

A new species of the genus *Odontocrabro* Tsuneki, 1971 from south-eastern Asia (Hymenoptera: Crabronidae)

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ŘÍHA M. 2007: A new species of the genus *Odontocrabro* Tsuneki, 1971 from south-eastern Asia (Hymenoptera: Crabronidae). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **92**: 205–209. – *Odontocrabro reticulatus* sp.nov., a new species of the genus *Odontocrabro* Tsuneki, 1971, is described from Malaysia and Thailand. An identification key to the Asian species of the genus is given.

Key words. Hymenoptera, Crabronidae, Crabronini, *Odontocrabro*, taxonomy, new species, South-eastern Asia

Introduction

The genus *Odontocrabro* Tsuneki, 1971 has until recently included seven species (LECLERCQ 1991, 1993): *Odontocrabro abnormis* Tsuneki, 1971 from Taiwan, *O. antropovi* Leclercq, 1991 from eastern Russia (Primorskij reg.), *O. binderis* Marshakov, 1980 from Mongolia, *O. orthodoxus* Hensen, 1989 from Turkey, *O. marocanus* Leclercq, 1993 from Morocco, *O. saharae* Leclercq, 1991 from Algeria, and *O. temporalis* (Gussakovskij, 1952) from Tajikistan and Uzbekistan. Determination characters for the genus are given by HENSEN (1989) and LECLERCQ (1991, 1993).

Odontocrabro reticulatus sp.nov. (Figs 1–5)

Type material. Holotype (labelled): ♀, “MALAYSIA - W; PAHANG; Cameron Highlands; ~1500m; TANAH RATA (35km SEE IPOH); 4°28'N 101°23'E; 19.–31.iii.2003; Říha M&M Němec leg.”. Allotype: ♂, the same data as holotype. Paratypes: 1 ♀, 6 ♂♂, the same data as holotype; 2 ♂♂, “THAI – N, 1.–15.v.1998, Chiang Mai prov., SAN PAKIA vill., 19.19N 98.50E, 1400m, Vít Kubáň leg.”; 1 ♀, “THAILAND, Nan prov., Ban Bo Klua env., 13.–26.v.2002, P. Průdek & M. Obořil leg.”. All coll. M. Říha, Brno, Czech Republic.

Description. Holotype. Length 3.8 mm (paratypes female 3.5–3.8 mm). Black species. Antennal scape (except brown postero-basal spot), mandibles largely (except apex and base) and basal fifth of all tibiae yellow. Apices of mandibles, antennae beneath, labium, palpi, pronotal lobe, tarsi and tibiae light brown. Base of mandibles and middle part of hind tibiae dark brown. Tegulae, precostal plates, pterostigma, costal and subcostal veins dark brown. Other veins light brown.

Head smooth and lustrous. Head length : width ratio 57 : 75. Scapal basin strongly depressed, without microsculpture, smooth and lustrous. Frons convex, divided by medial (frontal) furrow into two convexities. Frontal furrow continued between postoceli. Ocellar impressions present. Ocelo-ocellar distance: postocellar distance ratio 4 : 3. Frons, vertex and genae microreticulate, lustrous, with a few irregular punctures.

Posterior portion of vertex rather smooth and lustrous. Occipital carina low, separated from hypostomal carina by distance less than 0.5 diameter of fore-ocellus. Clypeus (Fig. 2) with six teeth, four on the median lobus (two medial in obtuse angle, two lateral in acute angle) and two separated from median lobus by excision almost reaching inferior margin of eyes. Scape ecarinate. Relative length of antennal scape : pedicelle : flagellomeres 1, 8, 9, 10 = 24 : 7 : 8 : 4 : 4 : 7. Mandibles long, bifid, evenly rounded, with inner tooth (directed slightly upwards) on antero-dorsal keel.

