

## New forms of the genus *Psithyrus* Lep.

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(With 2 figs.).

### *Psithyrus skorikovi*, sp. n.

♀. Head distinctly longer than wide at the eyes ( $H-L = 0,5$  mm); malar space as long as its width at the articulation with the mandible ( $h=l=1$  mm). Clypeus moderately convex, covered with unequal, coarse and strong, points, most sparse towards the labrum. Labrum large, more than one half longer than wide, coarsely punctured. Malar space very closely and rather hardly punctured, points sparse, its apex punctured more sparsely and coarsely than the base. Hind

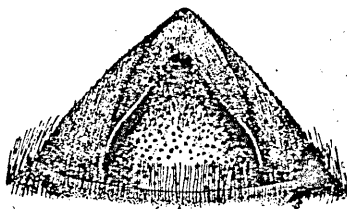


Fig. 1. *Psithyrus skorikovi* sp. n. Apical sternite of the female abdomen.

metatarsi three times as long as their largest width, prolonged into a sharp and rather narrow tooth, its posterior margin distinctly arcuate. Abdomen shining, moderately punctured, the points fine and not very close. Sixth abdominal segment rather pointed, drooping and very strongly bent under the abdomen. Lateral margins and apex of the sixth tergite (epipygium) minutely punctured and provided with an hardly visible, slight median carina on apical portion of the tergite. Sixth sternite (hypopygium) with low and gradually elevated lateral carinae (fig. 1), these latter being less convex than those in *P. norvegicus* and *P. lissonurus* and forming a more sharp-

pointed figure than that in both named species. Portion of the last sternite, lying between the carinae, covered with coarse unequal and sparse punctures, still more scarce in the middle of the basal area.

Black; prothorax, propleurae and the apical, largest part of scutellum, tergite I, pleurae and basal part of tergite II, pleurae of tergite III, and, probably, tergite IV (specimen is rather old) yellow; tergite VI covered with brownish-ferruginous pubescence. Hairs of the body rather short and coarse.

China, Gan-su, northern slopes of the Sinin Mountains, before 1. VII. 1910, G. E. and M. E. Grum-Grzhimajlo.

Type, a female, in the collection of the Zoological Museum of the Russian Academy of Sciences (from the collection of Mr. A. P. Semenov-Tian-Shanskij).

Species rather similar to *P. lissonurus* and *P. norvegicus*, but clearly differing from them by the structure of carinae and punctures, as well as the length of the malar space and the form of the posterior tooth of the hind metatarsi.

It is a great pleasure for me to name this new species after Mr. A. S. Skorikov, zoologist of the Museum of the Academy, to whom I am indebted for many valuable advices.

***P. norvegicus* Sparre-Schneider.**

Tromsö Museums Aarshefter, 40 (1917), No. 2, 1918 pp. 40—45, ♀.

♂. Malar space as long as its width at the articulation with the mandible, shining, smooth, with an indistinct hollow at the base, more or less sparsely, equally and finely punctured. Hind metatarsi longer and narrower than those of *P. quadricolor*.

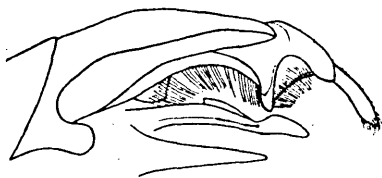


Fig. 2. *Psithyrus norvegicus* Sparre-Schneider.  
Dorsal aspect of the male genitalia.

Genitalia (fig. 2). Branches of the clasper with large and broad-rounded, shining basal extensions on the dorsal side, disposed in one plane. Squamae nearly always straight, long.

with the apices unbent inwardly; rarely as in *P. quadricolor*; their middle part sparsely and coarsely punctated. Head of sagitta narrower, longer and more stringht than that of *P. quadricolor*.

In coloration resembles very much *P. quadricolor*. — Black; occiput, prothorax, the narrow basal part of the scutellum and tergite I yellow, the most part of the tergite II black, apex of the tergite II and tergites III and IV white, tergites V and VI black, tergite VI with red hairs mix at the apex and sometimes with white ones on the pleurae; tergite VII red. Legs mostly black, tarsi with ferruginous hairs.

