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A CONTRIBUTION TO KNOWLEDGE OF *DROSOPHILIDAE (DIPTERA)* FAUNA IN KRAGUJEVAC BASIN

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In the collection of *Drosophilidae* flies caught in three localities of Kragujevac basin (about 140 km south of Belgrade, Serbia) among 795 individuals we identified: 13 species of *Drosophila*, 2 species of *Scaptomyza* and 1 species of *Chymomyza*.

KEY WORDS: *Drosophilidae*, the Balkans' fauna

A family of *Drosophilidae*, with 65 genus containing about 3500 described species (WHEELER, 1986; KEKIĆ 2002), is distributed all around the world but rather unequally. Since many of the genera are restricted to tropical regions, so far only about 370 species have been found in the whole Palearctic region, among which 160 belong to *Drosophila* genus. Data on the number of species in ex – Yugoslav republics, given in Kekic's study (2002), show that 59 species of this family were found in the last few decades.

Beginning from the fact that *Drosophila* species are used as a model system for experiments done in the field of genetics, evolutional and even molecular biology, it is necessary to have a good knowledge of *Drosophilidae* ecology i.e., spatial and time organization of populations of different kinds and at different habitats. The first data on *Drosophilidae* fauna in Kragujevac basin (STANIĆ *et al*, 2001) showed a great variety of *Drosophilidae* in this part of Serbia, therefore our investigations were continued.

A comparative analysis of the collections of the flies, caught using a standard method (BÄCHLI & BURLA, 1985) in three localities in Kragujevac and its sur-

roundings: (1) near the artificial lake Bubanj, in the urban area of the town, (2) in the beech forest near Crni vrh, (Bešnjaja I) and (3) at the end of the acacia forest in Bešnjaja (Bešnjaja II), revealed the following characteristics. Out of 795 caught individuals, 16 species were identified, and the greatest variety was in the habitat marked as Bešnjaja I (15 species). The biggest number of identified species belonged to *Drosophila* genus (13); two of the species belonged to *Scaptomyza* genus, and only one of them belonged to *Chymomyza* genus (Table 1). The fact that 6 individuals of *Chymomyza amoena* genus were found indicates the successful spreading of this species' habitat within Serbia and Montenegro, bearing in mind that the first specimen of this kind, considered to be an endemic species of North America, was identified in 1980 at Popovica locality (KEKIĆ AND BÄCHLI, 1983) and later at other localities in Serbia and Montenegro as well (see KEKIĆ, 1998).

Of all synanthropic *Drosophila* species found in Serbia and Montenegro (***busckii, funebris, immigrans, melanogaster, repleta, simulans***), there were only

Table I. The list of *Drosophilidae* species collected in three localities in Kragujevac basin

Species/locality	Bubanj	Bešnjaja I	Bešnjaja II	TOTAL
	24-27 V 2003	24-27 V 2003	24-27 V 2003	
DROSOPHILA				
D. ambiqua	2	1	2	5
D. confusa		5		5
D. funebris	2	1		3
D. helvetica	3	20	2	25
D. histrio		2		2
D. kuntzei	1	43		44
D. obscura		3	1	4
D. phalerata	1	150	9	160
D. rufifrons	1			1
D. subobscura	147	75	64	286
D. testacea	4	210	18	232
D. transversa	1	2	3	6
D. tristis	3	2	2	7
CHYMOMYZA				
C. amoena	2	2	2	6
SCAPTOMYZA				
S. graminum		1		1
S. pallida		8		8
TOTAL	167	525	103	795
No of species	11	15	9	16

3 individuals of ***Drosophila funebris*** in these collections. On the other hand, species that can be regarded as indicators of "wild" (forest) habitats: *confusa, helvetica, histrio, obscura, kuntzei, phalerata, transversa* and *tristis* , were numerous (more than 28%) in the studied habitats.

Analyses of composition of species in the habitats of Kragujevac basin made so far, including the results in our previous paper (STANIĆ *et al*., 2001), with 25 found species, show a great variety of *Drosophilidae* fauna in this part of central Serbia, and they also indicate the need for even more extensive studies that will include more "wild" habitats and the usage of combined techniques of collecting individuals of this family.

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ПРИЛОГ ПОЗНАВАЊУ ФАУНЕ *DROSOPHILOIDAE (DIPTERA)* КРАГУЈЕВАЧКЕ КОТЛИНЕ

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И з в о д

Током маја месеца 2003. године вршили смо фаунистичко-еколошка истраживања *Drosophilidae* мушица у региону крагујевачке котлине. Том приликом мушице смо ловили на стандардан начин, ентомолошком мрежицом уз помоћ воћних супстрата за примамљивање, на три локације: (1) у близини вештачког језерцета Бубањ, на ободу града Крагујевца, (2) у буковој шуми на обронку Црног врха, на око 13 км од Крагујевца, у излетишту које се назива Бешњаја (Бешњаја I) и (3) на крају багремове шуме, која се надовезује на поменуту букову шуму, на око 15 км од града (Бешњаја II).

Међу 795 уловљених јединки идентификовано је 16 врста, од којих највећи број припада роду *Drosophila* (13), две роду *Scaptomyza* и једна роду *Chymomyza*.

Овим радом број пронадјених врста *Drosophilidae* у региону крагујевачке котлине је повећан за 7, тако да сада износи 25 (види Станић *et al.*, 2001).

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