A new species of *Thambemyia* Oldroyd, 1956 (Diptera: Dolichopodidae) from Gujarat, India

Новый вид рода *Thambemyia* Oldroyd, 1956 (Diptera: Dolichopodidae) из Индии, штат Гуджарат

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Ключевые слова: Diptera, Dolichopodidae, Ориентальная область, Индия, *Thambemyia*, новый вид.

Abstract. *Thambemyia lopatini* Grichanov **sp. n.** is described from Western India in the nominotypical subgenus *Thambemyia* Oldroyd, 1956. It is the westernmost record of this mainly Pacific genus. The new species is the closest to *T. hui* Masunaga, Saigusa et Grootaert, 2005, known from the small islands along seacoast of the Chinese province Fujian, differing from the latter in wider male cercus (1.5 vs. 2.5 times as long as wide), shorter male postpedicel (3 vs. 3.4 times as long as high at base), in presence of ventral row of bristles on male hind femur, in ratio of cross-vein dm-cu to distal part of CuA_1 (3/4 vs. 1/1) and other characters. The following recombination is also proposed: *Conchopus shandongensis* (Zhu, Yang et Masunaga, 2005), **comb. nov.** (from *Thambemyia*).

Резюме. Описан новый вид *Thambemyia lopatini* Grichanov **sp. n.** из Западной Индии в номинативном подроде *Thambemyia* Oldroyd, 1956, представляющий наиболее западную точку распространения рода. Новый вид наиболее близок к *T. hui* Masunaga, Saigusa et Grootaert, 2005, обитающему на небольших островах вдоль морского побережья китайской провинции Фуцзянь, отличаясь от него широкими церками самца, коротким третьим члеником усика самца, наличием вентрального ряда щетинок на задних бедрах самца, соотношением крыловых жилок dm-cu и CuA_1 и другими признаками. Предложена новая комбинация: *Conchopus shandongensis* (Zhu, Yang et Masunaga, 2005), **comb. nov.** (из рода *Thambemyia*).

Introduction

The mainly Pacific genus *Thambemyia* Oldroyd, 1956, was recently revised and separated from the closest Pacific genus *Conchopus* Takagi, 1965, by the following combination of characters: posterior notopleural bristle absent; thoracic pleura with setae in front of posterior spiracle; female postabdomen (sixth and seventh segments) exposed and extensively setose [Masunaga et al., 2005]. Four Oriental species inhabit seacoasts of China (*T. bisetosa* Masunaga, Saigusa et Grootaert, 2005, and *T. hui* Masunaga, Saigusa et Grootaert, 2005), Brunei (*T. bruneiensis* Masunaga, Saigusa et Grootaert, 2005), Thailand, Malaysia and Indonesia (*T. pagdeni* Oldroyd, 1956). The only Palaearctic species (*T. japonica* Masunaga, Saigusa et Grootaert, 2005) was separated in the subgenus *Prothambemyia* Masunaga, Saigusa et Grootaert, 2005, by the following combination of characters: gena short; palpus separated from gena and bearing long setae; face and clypeus separated from each other; acrostichals absent; male wing vein M_{1+2} thickened around midlength; male fore second tarsomere simple; male mid tibia lacking ventral seta subapically [Masunaga et al., 2005]. In addition, *T. shandongensis* was described from Palaearctic China by Zhu et al. [2005], who followed an old expanded concept of *Thambemyia*; the species has two notopleural bristles and bare thoracic pleura in front of posterior spiracle and must be recombined: *Conchopus shandongensis* (Zhu, Yang et Masunaga, 2005), **comb. nov.** Treating recent collections from India (Gujarat), I found an additional undescribed species of *Thambemyia*, representing the westernmost record of the genus in the Oriental Region.

Material and methods

The holotype and paratypes of the new species are housed at the Zoological Museum of Moscow State University, Moscow, Russia (ZMU). Part of the paratypes are deposited in the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN). *Thambemyia lopatini* Grichanov **sp. n.** was studied and illustrated with a Zeiss Discovery V-12 stereomicroscope and an AxioCam MRc5 camera. Morphological terminology and abbreviations follow Cumming and Wood [2009]. Body length is measured from the base of the antenna to the tip of abdominal segment 8. Wing length is measured from the base to the wing apex. Figure showing the male genitalia in lateral view is oriented as it appears on the intact specimen, with the morphologically ventral surface of the genitalia facing up, dorsal surface down.

Thambemyia (*Thambemyia*) *lopatini* **sp. n.**
(Fig. 1–5)

Material. Holotype ♂, India: Gujarat, Somnath, 20.883°N / 70.408°E, 7.11.2012, seaside, K. Tomkovich [ZMU]. Paratypes 6♂, 5♀, the same label [ZMU and ZIN].

