New Genus and Species of Gall Midges (Diptera, Cecidomyiidae) from the Seychelles

VOLDEMĀRS SPUŅĢIS

Faculty of Biology, University of Latvia, 4 Kronvalda Blvd., LV-1586 Rīga Latvia; e-mail: adalia@lanet.lv

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Abstracts: Seychellepidosis spinosa gen. et sp. nov. are described.

Key words: Cecidomyiidae, Porricondylinae, new species, Seychelles.

Introduction

Recently new Porricondylinae species of previously known genus *Asynapta northi* SPUNGIS was described (Spungis 2006). Numerous species of other subfamilies of gall midges remained unidentified. New collections have brought new genus and species. Review of species from the Seychelles is under preparation.

Descriptions

Seychellepidosis gen. nov.

The genus belongs to the Porricondylini and has the main characters of the tribus. Genus distinguishes from other genera by following set of characters: antenna with 2+14 flagellomeres in males and 2+10 in females; sensoria present on the first 8 segments in males, on all segments in females; eye bridge short - about 6 ommatidia wide; palpi with 4 segments as long as height of head; wings with R₅ close to the C, M absent, Cu bifurcated, Cu₁ nearly invisible; legs relatively short, tarsal claws simple with no basal teeth, empodium as long as claws; hypopygium specific - gonostylus with two spines, well developed and sclerotised tegmen and parameres, transversal bridge well defined and sclerotised, gonocoxite roots well defined and sclerotised; ovipositor lamellar.

Type species: *Seychellepidosis spinosa* sp. nov., by monotypy.

Seychellepidosis spinosa sp. nov.

HOLOTYPE: male on microscopic slide labelled "No. S108, Seychelles, Picard, Aldabra, 1974, Malaise trap, leg. R.Prys-Jones". **PARATYPE:** female on microscopic slide No S108 labelled as for the holotype. Type specimens deposited in the Museum of Natural History, London.

Male: Coloration light brownish, including scape and pedicel, thorax and head darker. Length of body 1.4 mm, length of wing 1.3 mm, length of antennae 1.4 mm. Antenna with 2+14 segments, scape with 3 ventral setae, pedicel shorter then scape, cylindrical, with 1 dorsal seta. Medial flagellomeres with node 1.4 times longer than width, stem darkens terminally, 1.2 times longer than node, terminal segment ovoid. The last two terminal segments fused. Basal whorl of seta consists of 13-14 setae, medial - 15-16 setae majority of them disposed in one row, distal whorl of 4 setae. Ring shaped sensoria fine, present on the first 8 flagellomeres. Palpus with 4 segments, as long as height of head, segments with relative length as 2:3:3:4 respectively, the first two segments fused. Eyes large, eye bridge 6 ommatidia wide. Thorax with 1 mesopleural and 2 pteropleural setae. Halteres 2 times shorter than height of thorax. Wing 2 times longer than width, Rm-m and Rs forming narrow angle with R5, R1 joining C before middle of the wing R₅ closer to C and joining with C just beyond wing apex, M_{1+2} absent, Cu with Cu₁ and Cu₂, Cu₁ nearly invisible, Cu₂ bent in distal part, evanescent at

apex. Abdomen without distinct pattern. Legs relatively short, tarsomeres with relative length as 2:12:6:3:2 respectively. Tarsal claw simple, evenly curved. Empodium slightly longer than claws. Hypopyge as long as wide. Gonocoxite short, inflated, dorsally with medial hyaline tooth, with no distal lobe. Ventral plate with large, round emargination having triangular sclerotised basal plate, and curved hyaline lateral lobes joining with apexes. Gonostyle small, sclerotised, with 2 dorsal teeth, with no claw, but separate strong setae. Epandrium wide, membranous, reaching middle of the hypopygium, with groups consisting of 6 lateral setae and fine suture in the middle. Hypandrium short and wide, bilobed, cerci as long as hypandrium, bilobed. Parameres strongly each sclerotised, xiphoid, parallel other. Tegmen sclerotised, rounded at apex, additionally with small lateral and basal pairs of small teeth. Genital rod nearly as long as hypopygium, weakly sclerotised. Gonocoxite root long, strongly sclerotised. widened proximally. Transverse bridge well distinct, strongly sclerotised.

Female. Coloration light brownish, thorax and head darker. Length of body 1.4 mm, length of wing 1.3 mm, length of antennae 1.0 mm. Antenna with 2+10 segments, scape with numerous ventral setae, pedicel as large as scape cylindrical with numerous dorsal setae. Medial flagellomeres with node about 3 times longer than width stem 5 times shorter than node, terminal segment 3 times longer than width. The last two terminal segments separated. Basal whorl of seta consists of 6-7 setae, medial with groups of 3 and 1 setae. Sensoria fine, with two rings and two connectives, present on all flagellomeres. Eyes large, eye bridge short, 4 ommatidia wide. Thorax with 1 mesopleural and 3 pteropleural setae. Ovipositor short, lamellar, pre-terminal 2 times longer than width, terminal segment ovoid. Other characters as in male.

Larva and biology unknown.

Material examined: 1 male, 1 female.

Distribution and occurrence: Seychelles, Picard Island.

Remarks: New species is deviating in morphology of all known Porricondylinae. New species has gonostyles with spines and lacking claw. This combination of characters is known for *Cedrocrypta montana* PANELIUS, 1965 and *Zatsepinomyia* MAMAEV et ZAITZEV, 1997. The new species differs in other characters of hypopyge: bidentate gonostyle, well-developed transversal bridge and toothed tegmen.

Derivation of specific epithet: from the presence of numerous spines on the hypopygium.

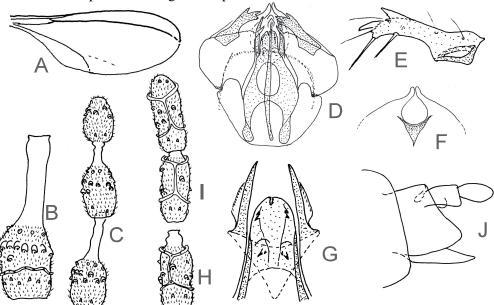


Figure 1. Morphology of *Seychellepidosis spinosa* sp. nov.: A – male wing, B – the 5th male flagellomere; C – the 12-14th male flagellomere; D – hypopygium; E – gonostylus; F – ventral plate; G – central sclerotised structures of the hypopygium; H – the 5th female flagellomere; I 10-11th female flagellomeres. Magnification: A – 28x; B, C, D, J, H, I – 280x; E, F, G – 400x.

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References

- Spungis V. 2006. New Porricondylinae gall midges (Diptera: Cecidomyiidae) from the Seychelles archipelago. – *Phelsuma* 14: 44-54.
- Panelius S. 1965. A revision of the European gall midges of the subfamily Porricondylinae (Diptera: Itonididae). – *Acta zoologica fennica* **113**: 157 pp.
- Mamaev B.M., Zaitzev A.I. 1997. New genus and species of free-developing gall midges of the subfamily Porricondylinae from Somalia (Diptera, Cecidomyiidae). – *Journal of the Ukrainian entomological Society* **3**, No 2: 5-13.

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