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CURRENT STATE OF DISTRIBUTION OF THE SPECIES *ERANTHIS HYEMALIS* (L.) Salisb., (*RANUNCULACEAE*) IN CROATIA

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In this work new localities and those already known of the species *Eranthis hyemalis* in Croatia are given. The new habitats are Lužani, Ciglenik, Čelinkovići, Sibinj, Završje, Vrhovina, Trnjani, Garčin and Donji Andrijevi. On these localities, the winter aconite grows at the edges of woodland, scrub and grassland. All localities were discovered in February 1995.

Key words: *Eranthis hyemalis*, new localities, Croatia

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U radu se navode nova i dosad poznata nalazišta vrste *Eranthis hyemalis* u Hrvatskoj. Nova su nalazišta Lužani, Ciglenik, Čelikovići, Sibinj, Završje, Vrhovina, Trnjani, Garčin i Donji Andrijevi. Na navedenim lokalitetima ozimnica raste na rubovima šumaraka, šikara i livada. Svi navedeni lokaliteti otkriveni su u veljači 1995. godine.

Ključne riječi: *Eranthis hyemalis*, nova nalazišta, Hrvatska

INTRODUCTION

The winter aconite (*Eranthis hyemalis*) is a relatively rare plant in Croatian flora generally distributed in the region of south and southeast Europe (cf. GAJIĆ 1970; TRINAJSTIĆ 1973; ŠILIĆ 1983; SUŠNIK 1984). Until recently it was known only in a relatively small number of localities, but lately several habitats of this plant have been discovered.

For the flora of Croatia, *E. hyemalis* was first noted by VISIANI (1826) for Boraja in Dalmatia (cf. TRINAJSTIĆ 1983) and by PAVIĆ (1851) for the area around Požega and

Papuk, then by MÜGGENBURG et al. (1866) for Jagodnjak near Požega and for Papuk, SCHLOSSER & VUKOTINOVIĆ (1869) for the area of Ivančica in Hrvatsko Zagorje, and by Kanitz (MÜGGENBURG et al. 1866) also for the area around Požega, and for Papuk. It was further noted by CINDRIĆ (1974) for the area of Dilj, to the northeast of Slavonski Brod, ŠEGULJA (1977) for the area of Vukomeričke gorice, REGULA-BEVILACQUA (1978) for the area of Strahinjščica (Donji Kamenečki), and TOPIĆ & ŠEGULJA (1983) for eastern Slavonija, near Vukovar and Tovarnik, in the Jelaš forest, as well as on the slopes along the Danube between Erdut and Aljmaš. In the review of the Požeška kotlina flora, the species *E. hyemalis* is mentioned also by ILIJANIĆ (1977).

Quite recently ŠEGULJA (1994) has presented a list of all known habitats of the species *E. hyemalis* in Croatia, among which new ones are Opeka near Varaždin, Donji Miholjac, Medvednica, as well as Mošćenice and Kastav on the slopes of Učka. Also, the winter aconite has been noted by FRANJIĆ (1992) in four localities for the area of Đakovština and in two localities for the area of Požeška kotlina.

Table 1. Previously described and new localities of the species *Eranthis hyemalis* (L.) Salisb. (*Ranunculaceae*) in Croatia

