



Article

Himantoglossum jankae (Orchidaceae: Orchideae), a new name for a long-misnamed lizard orchid

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Abstract

A new name, *Himantoglossum jankae*, is given to the widely recognised lizard orchid species that is distributed primarily in the Balkan Peninsula and the northwestern region of Asia Minor and has been erroneously named *H. caprinum* in most previous literature. The new species differs from its closest relatives in having the combination of relatively large, reddish-purple coloured flowers and labella that bear red papillate spots and comparatively long spurs. We present a morphological description of *H. jankae*, together with illustrations, distribution information and diagnostic comparisons with *H. calcaratum*, *H. adriaticum* and *H. caprinum*.

Key words: Asia Minor, Balkan Peninsula, Hungary, Janka, taxonomy

Introduction

Sramkó *et al.* (2012) recently demonstrated that neither the original material of *Orchis caprina* Marschall von Bieberstein (1819: 602) [= *Himantoglossum caprinum* (Marschall von Bieberstein) Sprengel (1826: 694)] nor the complete material of this species from its classic area in the Crimea correspond with the current application of this name. They also demonstrated conspecificity of *H. caprinum* and *H. affine* (Boissier 1882: 56) Schlechter (1918: 287) as described from Asia Minor, showing that *H. affine* is a later synonym of *H. caprinum*. Consequently, the name *H. caprinum* should no longer be applied to the lizard orchid species with papillate red spots on the labellum that is distributed from southern Slovakia across the Balkans to northern Turkey. Instead, this name should be fixed to the closely related Crimean and southwestern Asian species that lacks such labellar spots.

Although the change in the interpretation of the name *H. caprinum* will cause some inconvenience for European taxonomists, its rejection in favour of the widely used *H. affine* is not possible. In fact, ever since its original description, the name *H. caprinum* has been consistently and correctly applied to the Crimean lizard orchid. However, for some unknown reason, incorrect characteristics were subsequently ascribed to the Crimean plant (Schmalhausen 1897). Further Russian treatments uniformly continued uncritical reproduction of this erroneous description until recently (Vakhrameeva & Tatarenko 2008). This fact caused serious confusion; the wrong description encouraged botanists to incorrectly apply the name *H. caprinum* outside the Crimea, extending the putative geographic distribution of this species to central European territories where *H. caprinum* does not actually occur.

Given that the name *H. caprinum* remained formally correct when applied to Crimean plants, the confusion was not nomenclatural but rather taxonomic, manifested in the application of a single name to two species. Most importantly, it was the Crimean plant that was not misnamed. Since the name *H. caprinum* has always been applied to a taxon (although incorrectly circumscribed) that included its type, Art. 57.1 (ICBN; McNeill *et al.* 2006) does not apply. Consequently, in the absence of an available prior name at the rank of species, a new name must be given to the southeastern European (non-Crimean) taxon, which has erroneously been named *H. caprinum* in the literature from 1897 onwards. We therefore introduce the following name:

Himantoglossum jankae* Somlyay, Kreutz & Óvári *sp. nov. (Figures 1 and 2)

Himantoglossum calcarato primo adspectu maxime simile, sed calcaribus florum multo brevioribus; a H. adriatico floribus majoribus et plerumque lilacinis, calcaribus longioribus, lobulis labellorum lateralibus latioribus, a H. caprino labellis maculatis, lobulis lateralibus longioribus, nec non calcaribus longioribus differt.

Type:—HUNGARY. Budapest: “Comit. Pest. In declivibus dumetosis supra Solymár” [most probably Mt Kálvária in the Buda Mts at the border of Budapest and Solymár village], 7 July 1918, *Degen s.n.* (holotype BP 337088!).

A robust herbaceous, tuberous perennial. Flowering stem (30–)50–72(–110) cm tall; basal leaves 66–135(–240) × 17–40 mm, cauline leaves decreasing in size and becoming increasingly bracteoid upward. Inflorescence 100–500 mm long with (10–)20–40(–75) flowers. Lowest bracts (19–)30–44(–75) mm long, the remainder (6–)9–20(–30) mm long; uppermost bracts usually longer than the flowers that they subtend. Sepals (11–)13–16(–18) × (5–)6.2–7.8(–9) mm. Lateral petals (7–)9.5–11.5(–13) × (2–)2.5–3.5(–4.5) mm, usually three-lobed. Labellum deeply three-lobed, usually dark, rarely light reddish-purple, at the base whitish or cream-coloured with (6–)10–20(–33) dark purple papillate spots; mid-lobe (25–)46–68(–85) × 1–3 mm; apical notch of the mid-lobe (2–)8–50 mm deep; lateral lobes strongly crenulated, (4–)11–19.5(–29) × (1–)2–3(–4) mm. Spur (5–)6.5–8(–9.5) × (2–)2.5–3.5(–4.5) mm at the opening. Column short, stigmatic cavity quadrate, rostellum prominent. Mature capsules (10–)13.5–21.5(–25) × (3–)4–5(–6.5) mm.

