

UDC 581.95 : 582.542.1 (497.11)  
Original scientific paper

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***ELEUSINE INDICA* (L.) GAERTN. - AN ADVENTIVE PLANT SPECIES IN  
THE FLORA OF THE SOUTHEASTERN YUGOSLAVIA**

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Randjelović, V., Randjelović, N. and Zlatković, B. (1992-1993):  
*Eleusine indica* (L.) Gaertn. – an adventive plant species in the flora of the  
on southeastern Yugoslavia. – Glasnik Instituta za botaniku i botaničke  
bašte Univerziteta u Beogradu, Tom XXVI-XXVII, 71 - 76.

On the basis of floristic investigations, review of herbarium material  
(BEOU, Herb. Moesiacum Doljevac) and data from literature, new dis-  
tribution maps for Balkan Peninsula and Yugoslavia are presented for the  
adventive plant species *Eleusine indica*.

Key words: *Eleusine indica*, adventive plant species, locality

Ključne reči: *Eleusine indica*, adventivna biljna vrsta, lokalitet

INTRODUCTION

*Eleusine indica* is autochtonic weed species of the paleotropical floristical district  
(Weber, 1961), which arrived on the european ground at the end of the last century  
with seeds of american oil-flowers (Thellung, 1912) and wool (Weber, 1961). For  
the first time this species was noted for Europe in Belgium and Germany at the

beginning of this century (Ascherson & Graebner, 1899), and five years later it was found at the Balkan peninsula (Halaszy, 1904). The first finding of this species for Yugoslavia is coming from 1955. in Kotor, Piran and Umag (Hodak, 1959/60), and in Serbia three years later in the streets of Novi Sad (Slavnić, 1961). From that time during next thirty years this species was found in 25 localities on the territory of the Yugoslav countries. Except for mentioned localities this species was also recorded in the surrounding of Novi Sad (Obradović, 1966, Ivković, 1975, Čapaković & Ivković, 1978), Belgrade (Ivković, 1982, Jovanović, 1992) and Vukovar (Topić & Šegulja, 1978), spreading throughout Vojvodina, Mačva (Ivković, 1982), Slavonija and Baranja (Topić & Kusulja, 1989), from the district of Bačka and Srem to the other bank of the Danube and the Sava. It is also recorded in Turopolje region (Hulina, 1971, 1989), in surrounding of Zagreb (Marković & Hulina, 1970) and Split (Ilijanić, 1989), in the streets of Dubrovnik and Rijeka, and on some localities in Montenegro (Ivković, 1982). At the district of southeastern Yugoslavia this species was not found up to now.

## RESULTS AND DISCUSSION

During investigation of ruderal vegetation in southeastern Serbia we have found species *Eleusine indica* in some areas of plant communities *Lolio-Plantaginietum majoris* Bg. 1930. and *Polygono-Bidentetum* (Koch, 1926) Lohm. 1950. In first community this species is presented in the villages Kočane (near the road Niš-Priština), Doljevac, Pukovac (on the cattle market-place) and Koritnica and on the railway station in the city of Leskovac. Single turfs of this species we have found in the yards of mentioned villages. In second community this species has been met on the bank of the Jablanica river in village Živkovo, near by Leskovac. Also, it is found on sandy bank of the Toplica river in vegetation of alliance *Nanocyperion flavescenti* W. Koch 1926 in the village Šarlinac.

### Distribution of *Eleusine indica* at the Balkan Peninsula (Fig. 1)

Croatia: Piran, Umag (Hodak, 1959/60), in the surrounding of Zagreb (Marković & Hulina, 1970), Turopolje region (Hulina, 1971, 1989), Vukovar (Topić & Šegulja, 1978), Rijeka, Dubrovnik (Ivković, 1982), Split (Ilijanić, 1989).

Bulgaria: Čustendil (Ganchev, 1963), Petrič, Čustendil (Stojanović et al., 1966), Znepole region, Struma valley, Thracian plain (Andreev et al., 1992).

Greece: (Hayek, 1933), Thessaloniki (leg. Heldreich, Herb. Norm. N. 1294 in Halaszy, 1904).

### Distribution of *Eleusine indica* in Yugoslavia (Fig. 2)

Montenegro: Kotor (Hodak, 1959/60), Donja Plavnica, Titograd, Sutomore, Stari Bar (Ivković, 1982), Budva (7.8.1994, Lakušić, D., BEOU).

