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Review of the *cucullatus* species group of the genus *Psylliodes* LATREILLE (Coleoptera: Chrysomelidae: Galerucinae)

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ABSTRACT. A review of the *cucullatus* species group of the genus *Psylliodes* LATREILLE is provided. Description of the group and redescriptions of the species, distribution, diagnoses to species, and a key to the species are given. *Psylliodes olgae* n. sp. from Spain is described. Composition of the species group and its relations within genus are discussed. The ranks of the *Psylliodes cucullatus heydeni* WEISE and *Psylliodes macellus agropyri* PALIJ are restored to a distinct species. Lectotype of *Psylliodes agropyri* is designated. *Psylliodes cucullatus gansuica* JACOBSON and *Psylliodes cucullatus ussuriensis* L. MEDVEDEV are synonymized with *Psylliodes cucullatus* (ILLIGER).

Key words: entomology, taxonomy, Coleoptera, *Psylliodes*, *cucullatus* species group, review, new species, new synonyms.

INTRODUCTION

The monotypic *cucullatus* species group was established by LEONARDI (1970) within the genus *Psylliodes* LATREILLE. The status of *Psylliodes schwarzi pyrenaea* WEISE was changed to a separate species *Psylliodes pyrenaeus* WEISE, and also compared with *Psylliodes cucullatus* (ILLIGER), and included to this species group (DOGUET & TEMPÈRE 1975). The status of the subspecies *Psylliodes cucullatus gansuica* JACOBSON, *Psylliodes cucullatus ussuriensis* L. MEDVEDEV, and *Psylliodes cucullatus heydeni* WEISE was questioned by KRÁL (1967), GRUEV & DÖBERL (1997), and WARCHAŁOWSKI (2000).

This particular study reexamines the composition of the *cucullatus* species group and the status of the subspecies of *Psylliodes cucullatus* s.l.

METHODS

All observations, preparations and figures of details of the body were made using a dissecting microscope Lomo MBS-9. Photos of the female genitalia were made from the glycerin preparations using a Motic BA450 light microscope and a Canon EOS 350D digital camera. Figures of the male genitalia were made from the glycerin-gelatin preparations. Measurements were made using ocular-micrometer. Abbreviations for measurements: PI – pronotal index (maximum length/maximum width of pronotum); EI – elytral index (maximum length/maximum width of elytra); LI – pronotal-elytral length index (maximum length of pronotum/length of elytron); BI – body length-width index (length/width of body).

The following abbreviation identify the collections housing the examined material:

- NHMB – Naturhistorisches Museum in Basel;
- NMP – Národní Museum v Praze;
- ISNB – Institute Royal des Sciences Naturelles, Bruxelles;
- MTD – Staatliches Museum für Tierkunde, Dresden, Germany;
- ZMUA – Zoologisch Museum Universiteit van Amsterdam;
- HUB – Museum der Alexander Humboldt Universität;
- DEI – Deutsches Entomologisches Institute, Müncheberg;
- ZMUC – Universitets København, Zoologisk Museum, København;
- MNCN – Museo Nacional de Ciencias Naturales, Madrid;
- TAU – Zoological Department, Tel-Aviv University;
- ZIN – Zoological Institute, St. Petersburg.

***Psylliodes cucullatus* species group**

P. cucullatus species group, LEONARDI, 1970: 218.

DESCRIPTION

Body oval, cylindrical, more or less elongated, convex (figs. 1-9). Head large, wide, moderately flat, eyes comparatively small to medium in size; vertex large, wide, punctured usually with small punctures, rarely impunctate; interspaces slightly shagreened to almost smooth. Ocular sulci usually poorly developed, shallow, and narrow. Frontal calli narrow, weakly convex to almost flat, apices narrowing, joined with convex area at inner margin of eyes. Frontal ridge usually short, rectangular, trapezoidal, weakly convex to almost flat, poorly shagreened to almost smooth; anterofrontal ridge usually concave, forming a wide, obtuse angle. Antennal grooves usually shallow. Labrum not very long, wide, pentagonal, and roof-shaped transverse-medially, 4 medial setiferous pores well developed. Pronotum large, convex, sides usually not strongly converging anteriorly and narrowing dorsally, sometimes with sides almost parallel, anterolateral callosity poorly developed, weakly protruding from contour; punctation usually medium-sized or small and shallow to large and deep, dense to usually sparse, interspaces

shagreened to almost smooth, usually flat. Elytra convex, with sides weakly rounded medially to almost parallel; hind wings reduced, humeral calli poorly developed; punctures in striae large and deep, sometimes deeply engraved, secondary punctation small to medium-sized, elytral apices slightly rounded, almost straight to rounded distinctly, sometimes with denticle at sutural angle. Metatibia in lateral view almost straight, when viewed from above slightly but always curved inward, apices distinctly rounded (figs. 17-21); metatarsi articulated from apices not less than 1/3 of length of tibia, close to middle or almost at middle; inner ridge before tarsal articulation with small and obtuse denticle to large and distinct, outer ridge without denticles, rarely margins beyond tarsal articulation with a straight row of small denticles (*Psylliodes agropyri*), serratiform; metatarsal segment 1 distinctly curved outward usually at middle or before middle and widened before middle at lateral view (figs. 22-26). Tegmen modified (figs. 27-31); spermatheca small, collo short, narrowed apically and sharpened, nodulus wide, drop-shaped, duct short, wide, not coiled or overlapping (figs. 32-36). Sexual dimorphism in the structure of protarsal segments 1 poorly developed; males usually smaller and slenderer.

DIAGNOSIS

The *cucullatus* species group belongs to the complex of groups including also *glaber*, *gibbosus*, *vehemens* species groups, as well as the species *Psylliodes ellipticus* ALLARD and *Psylliodes belarbiei* DÖBERL, subgenera *Eupus* WOLLASTON and *Semicnema* WEISE. The complex is characterized by the body usually convex, head and prothorax large, labrum pentagonal, with transversal roof-shaped elevation medially, tegmen usually modified, most species usually wingless.

