spp.), *Vella* L. (7 spp.), and *Coincya* Rouy (6 spp.), all of which are members of the tribe Brassiceae, show habit, floral, fruit, and seed diversity far greater than those separating *Dolichorhynchus* and *Douepea*. The two genera are united formally herein to make the new combination available for the forthcoming volume of the *Families and Genera of Vascular Plants*.

Hooker and Thomson (1861) reduced *Douepea* (as *Douepia*) to the synonymy of *Moricandia* DC., but it is clear that the two genera are quite distinct. *Douepea* has well-developed median nectar glands, cuneate upper cauline leaves neither amplexicaul nor sagittate at base, non-connivent sepals with the lateral pair not saccate, and 20 to 40 ovules per ovary. In contrast, *Moricandia* lacks the median nectar glands and has upper cauline leaves with amplexicaul to sagittate bases, connivent sepals with the lateral pair saccate, and (30 to) 80 to 200 ovules per ovary.

**Douepea** Cambessèdes, in Jacquemont, Voy. Inde 4: 18. 1844. TYPE: *Douepea tortuosa* Cambessèdes, in Jacquemont, Voy. Inde 4: 18. 1844.

*Dolichorhynchus* Hedge & Kit Tan, Pl. Syst. Evol. 156: 197. 1987. Syn. nov. TYPE: *Dolichorhynchus arabicus* Hedge & Kit Tan.

**Douepea arabica** (Hedge & Kit Tan) O. Appel & Al-Shehbaz, comb. nov. Basionym: *Dolichorhynchus arabicus* Hedge & Kit Tan, Pl. Syst. Evol. 156: 198. 1987. TYPE: Saudi Arabia. North Hijaz, Wadi Qaraqir, 50 km E of Duba, on Tabuk road (at turn off 10 km W of Duba), sandstone ledge in narrow ravine, growing with *Nerium oleander*, 600 m, 14 Mar. 1986, *I. S. Collenette 5478* (holotype, E; isotype, K).

Literature Cited

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