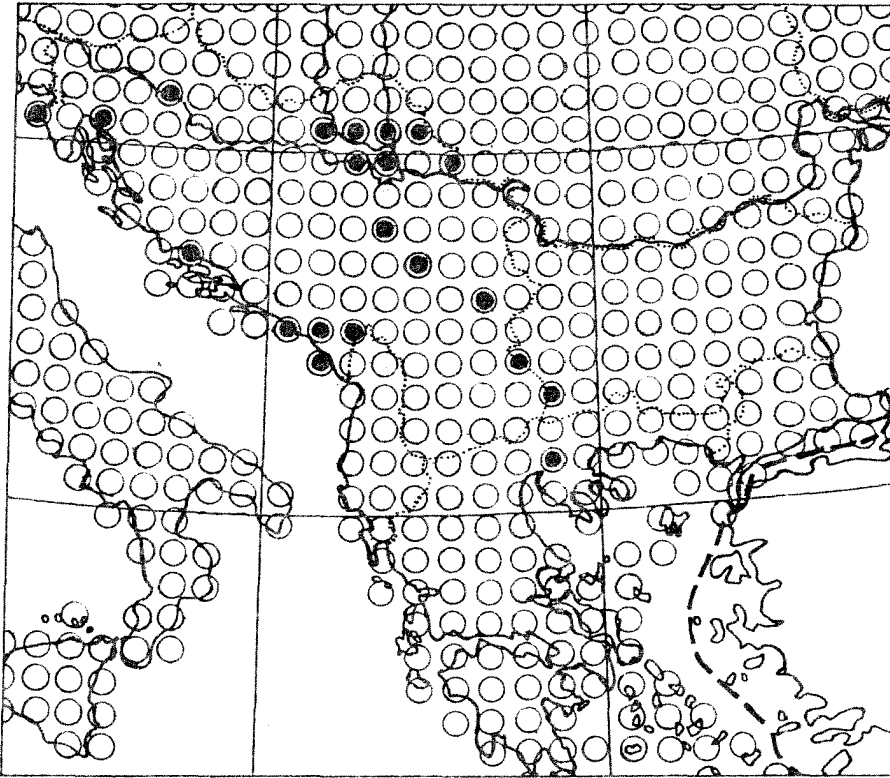


Fig. 1. – Distribution of adventive plant *Eleusine indica* at the Balkan Peninsula

North Serbia: Novi Sad (Slavnić, 1961, Ivković, 1975, Čapaković & Ivković, 1978), Petrovaradin (Obradović, 1966), Kač, Titel (Čapaković & Ivković, 1978), Stara Pazova, Nova Pazova, Batajnica, Beograd, Drenovac, Šabac (Ivković, 1982), Bela Crkva (10.8.1993, Lakušić, D., BEOU br. 331/93), Ruma (15.9.1993, Randjelović, V., Herb. Moesiacum Doljevac), Zrenjanin (28.9.1994, Randjelović, N., Herb. Moesiacum Doljevac), Mataruška banja (15.8.1994., Lakušić, D., BEOU), Pepeljevac near by Lajkovac (9.1994, Lakušić, D., BEOU).

Southeastern Serbia: Kočane, Pukovac (1977, Randjelović, N., Herb. Moesiacum Doljevac), Kočane (19.10.1994, Randjelović, V., Herb. Moesiacum Doljevac), Živkovo (9.10.1990, Randjelović, V. & N., Herb. Moesiacum Doljevac; Randjelović, 1992), Doljevac (27.8.1991, Randjelović, N. & V., Zlatković, B., Herb. Moesiacum Doljevac), Leskovac (22.9.1991., Randjelović, N. & V., Zlatković, B., Herb. Moesiacum Doljevac), Koritnica near by Bela Palanka (31.8.1983., Randjelović, N., Herb. Moesiacum Doljevac).

