A new species of Symmerus from Laos (Diptera: Ditomyiidae)

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ŠEVČÍK, J. 2000. A new species of Symmerus from Laos (Diptera: Ditomyiidae). *Entomol. Probl.* 31(2): 181-182. *Symmerus (Psilosymmerus) kubani* sp.nov. is described from the Louang Phrabang province in northern Laos. This is the southernmost record of the genus *Symmerus* and the first record of the family Ditomyiidae from Laos.

Key words: Ditomyiidae, Sciaroidea, Symmerus, fungus gnats, new species, zoogeography, Laos, Oriental region.

Introduction

No species of Ditomyiidae (Diptera: Sciaroidea) was recorded from the Oriental region by Colless & Liepa (1973). Saigusa (1966) and Munroe (1974), however, described two species of *Symmerus* Walker, 1848 from Taiwan and Nepal respectively, which suggests the occurrence of at least this genus in the Oriental region.

Studying a collection of fungus gnats collected by Vit Kubáň in Laos, I have found an apparently undescribed species of *Symmerus* with strongly pectinate antennae. This species is described in this contribution, confirming the occurrence of the family Ditomyiidae in the Oriental region. The type specimen, including the cleared terminalia, is stored in ethanol. The terminology used here principally follows Soli (1997).

Systematic part

Symmerus (Psilosymmerus) kubani sp.nov.

Type material: Holotype: LAOS, Louang Phrabang prov., 20°33'N 102°14'E, Ban Song Cha (5 km W), cca 1200 m, 1 male. Vít Kubáň leg., coll. Moravian Museum, Brno, Czech Republic.

Etymology. Named after Vít Kubáň, a specialist on Buprestidae (Coleoptera), who collected the type specimen.

Diagnostic characters. Antennae strongly pectinate. Mediotergite bare. Abdominal tergites unicolor brownish. Proximal half of both apical spurs on hind tibia widened. Male terminalia with broad S-shaped cerci and characteristic gonostyli. Ventral lobe of a gonostylus bifid, mediodorsal lobe with apical spines directed dorsolaterally.

Description. **Male**. Body length 6.8 mm. General coloration brownish.

Head. Yellowish brown, with dark brown area around ocelli. Lateral ocellus reaching dorsal margin of eye. Antennae brown, strongly pectinate. Flagellomeres produced ventrally, with the lobes 3 to 7 times the width

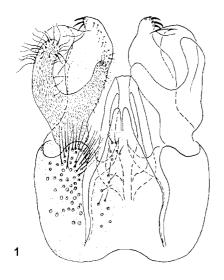
of the basal portion. Lengths of projections for flagellomeres 1 to 5, in mm: 0.4; 0.6; 0.8; 0.9; 0.9. The apical flagellomeres of the holotype missing. Clypeus brown, densely covered with black setae. Mouthparts and palpi brownish yellow. Relative lengths of palpomeres 1 to 4: 1:1:1,2:1.5.

Thorax. Mesonotum covered with setae, yellowish with 3 broad dark brown longitudinal stripes, the lateral ones not reaching the anterior margin of mesonotum. Medial stripe divided by a pale line. Scutellum yellow, with about 20 setae posterodorsally. Mediotergite yellow, bare. Pleurites yellowish. The propleuron with several setae, anepisternum with about 6 setae along its dorsal margin. Preepisternum 2 and anepimeron bare. Laterotergite bare, yellow, with brown band along its ventral margin. Halteres basally yellow, with brown knob.

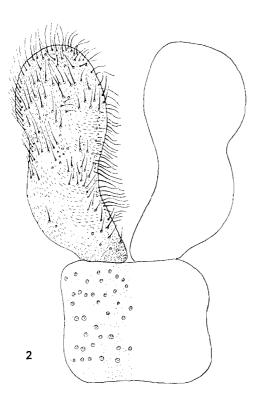
Legs. Coxae yellow. Fore coxa covered with setae. Mid and hind coxa mostly bare, with some setae apically. Femora yellow, with numerous trichia. Tibiae densely covered with black trichia, mid and hind tibia with several setae. Fore tibia with one apical spur, twice as long as tibial diameter. Mid tibia with two apical spurs, the anterior one twice as long as tibial diameter, the posterior one almost three times as long as tibial diameter. Apical spurs on hind tibia peculiar, strong, with proximal half widened. Both these spurs subequal in length and almost three times as long as the maximum tibial diameter. Tarsi brownish, with numerous setae. Relative lengths of tarfor particular legs: 5.2:2.6:1.9:1.1:1; 4.3:1.9:1.4:1:1; 5.5:2.3:1.6:1.2:1. Relative lengths of coxa, femur, tibia and tarsus for particular legs: 1:1.5:1.5:2.7; 1:1.8:2.3:2.5; 1:2.2:2.6:3.2.

Wings. Hyaline, covered with both microtrichia and macrotrichia. Wing length 5.25 mm. Ratio of length to width 3.1. Sc short, ending free. R4 basally downcurved. R-m short, as long as width of R1. Ratio of the length of the stem of M1,2 to the length of M1 is 0.68, that for the stems of M1,2 and R4,5 is 0.84. M1 indistinct, forming a symetrical fork with M2.

Abdomen. All tergites uniformly dark brown, bearing black setae. Sternites 1 to 5 yellowish brown with dark brown posterior triangles, sternites 6 to 8 all brown.



0.1 mm



Figs 1, 2 Symmerus (Psilosymmerus) kubani sp.nov., male terminalia: 1) ventral view; 2) dorsal view.

Terminalia. (Figs 1, 2). Total length 0.98 mm. Length of gonocoxopodites 0.73 mm. Length of cercus 0.63 mm. Maximum width of cercus 0.28 mm. Gonocoxites brown, cerci paler, gonostyli and aedaegal complex blackish brown. Sternite 9 long, reaching almost to half of gonostylus, subtriangular, narrowing caudally, its apical fourth bifurcate with lobes closely appressed. Caudal margin of gonocoxites medioventrally projecting in a pair

of thin pointed lobes. Aedaegal complex well sclerotized, subtriangular. Gonostylus complicated, its ventral lobe bifid (Y-shaped), with a lateral branch covered with curved setae. Mediodorsal lobe of gonostylus apically with several black spines directed dorsolaterally. Tergite 9 rectangular, almost as long as gonocoxites. Cercus wide. S-shaped, densely covered with setae both dorsally and ventrally.

Female unknown. Biology unknown. Distribution: Laos.

Discussion. The new species possesses several characters, which are considered within the genus apomorphic (cf. SAIGUSA 1973), e.g. strongly pectinate antennae, large cerci, long sternite 9 and gonostylus with strong apical bristles. The most closely related species are apparently Symmerus (Psilosymmerus) brevicornis OKADA, 1939, Symmerus (P.) pectinatus SAIGUSA, 1966 and Symmerus (P.) nepalensis MUNROE, 1974, from which it can be separated by the shape of cerci, sternite 9 and gonostyli. The genus Symmerus now comprises 15 extant species, including the above described species, which represents the southernmost record of this genus. This is also the first record of the family Ditomyiidae from Laos.

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