Archangel, Solovetzky Isl., 1896, G. Jacobson, ♂; St. Petersburg, Udelnaja, 13. VII. 1904, K. Prahwe, ♂; Sarjsky Pogost, Novoladozhsky distr., 13. 14. VII. 1903, V. Barovskiy, ♂; Tsherepovetz, Nelasskoje, VIII. 1922, V. Belizin, ♂; Kirillov distr., lake Vozhe, 16. VII, 1926, A. Belizin, 2 ♂♂; Novgorod, Valdaj distr., Chotilovo, 4., 7., 19. VII., 19. VIII. 1926, V. Popov, 4 ♂♂; Pomeranje, 22. VI. 1910, K. Prahwe, 2 ♂♂; Nizhnjaja Kurja in the neighbourhood of Perm, 28. VII. 1923, D. Charitonov, 2 ♂♂; Ekaterinburg, 15. VIII. 1924, J. Kolosov, ♂; Jakutks, Olekminsk, 15. VII. 1910, 16. VII. 1911, 17.—20. VII. 1910, N. Charitonov, 4 ♂♂.<sup>1</sup>

var. *pseudocitrinus*, nov. ♂.

Colored as typical form, but tergites III and IV with clear yellow hairs.

Transbaicalia, Station Gorjatschinskaja, 21.—22. VII. 1908, J. Kusnezov.

var. *transbaicalicus*, nov. ♂.

Colored as typical form, but the black band between the bases of the wings richly mix with yellow hairs; most part of the scutellum with yellow hairs; tergites III and IV with dull yellow hairs.

Transbaikalia, Tschita, 2/2. VII. 1921, Miss M. V. Redikorzev, ♂.

All specimens are deposited in the collection of the Zoolo-

<sup>1</sup> I have seen also one male of this species from Marienbad, Austria, in Mr. V. Belizin's collection (Prahwe's Museum of Natural History in Staupopol, Caucasus).

gical Museum of the Russian Academy of Sciences and in the author's collection.

The males of *P. norvegicus* could be placed in the middle between the males of *P. lissonurus* and *P. quadricolor*, what fact would confirm the opinion of the late J. Sparre-Schneider (1918). Our species differs from *P. lissonurus* in the structure of the malar space which in *P. lissonurus* is narrowed at apex, unequally punctured and strongly shining, as well as by the head of sagitta which in the second species is short-triangular with its apex extended towards the median line of genitalia: from *P. quadricolor* it differs by the structure of malar space and of the basal extensions on the dorsal side of the clasper branches.

Of course, the above description the males of *P. norvegicus* as such is only a presumable one, but I think one could be nearly sure that the existence of a new species of this group in our countries is almost excluded. I have seen besides one female of *P. norvegicus* in the collections of the Russian Academy of Sciences taken by Mrs. N. Skorikov in Alexandrov, government of Vladimir, 22. IV. 1909, which corresponds in all details to the Sparre-Schneider's description; the occurrence of this species in Russia is by this fact firmly stated. I take also some other female specimens from Russia as *P. norvegicus*, although the median carina on their sixth abdominal tergites are slighter than that in *P. norvegicus* from Alexandrov, but these carinae and all other structures are very much similar to those in this specimen. All females of *P. norvegicus* from Russia can be characterized by the length of malar space, the absence of the distinct ridge at the base of malar space on the middle portion of interior edge of the eye. These additional features, not mentioned by Sparre-Schneider, I believe, might be used for all specimens of *P. norvegicus*.

Petersburg, 27. IV. 1899, collector unknown, ♀; Tscherepovetz, 15. V. 1920, V. Belizin, ♀; Kursk, VI—VII. 1925, A. Vorobjev, ♀; Ekaterinburg, 10. VII. 1918, V. Redikorzev, ♀.

The *quadricolor* group (Franklin's *fernaldae* group

<sup>1</sup> I believe it would be correctio name this group after the first described species, — *P. quadricolor* Lepeletier 1832.

1912)<sup>1</sup> of the genus consists now, if we exclude the enigmatic and, probably, unexisting *P. suaveolens* Wahlberg 1854 (see also Dalla-Torre 1896), of following species: *P. quadricolor* Lep. 1832, *P. globosus* Eversm. 1852, *P. lissonurus* (Thoms.) 1872, *P. fernaldae* Franklin 1911, *P. tricolor* Franklin 1911,<sup>2</sup> *P. norvegicus* Sparre-Schneider 1918, *P. wheeleri* Bequaert & Plath 1925<sup>2</sup> and *P. skrikovi*, sp. n. This group is well characterized by Franklin (1912) and Bequaert and Plath (1925), and it forms now so excellently separated group, that we could, perhaps, fix it as a subgenus.

The *quadricolor* group is, probably, one of the youngest of the family and the most deviated from the primitive forms like those of the *vestalis* or *ashtoni* group.<sup>3</sup> The great variability and the close affinity of all species of *quadricolor* group may be explained as result of their recent appearance. Very remarkable fact also is that this group is distributed over the northern part of Holarctic region and is found in the southern portion of its area mainly in the mountainous countries, such as Sinin Mountains, the Caucasus, Balkans, Pyrenees, Rocky Mountains and Sierra Nevada.

