Tumidothrips spiniceps gen. et sp.nov., a new thrips from Laos (Thysanoptera, Phlaeothripidae, Idolothripinae)

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PELIKÁN J. 2004: *Tumidothrips spiniceps* gen. et sp.nov., a new thrips from Laos (Thysanoptera, Phlaeohripidae, Idolothripinae). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **89:** 19–23. – A very enigmatic new genus and species is described from Laos. It probably belongs in the vicinity of the genus *Mecynothrips* Bagnall, 1908 with respect to cetain remarkable features of the head.

Key words. Thysanoptera, Phlaeothripidae, Idolothripinae, Idolothripini, *Tumidothrips spiniceps* gen.nov., sp.nov., Laos

Tumidothrips gen.nov.

Type species: *Tumidothrips spiniceps* sp.nov.

Description.¹⁾ Very large phlaeothripid with an extraordinarily long pilous tube, head very specific, swollen in basal region with distinct bump on posterior corners, carrying a cluster of thick spines.

Head. The whole head covered with short spines, on cheeks standing on small warts and bent distinctly towards the base (Fig. 1). First postocular spine stronger and bent farther backwards. One pair of postocular spines developed, 60–70 behind posterior margin of eyes, standing more laterally. Antennae 8-segmented, segment I block-shaped, II cup-shaped, III–IV elongated, slightly club-shaped, with sensory cones, VIII narrowed at base. Upper and lower margin of eyes equal. Mouth cone short, broadly rounded, maxillary guides distended, numbering about 50 apart in the middle. Dorsum of head finely striate with transverse lines, sparsely confluent.

Thorax. Prothorax broader than head with very fine longitudinal sculpture bent towards the centre of posterior margin, with strong, stiff anteroangular and posteroangular spines, but reduced midlateral and posteromarginal ones. Epimeral sutures developed. Ferna transverse, divided, both halves touching in the middle. Basantra divided as well, both sclerites longitudinal, shifted to anteroangular area of prosternum. Pterothorax slightly broader than prothorax. Mesopraesternum transverse and slender. Mesonotal plate rounded at sides, in posterior half with a medial furrow and with fine dense lines, transverse and curving towards the centre. Metanotal plate large, with fine, dense longitudinal lines, both plates with a pair of campaniform sensillae.

¹⁾ Abbreviations: L. = length, W. = width, W.a. = width across apex, W.b. = width across base. All measurements in micrometres.

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Metathoracic sternopleural sutures not developed. All legs smooth, without protuberances. Forelegs not enlarged, with smooth margins, fore-tarsi without hook. Femora with short, rather strong setae on outer margins (about 30 on each femur), but only 5–8 much thinner setae on inner margins. Wings reaching to the end of abdominal segment VI, parallel-sided, duplicated cilia present, longitudinal vein only developed as a shadowy line. Pelta simply triangular, without lateral lobes.

Abdomen. Abdominal segments with posteroangular spiny setae. Tube very long, 1.5 times longer than head, set with short hairs in the basal two-thirds.

Differential diagnosis. The new genus belongs to the subfamily Idolothripinae, tribe Idolothripini with respect to the classification of MOUND & PALMER (1983). It recalls remotely *Mecynothrips kraussi* Mound et Palmer, 1983, a species that has a spiny bump but just behind eyes; it also has spines on distinct warts, which is not the case in *Tumidothrips* gen.nov. Furthermore, species of the genus *Mecynothrips* Bagnall, 1908 have conspicuously prolonged head, long cephalic setae, strong horns on fore-femora in males and other characters not existing in *Tumidothrips* gen.nov. On the contrary, neither of these species has a spiny head and basal cephalic lateral protrusion with spines as in *Tumidothrips* gen.nov, and nor do any of the other Thysanoptera.

Tumidothrips spiniceps sp.nov.

Material examined. Holotype, a macropterous female: "Northern Laos, Phongsaly province, Phongsaly env., 21.41–2N 102.06–8E, 28.v.–20.vi. 2003, elevation 1,500 m, P. Pacholátko leg." The holotype is deposited in the Department of Entomology of the Moravian Museum, Brno, Czech Republic.

Description. (Based on the holotype, macropterous female.)

