

THREE NEW DELPHINIUMS FROM TURKEY

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Three more new species of *Delphinium* (Ranunculaceae) belonging to sect. *Delphinastrum* DC., are described and illustrated from S and NE Anatolia: *D. petrodavisanum*, *D. kitianum* and *D. iris*.

Whilst working through some recently collected material of *Delphinium* from Turkey, three new species were discovered. They have not been included in the Supplement volume of the *Flora of Turkey and the East Aegean Islands* which was published in September 1988.

***Delphinium petrodavisanum* Ilarslan & Kit Tan, sp. nov.** (sect. *Delphinastrum* DC.).
Fig. 1Aa–f.

Affinis *D. cilicico* P.H. Davis & Kit Tan ex Tauro Cilicico, sed statura altiore, racema strigosa multiflora, calcari praerupte ascendenti et petalis inferioribus minoribus calcaribus brevibus differt.

Perennial. *Stem* erect, 65–100cm, branched, zigzag and crispate-pubescent to glandular-hairy below, densely crispate-pubescent above. *Lower leaves* with 4–9.5cm long, non-vaginate petioles; lamina ovate-lanceolate in outline, adpressed-pilose, deeply dissected into lanceolate, acute segments 14–15 × 1–2mm. *Racemes* branched, 25–40cm, many-flowered, pubescent. *Lower bracts* linear-lanceolate, 2–4cm, lacinate; *upper bracts* entire, linear-lanceolate, shorter than pedicels. *Pedicels* 6–7 (–15)mm. *Sepals* deep to somewhat pale blue, pubescent, posterior spurred; spur 10–11mm, steeply ascending, obtusely saccate at apex; lateral sepals oblong-obovate, 6–7 × 3–4mm; lower sepals oblong-ovate, 4–6 × 2–2.5mm. *Upper petals* unclawed, with 9.5–10mm long nectariferous spur; blade c. 6mm, bifid at apex. *Lower petals* 5.5–8mm including 2.5–3.7mm claw; limb ovate, 3–5.3mm, bifid to c. middle, white-pilose. *Filaments* sparse-pilose. *Follicles* 3, glabrous; styles c. 5mm. *Fl.* July.

Type: Turkey. C4 Konya: 5km from Ermenek to Hadim, rocky limestone slope, flowers deep blue, 1300–1400m, 11 vii 1985, *R. Ilarslan* 1642 (holo. ANK; iso. E, RSA).

TURKEY. S. Anatolia (Cilician Taurus). C4 Konya: 20km from Hadim to Konya, near village of Eyiste, granitic slope by stream, 1200–1300m, 11 vii 1985, *R. Ilarslan* 1640 (ANK, E).

Endemic. Affinities with *D. cilicicum* from the Cilician Taurus, differing by its taller habit, dense-flowered raceme, steeply ascending spur and smaller, short-clawed lower petals.

It is a pleasure to name another Turkish *Delphinium* in honour of Peter H. Davis,