Pronotum flattened above, anterior margin feebly carinate and slightly emarginate at centre, with shallow impressions on each lateral third above. Lateral corners rounded, without teeth. Scutum excluding anterior corners reticulate. Notauli replaced by lines. Parapsidal lines distinct. Medial line replaced by two striae. Prescutelar furrow deep, strongly crenate (with ten depressions). Scutellum finely reticulate. Metanotum microreticulate. Postscutelar furrow shallow. Propodeum very smooth and lustrous, without microsculpture, with only medial furrow and short lateral carinae on posterior slope. Anterior margin with a number of short carinae. Prosternal tubercle strong, pointed. Epicnemial area swollen (in dorsal view). Epicnemial furrow broad and deep. Mesopleurae microreticulate and lustrous, upper part smooth. Verticulus absent, precoxal area without tooth. Metapleurae roundly swollen lengthwise (as in *O. abnormis*), smooth and lustrous. Scrobe elongated by deep furrow, joining mesopleural furrow. Mesosternum reticulate. Deep elliptical cavity between and in front of middle coxae, covered with relatively long white hairs (as in *O. abnormis*).

Abdomen sessile. Tergites 1–3 without microsculpture, smooth and lustrous. Tergites 4 and 5 with microsculpture, smooth and lustrous. Pygidial plate trilobate, dull (Fig. 3). Sternites microreticulate and lustrous with setiferous punctures along posterior margins.

Legs essentially as in *O. abnormis* (TSUNEKI 1971: Figs 62–64), but fore-coxae normal, without bifurcate process. Middle metatarsi with two strong, yellowish translucent spines on inner margin. Middle femora with shallow postero-basal longitudinal depression.

Pubescence white; on genae 1.6 times longer than diameter of fore-ocellus; on epicnemium, mesosternum, posterior portion of mesopleurae and on all femora ventrally as long as diameter of fore-ocellus; on pronotum 0.7 times longer than diameter of fore-ocellus.

Wings as in *O. abnormis*.

Alotype. As in holotype, with the following differences: Length 3.8 mm (paratypes male 3.2–4.2 mm). Mandibles without yellow, only with subbasal dark yellow spot. Pronotal lobe black. All tibiae dark brown. Inner tooth of mandibles smaller than in female, but distinct (in dorso-lateral view). Prescutelar furrow deep, narrow, not crenate (only indication on sides). Last tergite smooth, lustrous, without microsculpture, pygidial plate absent. Legs feebly modified (as in female, but not so strong). Middle basitarsus thin, produced at inner apex, without translucent spines. Aedeagus (Figs 4a,b).

Variability. Paratypes. Mandibles black to yellow in males. Tibiae dark brown to light brown, apical fifth yellow to whitish.

Distribution. Thailand, Malaysia.

Derivatio nominis. Reticulate – superficially net-like, referring to the surface of the mesonotum.

Differential diagnosis. The new species differs from the related species *O. antropovi*, *O. abnormis* and *O. binderis* in the features stated in the key, mainly in the form of median lobus of clypeus and the reticulate surface.

Key to the Asian species

HENSEN (1989) wrote: “*The structure of the pygidium of O. orthodoxus is similar to temporalis only.*” However, the original description of *O. temporalis* by GUSSAKOVSKIJ (1952) states: “*Base of pygidium with triangular convexity, other surface depressed, apically trilobate as in Crossocerus podagricus Linden., but more narrow.*” Following this description, only *O. orthodoxus* has a pygidium with a V-shaped carina (HENSEN 1989: p. 101, Fig. 4). Other Asian species have a trilobate pygidial area, as in the original description of this genus (TSUNEKI 1971: p. 23, Fig. 60).

The following key is based on females, because males are available for only three Asian species (*O. antropovi*, *O. temporalis* and *O. reticulatus* sp.nov.). Determination characters for the two African species, *O. marocanus* and *O. saharae*, are given by LECLERCQ (1991, 1993).

1. Occipital carina strongly raised and projecting; median lobus of clypeus reduced to a single, truncate tooth. Tajikistan, Uzbekistan. ***O. temporalis* (Gussakovskij)**, ♀♂
- Occipital carina low, not raised. 2.
2. Median lobus of clypeus not developed; head and thorax smooth and lustrous. SE Russia. ***O. antropovi* Leclercq**, ♀♂
- Median lobus of clypeus well developed. 3.
3. Pygidium with V-shaped carina; male unknown. Turkey. ***O. orthodoxus* Hensen**, ♀
- Pygidium trilobate, mat. 4.
4. Fore-coxae with large bifurcate process; pronotum tuberculate; male unknown. Taiwan. ***O. abnormis* Tsuneki**, ♀
- Fore-coxae rounded; pronotum not tuberculate. 5.
5. Median lobus of clypeus as wide as shortest interocular distance, with median tooth; male unknown. Mongolia. ... ***O. binderis* Marshakov**, ♀
- Median lobus of clypeus almost twice as wide as shortest interocular distance, with two weak median teeth. Malaysia, Thailand. ***O. reticulatus* sp.nov.**, ♀♂

