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Preliminary list of the fauna of Drosophilidae from Užice, Serbia.

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During the past forty years, fauna of Drosophilidae has been collected and investigated at more than 60 geographic localities within the territory of former Yugoslavia (for review see Kekić *et al.*, 1999). A total of 59 species classified into 9 genera have so far been determined; the majority of them (as much as 37) belongs to the genus *Drosophila* (Kekić, 2002). However, Serbia is not yet analyzed sufficiently with respect to Drosophilidae fauna; to be more precise, the fauna of some regions is better explored, for example, in Vojvodina and the area along the Danube river (Kekić *et al.*, 1999; Kekić, 2002, 2009), while in some parts of the country faunistical researches were not carried out.

Here we report the results of the first faunistical research conducted in west Serbia (Užice). Užice is the administrative center of western Serbia (Zlatibor District); it is placed in the ravine, along the banks of Đetinja River, surrounded by hills.

Investigation of Drosophilidae fauna was performed during August; flies were caught in the central part of the city, around the house, in garden and orchard. According to classification of Drosophilidae habitats (the main criterion for this classification was the estimated extend of human influence on habitat). This habitat belongs to semidomestic type (locations constantly under the

human influence, Kekić, 2002). A mixture of seasonal fruit in the process of fermenting was put on plastic trays and distributed over the habitat. During the maximum of flies' activity (in the morning and evening), flies attracted by baits were captured by net. They were preserved in 70% ethanol, until species identification was done (according to Bächli and Burla, 1985; Bächli *et al.*, 2004; Kekić, 2009).

At the studied locality, 10 species of Drosophilidae were determined: eight of them belong to genus *Drosophila*, one to genus *Scaptodrosophila*, and one to genus *Scaptomyza* (Table 1). Among collected species, *Drosophila melanogaster* is dominant, with almost 75% of collected individuals. This is not surprising, since *D. melanogaster* is cosmopolitan species, associated with man and occurs mostly near houses, being especially numerous in gardens and orchards (Shorrocks, 1974). The other cosmopolitan *Drosophila* species recorded in Užice were: *simulans*, *funnebris* and *immigrans*. However, considering specific relief and immediate surroundings of this city, it is not unusual that some species usually found in woodland were observed, like *D. helvetica* or fungivorous *D. kuntzei*.

Table 1. List of Drosophilidae species recorded so far in Užice, Serbia.

GENUS	SUBGENUS	SPECIES GROUP	SPECIES
<i>Drosophila</i>	<i>Drosophila</i>	<i>Drosophila funnebris</i>	<i>funnebris</i>
"	"	<i>Drosophila immigrans</i>	<i>immigrans</i>
"	"	<i>Drosophila quinaria</i>	<i>kuntzei</i>
"	<i>Sophophora</i>	<i>Drosophila melanogaster</i>	<i>melanogaster</i>
"	"	"	<i>simulans</i>
"	"	<i>Drosophila obscura</i>	<i>ambigua</i>
"	"	"	<i>helvetica</i>
"	"	"	<i>subobscura</i>
<i>Scaptodrosophila</i>		<i>Scaptodrosophila rufifrons</i>	<i>rufifrons</i>
<i>Scaptomyza</i>	<i>Parascaptomyza</i>		<i>pallida</i>

Since the city is located in the ravine, on both sides of the river that is surrounded by a specific mountain relief, we believe that the expansion of research in this region will confirm the presence of a larger number of Drosophilidae species. Those faunistic collections would yield more completed data about species composition in the studied area, and, what is more important, their distribution and relationships in broader ecological context, since Drosophilidae fauna may be used as an indicator of the environmental conditions (Milošević *et al.*, 1997).

Acknowledgement: This research was supported by the Serbian Ministry of Science and Technological Development, Grant 146023.

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