

THE GENUS *CROCUS* L. IN THE FLORA OF SVILAJA MOUNTAIN

NEDILJKO ŽEVRNJA¹ & DALIBOR VLADOVIĆ²

¹Natural History Museum and ZOO, Kolombatovićevo šetalište 2,
21000 Split, Croatia

²5th Gymnasium, Zagrebačka 2, 21000 Split, Croatia

Ževrnja, N. & Vladović, D.: The genus *Crocus* L. in the flora of Svilaja Mountain. *Nat. Croat.*, Vol. 14, No. 4., 363–368, 2005, Zagreb.

An investigation of Mt Svilaja, Neorić, UTM XJ23, confirmed the finding of species *Crocus weldenii* Hoppe & Fűrnrrohr, which in this habitat appears in three forms: f. *weldenii*, f. *bicolor* Pavletić Zi. & Trinajstić and f. *lutescens* Pulević.

The locality of f. *lutescens* Pulević is the westernmost and southernmost finding of this form in Croatia. In the same habitat a population of *Crocus tommasinianus* Herbert was also found (the westernmost finding of this species in Croatia).

Key words: *Crocus weldenii* Hoppe & Fűrnrrohr, *Crocus tommasinianus* Herbert, Mt Svilaja, flora of Croatia

Ževrnja, N. & Vladović, D.: Rod *Crocus* L. u flori planine Svilaje. *Nat. Croat.*, Vol. 14, No. 4., 363–368, 2005, Zagreb.

Istraživanjem planine Svilaja, područja Neorić UTM XJ23 pronašli smo nalazište vrste *Crocus weldenii* Hoppe & Fűrnrrohr koja se na staništu javlja u tri forme: f. *weldenii*, f. *bicolor* Pavletić Zi. & Trinajstić, te f. *lutescens* Pulević. Nalazište f. *lutescens* Pulević je najzapadnije i najsjevernije nalazište ove forme u Hrvatskoj. Na istom staništu nalazi se i populacija vrste *Crocus tommasinianus* Herbert (najzapadnije nalazište ove vrste u Hrvatskoj).

Ključne riječi: *Crocus weldenii* Hoppe & Fűrnrrohr, *Crocus tommasinianus* Herbert, planina Svilaja, Hrvatska

INTRODUCTION

Mt Svilaja (Fig. 1.) is the third biggest mountain in Dalmatia County and the sixth biggest in the whole of Croatia. However, it has been the least studied of the western Dinarids (FORENBACHER, 1914; LOVRIĆ & RAC, 1987). Among available data there are papers by MAZZOLENI, 1845; VISIANI, 1842–1881; ADAMOVIĆ, 1911; 1913; JEDLOVSKI, 1961; LOVRIĆ & RAC, 1987. There is only one known site for the genus *Crocus* L. and the species *Crocus weldenii* Hope & Fűrnrrohr (cited by VISIANI, 1842; 119 specimens of *Crocus biflorus* Mill., PULEVIĆ, 1976; 1977a) in the area of Lemeš situated between Drniš and Vrlika.