Etymology:—The specific epithet commemorates Viktor Janka (1837–1890), Hungarian scientist, who was one of the leading botanists exploring the Balkan Peninsula in the 19th century.

Distribution and habitat:—Slovakia, Hungary, Romania, Croatia, Serbia, Montenegro, Macedonia, Albania, Bulgaria, Greece, northern Turkey. Dry grasslands, forest edges, shrublands on calcareous soils.

Phenology:—In Hungary the species flowers from June to July (rarely extending into August). The mean flowering date is the Julian day 190 (9 July), based on 51 observations covering a 163 year time-span (Molnár V. *et al.* 2012).

Conservation status:—*Himantoglossum jankae* (recorded as “*H. caprinum*”) is designated a threatened and protected species in most of the countries in which it occurs. It is listed in Annex II of Council Directive 92/43/EEC (the ‘Habitats Directive’) under the name “*Himantoglossum caprinum* (Bieb.) V.Koch”.

Additional specimens examined (paratypes):—HUNGARY. Budapest: Budakeszi-erdő, 27 July 1899, *Bernátsky s.n.* (BP 33350!); Budapest: Farkas-völgy, June 1902, *Lengyel s.n.* (BP 348446!); Budapest: Hármashatár-hegy, July 1919, *Vajda s.n.* (BP 287469!); Budapest: Pesthidegkút, Kálvária-hegy, 1 July 2007, *Somlyay s.n.* (BP 691520!); Budapest: Fekete-fej, 25 July 1944, *Papp s.n.* (BP 372474!); Nagykovácsi: Remete-hegy, 2 August 1920, *Degen s.n.* (BP 337090!); Nagykovácsi: Nagy-Szénás, 13 July 1930, *Vajda s.n.* (BP 287468!); Pilisszántó: Pilis, 21 June 1934, *Csapody & Jávorka s.n.* (BP 33385!); Süttő [?]: Sártvány-hegy, 3 July 1966, *Jeney s.n.* (BP 684423!); Vác: Naszály, 4 July 1948, *Pénzes s.n.* (BP 379445!); Veszprém [?]: Esztergáli-völgy, 30 June 1929, *Rédl s.n.* (BP 414279!); Pécs: Misina, 6 July 1931, *Zsák s.n.* (BP 33363!); Siklós: Máriagyűd, 17 July 1870, *Simkovics (Simonkai) s.n.* (BP 33376!); Mád: Király-hegy, 26 July 1871, *Simkovics (Simonkai) s.n.* (BP 33379!). SLOVAKIA. Svätý Jur (Pozsonyszentgyörgy), 2 August 1855, *Résely s.n.* (BP 33371!); Skalica (Skalitz, Szokolca): 26 June 1861, *Holuby s.n.* (BP 33384!). ROMANIA. Băile Herculane (Herkulesfürdő): Domugled, June 1856, *Heuffel s.n.* (BP 33362!); Alba Iulia (Alba Carolina, Gyulafehérvár): 26 July 1857, *Haynald s.n.* (BP 33361!); Ghioroc (Gyorok): 10

337088



BP Herb. Carpato-Pannonicum

DR. A. DE DEGEN, plantæ Hungariæ exsiccata.

Himantoglossum hircinum

Comit. Pest. In declivibus Sumetosi supra

Solyvár.

legit d. F. m. 1911

Himantoglossum caprinum
(M. B.) Sprengel
rev.: H. Baumann
15. 02. 1980

FIGURE 1. Holotype of *Himantoglossum jankae* from Degen's collection (BP 337088).