This group is close to the *glaber* and *gibbosus* species groups in the shape of body, habitus, structure of head, character of punctation and shagration; similar to the *glaber* species group in the structure of the spermatheca, with nodulus short and duct not coiled and overlapping. Differs from both groups in the structure of metatibia curved inward and the metatarsal segment 1 curved outward and widened before middle, the metatarsi articulated at some distance from apices, not less than 1/3 of length of tibia, sometimes close to middle. The *cucullatus* species group also closely related to subgenus *Eupus* in the structure of metatibia, shape of metatarsal segment 1 and spermatheca. The *Psylliodes stolidus* WOLLASTON occupies an intermediate position between the *cucullatus* species group and the subgenus *Eupus* in the structure of metatibia, shape of the body, and shape of the 1st segment of male fore tarsus.

DISTRIBUTION

The *cucullatus* species group is distributed from Portugal to the Far East. The most of species are inhabit the western part of the range (Iberian Peninsula, southern France, south of the European part of Russia) whereas single species *Psylliodes cucullatus* (ILLIGER) possesses a transpalearctic range.

Psylliodes cucullatus (ILLIGER)

Haltica cucullata ILLIGER, 1807, Mag. Ins., VI: 73, 172.

Psylliodes spergulae GYLLENHAL, 1813, Ins. Suec., III: 571.

Psylliodes spergulae var. *angustata* WALTIL, 1835, Reise Südspan.: 82.

Psylliodes vicina BOIELDIEU, 1859, Ann. Soc. Ent. Fr., VI (3): 479.

?*Psylliodes augustalisi* PIC, 1909, Echange, XXV: 146.

Psylliodes cucullata gansuica JACOBSON, 1922, Ann. Zool. Mus. Acad. Leningr., XXIII: 526. **syn. n.**

Psylliodes cucullata ussuriensis L. MEDVEDEV, 1973, Entomol. Obozr., LII (4): 884. **syn. n.**

TYPE LOCALITY

Portugal.

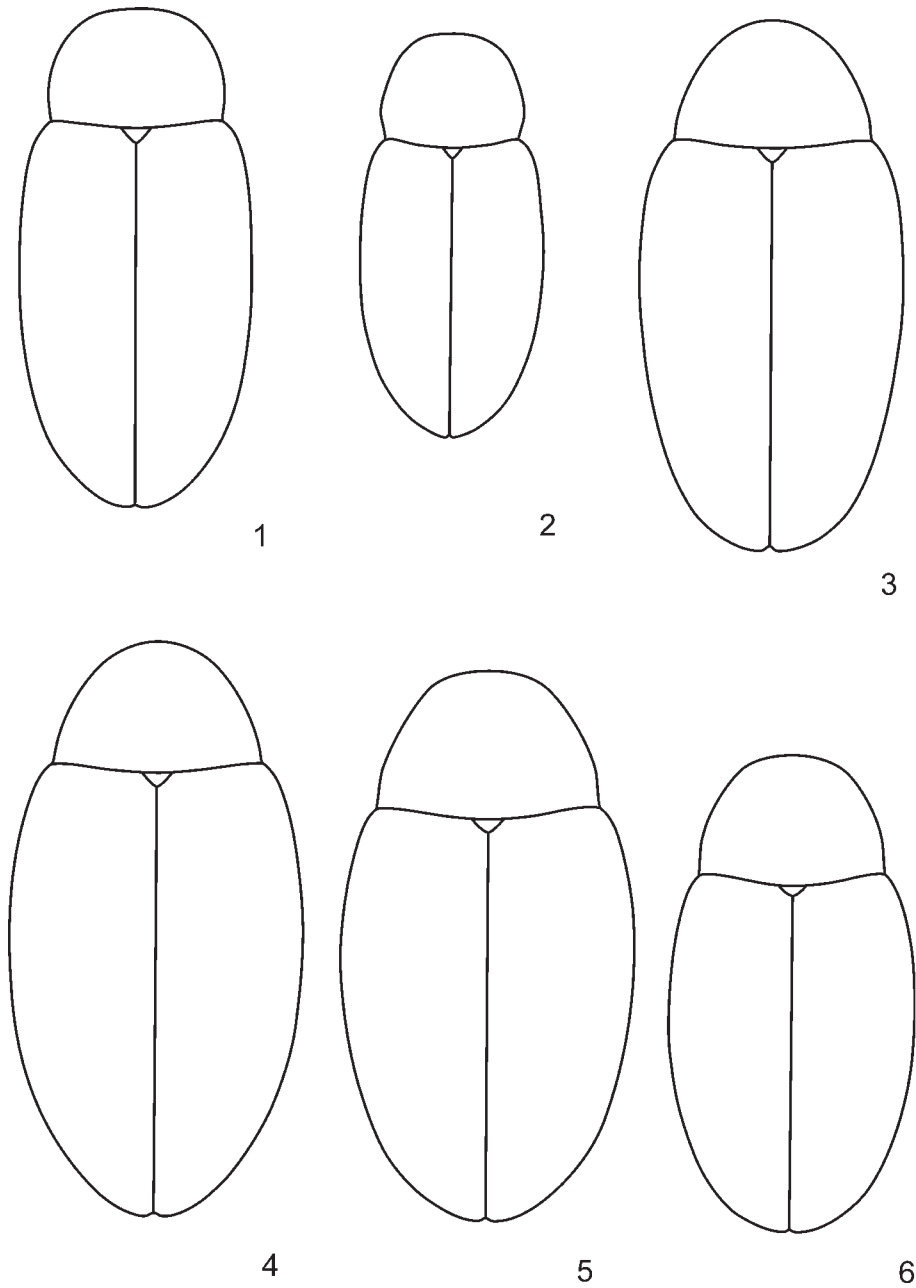
TYPE MATERIAL

Psylliodes cucullatus: Lectotype, ♀ (HUB), (labels numbered): 1. "56192", 2. "Psylliodes cucullata Ill. Lectotype ♀ S. Dognet des. 1993", 3. "Cucullata N.* Spergulae Gyll. Lusit. Brunov. Dahl."

Psylliodes cucullata gansuica: Syntypes, 1 ♂, 2 ♀ (ZIN): 1. "17927", 2. "Gan'-su VIII 72. Przhivalskiy".