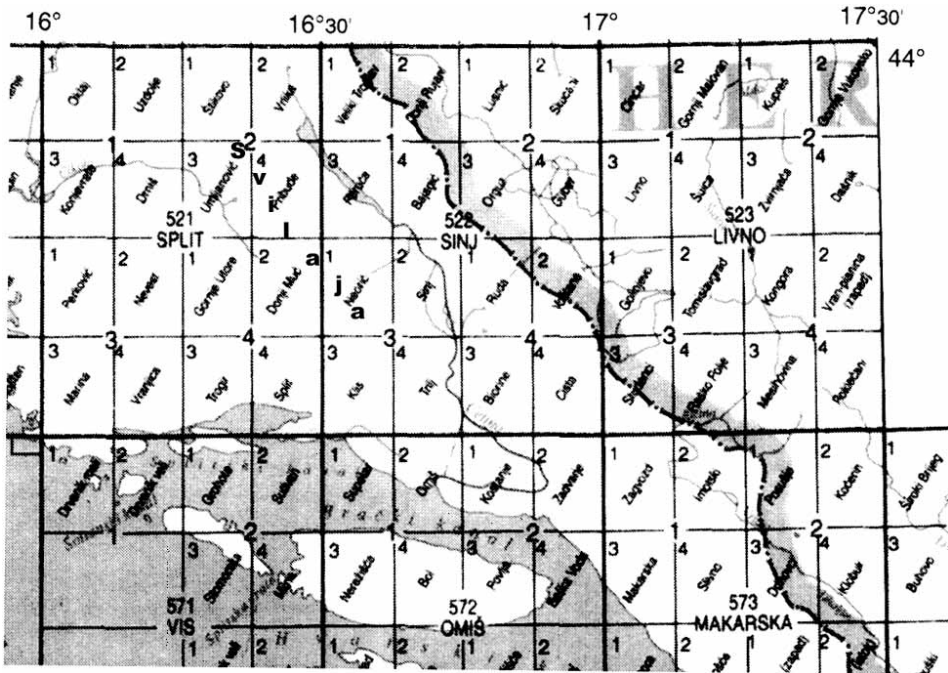


Fig. 1. Position of Mt Svilaja in Croatia

RESULTS

New findings (habitat):

In the vicinity of the village of Neorić (Fig. 2.) UTM XJ23, on 4th, 5th and 7th March 2003 we collected two species of the genus *Crocus* L., as listed below:

Crocus weldenii according to PULEVIĆ, 1977a; PAVLETIĆ & TRINAJSTIĆ, 1979:

f. *weldenii* (Fig. 3.)

f. *bicolor* Pavletić Zi & Trinajstić (Fig. 4.)

f. *lutescens* Pulević (Fig. 5.)

Crocus tommasinianus Herbert (Fig. 6.)

All three forms of *C. weldenii* Hoppe & Furnrohr, as well as the species *Crocus tommasinianus* Herbert are present in the habitat of *Quercus-Carpinetum orientalis*.

DISCUSSION

There are many papers related to the chorology of the species *Crocus weldenii* Hoppe & Furnrohr and new findings of it. On Mt Svilaja, *Crocus weldenii* Hoppe & Furnrohr was recorded in 1842 by Visiani in Lemeš area and it has also probably