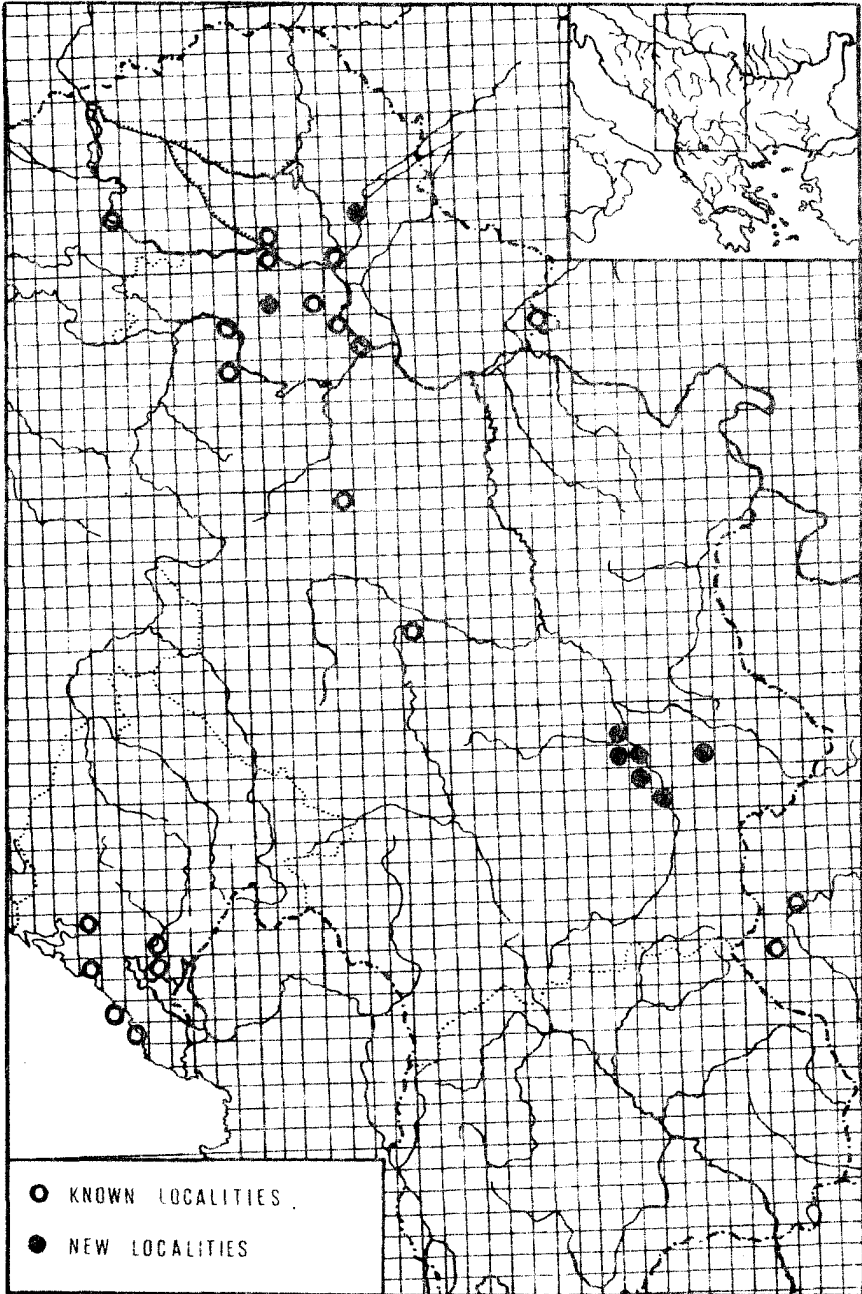


Fig. 2. – Distribution of adventive plant *Eleusine indica* in Yugoslavia

## CONCLUSION

Adventive plant species *Eleusine indica* was noted for Croatia, Montenegro and northern Serbia (Fig. 1) up to now. Species finding in the city of Leskovac and in villages Šarlinac, Doljevac, Kočane, Pukovac, Živkovo and Koritnica are new localities on the territory of Yugoslavia. In the southeastern Serbia as well as in the other parts of Yugoslavia this species is an inhabitant of ruderal plant communities.

## ACKNOWLEDGEMENTS

The author's gratitude belongs to Dr Ljerka Marković, professor at University of Zagreb, and mr DMITAR Lakušić, assistant at University of Belgrade.

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## Rezime

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### *ELEUSINE INDICA* (L.) GAERTN. - ADVENTIVNA BILJNA VRSTA JUGOISTOČNE JUGOSLAVIJE

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Adventivna biljna vrsta *Eleusine indica* je do sada nalažena u Hrvatskoj, Crnoj Gori i severnoj Srbiji, tako da nalazišta ove vrste u gradu Leskovcu i selima Šarlincu, Doljevcu, Kočanu, Pukovcu, Živkovu i Koritnici u jugoistočnoj Srbiji predstavljaju nove lokalitete i proširenje njenog areala na teritoriji jugoslovenskih zemalja. Kao i u ostalim delovima Jugoslavije i u jugoistočnoj Srbiji je ova vrsta stanovnik ruderalnih biljnih zajednica.