New species of the genus *Pseudocolla* Radovsky from Central Asia (Hymenoptera: Sphecidae).

**Nовые виды рода *Pseudocolla* Radovsky из Средней Азии (Hymenoptera: Sphecidae).**

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**КЛЮЧЕВЫЕ СЛОВА:** систематика, Hymenoptera, Sphecidae, Pseudocolla, новые виды, Средняя Азия.

**ABSTRACT:** Six new species of the digger wasp genus *Pseudocolla* Rad. are described from Central Asia: *P. clanica* sp.n., *P. desertica* sp.n., *P. ilava* sp.n., *P. eleji* sp.n., *P. tridentata* sp.n. and *P. turkmenica* sp.n.

**РЕЗЮМЕ:** Описаны 6 новых видов жужелиц рода *Pseudocolla* из Средней Азии: *P. clanica* sp.n., *P. desertica* sp.n., *P. ilava* sp.n., *P. eleji* sp.n., *P. tridentata* sp.n. и *P. turkmenica* sp.n.

**Introduction**

The sphecid genus *Pseudocolla* Radovsky, currently containing 20 species (Bobart, Menke, 1976), is distributed mainly in desert areas of the southern Palearctic. Two species of the genus have been known from Central Asia [Mocquod, 1894; Gussakovskij, 1952; Mjatezewa, 1972]. Examination of Central Asian material of *Pseudocolla* in the collections of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN), as well as the author’s personal collection has revealed ten species, including some new to science. Six of them are described below.

The holotypes and most paratypes are deposited in the ZIN, some paratypes of *P. clanica* sp.n. and *P. turkmenica* sp.n. are shared also with the collections of Zoological Institute of the National Academy of Sciences of the Republic of Kazakhstan, Almaty (ZIN), and of Zoological Museum of the Moscow State University (ZMUM).

**Taxonomic part**

*Pseudocolla clanica* Kazenas, sp.n.

**Figs.** 1-8.

**MATERIAL.** Holotype, ♀: "Ургенч, Западный Казахстан, окрестности Караша, 1-07.1991 (Казенас)" (ZIN). Paratypes: ♀ 5, ♂ 4, same data as holotype; ♀, same locality, 28.04.1991 (Казенас); ♀ 1, ♂ 1, "Туркменская земля, 5-8 км южнее города Кумерджан, 15.05.1991 (Казенас)" (ZIN).

**DESCRIPTION.** Female Clypeus with 4-dentate apical margin (Figs. 1, 2), almost contacting with eyes. Medial lobe strongly convex, slightly concave lateromedially. Pare delicately and densely punctate, with short appressed pubescence, scarcely concealing its sculpture. From above and ventrally to posterior edge of hind scutellum sparsely punctate, inner orbits weakly diverging below (Fig. 1). Pronotum with neither teeth nor tubercles, nor notches dorsally (Figs. 3, 4). Scutum mainly delicately and sparsely punctate, densely punctate basally, without long erect hairs, almost without short pubescence. Mesoscutellar shining, very delicately and densely punctate and microsculptured. Postscutellum delicately and densely punctate. Propodeum dorsum subshining, delicately and irregularly rugose basally, delicately transversely striate apically. Gaster delicately and densely punct-
tate, more sparsely on apical parts of segments; interspacing smooth and shining, without microsculpture. Pygidial plate broad (Fig. 5), with very delicate, slightly curved longitudinal ridges apically, almost smooth and with a few hardly outlined punctures basally.

Head and thorax mainly black. Mandible basally, pronotum dorsally, tegula and postscutellum (sometimes a spot on scutellum) yellowish-white. Protornal lobe dark brown. Gaster dark brown, basal segments more or less red, apical segments almost black. Tergites 1-4 with yellowish-white markings (Fig. 6). Antennae dark brown, flagellum mainly reddish-yellow ventrally. Coxa, trochanters, and femora black basally. Femora more or less brownish-red apically, with light yellow spots. Tibiae yellowish-white, red ventrally. Tarsi more or less red, fore and middle tarsi partly light yellow basally, hind tarsal brown apically. Wing veins dark brown, paler basally. Pterostigma brown, light yellow basally.