Large dark phlaeothripid with bizarre head (Fig. 1) and extremely long pilous tube. Total length of body 8.00 mm, length of tube 3.16 mm. Body brown, abdomen dark brown. All femora dark brown, trochanters lighter, yellowish, fore-tibiae entirely yellow, middle tibiae yellow with basal quarter brownish, hind tibiae yellow with basal fifth brownish, tarsi yellow with dark plate. Wings colourless, forewings with indistinct shadow line. All body spines light yellowish, short spinuli on femora and the tube is black.

Head. L. 685, small across the fore-margin, W. behind eyes 222 prolongation before eyes L. 72, posteroangular region of head very wide and extraordinarily tumid, W.b. 432, L. of head 1.58 longer than wide. Whole head covered with yellowish-white spines, 36–40 long, curving towards the rear. One postocular spine on cheeks, just behind the posterior margin of eyes, stouter and longer, 50, more curved towards the rear. Cheeks widened towards the rear, posterior angles of head bulging laterally and remarkably, the bump covered with a bundle of white-yellowish spines 40–60 long. Dorsum of head covered with fine anastomosing wrinkles and with short spines. Posterior margin of head with dark, strongly chitinized transverse apodeme, sides of head forming a short neck about 35 long. Ocellar triangle closed between anterior half of compound eyes, with

several pairs of ocellar setulae: one pair situated at sides of fore-ocellus, two pairs between fore- and hind ocelli just at inner margin of compound eyes and one pair behind the posterior ocelli. A pair of setulae situated at the level of hind margin of eyes. Postocular setae transformed into spines, standing 55 behind the hind margin of eyes Antennae moderately long, sum of segments L. 1050, segment I. block-shaped L. (W.) 84–96 (60–66), segment II. Small, cup-shaped, 84–96(60), dorsal setae relatively long, 55, III. slightly elongated, 240–250(36–42), gradually club-shaped, IV.–VI. as well, IV. 190(36–48), V. 180(36–44), VI. 120(36–42), VII. 84–96(28–30), VIII. 57(22–24) short, constricted at base. Sensory cones on III. 1 outer, on IV. 1+1, on V.–VII. each with 1 dorsal.

Thorax. Pronotum L. (W. with coxae) 360(600), structure of very fine, longitudinal confluent lines, slightly anastomosed, curving towards the basal centre. Dorsum without spinuli, epimeral sutures well developed, pronotal setae transformed into strong spines, anteroangulars L. 80–85, directed obliquely forward, anteromarginals reduced, midlaterals 95, epimerals 145, posteromarginals reduced in the middle of notum, 120 from the posterior margin of notum. Mouth cone broadly rounded to the middle of prosternum. Ferna divided, transversally triangular, basantra divided longitudinally, shifted to anterior angles of prosternum. Pterothorax L. 720 (W. 780), mesonotum with a median furrow in the posterior half, both halves of the plate with fine, dense, transverse structure curving towards the posterior centre. Pair of central sensilla 110 from each other. Metanotal plate 420 long, finely striate longitudinally, a pair of sensillae 95 from anterior margin of plate and 95 from each other.

Legs rather long and slim, smooth, lacking horns or tubercles, outer margins of all femora with dark spines 25–36 long, inner margins with sparse, weaker, shorter and thinner spines. L. (W.) of femur, tibia and tarsus (without long arolium): fore 490(155), 490(110), 85(70), middle 445–456(140), 505(100), 120–130(70), hind 780(130–140), 745–780(90), 120–132(70–80). Fore-femora not enlarged, smooth, lacking dentation, fore-tarsi without teeth. Wings about 2400 long, reaching to the end of abdominal segment VI., across the middle W. 135, accessory setae 20, both wings with one very faint, brownish longitudinal vein.

Abdomen long, pelta simply triangular, without lateral lobes, Middle abdominal segments slightly shorter than wide, segment V L. (W) 445(565), segment VII 360(455). Abdominal segments II. to VIII. in posterior angles with short yellowish-white spines 120–130 long. Segment IX L. 300 (W.b. 336, W.a. 205), posterior angles with two pairs of spines, B2 longer (120) than B1. Tube extremely long, L. 3165, 1. 5 times longer than head, covered with short, fine setulae except for terminal quarter, basal setulae 48–56, successively shorter, distal ones 36 long. Terminal setae 240–250 long, light yellowish.

Distribution. Northern Laos.

Name derivation. Extremely conspicuous for the tumid, swollen base of head, all of which is covered with spines; and the spiny head.

Differential diagnosis. The single species is described with in a new genus.

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Fig. 1. Tumidothrips spiniceps gen. et sp.nov., head of female (holotype).

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