Description. Male (Fig. 1). Head: bluish black, pollinose; eyes forming almost regular circle (anterior view), 0.55 mm in height;

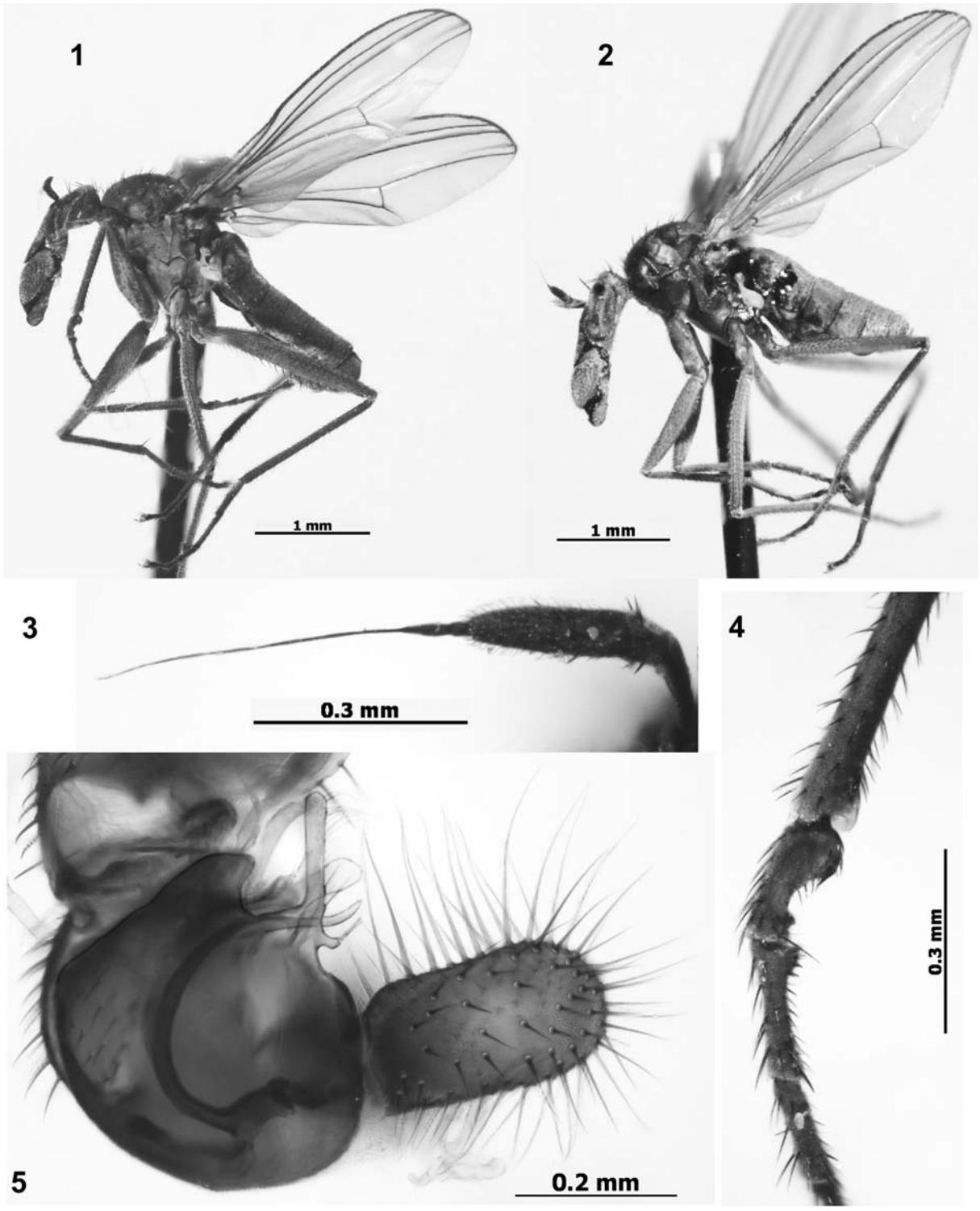

Fig. 1–5. *Thambemyia lopatini* Grichanov, **sp. n.**

1 – male habitus, left laterally; 2 – female habitus, left laterally; 3 – male antenna, dorsolaterally; 4 – apex of fore tibia and fore tarsomeres 1–3, posterior view; 5 – hypopygium right laterally.

Рис. 1–5. *Thambemyia lopatini* Grichanov, **sp. n.**

1 – внешний вид самца, вид слева; 2 – внешний вид самки, вид слева; 3 – усик самца, вид сверху-сбоку; 4 – вершина передней голени и три базальных членика передней лапки, вид сзади; 5 – гипопигий справа.

face and clypeus fused, narrow, 0.62 mm long, whitish pollinose; clypeus strongly projecting, about as long as face; 2 ocellar bristles strong, vertical as long as ocellar bristle and postvertical bristle about 1/2 as long as ocellar bristle; postocular ciliation black, strong, about as long as postvertical on upper 1/2, finer and short below; antenna (Fig. 3) black, with elongate bare scape; pedicel with ring of short setae; postpedicel 3 times as long as high, flattened laterally, with some short black setae, with apical arista-like stylus; 1st stylomere and base of 2nd stylomere distinctly thickened; length (mm) of scape to pedicel to postpedicel to stylus (1st and 2nd segments), 0.16, 0.07, 0.23, 0.03, 0.5; gena black, triangular, slightly longer than wide at base, with short black setae; palpus 0.54 mm long, 2 times longer than wide, black, pollinose, densely covered with short black setae; proboscis 0.82 mm long, black.