ADDITIONAL MATERIAL EXAMINED

FRANCE: "Gallia" 1 spec. (ZIN). DENMARK: "Kopenhagen Leonhard" 1 spec. (DEI). GERMANY: "Leipzig Probstheida Ascheplatz Rasenweg 22.8.1956 Dieckmann" 2 spec. (DEI); "Umgebung Berlin" 5 spec. (DEI); "Berlin" 1 spec. (DEI); "Thüringen Dr. Fiedler Suhl" 1 spec. (DEI); "Grunaer Wld. Düb. Heide, 29.6.1958 Dieckmann leg." 3 spec. (DEI); "Leipzig Letzner" 2 spec. (DEI); "Marienau Letzner" 1 spec. (DEI); "Breslau Letzner" 1 spec. (DEI); "Altvater Letzner" 1 spec. (DEI); "AhrenshoopUstsee Juni 1956 Mohr" 1 spec. (DEI); "Berlin - Friedrichshagen" 1 spec. (DEI); "Umg. Berlin Störitzsee 12.7.62 J. Oehlke" 1 spec. (DEI); "Fichtelberg - 100 m nachts, Fichtenwald 26.8.55 Dieckmann" 2 spec. (DEI); "Preetz" 3 spec. (DEI); "8.VI Eutinß Holstein" 2 spec. (DEI); "Mecklenburg Perleberg 6.7.1972 Dieckmann" 2 spec. (DEI); "Klötze, Bez. Magdeburg 6.7.1981 Dieckmann lg." 1 spec. (DEI); "Mark Brandenburg Eberswalde 12.VIII.1984 leg. Dieckmann" 1 spec. (DEI); "Borstel 27.7.64 b. Hamburg, coll. Koltze" 1 spec. (DEI); "Blankenese 21.6.82 b. Hamburg, coll. Koltze" 3 spec. (DEI); "D: Mark Brandbg. Ebersw.: Britz nördl. Britz Juni-Sept. 1992 Leg. M. Sommer / FP 6" 3 spec. (DEI); "Sachsenwald Aumühle 9.8.1896" 2 spec. (NMP); "Annaberg I. Erzgeb." 5 spec. (MTD); "Aüersberg Erzgeb." 1 spec. (MTD); "Thüringen 1903" 2 spec. (MTD); "Klotzsche" 6 spec. (MTD); "Dresden 17.8.23 Dr. Fuchs" 1 spec. (MTD); "Feistritz a/w 3.7.09 Kelemen" 1 spec. (MTD); "Stettin Pommern" 1 spec. (MTD); "Guhrau Silesia" 1 spec. (MTD); "Gugrau Schlesien" 3 spec. (MTD); "Mähren" 10 spec. (MTD); "Wehrsdorf k.18^b Schmidt 1.8.31" 2 spec. (MTD); "Nawitz-Danzig." 3 spec. (MTD); "Liegnitz Letzner" 1 spec. (MTD); "Geising" 1 spec. (MTD); "Dresden" 1 spec. (MTD); "O-Lössn." 3 spec. (MTD); "Tolkew" 1 spec. (MTD); "German. (Küchels.)" 1 spec. (ZMUA); "Freidrichrode ex. Coll. W. Hubenthal" 1 spec. (ZMUA); "Cucullata Ill. Germania" 2 spec. (ZMUC). AUSTRIA: "Kranebitten Innsbruck 19.6.38



1-6. *Psylliodes* spp. Body outline. 1, 3, 5 – female; 2, 4, 6 – male. 1, 2 – *Psylliodes agropyri* PALIJ; 3, 4 – *Psylliodes cucullatus* (ILLIGER); 5, 6 – *Psylliodes heydeni* WEISE