Many old authors, e. g. Pérez (1883), Dalla-Torre (1896) and others believed that many palaeartic species of this group are only colour varieties. All tables for determination given by them, therefore, were unsatisfactory, being based only on the coloration of the species. A careful comparative study of the structural characters of all palaeartic species proves that these forms, e. g. *P. globosus*, *quadricolor*, *lissonurus*, are not colour phases of one and the same species, but, very distinct, though rather closely related species.

The palaeartic species may be separated as follows.

1 (10). Females.

2 (7). Carinae of the sixth abdominal sternite without distinct

<sup>1</sup> Mr. Th. Frison 1926, after having studied the paratypes of this species, believed it to be only a colour variety of *P. fernaldae*.

<sup>2</sup> Bequaert and Plath's opinion is that there we have both sexes only of the same species; see also Franklin 1912.

<sup>3</sup> The species of the latter group is very like in their genitalia to those of the genus *Mendacibombus* of the humble-bees, so we could call the *vestalis* group as the most primitive among *Psithyridae*.

triangular sharp projection at its middle. (In that case and further carinae must be seen from the side view). They are prolonged on the middle part of the sternite. Malar space without distinct ridge at its base on the middle portion of the inferior edge of the eye.

- 3 (6). Carinae of the sixth abdominal sternite slight, straight and forming no visible projections. Malar space as long as its width at the articulation to the mandible.
- 4 (5). Malar space faintly shining, closely and coarsely punctured all over its surface, the basal portion wrinkled. Carinae of the sixth abdominal sternite slight, equally projected. Hind metatarsi with long and sharp triangular point . . . . *P. skorikovi*, sp. n.
- 5 (4). Malar space light, shining, less closely and more finely punctured, its apex usually without punctures, smooth. Carinae stronger, further projected and convex. Hind metatarsi with a short and obtuse triangular point . . . . . *P. lissonurus* (Thomson).
- 6 (3). Carinae of the sixth abdominal sternite strong, convex and forming a visible projection. Malar space distinctly longer than its width at the articulation to the mandible. *P. norvegicus* Sparre-Schneider.
- 7 (2). Carinae of the sixth abdominal sternite forming a distinct triangular projection, short and not prolonged beyond the middle part of the sternite. Malar space with distinct ridge at its base on the middle portion of the inferior edge of the eye.
- 8 (9). Carinae of sixth abdominal sternite forming a sharp triangular projection. Fifth tergite rather not shining more or less closely and equally punctured. Abdominal apex always with black hairs. Length 12—16 mm.  
*P. quadricolor* Lep.
- 9 (8). Carinae of the sixth abdominal sternite rather blunt and usually with a low projection. Fifth tergite light, shining, with scattered punctations at its middle and close ones at its sides. Abdominal apex always without black hairs. Length 15—20 mm.  
*P. globosus* Eversm.
- 10 (1). Males.

- 11 (14). Basal extensions on the dorsal side of the branches of clasper large, broadly rounded, disposed in the one plane.
- 12 (13). Malar space light, shining, distinctly narrowed towards its apex, with more or less hard, fine and unequally dispersed points. Head of sagitta short-triangular, with its apex extended towards the median line of the genitalia. Hairs of the body long.  
*P. lissonurus* (Thom s.)
- 13 (12). Malar space shining, almost rectangular, with more or less equal and very fine points. Head of sagitta narrow, long and straight. Hairs of the body rather short . . . *P. norvegicus* Sparre-Schneider.
- 14 (11). Basal extensions of the dorsal side of branches of the clasper narrow, small and lightly wrinkled, with distinctly separated middle portion; they are disposed at distinct angles to one another.
- 15 (16). Squamae long, coarsely punctured and sharply tooth-shaped, not shining, much wrinkled. Occiput rather rectangular. Abdominal apex without black hairs.  
*P. globosus* Eversm.
- 16 (15). Squamae usually low, large, closely punctured, especially in the middle portion; its peripheral parts shining, with no points. Occiput roundish. Abdominal apex with black hairs . . . . . *P. quadricolor* Lep.

After this paper was send to „Konowia“ the author recieved a copy of the new article of Dr. Th. H. Frison (Trans. Amer. Ent. Soc., LIII, 1927, pp. 51—78), where is established a new subgenus — *Fernaldaepsithyrus* Frison. All species, mentioned above, may be include into this subgenus.

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