

**NEW AND LITTLE-KNOWN *MELIGETHES*
SPECIES FROM YUGOSLAVIA
(COLEOPTERA, NITIDULIDAE, MELIGETHINAE)**

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In the present paper the occurrence of three species of pollen-beetles, *Meligethes spomnrafti* Audisio, 1976, *M. reitteri* Schilsky, 1894, and *M. caudatus* Guillebeau, 1897, previously not listed from Yugoslavia, is reported, and the unknown female of the probably endemic *M. cooteri* Audisio, 1989, is described, with notes on host-plants of the species dealt with.

KEY WORDS: Taxonomy, geographic distribution, host-plants, Coleoptera, Nitidulidae, Balkans, Yugoslavia.

INTRODUCTION

As a result of intensive field researches carried out by the senior author in more recent years in Yugoslavia on the pollen-beetles of the genus *Meligethes*, a series of interesting faunistic data were assembled. A few formerly unrecorded and rather unexpected or new species were found (AUDISIO, JELENEK & STEVANOVIC, 1999; AUDISIO & STEVANOVIC, in preparation). In the present paper some of the more interesting data are presented. They concern three species of the genus *Meligethes*, which are new for Yugoslavia. In addition, the description is given of the so far unknown female of *Meligethes cooteri* Audisio, 1989, recently described from Montenegro (AUDISIO, 1989, 1993). This species, whose biology was almost unknown, is most probably endemic to the mountain areas of NW Balkan.

Collection acronyms: CAR= Audisio's collection, Rome University;
CSN= Stevanović's collection, Niš.

***Meligethes cooteri* Audisio**

Meligethes cooteri Audisio, 1989: 25; Audisio, 1993: 743.

Material examined. YUGOSLAVIA: Montenegro - Durmitor Mts., Durmitor National Park, Mali Međed, 1900 m, 15.07.1954, Mrkić leg., 1♀, (CSN); ibid., 18.07. 1954, G. Nonveiller leg., 2♂, 2♂ (CSN, CAR); Durmitor National Park, Jakšica katuni, 16.07.1954, Mrkić leg., 1♀, 1♀ (CSN, CAR); Durmitor National Park, Todorov do, 14.07.1985, Pavićević leg., 1♂ (CSN); Durmitor National Park, Orin katun, 1800-1900 m, 20.07.1997, on *Stachys alopecuroides* (L.) Benth. (Lamiaceae), Stevanović leg., 1♀ (CSN); Durmitor National Park, Struga, 1800-1900 m, 20.07.1997, on *Stachys alopecuroides* (L.) Benth. (Lamiaceae), Stevanović leg., 24♀ (CSN, CAR); Durmitor National Park, Lokvice, 1800-1900 m, 21.07.1997, on *Stachys alopecuroides* (L.) Benth. (Lamiaceae), Stevanović leg., 1♀ (CSN); Durmitor National Park, Indjini dolovi, 1750 m, 21.07.1997, Stevanović leg., 1♀ (CSN); Durmitor National Park, Vilino kolo, 1850 m, 22.VII 1997, on *Acinos alpinus* (L.) Moench. (Lamiaceae), Stevanović leg., 1♀ (CAR).

Description of female. Length 2.1 to 2.35 mm. Metasternum and last visible abdominal segment simple. Anterior tarsi distinctly narrower than in the male. Ovipositor (Fig. 1) very similar to those of *Meligethes persicus* Faldermann, 1837 (=*M. pedicularius* Auct., nec, Gyllenhal, 1808 and of *M. pedicularius* (Gyllenhal, 1808) (Audisio, 1993).

Geographic distribution. This species was so far known only from the male holotype (Audisio, 1989, 1993) from Durmitor National Park, Čvorog bogaz (Fig. 2).

Biology. The larval host-plant of *Meligethes cooteri* is the widespread *Stachys alopecuroides* (L.) Benth. (Lamiaceae). To the genus *Stachys* belong the host plants of several other closely related species of the *Meligethes difficilis* species group (AUDISIO, 1993). *Meligethes cooteri* was collected on meso-xerophilous meadows, situated from 1750 m up to 2000 m. Despite the apparently very restricted geographic range of this species, no specimens of it were so far collected on other more locally distributed or endemic species of the genus *Stachys*.