Body length 5.5-6.5 mm.

MALE. Mandible in basal third with an oblique ridge bearing a row of short, light hairs fused together, hairs almost thrice as short as diameter of midcoecelus. Longest hairs at anterior margin of lateral clypeal lobes almost 1.5 times longer than diameter of midcoecelus. Medial clypeal lobe emarginate apically (Figs. 7, 8), smooth and glabrous anteriorly, delicately and densely punctate and pubescent on remaining surface. Inner eye orbits weakly diverging below 'oom middle of front (Fig. 7). Front with dense appressed pubescence. Frontal furrow distinctly developed medially on convex part of front. Distance between kind ocelli almost 1.1 times greater than that between one of them and nearest eye, 2.4 times greater than diameter of hindocellus. Flagellomeres 5-11 more or less modified. Last flagellomere broadened and curved apically, narrowed basally, clavate (Fig. 5). Sculpture and pubescence almost as in female. Tergite 6 with dense light hairs. Light markings less developed than in female. Mandible pale yellow, partly reddish medially. Clypeus more or less light yellow, at least so apically and medially. Antenna black to black-brown. Apical flagellomeres sometimes more or less yellow ventrally. Thorax black, only aculeum (and sometimes pronotum) with yellow spots. Tegula with yellow spots. Pronotal lobe brown, sometimes reddish. Gaster black, slightly brownish basally. Tergites 1-3 with light yellow spots (sometimes more or less reduced) medially and laterally. Color of legs as in female. Body colour very variable, up to completely black.
Body length 5.2-5.8 mm.

**DIAGNOSIS.** Pseudoscolia flavus sp. n. differs from congeners by the shape of the eyes (\(e\) and \(e'\)) and apical flagellomeres (\(f\)), by the body color, sculpture, and hair vestiture as well as by the combination of diagnostic features.

**Pseudoscolia flavus** Kazenas sp. n.

Figs. 10-13.

**MATERIAL.** Holotype: 9: "Turkmenistan, Karakum, Perepel, 17.05.1990 (Kazenas)" (Turkmensitan, Karakum, Perepel, 17.05.1990 (Kazenas)). Paratypes: IV; same locality and collector, 7.05.1990 (ZIN).

**DESCRIPTION.** FEMALE. Apical margin of clypeal medial lobe with two acute teeth divided by a narrow notch, with two broad lateral teeth separated from middle ones by broad notches (Fig. 10). Medial lobe of clypeus uniformly convex, smooth, shining. Eyes almost contacting with clypeus. Frons very densely and delicately punctate, almost without pubescence. Face moderately broad, eyes not very strongly diverging below (Fig. 10). Distance between hindocellus and nearest eye c. 1.1 time greater than that between hind ocelli, 2.7 times greater than their diameter (19:17:7). Pronotal collar angulate anterodorsally (Fig. 11). Pronotum laterally with a curved ridge looking like an angulate prominence (see from above) (Figs. 11, 12). Scutum smooth and shining; sparsely and moderately punctate. Metapleural very delicately and densely punctate, with appressed and erect hairs. Propodeal dorsum delicately, transversely, partly obliquely rugose-striate, weakly shining, with microsculpture. Gastral tergites delicately, but not very densely puncate, smooth and shining, with very weak microsculpture. Pygidial plate very broad (Fig. 13), with reticulate microsculpture, dull, with very dense microsculpture apically, partly smooth basally, sparsely puncate. Body light yellow (partly whitish), only vertex, scutum, apical margins of gastr al segments, and gaster apically reddish to brownish. Antenna brownish apically.

Body length 6.1 mm.

