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Description of *Pristaulacus leleji* sp.n. (Hymenoptera: Aulacidae) from Thailand

Описание *Pristaulacus leleji* sp.n. (Hymenoptera: Aulacidae) из Таиланда

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Ключевые слова: Aulacidae, новый вид, Ориентальная область.

Abstract. *Pristaulacus leleji* Turrisi et Nobile, **sp.n.** from Thailand (Kanchanaburi Province) is described and illustrated, increasing the number of *Pristaulacus* species reported from the region to ten.

Резюме. Дано описание и иллюстрации нового вида *Pristaulacus leleji* Turrisi et Nobile, **sp.n.** из Таиланда (провинция Канчанабури). Число видов *Pristaulacus*, зарегистрированных в Таиланде, увеличивается до десяти.

The parasitic wasp family Aulacidae currently includes 247 extant species grouped within only two genera: *Aulacus* Jurine, 1807 and *Pristaulacus* Kieffer, 1900 [Turrisi et al., 2009] and it is found in all regions of the Earth except Antarctica [Kieffer, 1912; Hedicke, 1939; Smith, 2001; Turrisi et al., 2009]. The genus *Pristaulacus* is the most speciose, counting 170 extant species [Turrisi et al., 2009]. In the Oriental region, aulacids are represented by some 50 species, mostly belonging to *Pristaulacus* [Turrisi, 2014a], but the largest amount of species still remains undescribed, with more than one hundred estimated species [Turrisi, 2014b].

Aulacids are parasitoids of wood-boring Hymenoptera and Coleoptera, with a koinobiont endophagous strategy [Turrisi, Vilhelmsen, 2010]. Hosts are not certain for many species, but on the basis of the present knowledge they are represented by some Coleoptera (mainly Buprestidae and Cerambycidae) and Hymenoptera (Xiphydriidae). [Jennings, Austin, 2004]. The biology is better known for *Aulacus striatus* Jurine, 1807, which is associated with xylophagous larvae of *Xiphydria camelus* (Linnaeus, 1758) [Skinner, Thompson, 1960], whereas the biology of most part of species is not known, mostly with little data on putative hosts only.

The knowledge on aulacids from Thailand is very poor, and only nine species are presently known (all belonging to the genus *Pristaulacus*), mostly being described very recently: *P. gusenleitneri* Turrisi et Smith, 2011, *P. iosephi* Turrisi et Madl, 2013, *P. konishii* Turrisi et Smith, 2011, *P. nigripes* Kieffer, 1911, *P. sharkeyi* Turrisi et Smith, 2011, *P. takakuwai* Turrisi et Watanabe, 2011, *P. thailandensis* Turrisi et Smith, 2011, *P. vietnamensis* Turrisi et Smith, 2011 and *P. watanabei* Turrisi et Smith, 2011 [Smith, 2001; Turrisi, Smith, 2011; Turrisi, Watanabe, 2011; Turrisi, Madl, 2013].

In the present paper a new species of *Pristaulacus* from Thailand is described, illustrated and compared with the most similar species.