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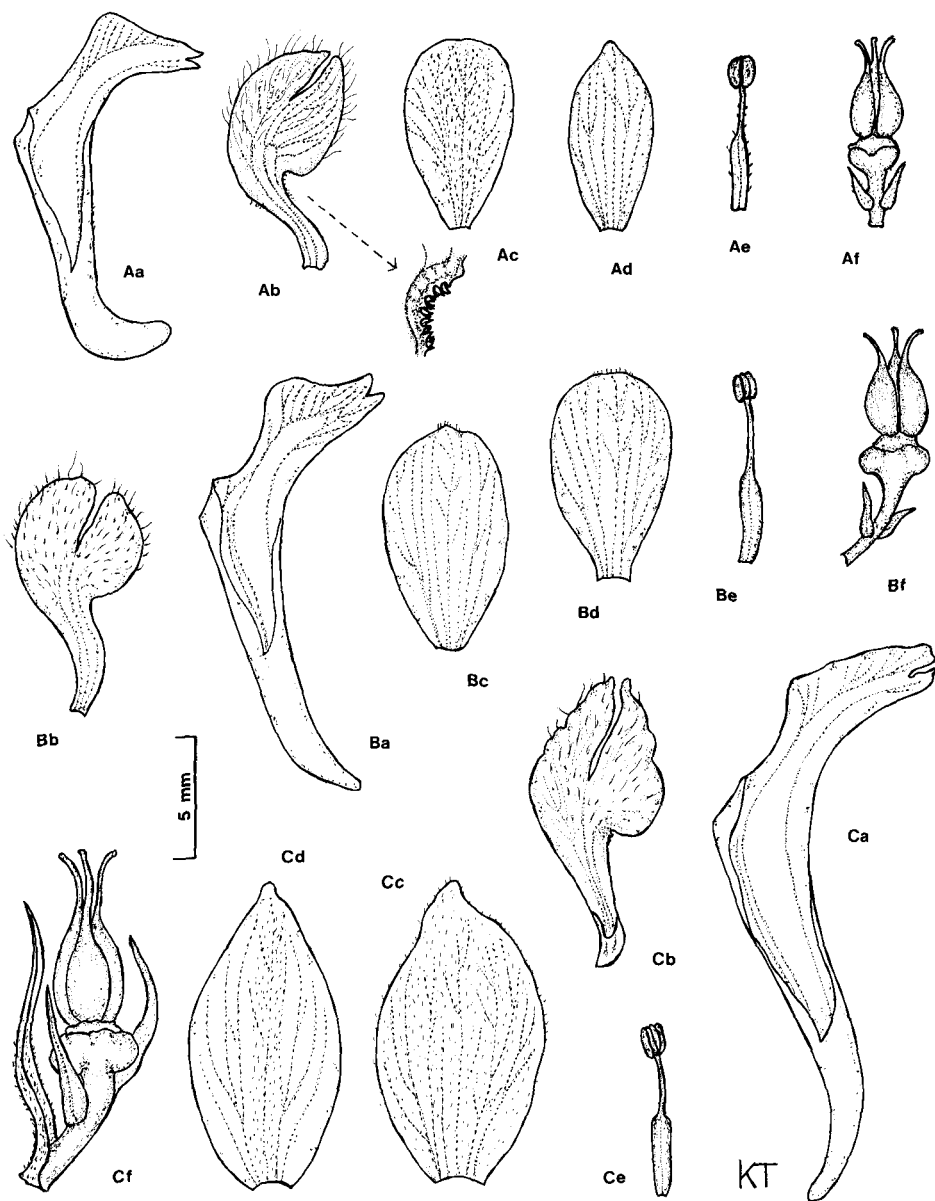


FIG. 1. Aa-f, *Delphinium petrodavisanum*; Ba-f, *D. kitianum*; Ca-f, *D. iris*. a, upper petal; b, lower petal; c, lateral sepal; d, lower sepal; e, stamen; f, immature follicles. All drawn to scale shown.

botanist and plant-collector extraordinary, in further recognition of the contribution he has made to an understanding of this genus in Turkey.

***Delphinium kitianum* Ilarslan, sp. nov.** (sect. *Delphinastrum* DC.). **Fig. 1Ba–f.**

Affinis *D. nydeggeri* Hub.-Mor. a quo statura multo altiore, inflorescentia longiore densioreque, floribus intense indigotico-purpureis calcari ascendenti, sepals latioribus extus glabris, limbo petalorum inferiorum in unguem gradatim attenuato (haud abrupte angustato) et obtuse rotundato-lobato differt.