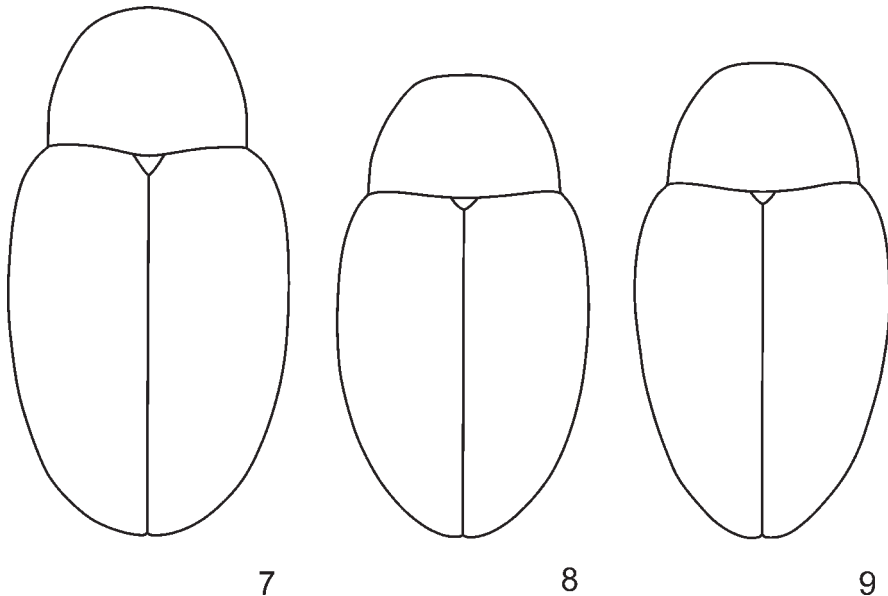
leg. Breddin” 6 spec. (DEI); “Tirolis Mergan O. Leonhard” 1 spec. (DEI); “Süd-Tirol Ahrntal 29.VII.1977 Wellschmied” 2 spec. (DEI); “Glatz. Geb.” 2 spec. (MTD); “Tirolis. Zillertal. V.d. Hoop 8.'90” 1 spec. (ZMUA); “Tirolis” 1 spec. (ZIN); “3. M. 731 Austr. P. cucullata” 3 spec. (ZIN). LITHUANIA: “Wilna Rossia” 14 spec. (MTD). LATVIA: “Latvia Tsirma, bl. Rezekne, 2-14.VII.1959 A. Lyubischev” 1 spec. (ZIN); “Kowno Georgenburg P. Winogradoff N.” 1 spec. (ZIN). CZECH REP.: “Bohemia cent. Troja u Prahy leg. J. Kral” 1 spec. (NMP); “Boh. 04.1947 Rokytnice J. Kral lgt.” 4 spec. (NMP); “Moravia Dr. Fleischer” 1 spec. (MTD); “Moravia Reitter” 2 spec. (ZMUA). POLAND: “Polen, Tomaszow Lub. Feuchte Wiesen VI.71. leg. K.-H. Mohr” 1 spec. (DEI); “Polen, Pieninengeb. Umg. Czorsztyn Berg Zor, Juni 68 K.-H. Mohr leg.” 1 spec. (DEI); “Jeschken” 3 spec. (MTD); “Besciden Reitter” 1 spec. (TAU); “Bodzentin Keletskago uezd. [Distr.] Jacobson 30.V.95” 1 spec. (ZIN). SLOVAKIA: “N Tatry Donovaly 10/8 1950” 2 spec. (NMP); “Slov. c. 7.58 Remata” 1 spec. (NMP). BYE-LORUSSIA: “s. Korolevo Vitebsk. u. Birulya 27.VI.05” 5 spec. (ZIN); “Polykovitchi Mogilev. gub. [Reg.] Zubovskiy 93.” 1 spec. (ZIN); “st. Zamostoch'e Mogil. g. [Reg.] Birulya 15.VI.05” 1 spec. (ZIN); “okr. [env.] Minska, 21.VIII.1953 A Lyubischev” 2 spec. (ZIN). UKRAINE: “Khersonsk. g. [Reg.] 9.VII.99” 1 spec. (ZIN); “Ukraine, East Carpathians, trans. from Dil Mt. to Topesh Mt., Bovtsarskiy Verkh Range, 1000-1300 m, 16.VII.2001 K.S. Nadein” 4 spec. (ZIN); “Borschovo 11v. from Radomyslya Kiev. g. Birulya 11.VI.910” 1 spec. (ZIN). RUSSIA: “USSR, Voroniezh env. Khabarovsk A. Kurka lgt. 6.7.1977” 1 spec. (NMP); “USSR Bajkal step 29.6.1977 A. Kurka lgt.” 1 spec. (NMP); “Sibiria cent. Barnaul 18–27.7.1967 Ing. Vlad Zouhar lgt.” 1 spec. (NMP); 1055 spec. (ZIN) from the following Regions and Territories (administrative divisions): Leningradskaya Reg., Krasnoyarskaya Reg., Smolenskaya Reg., Vladimirskaaya Reg., Yaroslavl'skaya Reg., Permskaya Reg., Ryazanskaya Reg., Kazanskaya Reg., Kaluzhskaya Reg., Ul'yanovskaya Reg., Rostovskaya Reg., Chuvash Rep., Tobol'skaya Reg., Kurganskaya obl. Orenburgskaya Reg., Tomskaya Reg., Chitinskaya Reg., Semipalatinskaya Reg., Sverdlovskaya Reg., Komi Reg., Altai Terr., Irkutsk Reg., Tyva Rep., Yakutsk Reg. Amurskaya Reg., Primorskiy Terr., Khabarovskiy Terr., MONGOLIA: “Mongolia Central aimak 26 km O von Somon Lun 1180 m Exp. Dr. Z. Kaszab 1964” 1 spec. (NMP); 292 spec. (ZIN) from the following Aimak (administrative divisions): Vostochniy aimak, Suhe-Batorskiy aimak, Henteyskiy aimak, Central'nyi aimak, Ubsunurskiy aimak, Selenginskiy aimak, Bulganskiy aimak, Hubsugul'skiy aimak, Ara-Hangayskiy aimak, Sredne-Gobiyskiy aimak, Yuzhno-Gobiyskiy aimak. CHINA: “W-China 18.7.1991 Tianshan 2-3000 m Urumchi – Heuxia leg. Snizek” 1 spec. (ZIN). SOUTH KOREA: “Yandok, Prov. Hamgen Namdo, Korea Borkhsenius 8.VIII.950” 1 spec. (ZIN); “Pukchhon, Prov. Hamgen Namdo, Korea Borkhsenius 2.VIII.950” 1 spec. (ZIN).

REDESCRIPTION

Body oval-elongated, convex (figs. 3, 4). Dorsally dark-brown to black, bronzy or metallic shining, pronotum usually with bronzy shining, darker than elytra. Fore and middle tibia and tarsi reddish-brown, middle parts of fore and middle tibia sometimes darkened; fore and middle femora almost to apices sometimes darkened; metafemora

black-brown with metallic lustre to light reddish-brownish, elytral apical third and abdominal sternites sometimes light reddish-brownish; antennal segments 1-3 yellow-reddish, other darker.

Head large, wide, eyes moderately large and convex. Vertex large and wide, weakly convex, seldom moderately convex; covered with a rough shagreen-like sculpture, with finest, sparse wrinkles; punctures sparse, not large, superficial, weakly visible to more or less visible, larger and denser; above impression between frontal calli vertex sometimes slightly impressed. Ocular sulci usually almost not developed, very weak, presented by weak, narrow longitudinal rugosity, not rarely with punctation along inner eyes margins; seldom sulci more developed, slightly deep and narrow; close to apices of frontal calli rather deeper and wider. Frontal calli more or less narrow, almost smooth, covered with thin, smooth, weak longitudinal wrinkles; elongated apices joined with convex inner margin of eyes, juncture sometimes impressed, not separate distinctly from vertex and frons; separated from each other by more or less large, deep impression. Frontal ridge short, wide, weakly convex, usually rectangular, sometimes trapezoidal; dorso-medially and basally sometimes flattened or slightly concave; surface usually almost smooth, with unclear, very fine and short wrinkles as smoothed shagreen, shining. Anterofrontal ridge weakly convex, with the same sculpture as frontal ridge, sometimes punctation very unclear; anterior edge of frons distinctly concave, forming obtuse angle. Antennal grooves not very deep, with the same sculpture as frontal ridge or coarser basally. Antennal socket distance from eye margins slightly less than diameter of socket. Labrum not very long, moderately large and wide; 4 medial setiferous pores well developed.



7-9. *Psylliodes* spp. Body outline. 7, 8 - female; 9 - male. 7 - *Psylliodes pyrenaicus* HEIKERTINGER; 8, 9 - *Psylliodes olgae* n. sp.