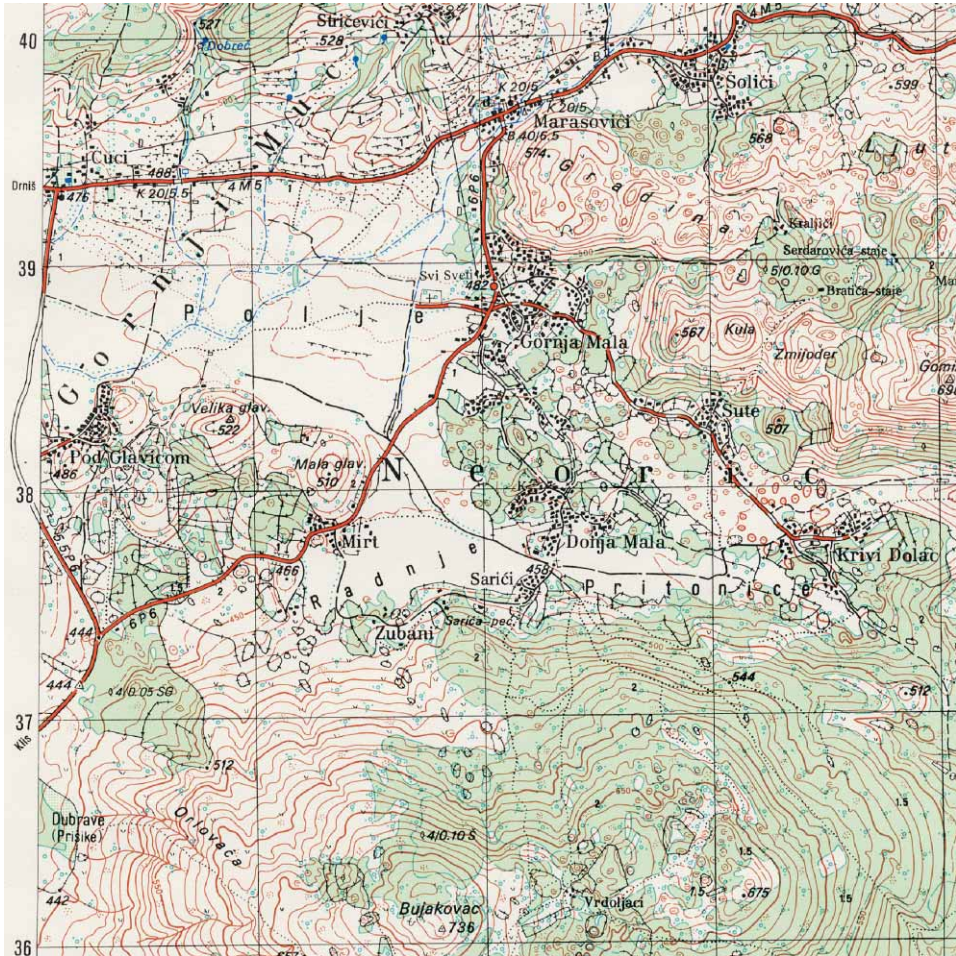


Fig. 2. Area of the village of Neorić

been found as *f. weldenii*. Systematization of this site and species chorology were elaborated by PULEVIĆ (1977a), and later completed by PAVLETIĆ and TRINAJSTIĆ in 1979. More recently, two new sites in Croatia, for *f. lutescens* Pulević were published in the literature, to be precise, Paklenica National Park (HRŠAK & LUKAČ, 2001) and on south Velebit (from the coastal village of Kijaca in Uzelačke Rastovce, at a height of approximately 550 m close to Mamutova lokva as it is called; near Ognjila; near cattle-breeding farms above the village of Kijaca; near the Adriatic road, approximately 150 m (LEMIC, 2003).

The finding of *f. bicolor* by Pavletić Zi and Trinajstić is the northernmost finding of this form.



Fig. 3. *Crocus weldenii* f. *weldenii*



Fig. 4. *Crocus weldenii* f. *bicolor* Pavletić Zi. & Trinajstić



Fig. 5. *Crocus weldenii* f. *lutescens* Pulević



Fig. 6. *Crocus tommasinianus* Herbert

For f. *lutescens* Pulević, a find near Neorić is the most southern and the most easterly finding of this form in Croatia.

The species *Crocus tommasinianus* Herbert, according to PULEVIĆ (1977b) and VLAĐOVIĆ (1994), on Mt Mosor, is the westernmost border of area where this species is present. The paper also cites the finding site of Troglav (HERBERT, 1847: 273; MAW 1886: 150) on Mt Dinara, which is the northernmost finding site of this species in Croatia.

The finding of this species in Neorić on a hillside of Mt Svilaja completes the area presence of the species in Croatia, because it fills the gap between Mt Mosor and Mt Dinara. At the same time it is the westernmost finding site of the species *Crocus tommasinianus* Herbert.

In March 2003 on a southern hillside of Mt Svilaja, in the village Neorić, UTM XJ 23. confirmed the finding of the species *Crocus weldenii* Hoppe & Furnrohr was confirmed, within a degraded association of *Quercus-Carpinetum orientalis*.