**MALE unknown.**

**DIAGNOSIS.** Pseudoscolia flavus sp. n. differs from congeners by the structure of the clypeal fore margin and pronotum, very bright body colour, sculpture, and hair vestiture.

**Pseudoscolia inleji** Kazenas, sp. n.

Figs. 14-19.

**MATERIAL.** Holotype: 9: "Turkmenistan, Balaszskyi kartal, 14.05.1978 (A. Astan)" (Turkmensitan, Balaszskyi kartal, 14.05.1978 (A. Astan)). Paratypes: 9; same locality, 15.05.1978 (N. Kurmanov) (ZIN).

**DESCRIPTION.** FEMALE. Medial clypeal lobe 6-dentate apically (Figs. 14, 15). Distance between clypeus and eyes c. 2 times shorter than diameter of midocellus. Medial lobe of clypeus delicately and sparsely puncate, dense apically. Inner orbits strongly diverging below (Fig. 14.). Face at level of posterior margin of lateral clypeal lobes c. 1.5 times as broad as at level of anterior edge of lore ocelli. Antennomere 8 c. 1.3 times as long as broad, longer than 7th or 9th. Distance between hindocellus and nearest eye c. 2 times shorter than diameter of hindocellus, slightly less than distance between hind ocelli. Longest hairs on vertex twice as long as
diameter of midocellus. Pronotum dorsally with neither roach nor teeth, nor prominences (Figs. 16, 17). Scutum sparsely punctate, punctures 3-4 times smaller than midocellus. Hairs 1.5-2 times longer than diameter of midocellus. Postscutellum delicately and densely punctate. Propodeal dorsum subshining, irregularly, mainly transversely, delicately striate, very delicately reticulate basally and medially, microsculptured laterally and posteriorly. Mesopleuron delicately and densely punctate, with appressed pubescence and long erect hairs. Pygidial plate as in Fig. 18. Head and thorax black; metanoe, clypeus, small lateral facial spots near clypeus, pronotum dorsally, pronotum lobe, spot on tegula, two spots on postscutellum, emarginate bands of tergites 1-5 (Fig. 19), spots on midocellus, femora and tibiae dorsally light yellow. Epipleuron black-brown, yellow apicoventrally. Legs almost entirely red, coxae and femora partly black. Gaster brownish-red, partly brown. Hind tarsi brown.

Body length 6.7-7.5 mm.

MALE unknown.

DIAGNOSIS: This species differs from the most closely related *P. diversicornis* F. Morawitz by the greater distance between the clypeus and eyes, antennomere 8 longer than neighboring ones, absence of a notch on the pronotal dorsum, dull propodeal dorsum, delicately rugose (not simply striato-reticulate) pygidial plate, other details of sculpture, as well as by the body pubescence and color.

ETYMOLOGY. The species is dedicated to Dr. A.S. Lelej (VLdV, Rostovsk).
Tergites delicately and densely punctate, interspecific smooth and shining, very vaguely microsculptured. Apical setae of fore basitarsus about as long as tarsomere 2. Mandible, clypeus, face laterally, pronotum dorsally, pronotal lobe, postscutellum, and tegula yellowish-white. Large spot on front near midcoelus, transverse spot on vertex behind ocelli, and scutellum yellow (sometimes light yellow). Gaster blackish-brown (partly reddish), with yellowish-white bands bearing two emarginations only on tergite 1 non-entaginate). Coxae and trochanters brown, light yellow apically. Femora light yellow, more or less brown or red basally. Tibiae and tarsi light yellow, partly reddish. Antenna light yellow, partly reddish.

Body length 3.6 mm.

**FEMALE unknown.**

**DIAGNOSIS.** *Pseudoscolia tridentata* sp.n. differs from congeners by the following combination of features: fore edge of clypeus tridentate, antennae short, unmodified pronotum neither notched dorsal nor prominent above scutum; scutum sparsely punctate; propodeum dorsally partly smooth posteriorly; body with rich light pattern; body length smaller.