Pronotum weakly transverse, very convex, especially medially; sides distinctly converging dorsally and narrowed forward; ventrally rather wider than dorsally; anterior margin strongly convex viewed from above and strongly rounded, posterior less convex and rounded, lateral margins weakly rounded; anterior border very thin and poorly visible in background sculpture, posteriorly distinctly wider and more convex, almost smooth, lateral margins narrow and almost smooth; anterolateral callosity moderately developed and moderately swollen, weakly in anterior half, posterior protruding stronger from contour, setiferous pores forming distinct angle; more rarely callosity poorly developed, punctuation of disc very dense, with distance between punctures not exceed half their diameter, seldom punctuation sparser with distance about equal to puncture diameter; punctures large, deep, often with irregular shape, often slightly elongated with unclear margins; interspaces weakly to distinct convex, with more or less clear shagreen, sometimes moderately smooth; sides with punctures larger, deeper, denser, interspaces more convex with tendency to form short, wide wrinkles, and with coarse, grainy large shagrination.

Elytra long, moderately narrow, narrowed apically, especially in males; punctures in striae large and deep, distance between punctures usually not exceeding half the diameter; distance between striae on average 1–1.5 times their diameter; in small males distance between striae about half puncture diameter and striae more or less engraved, interspaces convex; in large females distance between striae about 2 times diameter, striae not engraved, interspaces flat; usually interspaces weakly convex, striae slightly engraved; secondary punctuation usually rather small, punctures not dense, superficial, partly smoothed, sometimes arranged in 2 confused striae; seldom punctures more or less large and more distinct; interspaces between punctures covered with a sculpture as in the vertex but significantly finer, partly smooth to almost smooth; elytral apices distinctly rounded to suture; sutural angles 90 degrees, not forming denticle.

Metatibia curved inward in dorsal view; gradually and rather weakly widened to apices; inner ridge with rather small and not sharp denticle, outer without denticles (fig. 18); metatarsi articulated at large distance from apices, close to middle or about at proximal third of tibia; metatarsal segment 1 curved and widened before middle (fig. 22).

Aedeagus – fig. 10, tegmen – fig. 27; spermatheca – fig. 32, vaginal palpi – fig. 37, tignum – fig. 42, female pygidium – fig. 46.

Measurements. Male (n=10): length – 2.45–3.00 mm, width – 1.11–1.43 mm; PI – 1.24–1.40 (1.32); EI – 2.76–3.44 (3.21); LI – 2.50–2.93 (2.74); BI – 1.98–2.22 (2.11).

Female (n=10): length – 2.72–3.50 mm, width – 1.36–1.67 mm; PI – 1.25–1.37 (1.32); EI – 2.96–3.33 (3.20); LI – 2.70–3.02 (2.88); BI – 1.90–2.09 (2.03).

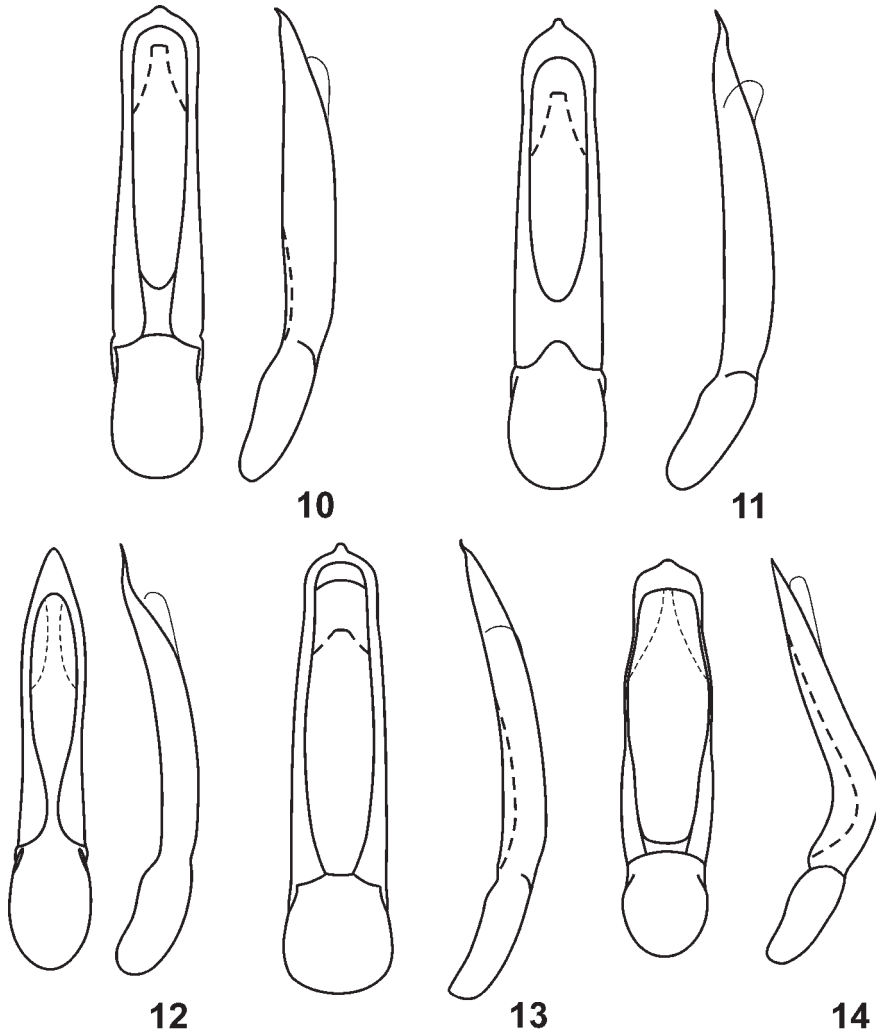
DIAGNOSIS

Psylliodes cucullatus is closely related to *Psylliodes heydeni* WEISE from which it differs in the structure of genitalia, sculpture of vertex coarser, ocular sulci less developed, frontal ridge and anterofrontal ridge sculptured coarser and with another shape, anterior edge of frons less concave, pronotum distinctly converging dorsally and

narrowing forward (fig. 15), with punctation larger, coarser, interspaces more convex, shagreen more developed, elytral apices distinctly rounded to suture.

DISCUSSION

Psylliodes cucullatus is a variable species within certain limits what is the result of its wide distribution. Therefore, some forms that are usually considered as subspecies were described. However, some doubts were declared against the reality of subspecies rank of these forms (KRÁL, 1967; GRUEV & DÖBERL, 1997). A detailed analysis based



10-14. *Psylliodes* spp. Aedeagus, ventral view, lateral view. 10 – *Psylliodes cucullatus* (ILLIGER); 11 – *Psylliodes heydeni* WEISE; 12 – *Psylliodes agropyri* PALIJ; 13 – *Psylliodes olgae* n. sp.; 14 – *Psylliodes macellus* (WEISE)

on the vast materials of ZIN and that of the other museums was carried out and has cleared up the current ambiguous situation.

