SPHAEROLIODES ACUMINATUS SP. N.  
(COLEOPTERA: LEIODIDAE, LEIODINAE) FROM TAIWAN  
AND NOTES ON TWO OTHER SPECIES

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Sphaerolides acuminatus sp. n. from Taiwan is described and distinguished from the others species of the genus. Colenisia topali Daffner, 1988 is recorded for the first time from Taiwan and Zeadolopus ventriculus Švec, 1997 from Ghana.

Key words: taxonomy, Leiodidae, Leiodinae, Sphaerolides, Colenisia, Zeadolopus, Taiwan, Ghana

INTRODUCTION

Two species of the genus Sphaerolides Portevin, 1905 were known up to now (Portevin 1905, Perkovsky 1988). Both species seem to occur very rarely. Only the type series is known of S. erlan Perkovsky, 1988; the other species, S. rufescens Portevin, 1905 was recorded only four times since the year of the original description (Portevin 1914, 1927, Hlinskovsky 1963, Perkovsky 1988).

Colenisia of the Palaearctic region was studied by Daffner (1988), Hoshina (1999) and Švec (1994). Only two Palaearctic species occurring in continental China and Taiwan were described under the genus until now.

African Zeadolopus were recently reviewed by Švec (1997). Altogether four species including one species of doubtful taxonomic placement are known from Africa.

MATERIAL

The leiodid material from the collection of the Hungarian Natural History Museum, Budapest (HNHM) was studied. Two specimens of an unknown Sphaerolides that were discovered among the material were compared to three specimens of S. rufescens preserved in the collection of the National Museum, Prague (NMP). Hlinskovsky (1963) designated one of them as allotypus and the others as paratypes, although the specimens did not belong to the type series. In fact the original description was based on a single female only. For the identification of the other species mentioned in this paper, the type and other material are preserved in the author’s collection.
TAXONOMIC PART

*Sphaeroliodes acuminatus* sp. n. (Figs 1–4)

Type material – Holotype, male, “Taiwan, Nantou Pr., Hoshuanshan Exp. Stat., 24°09’N, 121°17’E, from bark at night, 3100 m, 27.ix.1999, G. Csorba & B. Herczig”, HNHM; paratype, male, the same, SC.

Description – Length of body 4.8–5.1 mm, in holotype 4.8 mm, head 1.0 mm, pronotum 1.3 mm, elytra 2.5 mm, antenna 1.6 mm, maximum width of head 1.6 mm, pronotum 2.9 mm, elytra 2.8 mm. Broadly oval (Fig. 1); reddish-brown with pronotal lateral margins widely and basal margin narrowly reddish; underside reddish with yellow-brown mesosternum and light chestnut metasternum. Mouth parts and antennae up to segment 6 reddish-brown; antennal segments 7–11 infuscate. Dorsum partly, venter entirely microsculptured.

Head. Convergent anteriorly in dorsal view; widest at broadly rounded temporal angles. Temples very long; length ratio of eye : temple = 1.4. Clypeal line very fine and unobtrusive. Puncturation fine, punctures separated by about 4–8 times their own diameter; each puncture furnished by single short fine pale, forward directed, seta. Two large frontal punctures located near each eye medially. Traces of microsculpture on front near eyes. Antennae (Fig. 4) with very long and slim segment 3.

Length ratio of antennal segments 2–11: 1.0 – 3.0 – 1.0 – 1.0 – 0.8 – 0.9 – 0.9 – 1.3 – 1.3 – 2.5. Ratio of length : width of antennal segments 2–11: 1.3 – 3.5 – 1.2 – 1.1 – 0.8 – 0.8 – 0.8 – 1.0 – 1.0 – 2.1. Width ratio of club segments: 1.0 – 0.9 – 1.2 – 1.2 – 1.1.

Pronotum. Widest at base. Basal margin curved forward laterally to posterior angles; those very broadly rounded in dorsal and lateral view. Pronotum very finely bordered from lateral sixth of basal length to anterior angles. Median part of pronotal base and anterior margin simple. Punctures larger than those on head; separated by 4–6 times their own diameter, each puncture furnished by single short fine pale, backward directed, seta. One large shallow puncture at each side of disc. Interstices with microreticulation increasing in strength laterally and basally; anteriorly weakly developed, superficial.

Scutellum. Smooth.


Legs. Tarsal segment 1 on anterior and middle legs strikingly dilated, broader than tibia distally; segment 2 feebly dilated.

Genitalia. Aedeagus as in Figs 2–3. Female unknown.

Variation. Head lacking microsculpture; pronotum anteriorly and on disc with traces, posteriorly and laterally with well-developed microreticulation in paratype.

Diagnosis. *Sphaeroliodes acuminatus* sp. n. differs from both other species of the genus by antennal segment 3, being three times longer than segment 2, while segment 3 is at most 1.5 times as long as segment 2 in both species compared. Also aedeagus shows specific characters.
Figs 1–5: Sphaeroliodes acuminatus sp. n.: 1 = body outline, 2 = aedeagus laterally, 2 = anterior tarsus, 3 = tip of aedeagus dorsally, 4 = antenna. 5: S. rufescens PORTEVIN, 1905, tip of aedeagus dorsally

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DISCUSSION

PERKOVSKY (1988) in the key to the identification distinguished Sphaeroliodes erlan from S. rufescens by their colour and presence of microsculpture and by width-to-length ratio of antennal segments 9 and 10. According to the original description S. erlan has reddish head and pronotum lacking microsculpture, while microsculpture is present on dark brown head and pronotum in S. rufescens. Presence and strength of microsculpture are variable in S. acuminatus. PERKOVSKY (1988) supposed antennal segments 9 and 10 to be quadrate while width-to-length ratio is 1.3–1.4 in S. erlan. In fact the same ratio is 1.3 (segment 9) and 1.2 (segment 10) in specimen of S. rufescens labelled as allotypus. The shape of aedeagus (judging from the drawing given by PERKOVSKY 1988, figs 4–5) is extremely similar, without obvious differences, in S. erlan and S. rufescens. It seems that the matter requests further studies.

Taking into account all that is mentioned above, all species of the genus could be distinguished as follows:

1 Tip of aedeagus truncate with rounded edges (Fig. 5). Antennal segment 3 at most 1.5 times as long as segment 2
   – Tip of aedeagus triangular (Fig. 3). Antennal segment about 3 times as long as segment 2. Length 4.8–5.1 mm. Taiwan
     S. acuminatus sp. n.
2 Head and pronotum dark brown; microsculptured. Length 3.8–4.5 mm. Japan, Kuril Isl.
   S. rufescens PORTEVIN, 1905
   – Head and pronotum reddish; without microsculpture. Length 4.5 mm. Russian Far East
     S. erlan PERKOVSKY, 1988

Colenisia topali DAFFNER, 1988

Material examined – 2 males, Taiwan, Nantou Prov., Huisun Forest Area, 15 km N of Puli, 500 m, under bark, 12–13.4.1997, G. Csorba & L. Ronkay, HNHM, SC.
Distribution: Vietnam, Taiwan. New for Taiwan.

Zeadolopus ventriculus ŠVEC, 1997

Material examined – 2 males, 2 females, Ghana, Ashanti, Kumasi, 330 m, N 6.43 – W 1.36, light trap, no 225, 12.vi.1967, leg. Endrödy-Younga, 1 male, same but 16.vi.1967, light trap, no 226; 4 specimens, HNHM, 1 specimen, SC.

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