Pristaulacus leleji Turrisi et Nobile, **sp.n.**

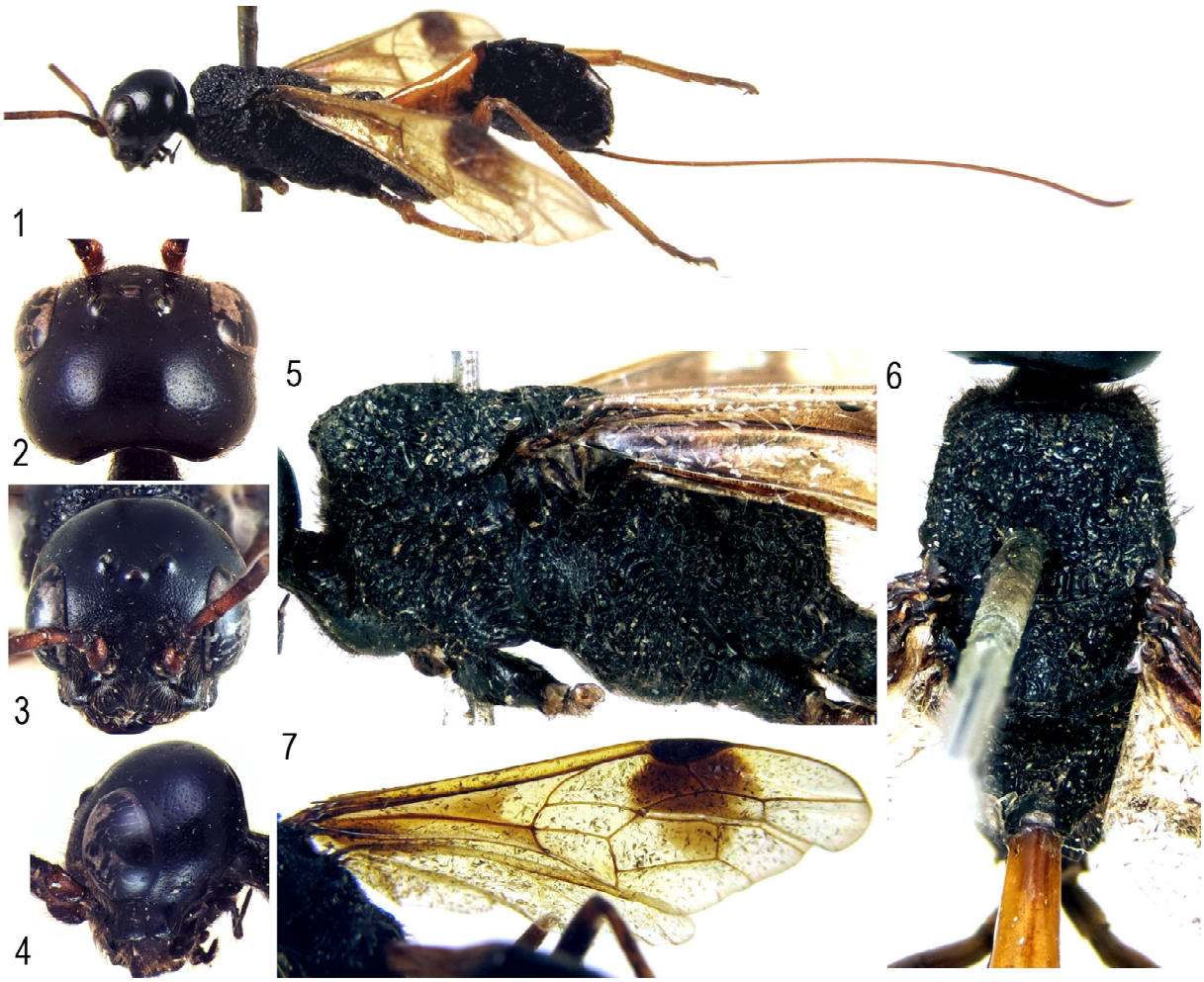
Figs 1–10.

Type material. Holotype: female (antennae partly missing: only antennomeres 1–5 present);, **Thailand**, labelled: «Museum Leiden, C. Siam 150 m, Kwae Noi Riv. Exp. Niki, 23.IV–5.V, J.K. Jonkers, 1946/*Pristaulacus leleji* Turrisi & Nobile sp.nov. ♂ Holotypus» (Naturalis Biodiversity Center, Leiden, The Netherlands).

Diagnosis. Large sized; head and mesosoma blackish; antennae reddish orange; mid and hind femora dark reddish orange, mid and hind tibiae and tarsi reddish orange; fore wing hyaline, with basal half extensively infuscate and a wide dark brown substigmal spot; metasomal segments 1 and 2 entirely reddish orange; head weakly shiny with fine, deep and dense punctures, temples slightly more than eye width, subparallel and regularly rounded posteriorly, occipital groove wide and shallow, occipital carina narrow, rim-like; lateroventral margin of pronotum with one anterior and one posterior stout tooth-like process, the former larger than latter; mesosoma entirely areolate-rugose, mesoscutum squared, slightly incavated medially; hind coxae short and stout, with a transverse ovipositor guide; tarsal claws with six tooth-like processes; ovipositor about 1.3 times fore wing length.

Description. Length (excluding ovipositor): 16.4 mm; fore wing length: 12.3 mm.

Colour: mainly black, except maxillo-labial complex with last two palpomeres dark brown; antenna dark reddish; mid and hind femora dark reddish; mid and hind tibiae and tarsi reddish orange, pretarsi darker; wings hyaline, with basal half extensively infuscate, brownish and a wide dark brown substigmal spot, larger than stigma and extended posteriorly to



Figs 1–7. *Pristaulacus leleji* **sp.n.**, holotype female: 1 — habitus, lateral view; 2–4 — head (2 — dorsal view; 3 — frontal view; 4 — lateral view); 5, 6 — mesosoma (5 — lateral view; 6 — dorsal view); 7 — wings.

Рис. 1–7. *Pristaulacus leleji* **sp.n.**, голотип, самка: 1 — габитус, вид сбоку; 2–4 — голова (2 — сверху; 3 — спереди; 4 — сбоку); 5, 6 — мезосома (5 — сбоку; 5 — сверху); 7 — крылья.

discal cell 2; metasomal segments 1 and 2 orange, except apex of tergite 2; valvula 3 of ovipositor dark brown; setae: brownish, golden on clypeus and mandible.