Coordinate of ground field	Name of ground field	Locality
0651	Opatija	*Kastav (ŠEGULJA 1994)
0751	Mošćenice	*Mošćenice (ŠEGULJA 1994)
9861	Krapina	*Donji Kamenečki (REGULA-BEVILACQUA 1978)
0061	Donja Stubica	*Medvednica (ŠEGULJA 1994)
0462	Kravarско	*Vukomeričke gorice (ŠEGULJA 1977)
2362	Perković	*Boraja (VISIANI 1826)
9862	Lobor	*Ivančica (SCHLOSSER & VUKOTINOVIĆ 1869)
9763	Tužno	*Opeka (ŠEGULJA 1994)
0471	Novo Zvečevo	*Papuk (PAVIĆ 1851; MÜGGENBURG et al. 1866)
0672	Požega	*Požega (PAVIĆ 1851), *Jagodnjak (MÜGGENBURG et al. 1866)
0872	Oriovac	Lužani, Čelikovići
0773	Grižići	*Ruševo (FRANJIĆ 1992)
0873	Sibinj	Sibinj, Ciglenik, Završje
0274	Viljevo	*Donji Miholjac (ŠEGULJA 1994)
0774	Graberje	Vrhovina, *Dilj (CINDRIĆ 1974), *Paka (FRANJIĆ 1992)
0775	Trnava	*Slobodna Vlast, *Musić, *Levanjska Varoš, *Ovčara (FRANJIĆ 1992)
0875	Garčin	Garčin, Trnjani
0876	Velika Kopanica	Donji Andrijevc
0479	Aljmaš	*Erdutski brijeg (TOPIĆ & ŠEGULJA 1983)
0480	Bogojevo	*Erdutski brijeg (TOPIĆ & ŠEGULJA 1983)
0680	Vukovar	*Vukovar (TOPIĆ & ŠEGULJA 1983)
0880	Nijemci	*Tovarnik (TOPIĆ & ŠEGULJA 1983)

* Previously described localities

As the winter aconite (*E. hyemalis*) is among to very rare plants in Croatian flora it is protected by law. As it is a very decorative early spring flower (cf. PLAVŠIĆ-GOJKOVIĆ 1972; Zi. PAVLETIĆ 1984; Lj. REGULA-BEVILACQUA 1991), every new locality of this interesting plant deserves our attention.

NEW LOCALITIES

In February of 1995, the state of the distribution of the winter aconite – *Eranthis hyemalis* in the area of Brodsko-Posavska County was determined. In total nine new localities were discovered – Lužani, Ciglenik, Čelikovići, Sibirnj, Završje, Vrhovina, Trnjani, Garčin and Donji Andrijevci. In the said localities, the winter aconite grows at the edges of woodland, scrub and grassland.

All localities of the species *E. hyemalis* known so far including the new ones are shown in Table 1 and in Figure 1, where the floristic mapping grid of the Republic of Croatia has been used as the basis (cf. Zi. PAVLETIĆ 1969; LIBER 1990).

DISCUSSION

Since the winter aconite (*Eranthis hyemalis*) is a relatively rare plant of Croatian flora, until recently it was known only from a small number of localities (cf. VISIANI 1826; TRINAJSTIĆ 1983; PAVIĆ 1851; MÜGGENBURG et al. 1866, SCHLOSSER & VUKOTINOVIĆ 1869, CINDRIĆ 1974; ŠEGULJA 1977; REGULA-BEVILACQUA 1978; TOPIĆ & ŠEGULJA 1983; ILIJANIĆ 1977; ŠEGULJA 1994). A detailed review of the already known and new habitats of the winter aconite was presented by FRANJIĆ (1992) and the plant was mentioned in four new localities for the region of Đakovština and in two new localities for the region of Požeška kotlina. There, the winter aconite occurs in a large number on degraded stands of the association of the common oak with hornbeam (*Carpino betuli-Quercetum roboris*) and the association of sessile oak with hornbeam (*Quercus-Carpinetum illyricum*). Its most frequent presence was observed in young locust-tree stands. It has been observed that the winter aconite does not penetrate deeper into a full canopy forest. On agricultural land it occurs, also in large numbers, on clover-patches and small plots of land under various crops where the use of pesticides and fertilizers is insignificant. On arable land with intensive agricultural production, the species occurs in small numbers at the edges of plots of land only. It can be assumed that *E. hyemalis* has been preserved in the above localities in such large numbers and in a very vital condition because they are among the industrially most underdeveloped parts of Đakovština and the Požeška kotlina.

Latest research confirms this because in the new localities the winter aconite occurs in similar stands and again in underdeveloped parts of Brodsko-Posavska County.