**Pseudoscolia desertica** Kazenas, sp.n.

Figs. 24-28.

**MATERIAL.** Holotype: D: "YURKON, 40 km S3 Aristovka, 24.05.1965 (Keresner)" (MBP), Keresner, 40 km NW of Dushinghly, 24.05.1965 (Keresner) (ZIN).

**DESCRIPTION.** FEMALE. Anterior margin of clypeal medial lobe 4-dentate (Fig. 24). Clypeus completely and front delicately and densely punctate, with dense, appressed, silvery pubescence. Face broad, inner orbits of eyes subparallel (Fig. 24). Distance between hind coeculus and nearest eye slightly greater than that between hind ocelli. c. 3 times greater than diameter of hind coeculus (25:23.8).

Vertex with long hairs c. 2 times longer than diameter of midcoelus. Pronotum uniformly concave dorsally, with neither prominence nor notches, nor teeth (Figs. 25, 26). Scutum and mesepimeron delicately and sparsely punctate, only with short appressed light hairs. Propodeal dorsum with very delicate reticulate microsculpture, partly smooth posteriorly. Gaster rather broad. Terga densely punctate, punctures 3-6 times smaller than midcoelus. Reticulate microsculpture weakly developed. Terga (especially 3 and 4) with dense, rather long, curved, light hairs laterally, longest hairs almost 2 times longer than diameter of midcoelus. Pygidial plate (Fig. 27) smooth and shining, delicately and sparsely punctate. Body red, with yellowish-white markings. Mandible mainly, clypeus, ventrolateral spots of frons and between antennae, pronotum dorsally, pronotal lobe, tegula, postscutellum, interrupted or emarginate apical bands of gastric tergites (Fig. 28), small apical spots on mid- and hind coeculae, ventrolateral spots on femora, as well as tibiae and tarsi totally yellowish-white. Scapus and pedicelum red. Flagellum brown, partly reddish.

Body length 6.7 mm.

**MALE unknown.**

**DIAGNOSIS.** *Pseudoscolia desertica* sp.n. differs from related congeners by a general combination of diagnostic features. The most important traits are the following: wide face, completely silvery clypeus, 4-dentate clypeal lobe margin, convex pronotum (with neither prominences nor hollows, nor teeth), subparallel inner eye orbits, absence of wrinkles and burrows on propodeal enclosure, unusual hair vestiture on sides of tergites, relatively small body size, red color of body and legs. Presence of a rich yellowish-white pattern. *P. desertica* sp.n. differs from the closely related species also by the
Figs 24-28. *Pseudoscelis desertica* sp. n., 24 - head, frontal view; 25 - dorsal part of pronotum, frontal view; 26 - dorsal part of pronotum in profile; 27 - pygidial plate; 28 - gaster, dorsal view.

Figs. 29-35. *Pseudoscelis tachytes* sp. n., 29-30, 34 & 35; 31 & 32 - head, frontal view; 30 - clypeal lobe margin; 31 - dorsal part of pronotum, frontal view; 32 - pygidial plate; 33 - gaster, dorsal view; 35 - antenna.
dense pinnity of the medial clypeal lobe, vestiture and puncture of the gaster, traits of sculpture and markings of the body.

*Pseudosoria turkestanica* Kazenas, sp.n.  Figs. 29-35.

MATERIAL. Holotype, 9, "Turkizan, okolostity 6.0.1916 (Shahsavan)"); 20, "Kyzyl Khantakut - Biti Amuragar, 12.0.1915 (Khachavan)"); 20, "South Khustak; Karakorun near Dulikh, 12.0.1895 (Kohtarshchuk)"); (ZIN, ZK, ZMUM).

