Gladiolus attilae (Iridaceae), a new species from East Anatolia, Turkey

Kit Tan¹, Brian Mathew² & Asuman Baytop³

¹ Institute of Biology, University of Copenhagen, Øster Farimagsgade 2D, DK-1353 Copenhagen K, Denmark, e-mail: kitt@bi.ku.dk (author for correspondence)

Received: January 19, 2006 > Accepted: January 25, 2006

Abstract.

Gladiolus attilae is described as a species new to science based on material cultivated at a private garden in Istanbul, originating from bulbs collected in East Anatolia. The species is illustrated by three photographs and a line drawing.

Key words: *Gladiolus (Iridaceae)*, new species, Turkey

Gladiolus attilae Kit Tan, B. Mathew & A. Baytop, sp. nov. (Figs. 1-4).

Gladiolus attilae sp. nov. ex affinitate *G. atroviolacei* differt ab eo inflorescentiā (spicā) modice laxā, perianthio purpureo (magenta, nec violaceo), seminibus appendice vexilluliforme (ergo partialiter alatis).

With affinities to *G. atroviolaceus* Boiss., differing in its moderately lax (not dense) spike, flower colour (pinkish-purple not deep violet-purple) and seeds with flaplike appendage, thus partially winged (not unwinged).

Glabrous perennial. *Corm* symmetrical, subglobose, enclosed by several layers of brownish, finely reticulate fibrous tunics, propagating vegetatively by numerous small corms. *Stem* 50–65 cm as measured from ground level. *Lowest leaf* reduced to a ± subterranean sheathing cataphyll 6–8 cm long; *cauline leaves* 4 (-5), smooth, greyish- to glaucous-green, synanthous, ensiform, sheathing and equitant, venation parallel, ± equidistant; lamina 5–8 (-10) mm broad. *Spike* moderately lax, 7–11-flowered, distichous. *Flowers* each subtended by a 2-valved spathe; valves glaucous-green to greyish-purple, unequal, upper 1.5–2 cm, lower 2–4 cm. *Perianth* zygomorphic, pinkish-purple (magentapink); hypanthial tube infundibular, curved, posteri-

or 7-10 mm, anterior 9-12 mm; perianth segments 6 (2 median and 4 lateral), unequal; upper median segment slightly flared, paler pink or cream-coloured distally, 22-25 mm with narrowly obovate, apically rounded, 9-10 mm broad limb and 9-10 mm long claw; lower median 17-20 mm with 4-5 mm broad limb and 8–10 mm claw; upper lateral segments shorter and narrower than upper median, 20-22 mm with 6-7 mm broad limb and c. 10 mm claw; lower lateral segments spathulate, 17-20 mm with c. 4 mm broad limb and c. 10 mm long claw. Filaments 10-12 mm, adnate to perianth tube, filiform, yellowish-pink; anthers shorter than filaments, 8-10 mm, included, basifixed, blackish-purple. Style filiform, included, cleft at apex into $3 \pm$ equal, dilated-spathulate branches with decurrent stigmatic surfaces. Ovary 3-locular. Capsule loculicidal, depressed-ellipsoid, 10-13×7-10 mm, several-seeded. Seeds ellipsoid-triquetrous, 3.5–4×c. 2 mm, reddish-brown, with 1–1.5 mm flap-like appendage. Flowering throughout June; fruiting till late July.

Type: Turkey. Flowering material cultivated in the garden of Mr Ahmet Attila at Samandıra in A2(A) Istanbul, originating from corms brought from B7 Elaziğ by his son-in-law, pressed on 22 June 1991, *A. Baytop* ISTE 62995 (**Holotype** ISTE; **Isotype** K).

²c/o Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB, U.K.

³ c/o Faculty of Pharmacy, Istanbul University, Beyazit, Istanbul 34452, Turkey





Figs. 1-3. *Gladiolus attilae* (photographed by T. Baytop at Samandıra, Istanbul, June 1997).