Herbaceous perennial with irregularly tuberous roots. *Stem* single, erect, 70–150cm, branched, sulcate and crispate-pubescent to subglabrous below, less angled and glabrous above. *Lower leaves* long-petiolate; petioles 10–22cm, vaginate; lamina suborbicular in outline, glabrous, palmately dissected into linear to oblong-lanceolate or elliptic segments 2–4(–5)mm wide. *Median and upper cauline leaves* with 6–7cm long petioles, lacinate at apex, laciniae c. 15 × 1mm. *Flowers* deep indigo-purple, in a ± lax, 30–47cm long, sparingly and divaricately branched raceme. *Lower bracts* 2–2.5cm, linear to lanceolate; *upper bracts* entire, linear- to triangular-lanceolate, 3–4mm, much shorter than pedicels. *Bracteoles* small, situated in upper third of pedicel at anthesis. *Pedicels* 10–12mm, elongating to 20mm in fruit, ascending, strict. *Sepals* glabrous; spur cylindrical, 12–14mm, obliquely to steeply ascending, obtuse-saccate at apex; lateral and lower sepals oblong-obovate, 6–8 × 3–4mm, obtuse. *Upper petals* glabrous, 19–20mm including 11–12mm long spur; blade oblong, 8–9mm, bifid at apex. *Lower petals* spathulate, 8–9.5mm including 3.5–4mm claw; limb orbicular-ovate, 4.5–5.5mm, lobed to c. middle, bearded. *Filaments* glabrous, with dilated and flattened bases; anthers yellow. *Follicles* 3, oblong, c. 11 × 3mm at maturity, glabrous. *Seeds* triquetrous, c. 1.5mm. *Fl.* July–August.

Type: Turkey. C4 Konya: Ermenek, Kazanci, near village of Cevizli, on NW-facing igneous and calcareous slopes, flowers deep indigo-purple, 1300m, 10 vii 1985, *R. Ilarslan* 1639 (holo. ANK; iso. E, RSA).

A distinctive new species endemic to the Cilician Taurus. Affinities with *D. nydeggeri* Hub.-Mor. also described from the Cilician Taurus; the latter is a much smaller plant with a shorter, fewer-flowered inflorescence, horizontal spur and adpressed-pubescent sepals. *D. carduchorum* Chowdhuri & Davis from SE Anatolia differs from *D. kitianum* in having stems viscid-pubescent above, bright blue or violet blue flowers with ± horizontal spur, adpressed-pubescent sepals and hirsute-pubescent follicles.

Named in honour of Dr Kit Tan, in grateful appreciation of her kind help during my sabbatical visit to the Royal Botanic Garden, Edinburgh—*R. Ilarslan*.

***Delphinium iris* Ilarslan & Kit Tan, sp. nov.** (sect. *Delphinastrum* DC.). **Fig. 1Ca–f.**

D. carduchoro Chowdhuri & Davis affinis, a quo indumento caulino adpresso, haud crispato, foliis basalibus pubescentibus petiolis brevioribus, inflorescentia densiore multifloraque, folliculis glabris distinguitur.

Perennial 60–80cm tall. *Stem* erect, striate, viscid-pubescent to subglabrous below, angled and adpressed-pubescent above. *Lower leaves* with 2.5–3cm long, vaginate petioles; lamina ovate-lanceolate in outline, palmatisect, segments linear, 0.5–1mm

wide, adpressed-pubescent. *Upper cauline leaves* short-petiolate. *Raceme* simple, 30–35cm, many-flowered, adpressed-pubescent. *Lower bracts* 30–35mm, lacinate; *upper bracts* 10–12mm, linear, entire. *Pedicels* up to 15mm, strict. *Sepals* deep blue, spur 12–13mm, ascending; lateral sepals broadly ovate, 10–11 × 4–6.5mm; lower sepals oblong-ovate, 9–11 × 3.5–6mm, pubescent. *Upper petals* with 14–15mm spur; blade 8.5–9mm, bifid at apex. *Limb of lower petals* 5.5–6 × 4–5.5mm, acutely lobed to c. middle, bearded. *Filaments* glabrous. *Follicles* 3, oblong-ovoid, c. 11 × 3mm, glabrous. *Fl.* July.

Type: Turkey. A9 Kars: 6km from Ardahan to Kars, 1700m, 28 vii 1979, *M. Nydegger* 14648 (holo. E, iso. Hb. Nydegger, Basel).

Endemic to NE Anatolia. In Davis's key to the Turkish species of *Delphinium* (*Flora of Turkey and the East Aegean Islands* 1: 109, 1965), *D. iris* runs down closest to *D. carduduorum* from SE Anatolia. However, it can be distinguished by its adpressed, non-crispate stem indumentum, pubescent basal leaves with shorter petioles, denser, many-flowered inflorescence and glabrous (not hirsute-pubescent) follicles.

D. iris is named for Iris, daughter of R. Ilarslan.

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