

***Epipactis futakii* (Orchidaceae), a new species for the Hungarian flora**

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Abstract – A single specimen of *Epipactis futakii* new to the flora of Hungary was found in the Pilis Mts (Pest county) in 2008. In 2009 four blooming specimens (representing three individuals) were detected at the same locality. The plant grew in a hornbeam-oak-beech forest rich in orchid taxa, of which *Epipactis leptochila* has not been published from the Pilis Mts yet. With two figures.

Key words – *Epipactis futakii*, Hungary, Orchidaceae, Pilis Mts.

INTRODUCTION

In 1998 a new *Epipactis* species, *E. futakii* MEREĎA et POTŮČEK was described from Slovakia (MEREĎA & POTŮČEK 1998). *Epipactis futakii* is an obligate autogamous taxon, which is reflected in its floral morphology (see HOLLINGSWORTH *et al.* 2006): during anthesis the flowers always remain pendulous and closed. In fact, *E. futakii* is the only known *Epipactis* species that forms cleistogamic flowers exclusively. Although the rostellum is present and persistent, it is functional only initially. The epichil is triangular and acute, greenish with a pair of whitish calli near its base. An additional diagnostic feature of the species is the unique colour of the flower: the base of tepals becomes violet while the rest remains green (MEREĎA & POTŮČEK 1998, VLČKO *et al.* 2003). The species has only been recorded from only five regions of Slovakia so far: Malé Karpaty Mts, Považský Inovec Mts, Strážovské vrchy Mts, Biele Karpaty Mts and from the boundary of Revúcka vrchovina and Ostrôžky – near Ružiná (MEREĎA & POTŮČEK 1998, PERNÝ & MEREĎA 2000, HRIVNÁK *et al.* 2005, MEREĎA 2010, JÁNSKÝ 2010).

According to VLČKO *et al.* (2003) *E. futakii* prefers beech and beech-hornbeam forests of the submontane altitudinal zone, and grows on calcareous soils. It is regarded as an endangered taxon in the latest Slovak red list (FERÁKOVÁ *et al.* 2001).

EPIPACTIS FUTAKII IN HUNGARY

During a field trip in the Pilis Mts (Pest county) made by the author in July of 2008 a single specimen of *E. futakii* was found near the mouth of Vaskapu Valley at ca 440 m a. s. l. The locality belongs to Pilisszentkereszt village, and can be found on the eastern side of the block of Mt Pilis (756 m), which is built up mainly of limestone. In July of 2009 the locality was thoroughly investigated, and four blooming specimens (representing three individuals) of *E. futakii* were recorded (Figs 1–2).



Figs 1–2. 1 = *Epipactis futakii* at Vaskapu Valley (Pilis Mts) (photo: L. SOMLYAY, 15th July, 2009), 2 = Flowers of *Epipactis futakii* at Vaskapu Valley (Pilis Mts) (photo: A. MOLNÁR V., 30th July, 2009)

The specimens grew in a hornbeam-oak-beech forest lacking shrub layer, but with a rich grass layer featuring many orchids: beside *E. futakii*, *E. helleborine* (LINNAEUS) CRANTZ, 1769, *E. leptochila* (GODFERY) GODFERY, 1921, *E. purpurata* SMITH, 1828, *Cephalanthera damasonium* (MILLER) DRUCE, 1906, *C. rubra* (LINNAEUS) RICHARD, 1818, *Neottia nidus-avis* (LINNAEUS) RICHARD, 1817 and *Platanthera bifolia* (LINNAEUS) RICHARD, 1817 were found in a relatively small area. Of the above taxa *E. leptochila* has not been recorded in the Pilis Mts yet (HOLUB 1972, SOÓ 1973, MOLNÁR 2003, 2009). Further accompanying species in the grass layer were *Acer campestre* LINNAEUS, 1753, *A. pseudoplatanus* LINNAEUS, 1753, *Atropa belladonna* LINNAEUS, 1753, *Campanula rapunculoides* LINNAEUS, 1753, *Carex digitata* LINNAEUS, 1753, *C. pilosa* SCOPOLI, 1772, *Dentaria bulbifera* LINNAEUS, 1753, *Epilobium montanum* LINNAEUS, 1753, *Fagus sylvatica* LINNAEUS, 1753, *Fraxinus excelsior* LINNAEUS, 1753, *Galium odoratum* (LINNAEUS) SCOPOLI, 1771, *Hedera helix* LINNAEUS, 1753, *Hypericum hirsutum* LINNAEUS, 1753, *Lathyrus vernus* (LINNAEUS) BERNHARDI, 1800, *Mercurialis perennis* LINNAEUS, 1753, *Milium effusum* LINNAEUS, 1753, *Monotropa hypopitys* LINNAEUS, 1753, *Mycelis muralis* (LINNAEUS) DUMORTIER, 1827, *Quercus petraea* (MATTUSCHKA) LIEBLEIN, 1784, *Rumex sanguineus* LINNAEUS, 1753, *Salvia glutinosa* LINNAEUS, 1753, *Sanicula europaea* LINNAEUS, 1753, *Viola reichenbachiana* JORDAN ex BOREAU, 1857, etc.

Epipactis futakii is a new member of the Hungarian flora, and Hungary is the second country from where this interesting species is recorded.

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