Psylliodes cucullatus ussuriensis MEDVEDEV (1973) was described as a subspecies from the Russian Far East. It differs from the nominotypical subspecies in reddish and lighter colouration of the elytral apical half to third, metafemora and ventral abdominal segments; there are no other differences between these forms. A large number of the specimens cited above from the Far East (Russia: Amurskiy Terr. and Primoskiy Terr.) possess the typical colouration. The intermediate forms as well as extreme ones occur together in the same locality. Geographical distribution of this form is not limited to the Far East territory, there are individuals with light colouration from Tatarstan Republic and Mongolia. Sometimes the light body colouration is a result of the beetles just emerging and their colouration is partly developed. These facts suggest that this form is not a geographic race and give all bases to consider *P. cucullatus ussuriensis* as colour form only.

Psylliodes cucullatus gansuica was described by JACOBSON (1922) from Mongolia and its only differences from the typical form are dorsal punctation being sparser and interspaces smoother. The vast materials from Mongolia collected by Soviet-Mongolian expeditions (ZIN) were examined as well as materials from other localities. Though the character of punctation is usually stable, nevertheless, it may be variable within some limits and depend on the body size: in large females the punctation is smaller and sparser, interspaces flatter and smoother than in small males. In the material from Mongolia the individuals with sparse punctation occurs together with individuals with typical punctation. The number of individuals of *gansuica* is not higher than that of the typical form and there are intermediate states of the characters. This form is not geographically localized; the same state of this character was discovered in individuals from Czech Republic (Tatry Mount.), European Part of Russia (Voronezhskaya Reg.). According to these facts *P. cucullatus gansuica* is not a subspecies.

DISTRIBUTION

Transpalearctic species, distributed from Portugal to the Far East: Europe, Caucasus, Kazakhstan, Siberia, Russian Far East, China, Mongolia, Korea.

Psylliodes heydeni WEISE, stat. resurrect.

Psylliodes heydeni WEISE, 1888, Naturgesch. Ins. Deuthschl. Col. VI: 785

Psylliodes cucullatus heydeni WEISE, as subspecies: HEIKERTINGER, 1921; HEIKERTINGER & CSIKI, 1940; DOGUET, 1992, 1994a, 1994b; GRUEV & DÖBERL, 1997; WARCHALOWSKI, 2000.

TYPE LOCALITY

Portugal (Sierra de Gerez).

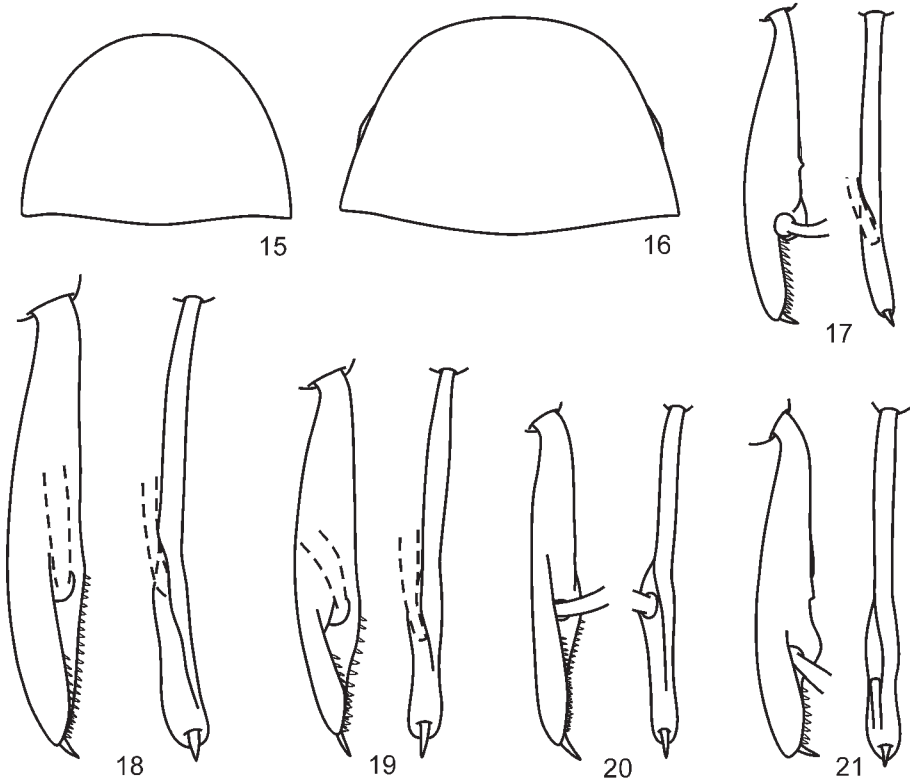
TYPE MATERIAL

Lectotype, ♂ (HUB), (labels numbered): 1. "Sa de Gerez Heyden" 2. "Heydeni m. 87", 3. "*Psylliodes cucullata heydeni* Wse. Lectotype S. Doguet des. 1993". Para-

lectotype, ♂ (DEI): 1. "Jerez 6.7.", 2. "Heyd. 69", 3. "Lusitania v. Heyden 1868", 4. "Heydeni Ws.", 5. "vidi III. 1915 Heikertinger", 6) "Syntypus".

ADDITIONAL MATERIAL EXAMINED

PORTUGAL: "Caril Paganetti" 3 spec. (DEI); "Cintra 10. 6.", "Heyd. 33.", "Lusitania v. Heyden 1868" 1 spec. (DEI); "Oporto Portug." 1 spec. (MTD); "Porto Portugal" 1 spec. (NHMB). SPAIN: "Caboalles Paganetti" 1 spec. (ZIN); "E: Navarra Pyr. occ. Coll de la Pierre Saint-Martin 1760 m Zerche leg 11.VI.91", 2 spec. (DEI); "E: Prov de Asturias Covadonga Hütte Vega Redonga", "1650 m 7.VI.91 Zerche leg.", 4 spec. (DEI). "Caboalles Paganetti" 1 spec. (DEI); "Cancas Ast. Paganetti" 2 spec. (DEI); "La Granja VI-1908 Arias" 1 spec. (MNCN); "La Granja" 2 spec. (MNCN); "Guadarrawa J. Ardois" 2 spec. (MNCN); "Gargnano Schneider" 2 spec. (MTD); "Cancas Ast. Paganetti" 1 spec. (ZMUA); "Caril Paganetti" 1 spec. (ZMUA); "Caboalles Paganetti" 4 spec. (NHMB); "Palencia Paganetti" 1 spec. (NHMB); "Cancas Ast. Paganetti" 1 spec.