***Meligethes spornrafti* Audisio**

Meligethes spornrafti Audisio, 1977: 15; Audisio, 1993: 545

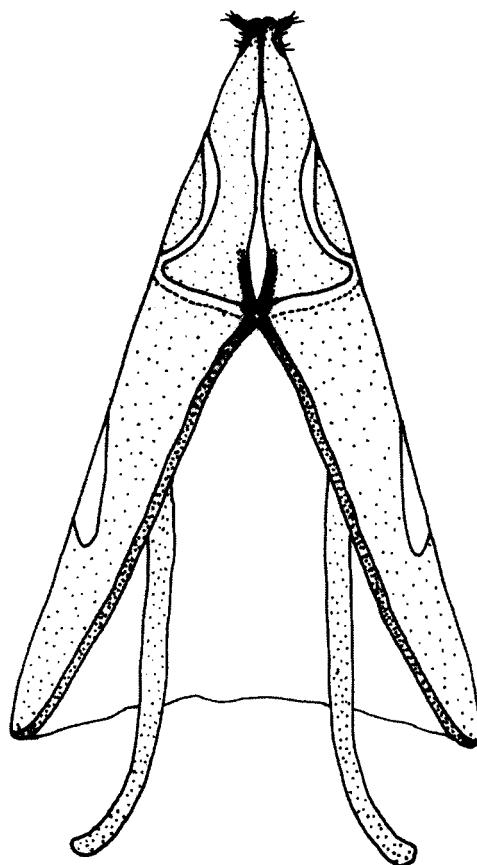


Fig. 1. Ovipositor of *Meligethes cooteri* Audisio, ♀, from Montenegro, Durmitor national park, Struga

Material examined. YUGOSLAVIA: Serbia – Mt. Suva planina, Vodice, 22.05.1997, on *Cardamine bulbifera* (L.) Crantz (Brassicaceae), M. Stevanović leg., 1♂ (CAR); Mt. Suva planina, Beliška Čuka, 25.05.1997, on *Arabis turrita* L. (Brassicaceae), M. Stevanović leg., 2♀ (CSN); Mt. Rtanj, Skok, 27.06.1998, on *Coronilla varia* L. (Fabaceae), M. Stevanović leg., 3♀ (CSN); Mt. Rtanj, Baba, 27.06.1998, on *Centaurea atropurpureum* L. (Asteraceae), M. Stevanović leg., 1♂ (CSN); Mt. Rtanj, Ledenička strana, 27.06.1998, on *Campanula persicifolia* L., (Campanulaceae), M. Stevanović leg., 2♀ (CSN); Mt. Svrljiške planine, Cigančica, 09.04.1999, on *Arabis turrita* L., M. Stevanović leg., 2♂, 3♀ (CSN); Mt. Svrljiške planine, Kosmac, 19.04.1999, on *Arabis turrita* L., M. Stevanović leg., 3♂, 6♀