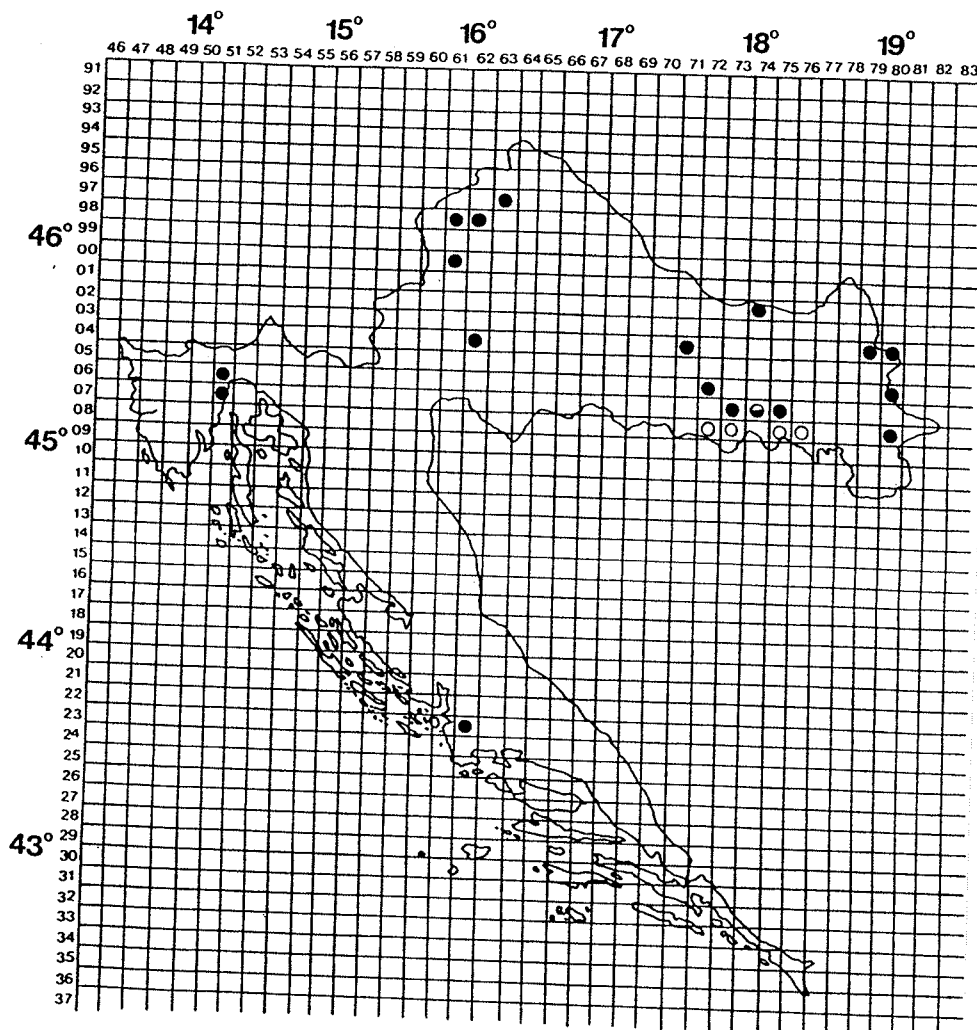


Fig. 1. Distribution of *Eranthis hyemalis* (L.) Salisb. in Croatia
 ● The previously described localities; ○ The new localities

CONCLUSION

The winter aconite (*Eranthis hyemalis*) is not so rare plant in Croatian flora, although until recently it was known only from a relatively small number of localities.

In February of 1995, the current state of the distribution of the winter aconite – *Eranthis hyemalis* in the area of the Brodsko-Posavska County was determined. In total nine new localities were discovered – Lužani, Ciglenik, Čelikovići, Sibinj,

Završje, Vrhovina, Trnjani, Garčin and Donji Andrijevi. In the above localities, the winter aconite grows at the edges of woods, scrub and grassland.

The winter aconite (*E. hyemalis*) has been preserved in large number in the above localities in a very vital state because they belong to the industrially most underdeveloped parts of Brodsko-Posavska County.