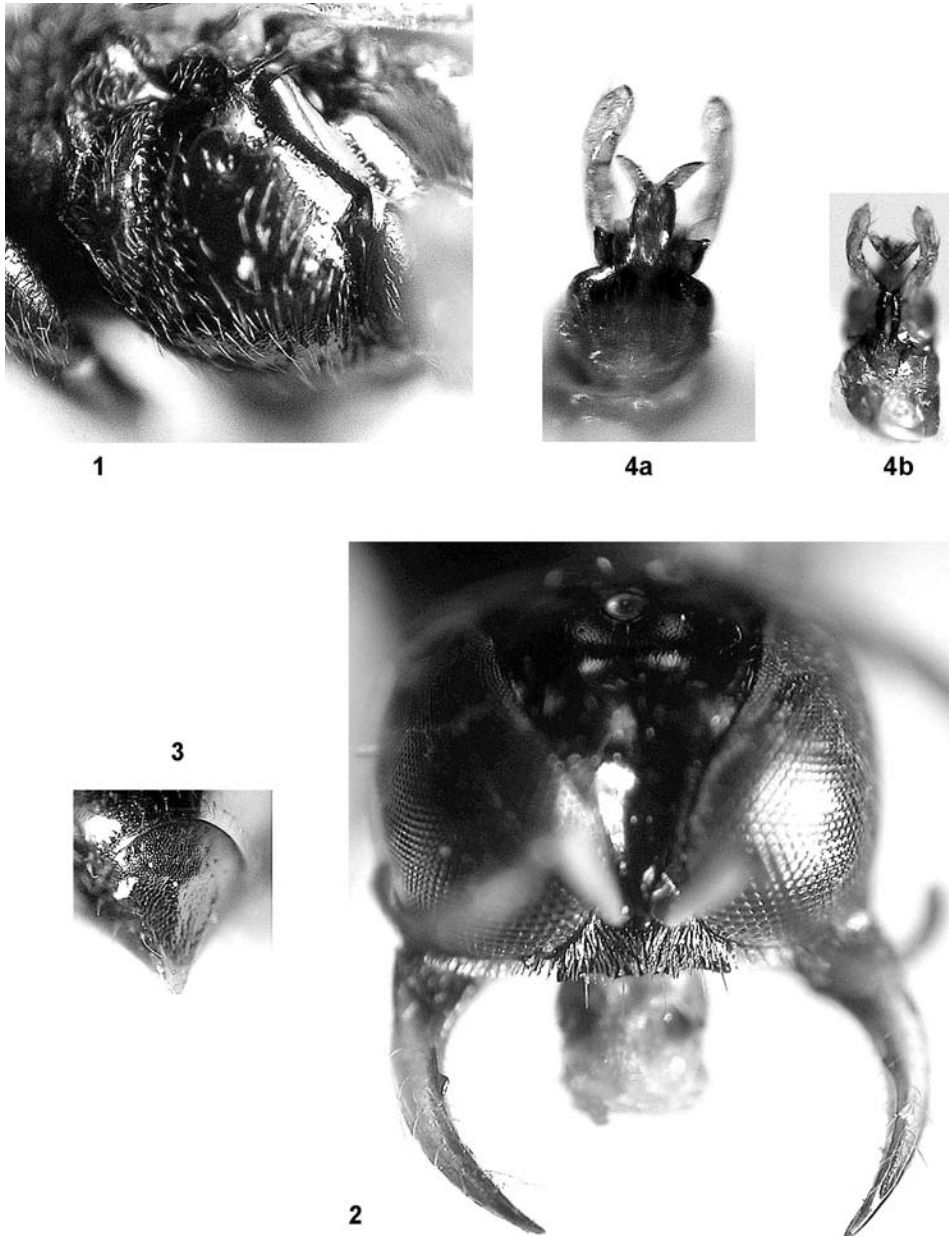


Fig. 1–4. 1 – Mesosoma, lateral view; 2 – head, frontal view; 3 – pygidial plate; 4a – aedeagus (alotype), dorsal view; 4b – aedeagus (alotype), ventral view.

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