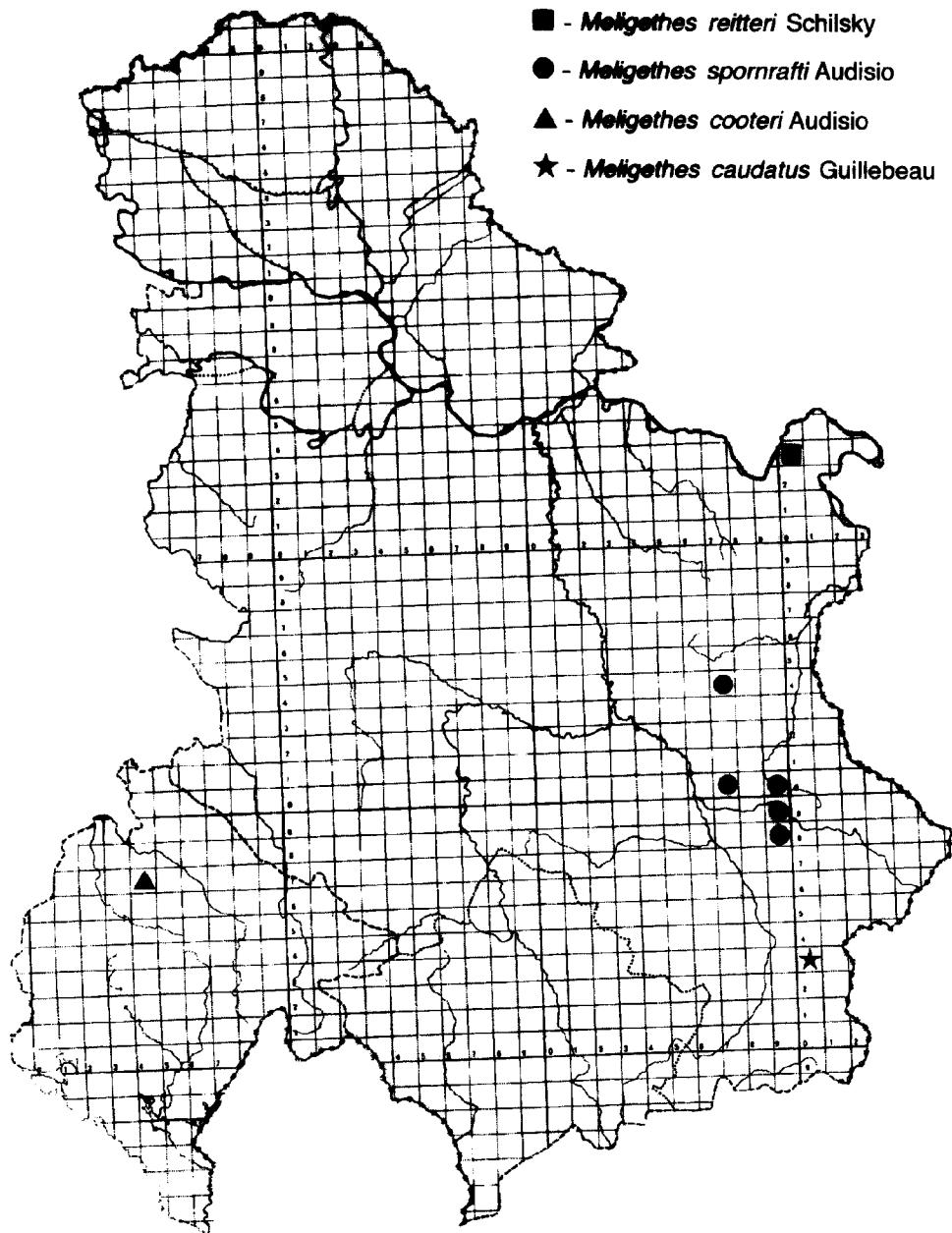


Fig. 2. Distribution of investigated species in Yugoslavia

(CSN); Mt. Svrliške planine., Šainac, 21.04.1999, M. Stevanović leg., 1 ♂, 1 ♀ (CSN); Kameničeki Vis Mts., Ljuti vrh, 16.06.1998, on *Campanula persicifolia* L., B. Mitić leg., 2 ♂ (CSN); Gorge Sićevačka klisura; Ostrovica, 05.4. 1998, M. Stevanović leg., 1 ♂ (CSN).

Geographic distribution. This species was so far known from SE France (Basses Alpes, Alpes Maritimes), from the Western Italian Alps, and from peninsular Italy (AUDISIO, 1993). The new above listed localities in Yugoslavia show that this species, clearly absent both from NE Italy and the Eastern Alps, has an evident Transadriatic distribution (Fig. 2).

Biology. The larval host-plants of *Meligethes spornrafti* are members of the genus *Arabis* (Brassicaceae), although adults are frequently collected also on *Cardamine spp.* (Brassicaceae) (AUDISIO, 1993); *Arabis turrita* L. and related species are the main host-plants both in Italy and in Yugoslavia.

Meligethes reitteri Schilsky

Meligethes reitteri Schilsky, 1894: 4; Audisio, 1993: 543.