Thorax: bluish black, with pollinosity; mesonotum with pair of blackish longitudinal stripes; acrostichals minute, uniserial or irregularly biserial; 6–7 pairs of asymmetrical dorsocentrals; 1 humeral with 1–2 short setae in front, 1 posthumeral, 1 notopleural, 1 sutural, 1 postsutural, 1 supra-alar, 1 postalar; proepisternum with 3–4 short black setae; anepisternum with about 6 setae; one seta present in front of posterior spiracle; 2 pairs of strong scutellars, of which outer pair 2/3 length of median bristles; scutellum about 2 times wider than long; postscutellum about as long as scutellum.

Legs: black; trochanters and adjacent apices of coxae and femora brown; fore coxa clothed with short black setae anteriorly, longer distally; fore leg with short black vestiture typical for the genus; 1st and 2nd tarsomeres modified as shown on Fig. 4; 5th segment flattened dorsoventrally; pulvillus, empodium and claws normally developed; mid coxa with 1 longish and 2–3 short black setae laterally, bearing some longer setae apically; mid femur with short black vestiture, with some erect anterodorsal setulae at middle and with short posteroventral subapical seta; mid tibia with strong apicoventral bristle; mid tarsus simple; hind coxa with strong outer bristle above middle, with 2 short setae at apex; hind femur with row of black bristles on ventral surface except base and apex, about half as long as femur diameter; hind tibia and tarsus simple, without strong bristles. Fore podomere length (from femur to tarsomere 5 in mm): 1.04, 0.96, 0.22, 0.23, 0.17, 0.12, 0.18, mid podomeres: 1.53, 1.36, 0.57, 0.31, 0.21, 0.13, 0.2, hind podomeres: 1.64, 1.39, 0.34, 0.33, 0.25, 0.14, 0.18.

Wing: simple, greyish, with simple veins; Sc developed; R_{2+3}, R_{4+5} and distal part of M_{1+2} weakly convex anteriorly; R_{4+5} and M_{1+2} almost parallel behind level of dm-cu; ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} (mm), 0.11/0.22; ratio of cross-vein dm-cu to distal part of CuA_1 (mm), 0.15/0.2; dm-cu slightly convex, perpendicular to both longitudinal veins; posterior wing margin almost straight; calypter brown, with short black setae; halter yellow.

Abdomen: bluish-greenish black, with weak pollinosity, with short black setae; 1st tergum with membranous anterior margin; sterna simple, almost glabrous; 7th segment reduced, V-shaped, with left arm stronger at apex; 8th segment black, rounded, covered with short setae; hypopygium (Fig. 5) black, moderately large; epandrium rounded, with basoventral projection on right side only; hypandrium short, pointed at apex; phallus narrow and simple, pointed; epandrial lobe (hypandrium sensu Masunaga et al. [2005]) short, ovate, weakly sclerotized, covering strong epandrial bristle; surstylus fused with epandrium; ventral arm of surstylus (ventral epandrial lobe sensu Masunaga et al. [2005]) long and thin, with row of long setae along whole length; dorsal arm of surstylus as short appendix at base of ventral arm, bearing 2 relatively short apical setae; cercus black, 2/3 length of epandrium, 1.5 times as long as wide, covered with long marginal setae; ventral setae longer than dorsal setae, slightly longer than width of cercus.

Length (mm): body 3.13, wing 3.08/0.92, antenna 1.

Female (Fig. 2). Similar to male except lacking male secondary sexual characters, otherwise as follows: postpedicel 2.5 times as long as high; legs simple; mid and hind femora blackish brown; 6th and 7th abdominal segments exposed and extensively setose; hemitergites of tergum 10 each with 2 long thickened spines (acanthophorites).

Length (mm): body 2.95, wing 3.2, antenna 1.

Etymology. The species is named after the late Soviet and Belorussian entomologist Prof. Igor Konstantinovich Lopatin (Minsk).

Diagnosis. The new species keys to *T. hui* [Masunaga et al., 2005], known from the small islands along seacoast of the Chinese province Fujian, differing from the latter in wider male cercus (1.5 vs. 2.5 times as long as wide), shorter male postpedicel (3 vs. 3.4 times as long as high at base), in presence of ventral row of black bristles on male hind femur, in ratio of cross-vein dm-cu to distal part of CuA_1 (3/4 vs. 1/1), etc.

Ecology. All types of *T.* (*T.*) *lopatini* **sp. n.** were collected together on small stones lying on sandy beach at a sea coast, not farther than 10 m away from the shore line (K. Tomkovich, pers. com.).

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