DESCRIPTION. FEMALE. Clypeus short, together with teeth c. 3.1 times shorter than maximum width. Eyes strongly diverging below (Fig. 29). Apical margin of clypeus 6-dentate (Fig. 30). Median lobe of clypeus delicately and sparsely punctate, very delicately and densely punctate and weakly pustulate apically. Face rather densely pubescent. Hairs of hair directed upward and obliquely laterally on upper part and downward on remaining parts. Longest hairs of vertex c. 1.5 times longer than diameter of midocellus. Vertex behind ocelli convex. Head behind eyes considerably prominent. Distance between hind margin of head and ocelli about as long as that between posterior margin of ocelli and anterior margin of head (see above). Distance between hind ocelli c. 2.2 times greater than their diameter and almost as wide as distance between hindocellus and nearest eye. Pronotum collar slightly notched or almost straight medially (Fig. 31). Scutum and scutellum delicately, irregularly and sparsely punctate. Punctures 4-6 times smaller than diameter of midocellus. Interspaces smooth and shining, very sparsely micropunctate. Prosternum at least anteriorly very delicately and densely punctate, with short erect pustules. Mesepimeron very delicately and densely punctate, with appressed pubescence and long erect hairs. Propodeum dorsum irregularly, mainly obliquely rugulose distally, smooth apically. Abdominal tergites with dense (sparse apically), small punctuation, very delicately reticulate-micropunctate. Pygidial plate (Fig. 32) with dense reticulate microsculpture, very delicately longitudinally striate basally. Head and thorax black. Mandibles mainly, clypeus, two spots at pronotum, pronotal lobes, tegulae, postscutellum, emarginate laterally spiral bands of gastric tergites (Fig. 33), narrow lateral ala on sternites 2-4, apical spots on costae and trochanters, fore- and midleg femora ventraly, hindleg femora apically, as well as tibiae and tarsi dorsally yellowish-white or light yellow. Gaster red, partly brownish. Femora partly red, more or less black basally. Wing veins mainly black, precosta light brown, reddish apically.

Body length 7.5-9.5 mm (9.0 mm in holotype).

MALE. Anterior margin of clypeus 4-dentate (Fig. 30). Bristles of oblique row on anterior part of surface of mandible about as long as 1/3 diameter of midocellus. Hairs at anterior margin of lateral clypeal lobes 1.5 times longer than diameter of midocellus. Distance between hindocellus and nearest eye almost 2.5 times shorter than diameter of midocellus. Eyes diverging below (Fig. 35). Distance between hind ocelli subequal to that between hindocellus and nearest eye. 2.2 times greater than diameter of hindocellus. Flagellomeres more or less modulated: broadened, flattened, and with prolonged apex ventrally (Fig. 35). Front delicately and densely punc
tate, with pustules similar to that of female. Vertex behind ocelli convex medially. Sculpture and pustulence almost as in female. Tergite 6 laterally with dense hairs directed forwards. Body color almost as in female, only gaster black with small, brown fragments near light spots. Pagellum black. Femora mainly black. Gastral tergites black, brownish apically, segment 7 red or brownish apically.

Body length 6.0-7.5 mm.

DIAGNOSIS. *Pseudosoria turkestanica* sp.n. differs from the closely related congeners by the following combination of features: clypeal fore margin 6- (5) and 4-dentate (6), eyes strongly divergent below; antennae black-brown; flagellomeres more or less less dentiform, pronotum with a weak hollow or almost straight, without teeth, scutum with sparse small punctures; propodeal enclosure smooth apically; pygidial plate delicately sculptured; scutellum black; gastric tergites with lateral emargination of light bands. It also differs from *P. discorsicornis* F. Morawitz by the coarser punctures of the medial clypeal lobe, shorter hairs of the vertex, smaller punctures of the scutum, more delicate sculpture of the propodeal enclosure, presence of a hair vestiture on the postscutellum, denser punctures and presence of an appressed hair vestiture on the mesepimeron, darker flagellum, and absence of ventrolateral facial light spots near eyes.

References