Material examined. YUGOSLAVIA: Serbia- Miroč Mt, Veliki Štrbac, 18.07.1998, on *Hesperis sylvestris* Crantz (Brassicaceae), M. Stevanović leg., 6♂, 3♀ (CSN).

Geographic distribution. This species is widespread, although rare, known so far from the Altai Region in Middle Asia to the Pyrenean Mts. in northern Spain; in the Balkans previously cited only from Bosnia (AUDISIO, 1993) (Fig. 2).

Biology. The larval host-plants of *Meligethes reitteri* are *Hesperis matronalis* L. and *Hesperis sylvestris* Crantz (Brassicaceae) in most parts of its geographic range.

Meligethes caudatus Guillebeau

Meligethes caudatus Guillebeau, 1897: 226; Audisio, 1993: 775; Jelinek, 1997: 132.

Material examined. YUGOSLAVIA: Serbia- lake Vlasina, 11.05.1997, on *Crocus veluchensis* Herb. (Iridaceae), M. Stevanović leg., 6♂, 8♀ (CSN, CAR).

Geographic distribution. This boreomontane species is widespread, although rare, it was known so far from the Scandinavian Peninsula and from a few mountain areas of Central and Southern Europe (SE France, Switzerland, Northern and Central Italy, Austria, Czech Republic,

Romania, Poland and Ukraine: AUDISIO, 1993; JELINEK, 1997) (Fig. 2).

Biology. The larval host-plants of *Meligethes caudatus* are *Campanula spp.* (Campanulaceae) of the *C. rotundifolia* species-complex (AUDISIO, 1993). Adults are occasionally found also on other mountain flowers, such as *Crocus spp.* (Iridaceae), *Helianthemum spp.* (Cistaceae), *Carlina spp.* (Asteraceae), etc.

REFERENCES AUDISIO, P., 1977. Un nuovo *Meligethes italiano* del gruppo di specie di *M. aeneus* (F.) (Coleoptera, Nitidulidae). *Boll. Ass. Romana Entomol.*, 31 (1976) (1-4): 15-22; AUDISIO, P., 1989. Un nuovo *Meligethes jugoslavo* del gruppo di specie di *M. difficilis* (Heer). *Boll. Assoc. Romana Entomol.*, 43 (1988) (1-4): 25-28; AUDISIO, P., 1993. Coleoptera Nitidulidae - Kateretidae. Fauna d'Italia, vol. 32, Calderini ed., Bologna, XVI + 971 pp; AUDISIO, P., JELINEK, J. & STEVANOVIC, M., 1999. Morphological and biogeographical reexamination of the *Meligethes squamosus* species-complex (Coleoptera, Nitidulidae, Meligethinae). *Folia Heyrovskyana*, Vol. 7(1): 61-71; GUILLEBEAU, F., 1897. Descriptions de quelques especes nouvelles de Coleopteres. *Bull. Soc. ent. France*, 1897 (2): 222-227; JELINEK, J., 1997. New descriptions and records of Brachypterae and Nitidulidae from the Palaearctic region (Coleoptera). *Folia Heyrovskyana*, 5 (3): 123-138; SCHILSKY, J., 1894. *Meligethes reitteri*, *Meligethes longulus*. Küster, Käfer Europas, 30: 4-8.

НОВА И МАЛО ПОЗНАТЕ *MELIGETHES* ВРСТЕ ИЗ ЈУГОСЛАВИ-

ЈЕ (COLEOPTERA, NITIDULIDAE, MELIGETHINAE)

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И з в о д

У овом прилогу се доноси опис до сада непознате женке, вероватно, ендемичне врсте *M. cooteri* Audisio са Дурмитора. Врста је до сада била позната само по једном мужјаку кога је 1985. године пронашао J. Cooter (Дурмитор, Чворов богаз, 2000 м).

Такође се наводе први налази за Балканско полуострво врста *Meligethes spornrafti* Audisio и *M. caudatus* Guillebeau, као и први налаз *M. reitteri* Schilsky у Југославији. Износе се подаци о њиховом распросрањењу у нас и о биљкама хранитељкама наведених врста.

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