



## ***Bellevalia koyuncui* sp. nova (Asparagaceae): a new species from South Eastern Anatolia, Turkey**

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*Bellevalia* Lapeyrouse (1808: 425) is a genus comprising about 65 species and subspecies distributed over the Mediterranean region (Bareka *et al.* 2008, Jafari & Maassoumi 2008, Borzatti von Loewenstern *et al.* 2013).

Wendelbo (1984) reported 18 taxa, seven of which endemic to the country. In further studies, Wendelbo (1985) reduced *Bellevalia latifolia* Feinbrun (1940: 369) to a synonym of *B. olivieri* (Baker 1874: 8) Wendelbo (1985: 120). Since then, three species were published by Özhatay (2000), while Johnson (2003) reduced *B. pycnantha* (Koch 1849: 255) Losinskaja (1935: 310) to a synonym of *B. paradoxa* (Fischer & Meyer 1835: 30) Boissier (1882: 308). In recent years, four more species, *B. leucantha* Persson (2006: 253), *B. malatyaensis* Uzunh. & H.Duman in Uzunhisarcıklı *et al.* (2013: 652), *B. chrisii* Yıldırım & B.Şahin in Yıldırım *et al.* (2015: in press) and *B. pseudolongipes* Karabacak & Yıldırım in Karabacak *et al.* (2014: 210) were described. In this study, we present a further new species, *Bellevalia koyuncui*, endemic to Turkey.

### **Material and methods**

The *Bellevalia* specimens were compared with relevant taxonomic literature (Feinbrun 1940, Wendelbo 1984, 1990, Özhatay *et al.* 1991, Cowley *et al.* 1994, Özhatay 2000, Persson 2006, Tugay 2012, Uzunhisarcıklı *et al.* 2013, Yıldırım *et al.* 2015, Karabacak *et al.* 2014) and with *Bellevalia* specimens in the herbaria ANK, E, EGE, G, GAZI, HUB, K, and VANF (acronyms follow Thiers 2015). For obtaining chromosome number, we followed the protocol explained by Martin *et al.* (2011).

### **Description of the new species**

#### ***Bellevalia koyuncui* Karabacak & Yıldırım, sp. nov. (Fig. 1)**

**Type:**—TURKEY. B9 Siirt: Şirvan, Nallıkaya köyüne 5 km kala, step, 1286 m, 13 April 2014, O. Karabacak 9040 (holotype EGE!; isotype GAZI!, ANK!).

Bulb globose-ovoid, c. 2 cm diameter, outer tunic coriaceous and brownish, inner tunic papery and light brownish. Leaves 3–5(–6), linear lanceolate, as long as or longer than scape, 7–25 × 0.2–0.6 cm, dark green, mostly flat or slightly canaliculate, patent to slightly erecto-patent; margins narrowly cartilaginous, smooth or sometimes scaberulous. Scape one, 7–17 cm long, green. Raceme cylindrical at flowering and fruiting time; (1–)1.5–5 cm long, elongating to c. 8 cm in fruiting time, rachis bluish-green to pale green; bracts entire, minute, creamy-white to bluish, triangular to oblong; flowers arrangement alternate and spiral; pedicels 1\2 to as long as perigone, distinctly recurved, up to 5 mm long in flowering time; patent to erecto-patent and up to 8 mm in fruiting time; flowers (10–)15–70, 3.5–5 mm long, subcubical campanulate to oblong campanulate; perigone sky-blue in bud and starting flowering, changing to pale

8 chromosomes, with no Bs (Bothmer & Wendelbo 1981, Özhatay & Johnson 1996, Johnson & Brandham 1997, Nersesian 2001, Johnson 2003).

**Additional specimens examined (paratypes):**—Turkey B9 Siirt: Şirvan, Nallıkaya köyüne 5 km kala, step, 1286 m, 25 April 2011, *O. Karabacak 7990* (GAZI!).

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