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# **CENTAUREA UNIFLORA TURRA SUBSP. NERVOSA (WILLD.) BONNIER & LAYENS (COMPOSITAE), A NEW TAXON IN THE FLORA OF CROATIA**

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Vrbek, M. & Buzjak, S.: *Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens (*Compositae*), a new taxon in the flora of Croatia. *Nat. Croat.*, Vol. 11, No. 1, 107–111, 2002, Zagreb.

*Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens has been found on a mountain meadow near Guslica – in the north west part of »Risnjak« National Park (north west Croatia). This is the first finding of the plant in Croatia.

**Keywords:** *Centaurea uniflora* subsp. *nervosa*, flora, Croatia

Vrbek, M. & Buzjak, S.: *Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens (*Compositae*), nova svojta u flori Hrvatske. *Nat. Croat.*, Vol. 11, No. 1, 107–111, 2002, Zagreb.

*Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens nađena je na planinskoj rudini Guslice – sjeverozapadni dio Nacionalnog parka »Risnjak« (sjeverozapadna Hrvatska). To je prvi nalaz te biljke u Hrvatskoj.

**Ključne riječi:** *Centaurea uniflora* subsp. *nervosa*, flora, Hrvatska

## INTRODUCTION

The taxon *Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens (*C. nervosa* Willd., *C. plumosa* Kern., *C. Phrygia* Rchb., *Cyanus flosculosus* Baumg., *Jacea plumosa* Lam. p.p.) is an alpine plant of the south-east European floral element. According to floristic work (DOSTÁL, 1976; GAJIĆ, 1975; HEGI, 1987; JAVORKA & CSAPODI, 1991; LAKUŠIĆ, 1982; MOGGI, 1985; LAUSI, 1982; ROHLENA, 1942; WRABER, 1999) it is distributed in the northern Apennines, in the Alps, the southern and eastern Carpathians and in the mountains of the Balkan peninsula (Austria, Albania, Bulgaria, Montenegro, France, Greece, Italy, Hungary, Macedonia, Romania, Slovenia, Serbia and Switzerland). *C. uniflora* subsp. *nervosa* is a hemicryptophyte, and grows mainly on dry stony pastures and slopes, and in pine and beech scrub from the upper

montane to the sub-alpine zone, on a limestone bedrock at altitudes of from 1100 to 2600 m (LAUSI, 1982; MOGGI, 1985).

Although from the distribution data it was highly likely that the plant should grow in Croatian mountains too, in the floristic literature dealing with the area of the country (HAYEK, 1927; HIRC, 1896; SCHLOSSER & VUKOTINOVIĆ, 1869; DEGEN, 1938; RADIĆ, 1976; PLAZIBAT, 2000; ROSSI, 1924; FORENBACHER, 1990; DOMAC, 1994; VISIANI, 1826; VISIANI, 1847) no data have been found confirming the existence of *C. uniflora* subsp. *nervosa*, nor does the material of the ZA and ZAHO herbarium contain any indications of it for Croatia. However, this finding does confirm the assumption, and extends the known range in the mountains of the Balkan peninsula.

#### CENTAUREA UNIFLORA SUBSP. NERVOSA IN CROATIA

In July 2001, during research into endangered and protected flora of the north west, extended part of the »Risnjak« National Park, we found the taxon *C. uniflora* subsp. *nervosa* in the region of Guslica (Fig. 1). Two specimens were deposited in



Fig. 1. *Centaurea uniflora* subsp. *nervosa* (photo: M. Vrbek)

the herbarium of the CNHM, Croatian Natural History Museum, under inv. no. 4113 BOB. The plants were growing at the transition from beech scrub into the grassland of the alliance *Festucion pungentis* Horv. 1930 on a steep west-facing fairly stony slope at 1384 m asl., UTM VL63, MTB – 0553 (Fig. 2). In the surrounding vegetation, by the side of the beech scrub we found the following species: *Allium ericetorum* Thore, *Anthoxanthum odoratum* L., *Anthyllis vulneraria* L. subsp. *alpestris* (Hegetschw.) Acherson & Graebner, *Aquilegia vulgaris* L. subsp. *vulgaris*, *Koeleria eriostachya* Pančić, *Laserpitium peucedanoides* L., *Lotus corniculatus* L., *Narcissus poeticus* L. subsp. *radiiflorus* (Salisb.) Baker, *Phyteuma orbiculare* L., *Senecio doronicum* (L.) L. subsp. *doronicum*, *Serratula tinctoria* L. subsp. *macrocephala* (Bertol.) Rouy ex Hegi, *Thymus praecox* Opiz subsp. *polytrichus* (A. Kerner ex Borbás) Jalas, *Trollius europaeus* L. subsp. *europaeus*, *Veratrum album* L.

Although this is to date the only find of *C. uniflora* subsp. *nervosa* in Croatia, since it grows in the surrounding countries, it can be confidently expected to exist in other mountain areas with similar habitat conditions as well. For this reason in future investigations more attention should be devoted to habitats in which it could be expected, so as to determine its distribution in Croatia.