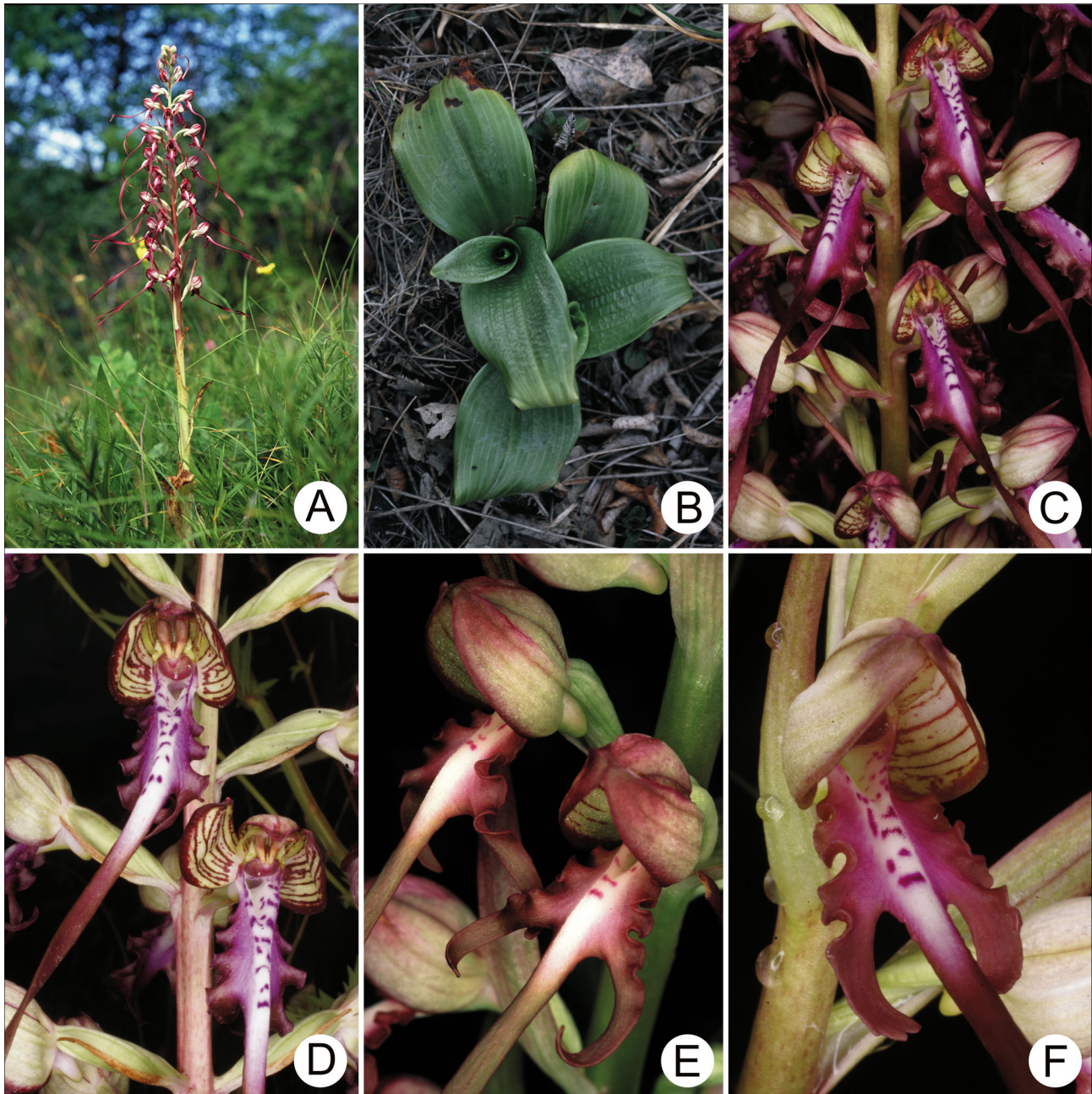


FIGURE 2. Illustrations of *Himantoglossum jankae* from Hungary. **A.** Habit (Budapest). **B.** Winter-green leaf-rosette (Veszprém). **C–F.** Flowers (C. Pilisszentkereszt, D. Tarcal, E–F. Veszprém) (Photos A. Molnár V.).

July 1888, *Simonkai s.n.* (BP 33380!); Orşova (Orsova) [?]: Alsó-Kazán, June 1912, *Jávorka s.n.* (BP 33364!); Babadag: Babadag forest, 15 July 1912, *Prodan s.n.* (BP 63857!); Pişchia (Hidasliget): 3 July 1913, *Lengyel s.n.* (BP 348434!). SERBIA. Vršac (Versec): Vár-hegy, 8 July 1901, *Bernátsky s.n.* (BP 33368!). CROATIA. Rijeka (Fiume), s.d., *Nož s.n.* (BP 33369!). BULGARIA. Madara: Madara Plateau, 43°16'45" N, 27°07'08" E, 415m, 29 June 2010, *Takács s.n.* (DE!). GREECE. Kavala, 8 June 1955, *Rechinger 15568* (W 4054!). TURKEY. Karatoprak ("Karatoprack"), June, *Frivaldszky s.n.* (BP 63880!).

Although *H. jankae* and *H. calcaratum* (Beck 1887: 55) Schlechter (1927: 145) are morphologically similar, we regard as diagnostic difference the contrasting lengths of the labellar spur: (5–)6.5–8(–9.5) mm in *H. jankae*, (7.5–)10–12(–14) mm in *H. calcaratum*. Moreover, *H. calcaratum* seems to be a narrow endemic species confined to the western part of the Balkan Peninsula. Disregarding rare individuals with colourless (apochromatic) flowers, the labella of *H. jankae* are reliably spotted, whereas those of *H. calcaratum* can occasionally be unspotted. Another

similar species with spotted labella is *H. adriaticum* Baumann (1978: 171), but all parts of its flowers are generally smaller, its spurs being considerably shorter [(2–)2.5–3(–3.5) mm long]. The morphological distinctions between *H. jankae* (referred to as “spotted” taxon) and *H. caprinum* (referred to as “unspotted” or “Crimean” taxon) were thoroughly discussed by Sramkó *et al.* (2012).

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