Habitat population appears in three forms: f. *weldenii*, f. *bicolor* Pavletić Zi. & Trinajstić, and f. *lutescens* Pulević. The locality of f. *lutescens* Pulević is the westernmost and southernmost site of this form in Croatia. In the same habitat there is also a population of the species *Crocus tommasinianus* Herbert, which is the westernmost finding of this species in Croatia.

Received May 17, 2005

REFERENCES

- ADAMOVIĆ, L., 1911: Die Pflanzenwelt Dalmatiens. Klinkhardt, Wien.
- ADAMOVIĆ, L., 1913: Biljnogeografske formacije zagorskih krajeva Dalmacije, Hercegovine i Crne Gore II, Vegetativne formacije viših brda i planina. Rad JAZU **195**, 113–179.
- FORENBACHER, A., 1913: Historijski pregled botaničkih istraživanja kraljevine Dalmacije od Visijanija do danas. Rad JAZU **202**, 51–95.
- HRŠAK, V. & G. LUKAČ, 2001: The genus *Crocus* L. in the Paklenica National Park. Acta Bot. Croat. **60** (1), 97–101.
- JEDLOVSKI, D., 1961: Razdioba Dalmacije na sjemenarske cjeline. Obavijesti Instituta za šumarstvo i lovna istraživanja NRH, **1**, 1–32.
- LEMIĆ, A., 2003: Novo stanište vrste šafrana *Crocus weldenii* na Velebitu. Priroda 3/2003 god. 93, br. **908**, 22–23.
- LOVRIĆ, A. Ž. & M. RAC, 1987: Doprinos fitogeografiji Svilaje i njezina povezanost s Biokovom. Acta Biokovica vol **IV**, 189–204.
- MAZZOLENI, A., 1845: Gita botanica in Dalmazia. Eugineo (Padova), **2**, 127–132.
- PAVLETIĆ, ZI. & I. TRINAJSTIĆ, 1979: Prilog poznavanju horologije taksona *Crocus weldenii* Hoppe & Furnrohr u srednjoj Dalmaciji. Acta. Bot. Croat. **38**, 163–166.
- PULEVIĆ, V., 1976: Revizija genera *Crocus* L. u Jugoslaviji. PhD Thesis, University of Ljubljana.
- PULEVIĆ, V., 1977a: Prilog taksonomiji i horologiji nekih vrsta *Crocus* L. iz Jugoslavije (*C. weldenii*, *C. alexandrii* i *C. adamii sens lat.*). Glasn. Republ. Zavoda za zaštitu Prir. Prirodnačke zbirke Titograda **10**, 81–99.
- PULEVIĆ, V., 1977b: Prilog poznavanju taksonomije i horologije *Crocus tommasinianus* Herbert (*Iridaceae*). Poljoprivreda i šumarstvo, XIII, **1**, 53–60.

PULEVIĆ, V., 1981: Rod *Crocus* L. u flori Biokova. Acta Biokovica **1**, 153–159.

VISIANI, R., 1842–1881: Flora Dalmatica, vol. I–III + Supplementum I–II/2. Lipsiae et Venetiis.

VLADOVIĆ, D., 1994: Flora planine Mosor. Mr. rad (mscr.) PMF Zagreb.

SAŽETAK

Rod *Crocus* L. u flori planine Svilaje

N. Ževrnja & D. Vladović

U ožujku 2003. godine na južnim padinama planine Svilaja, u mjestu Neorić (UTM XJ23) pronašli smo vrstu *Crocus weldenii* Hoppe & Furnrohr u degradiranoj zajednici *Quercus-Carpinetum orientalis*. Na staništu, vrsta se pojavljuje u tri forme: f. *weldenii*, f. *bicolor* Pavletić Zi. & Trinajstić, te f. *lutescens* Pulević. Nalazište f. *lutescens* Pulević je najzapadnije i najsjevernije nalazište ove forme u Hrvatskoj. Na istom staništu nalazi se populacija vrste *Crocus tommasianus* Herbert, a to je njeno najzapadnije nalazište u flori Hrvatske.