THE FIRST RECORD OF MACROPHYA ALBOANNULATA COSTA (HYMENOPTERA, TENTHREDINIDAE) IN SERBIA AND MONTENEGRO. Z. Nikolić and M. Brajković, Institute of Zoology, Faculty of Biology, University of Belgrade, Studentski trg 16, 11000 Belgrade, Serbia and Montenegro

The symphytan fauna of Serbia and Montenegro has been insufficiently studied so far (Zombori, 1982). The relatively few unsystematic studies mostly pertained to some economically significant species, so that only 207 species of sawflies have been recorded up to now (Nikolić and Brajković, 1999). Faunistic and ecological research on sawflies of Mt. Avala (near Belgrade, Serbia) carried out in 2002 and 2003 resulted in several findings new for the entomofauna of our country. Among other newly recorded sawfly taxa, it should be emphasized that one of them, Macrophya alboannulata O.G.Costa, 1859, was the most abundant species in these studies.

There is a marked diversity in abundance of specimens and species of the genus Macrophya, a genus of the nomino-typical subfamily of the most diversified symphytan family Tenthredinidae, which is more diverse in the warm temperate areas. Macrophya alboannulata, according to its known range (Europe and Central Asia), belongs to the west-Palaearctic faunal element.

Study of the sawflies of Mt. Avala was carried out using techniques standard for this group (Vasilev, 1978; Čingovski, 1985; Perović, 1992), over the course of a two-year period (2002–2003).

Sampling was carried out at several localities encompassing the principal plant communities present on Mt. Avala, predominantly forests, as described in detail by Obratov (1986).

The most widespread vegetation type on Mt. Avala is an oak forest of the Querco-Carpinetum (s.l.) type, with several variants. Sawflies were collected at two sites, one on northeastern and the other on western slopes of Mt. Avala, respectively.

The beech forests of Mt. Avala (Fagetum submontanum s.l.) were sampled around the “Ladne vode” spring on the eastern slope.

A large part of the northern slopes are now covered with old stands of planted pines (mainly Pinus nigra and P. sylvestris), with undergrowth that has retained characteristics of the original, mainly oak forest (sampled at one location).

Finally, communities of the open type (diverse seminatural meadows) were sampled at the peak of Mt. Avala (around the memorial complex, which is designed as a park area), and around the “Čarapicev Brest” locality.

Macrophya alboannulata was collected in all of the sampled communities of Mt. Avala. With 307 collected specimens, it was recorded as the most numerous sawfly species on Mt. Avala, with 141 specimens caught in 2002 and 166 in 2003 (Table 1). In the oak forest of Mt. Avala, 37 specimens were collected: 08. 04. 2002, 2 ♂♂, 2 ♀♀; 08. 05. 2002, 1 ♀; 08. 05. 2002, 8 ♀♀; 16. 05. 2002, 10 ♀♀; 23. 05. 2002, 4 ♀♀; 15. 04. 2003, 1 ♂; 29. 04. 2003, 2 ♂♂, 6 ♀♀; and 20. 05. 2003, 1 ♀. Sixty-three specimens were collected from the beech forests of Mt. Avala: 08. 05. 2002, 1 ♂, 12 ♀♀; 16. 05. 2002, 20 ♀♀; 23. 05. 2002, 4 ♀♀; 29. 04. 2003, 13 ♂♂, 4 ♀♀; 20. 05. 2003, 1 ♂, 7 ♀♀; and 28. 05. 2003, 1 ♀. In the phytocenosis of planted pines, 113 specimens were caught: 05. 05. 2002, 1 ♂, 28 ♀♀; 16. 05. 2002, 8 ♀♀; 18. 05. 2002, 1 ♂; 15. 04. 2003, 8 ♂♂, 1 ♀; 29. 04. 2003, 29 ♂♂; 20. 05. 2003, 7 ♀♀; and 24. 06. 2003, 1 ♂. Ninety-four specimens were collected in communities of the open type on Mt. Avala: 08. 04. 2002, 6 ♂♂, 2 ♀♀; 08. 05. 2002, 15 ♂♂; 23. 05. 2002, 15 ♀♀; 19. 06. 2002, 1 ♂; 15. 04. 2003, 1 ♂, 29. 04. 2003, 12 ♂♂, 10 ♀♀; 29. 04. 2003, 5 ♂♂, 9 ♀♀; 20. 05. 2003, 11 ♀♀; and 28. 05. 2003, 7 ♀♀.

It is noteworthy that specimens from Mt. Avala are somewhat lighter colored than the Central European ones (Scobiola-Palade, 1978; Benson, 1954). We therefore are giving a short description of the relevant body parts, as follows: head black, with labrum, clypeus, and base of the mandible pale colored; thorax black, corners of the pronotum and tegulae whitish; scutellum either entirely white or with two pale spots; legs black, inner side of femur, tibia, and tarsi of the first two pairs pale; hind legs with white spots on coxa and trochanter, as well as on tip of tibia; wings translucent, with dark stigma and veins; abdomen black with a white band along the hind margin of the first tergite; other tergites considerably variable in coloration, totally black or with more or less marked pale-colored hind margin. Body length varied from 7 to 12 mm.

Activity of adults was registered in the period April–June (Fig. 1). In 2002, the maximum number was observed during May, while the maximum number in 2003 was noted in April (Table 1). Adults of this species are practically absent from catches in the other months. Such an activity seems to be governed by phenology of the vegetation, in particular that of the larval host-plant (species of the genus Sambucus). Based on the recorded activity of *M. alboannulata* on Mt. Avala, it can be characterized as a spring species.

Table 1. Number of *Macrophya alboannulata* adults during the collecting seasons of 2002 and 2003.

<table>
<thead>
<tr>
<th>Months</th>
<th>April</th>
<th>May</th>
<th>June</th>
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<tbody>
<tr>
<td>N in 2002</td>
<td>12</td>
<td>128</td>
<td>1</td>
</tr>
<tr>
<td>N in 2003</td>
<td>130</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>163</td>
<td>2</td>
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Fig. 1. Activity dynamics of *Macrophya alboannulata* adults during the investigated period.