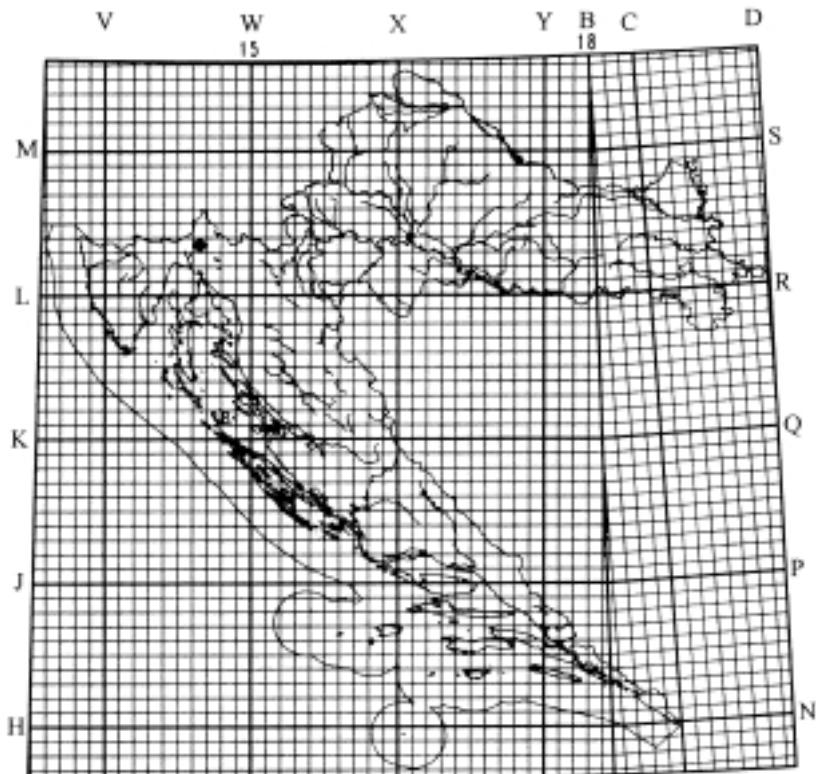


Fig. 2. The locality of *Centaurea uniflora* subsp. *nervosa* in Croatia (UTM)

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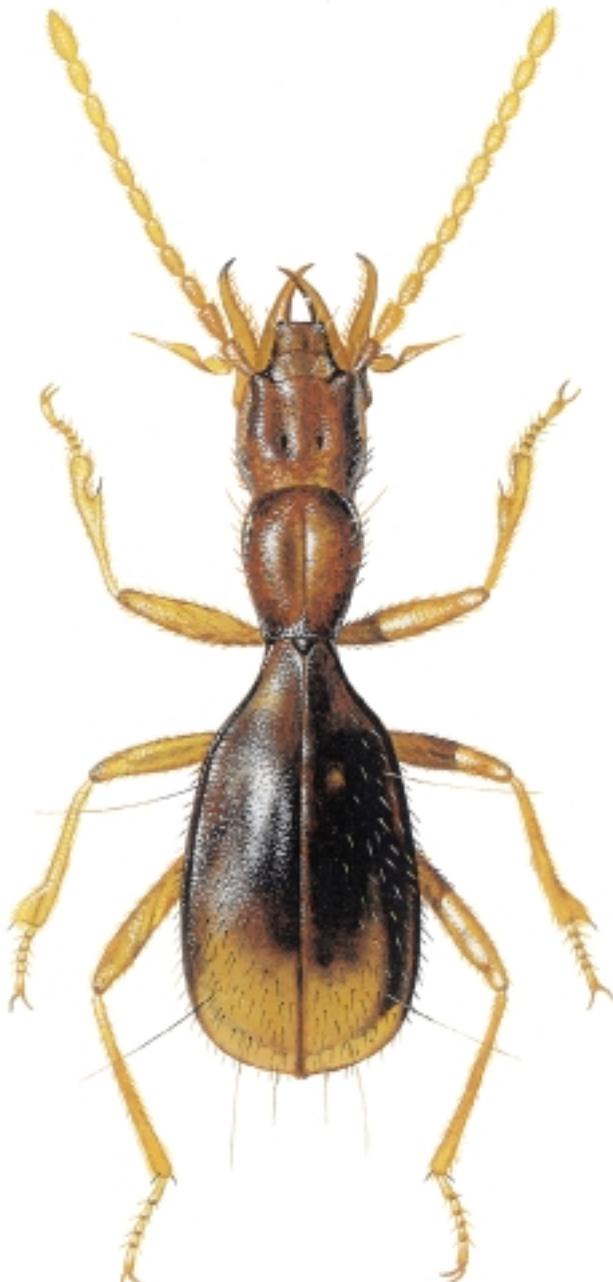
## S A Ž E T A K

### *Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens (Compositae), nova svojta u flori Hrvatske

M. Vrbek & S. Buzjak

Svojta *Centaurea uniflora* Turra subsp. *nervosa* (Willd.) Bonnier & Layens je biljka jugo-istočno europske rasprostranjenosti koja, iako raste u svim okolnim zemljama, dosad nije bila zabilježena za Hrvatsku. Našle smo je u srpnju 2001. godine na području Guslice, tijekom istraživanja ugrožene i zaštićene flore sjeverozapadnog, proširenog dijela Nacionalnog parka »Risnjak«. Biljke su rasle na prijelazu klekovine bukve u rudinu sveze *Festucion pungentis* Horv. 1930. na strmoj, zapadu okrenutoj, dosta kamenitoj padini na 1384 m nadmorske visine.

Ovim nalazom se upotpunjuje areal svojte *Centaurea uniflora* subsp. *nervosa* na planinama Balkanskog poluotoka. Na temelju ovog nalaza može se pretpostaviti da ta biljka raste i na drugim planinskim područjima Hrvatske na sličnim staništima. Kako bi se mogla odrediti njena rasprostranjenost u Hrvatskoj, treba joj u budućim florističkim i vegetacijskim istraživanjima posvetiti veću pozornost.



**Fig. 1.** *Lovricia aenigmatica* n. sp. holotype female, habitus – J. Kobylák del. 1999