15-21. *Psylliodes* spp. 15, 16 – Pronotum outline; 17–21 – hind tibia, dorsal view, ventral view. 15 – *Psylliodes cucullatus* (ILLIGER); 16 – *Psylliodes heydeni* WEISE; 17 – *Psylliodes pyrenaicus* HEIKERTINGER; 18 – *Psylliodes cucullatus* (ILLIGER); 19 – *Psylliodes heydeni* WEISE; 20 – *Psylliodes agropyri* PALI; 21 – *Psylliodes olgae* n. sp.

(NHMB); “Caril Paganetti” 2 spec. (NHMB); “Pyrenäen Aranchon ?” 2 spec. (NHMB); “Aranchon” 1 spec. (NHMB); “Hispan. Granja” 1 spec. (NHMB); “Hispania” 1 spec. (NHMB); “Ponferrada Paganetti” 1 spec. (NHMB); “Pyrenaei Staudinger” 2 spec. (NHMB); “Monte Aab. Ruente Santandor Ig. H. Franz” 1 spec. (NMP). FRANCE: “Coll. R.I.Sc.N.B. France Tarbes 9/25-VI-1853 Pandelle” 9 spec. (ISNB); “cucullata Illig. Laurs”, “Coll. Breit. Skalitsky” 2 spec. (NHMB). ?: “c...a” [illigible word, ca. 5 letters, handwritten] 1 spec. (MNCN); “1883 s... ..” [two illigible words in two lines, handwritten], 2 spec. (ZMUA); “Coll. Breit. Skalitsky” 2 spec. (NHMB).

REDESCRIPTION

Body short-cylindrical, convex (figs. 5, 6). Dorsally dark-brown to black, shining; pronotum usually black, darker than elytra; fore and middle legs, metatibia reddish-brown, fore and middle femora sometimes darkened basally, metafemora brown to piceous entirely or from above; antennal segments 1-3 reddish-yellow, others darker.

Head very large and very wide; eyes not very large and moderately convex. Vertex very large and wide, flattened or moderately convex; surface usually more or less smooth, covered with finest, sparse wrinkles similar to smoothed shagreened, seldom surface sculpture more developed; sometimes with punctures small, not dense, superficial, partly smooth, weakly visible among surface sculpture, distance between punctures at least 1.5–2 times their diameter; sometimes above impression between frontal calli with sculpture coarser and more distinct; above calli sometimes convex. Ocular sulci rather thin and shallow, with more or less even margins and bottom; vertex above sulci with longitudinal, smooth rugosity; close to calli apices more distinct and deeper, delineated apices from above; setiferous pores form shallow impression above frontal calli apices, wrinkled-punctured. Frontal calli narrow, weakly convex, apices narrow, elongated, joined with convex inner margin of eyes above antennal sockets, juncture sometimes impressed; surface almost smooth. Frontal ridge short and wide, weakly convex, almost square or weakly elongated, almost smooth. Anterofrontal ridge wide, weakly convex, almost smooth; fore edge of frons distinctly moderately angle-shaped, concave, forms obtuse angle, margins with row of setiferous pores. Antennal grooves shallow, almost smooth. Antennal sockets placed widely, distance between sockets and eyes margins usually not less than diameter of sockets. Labrum not large and long, moderately wide, 4 medial setiferous pores well developed, large and deep.

Pronotum large, weakly transverse, convex; anterior part dorsally slightly narrower than posterior, almost as wide as posterior; anterior and posterior margins not very convex, evenly rounded, anterior margin at lateral view not very convex; anterior border thin, visible, posterior wider, more convex, sides weakly rounded, parallel-sided or nearly so, its borders narrow and smooth; anterolateral callosity moderately developed, weakly protruding from contour, usually more or less protruding at setiferous pores, not forming angle and margin rounded. Disc with punctation small, irregular, shallow, distance between punctures 1–2.5 times their diameter, usually 1.5–2; interspaces flat, smooth or almost smooth, with minute, almost smoothed shagreen, seldom with shagreen slightly clearer; sides with punctation larger and deeper, distance between punctures about 1, interspaces more convex, shagreen more distinct, never coarse and grainy.

Elytra moderately long, not sharply narrowed apically; punctures in striae moderately large, deep, sometimes engraved (especially in small males); distance between punctures about half of their diameter, rarely slightly more; distance between striae 1 (in small males) to 2 times of puncture diameter, rarely 2.5 (in large females); interspaces flat to weakly convex; secondary punctation small, shallow, sparse, punctures form 1-2 confused striae; interspaces between punctures almost smooth or covered with indistinct, finest, sparse, short wrinkles or similar to shagreen; elytral apices weakly rounded to suture; sutural angles form distinct angle, not forming denticles.

Metatibia curved inward, before apex most widened; metatarsi articulated close to middle; inner ridge small, with no denticle (fig. 19). Metatarsal segment 1 before middle widened, almost straight (fig. 23).

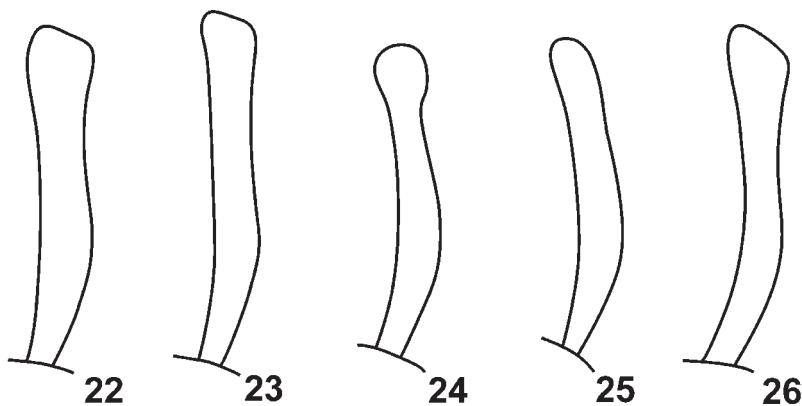
Aedeagus – fig. 11, tegmen – fig. 28; spermatheca – fig. 33, vaginal palpi – fig. 38, tignum – fig. 43, female pygidium – fig. 47.