Rather precise information on the original locality exists: Turkish grid-square B7, vilayet (province) of Elaziğ: 10 km before Kovancilar on the Elaziğ-Tunceli road, 500 m from Keban Baraji (the Keban Dam), c. 1000 m, on damp, sandy and gravelly ground, flowering June 1988.

Additional cultivated material examined (paratype): *loc. ibid.*, specimens in fruit, pressed on 3 July 1991, *A. Baytop* ISTE 63009 (ISTE; isoparatype K).

This attractive gladiolus is distinct by a combination of characters not shared by other species: parallel leaf venation, narrow and long-clawed perianth segments (3 upper perianth segments longer than the lower with claw at least half the total length), anthers shorter than the filaments, partially winged seeds and perianth colour. It is allied to the *G. atroviolaceus* group but differs in the characters stated. For location of perianth segments, see Fig. 4. The perianth is de-

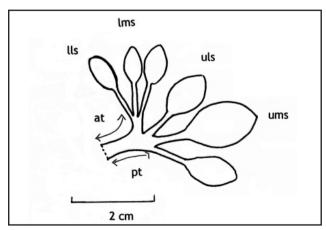


Fig. 4. *Gladiolus attilae* perianth dissected: **ums** – upper median segment; **uls** – upper lateral segment; **lms** – lower median segment; **lls** – lower lateral segment; **at** – anterior perianth tube; **pt** – posterior perianth tube. Drawn to 2 cm scale.

tached as a unit, and the tube slit lengthwise between the upper and lower lateral segments so that the 3 upper and 3 lower segments are separately pressed flat.

The herbarium material was prepared from plants grown in the private garden of Ahmet Attila, a keen and knowledgeable plant-collector interested in bulbous plants. At its *locus classicus* in the vilayet of Elaziğ in East Anatolia, the plant was locally common and in full flower in June 1988. Corms were brought by Attila's son-in-law and planted in the father's garden at Istanbul; thereafter, it flowered annually from June into early July when the first ripe fruits are produced. We do not know whether the plant still thrives on the shores of the Keban Dam which is subject to frequent flooding but we hope so. However, it is safe in cultivation at A2(A) Istanbul.

Attila (b. 1914) was the former head-gardener at Istanbul University, Süleymaniye in A2(E) Istanbul. At 92 he is now retired but still active in his horticultural nursery with the assistance of his two daughters. In good health and clear in mind he informed one of us (A. Baytop) that the gladiolus still grows and flowers in his garden.

In earlier days Attila had travelled extensively in Turkey to collect plants and often requested inhabitants from various parts of Anatolia to send him all kinds of bulbs. They often proved interesting. He built up a collection of bulbous plants in the Botanical Garden of the University while serving there as head-gardener. Attila was much valued and appreciated by Prof. Dr Turhan Baytop who recognized in his enthusiasm a kindred spirit. The latter wanted his name to be commemorated with a bulbous plant and had already expressed the wish to Brian Mathew at Kew in a letter dated 18th January 1981: "Attila has been interested in bulbous plants of Turkey for a long time and made a collection in Istanbul University Botanical Garden. I shall be very pleased if his name will be given to a bulbous plant". In his reply dated 16th February 1981, Brian Mathew wrote: "If I have some new taxa to describe, I will remember your wish for Mr Attila".

We are glad to follow the wishes of the late Prof. Dr Turhan Baytop (1920–2002) in naming the new species after Mr Ahmet Attila. It is an even greater pleasure to see such a beautiful plant bearing his name. By his gardening skill he has kept it alive and flourishing for more than 16 years.

Acknowledgements. Our thanks go to Mr Doğu Özgür, son-in-law of Ahmet Attila and the collector of the original plant material from Elaziğ. Prof. Dr Manfred A. Fischer, University of Vienna, kindly providing the Latin diagnosis.