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REFERENCES

- CINDRIĆ, M., 1974: Biljni pokrov podnožja Dilj-gore sjeveroistočno od Slavenskog Broda. Magistarski rad, mscr. Zagreb.
- FRANJIĆ, J., 1992: Nova nalazišta vrste *Eranthis hyemalis* (L.) Salisb. (*Ranunculaceae*) in Croatia. *Acta Bot. Croat.* **51**: 131–134.
- GAJIĆ, M., 1970: *Ranunculaceae* A. L. Juss. In: M. JOSIFOVIĆ (ed.) *Fl. SR Srbije* **1**: 204–316.
- ILIJANIĆ, Lj., 1977: O biljnom pokrovu Požeške kotline. *Požega 1927–1977*, 48–65. Slavonska Požega.
- LIBER, Z., 1990: Areal vrste *Ostrya carpinifolia* Scop. u Hrvatskoj. Diplomski rad – PMF. Zagreb.
- MÜGGENBURG, ST., A. KANITZ, J. KNAPP, 1866: Die bisher bekannten Pflanzen Slavoniens. *Verh. Zool.-Bot. Ges. Wien* **16**: 3–172.
- PAVIĆ, A., 1851: Correspondenz aus Posseg in Slawonien. *Österr. Bot. Wochenblatt* **1**: 124–125.
- PAVLETIĆ, Zl., 1969: Florističko kartiranje sjeverne Hrvatske u okviru izrade florističke karte srednje Evrope. *Acta Bot. Croat.* **28**: 455–458.
- PAVLETIĆ, Zl., 1984: Ozimnica. *Priroda* **73**(8): 234.
- PLAVŠIĆ-GOJKOVIĆ, N., 1972: Zaštićene biljne vrste u SR Hrvatskoj. Split.
- REGULA-BEVILACQUA, Lj., 1978: Biljni pokrov Strahinščice u Hrvatskom Zagorju. *Diss. – mscr.* Zagreb.
- REGULA-BEVILACQUA, Lj., 1991–1992: Ozimnica. *Ekološki glasnik* **2**(3–4): 92–93.
- SCHLOSSER, J., Lj. VUKOTINOVIĆ, 1869: *Flora Croatia*. Zagrabiae.
- ŠEGULJA, N., 1994: *Eranthis hyemalis* (L.) Salisb. In: I. ŠUGAR (ed.): *Crvena knjiga biljnih vrsta Republike Hrvatske*. Zagreb.
- SUŠNIK, F., 1984: *Ranunculaceae*. In: MARTINČIĆ, A. & SUŠNIK, F. (eds.): *Mala flora Slovenije* ed. **2**: 98–118. Cankarjeva založba. Ljubljana.
- ŠILIĆ, Č., 1983: Šumske zeljaste biljke. Sarajevo.
- TOPIĆ, J., N. ŠEGULJA, 1983: Nova nalazišta vrste *Eranthis hyemalis* (L.) Salisb. u Hrvatskoj. *Acta Bot. Croat.* **42**: 145–147.

- TRINAJSTIĆ, I., 1973: *Eranthis* (L.) Salisb. In: I. TRINAJSTIĆ (ed.): Analitička flora Jugoslavije 1(2): 244.
- TRINAJSTIĆ, I., 1983: Visianijev »Stirpium Dalmaticorum Specimen« preteča djela »Flora Dalmatica«. Zbornik Roberta Visianija Šibenčanina, 119–135. Šibenik.
- VISIANI, R., 1826: *Stirpium Dalmaticarum Specimen*. Pattavii. Prijevod J. Radić – Ogled dalmatinskog bilja. Split 1978.

SAŽETAK

Sadašnje stanje rasprostranjenosti ozimnice *Eranthis hyemalis* (L.) Salisb., *Ranunculaceae* u Hrvatskoj

Josip Franjić

Ozimnica (*Eranthis hyemalis*) nije tako rijetka biljka hrvatske flore, iako je do nedavno bila poznata samo iz razmjerno malenoga broja lokaliteta.

Tijekom veljače 1995. godine utvrđeno je stanje rasprostranjenosti ozimnice – *Eranthis hyemalis* na području Brodsko-posavske Županije. Otkriveno je ukupno devet novih lokaliteta ozimnice – Lužani, Ciglenik, Čelikovići, Sibinj, Završje, Vrhovina, Trnjani, Garčin i Donji Andrijevc. Na navedenim lokalitetima ozimnica raste na rubovima šumaraka, šikara i livada.

Ozimnica (*E. hyemalis*) se u velikoj množini sačuvala na navedenim lokalitetima u vrlo vitalnom stanju jer navedeno područje pripada industrijski najnerazvijenijim dijelovima Brodsko-posavske Županije.