Head: from above 1.2 times wider than long, dull; occipital margin slightly concave; temple, from above, well developed, subparallel, rounded, 1.1 times eye length; occipital carina narrow, 0.2 times or less diameter of an ocellus, continuous; POL : OOL = 1.5; ocellar area 1.7 times wider than long; vertex with fine, deep and dense punctures (distance between punctures 1.0–2.0 times puncture diameter); temple moderately coarse, deep and moderately dense punctures (distance between punctures 2.0–3.0 times puncture diameter); frons with moderately coarse, deep and very dense punctures (distance between punctures 0.5–1.0 times puncture diameter); clypeus with fine to moderately coarse, superficial and moderately dense punctures on basal half, polished on distal half; malar area with fine to moderately coarse, deep and dense punctures; occipital area with fine to coarse, deep and dense punctures. Antennomere 3 4.0 times longer than wide; antennomere 4 4.1 times longer than wide, and 1.2 times longer than antennomere 3; antennomere 5 3.7 times longer than wide, and 1.1 times longer than antennomere 3. Setae: erect, short and very scattered on vertex; erect, long and moderately dense on temple (length of setae 1.1 times diameter of an ocellus); erect, very long and moderately dense on upper frons; semi erect to recumbent, short and moderately dense on lower frons; recumbent, moderately long and moderately dense on clypeus; recumbent, short and dense on malar area.

Mesosoma: coarsely sculptured; pronotum areolate-rugose, with two tooth-like processes on each lateroventral margin, anterior process well developed, acute, posterior process less pronounced, obtuse; propleuron polished and shiny with coarse, deep and dense punctures on dorsal surface, fine to coarse, superficial and moderately dense on ventral surface (distance between punctures 2.0–3.0 times puncture diameter); prescutum triangular, wide, long, weakly concave toward apex, transverse-carinulate; mesoscutum areolate-rugose; dorsally not prominent, anterior margin square, slightly overhanging pronotum (lateral view); notauli deep and wide; scutellum areolate-rugose; mesopleuron areolate-rugose, except a very small part of subalar area rugulose-

Figs 8–10. *Pristaulacus leleji* **sp.n.,** holotype female: 8 — hind coxae, ventral view; 9 — hind tarsal claws; 10 — metasoma, lateral view.

Рис. 8–10. *Pristaulacus leleji* **sp.n.**, голотип, самка: 8 — задние тазики снизу; 9 — коготки задней лапки; 10 — метасома сбоку.

foveolate; metanotum scrobiculate, foveate-rugose in middle; propodeum areolate-rugose, anterior margin longitudinally carinate; venter of mesosoma polished to rugulose-punctate, transverse-carinate medially. Vein 2-rs+m short. Coxa I polished-punctate with fine to moderately coarse, superficial and scattered punctures; coxa II transverse-carinate on dorsal surface, weakly transverse carinulate-foveolate on ventral surface; coxa III transverse carinate-foveolate on dorsal surface, mostly polished-punctate on ventral surface, with moderately coarse, deep and dense punctures (distance between punctures 1.5–2.0 times puncture diameters); inner spur of mid and hind tibia slightly longer than outer spur; hind basitarsus 7.0 times longer than wide, equal to tarsomeres 2–5; tarsal claw with six tooth-like processes (pretarsus missing). Setae: erect to semi erect, moderately long to long, and scattered dorsally; semi erect to erect, moderately long and dense on sides and venter of mesosoma; erect, very long, and dense on hind surface of propodeum; erect, long, and dense on propleuron.

Metasoma: pyriform (lateral view), compressed laterally; petiole moderately elongate, moderately slender, 2.0 times longer than wide; ovipositor 1.3 times fore wing length.

Etymology. Named in honour of Prof. Arkadiy S. Lelej (Vladivostok, Russia) for his valuable contributions on Hymenoptera.

Distribution. The new species is presently known only from Central Thailand (Kanchanaburi Province).

Remarks. The male of the new species is unknown. *Pristaulacus leleji* sp.n. resembles *P. vivaldianus* Turrisi et Smith, 2011, described from Laos [Turrisi, Smith 2011], with regard to the habitus and the colour pattern; it can be readily separated due to the following main differences (Table 1).

Table 1. Main differences of *Pristaulacus vivaldianus* and *Pristaulacus leleji* sp.n.
Таблица 1. Основные различия *Pristaulacus vivaldianus* и *Pristaulacus leleji* sp.n.

Pristaulacus vivaldianus	*Pristaulacus leleji* **sp.n.**
1. Occipital margin with a wide and weak medial groove.	1. Occipital margin only slightly concave, without medial groove.
2. Antenna blackish brownish with antennomere 1 orange.	2. Antenna orange with antennomere 2 darker.
3. Frons with dense light brown setae.	3. Frons with scattered brownish setae.
4. Wings with base not infuscated, substigmal spot sharply defined, extended back to submarginal cell 2.	4. Wings with base widely infuscated, substigmal spot weakly defined, extended back to discal cells 2–3.
5. Hind basitarsus 8.6 times longer than wide, 0.9 times as long as tarsomeres 2–5 combined.	5. Hind basitarsus 7.0 times longer than wide, equal to length tarsomeres 2–5 combined
6. Metasomal tergite 1 reddish orange with a narrow longitudinal blackish band.	6. Metasomal tergite 1 entirely reddish orange.
7. Ovipositor 0.9 times fore wing length.	7. Ovipositor 1.3 times fore wing length.

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