Measurements. Male (n=10): length – 2.41–2.89 mm, width – 1.22–1.46 mm; PI – 1.35–1.52 (1.41); EI – 2.81–3.16 (3.02); LI – 2.52–2.93 (2.71); BI – 1.89–2.04 (1.98).

Female (n=10): length – 2.57–3.40 mm, width – 1.36–1.67 mm; PI – 1.42–1.56 (1.46); EI – 2.80–3.29 (3.05); LI – 2.67–3.02 (2.84); BI – 1.84–2.13 (1.98).

DIAGNOSIS

Psylliodes heydeni is closely related to *Psylliodes cucullatus* and *Psylliodes pyrenaicus*. From the first it differs in the structure of genitalia, ocular sulci more developed, frontal and anterofrontal ridges wider and smoother, anterior edge of frons more concave, vertex smoother, pronotum wider anteriorly, less narrowed (fig. 16), shagration finer and sparser, interspaces at disc smoother and flatter, elytral apices weakly rounded to suture. From the second it differs in the structure of genitalia, eyes larger, frontal ridge with sides more distinct and straighter, anterofrontal ridge more concave, vertex more



22-26. *Psylliodes* spp. 1st segment of hind tarsus, lateral view. 22 – *Psylliodes cucullatus* (ILLIGER); 23 – *Psylliodes heydeni* WEISE; 24 – *Psylliodes pyrenaicus* HEIKERTINGER; 25 – *Psylliodes agropyri* PALIJ; 26 – *Psylliodes olgae* n. sp.

convex, its shagreen less developed, ocular sulci more developed, setiferous impression deeper, and shape of metatibia.

DISCUSSION

Psylliodes heydeni was described by J. WEISE as a separate species and its status was changed to a subspecies by HEIKERTINGER (1921). The subspecific status of this form was more or less clear for a long time. Differences between *P. cucullatus cucullatus* and *P. cucullatus heydeni* are discussed in several works (DOGUET 1992, 1994a, 1994b; WARCHALOWSKI 2000). The situation with the subspecies described by HEIKERTINGER and followed by others prompted me to revise the position of *P. cucullatus heydeni*. The degree of the morphological differences (see diagnosis), in my opinion, is enough to recognize this form as a separate species. The degree of the differences between *P. cucullatus* and *P. heydeni* are at the same level as that of the other species within the group. Distribution of these forms is contradictory to the concept of the subspecies as geographic races. Both forms inhabit the Iberian Peninsula and France (Pyrenees) and the lectotype of *P. cucullatus* originates from Portugal which is the type locality of *P. heydeni*. These data undoubtedly support the specific rank of *P. heydeni*.

DISTRIBUTION

Portugal, Spain, France.

Psylliodes pyrenaesus HEIKERTINGER

Psylliodes schwarzi pyrenaesa HEIKERTINGER, 1921, Kol. Rundsch. IX: 43.

Psylliodes petasata WEISE, 1888 (nom. preoccup., nec *Psylliodes petasatus* FOU DRAS, 1860)

TYPE LOCALITY

France (Pyrénées).

TYPE MATERIAL

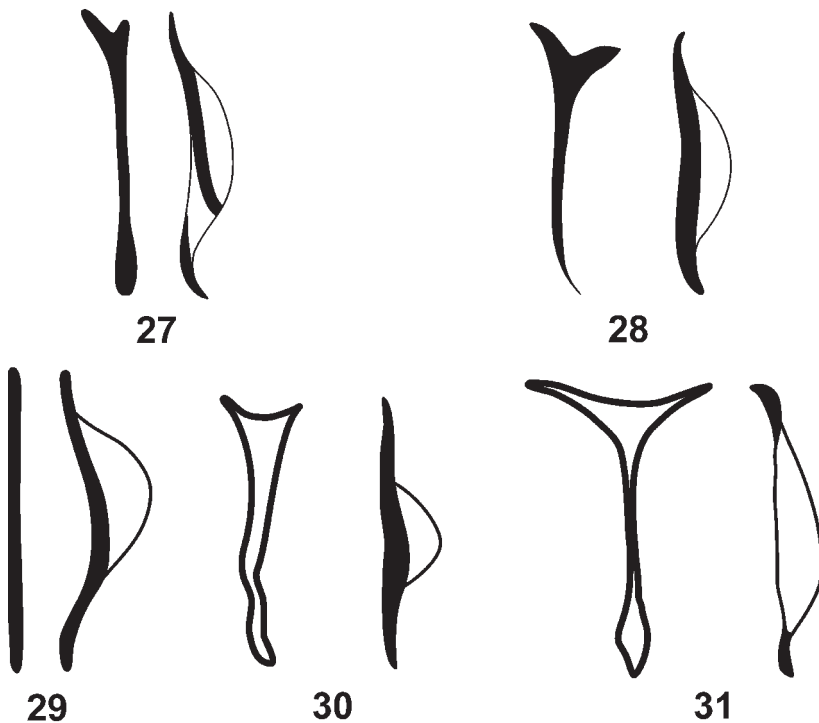
Paralectotypes, 2 ♀♀ (HUB), (labels numbered): 1. "Pyrenäen", 2. "petasata det. Weise", 3. "Ps. schwarzi pyrenaesa m. det Heiktgr.", 4. "PARALECTOTYPUS *Psylliodes pyrenaesus* Heikertinger Nadein K. des. 2006 "; 1 ♀ (HUB): 1. "Pyrenäen", 2. "petasata Foudr." 3. "Ps. schwarzi pyrenaesa m. det Heiktgr.", 4. "PARALECTOTYPUS *Psylliodes pyrenaesus* Heikertinger Nadein K. des. 2006 "

REDESCRIPTION

Body short-cylindrical, moderately convex, head and prothorax rather large (fig. 7). Dorsally black, shining, ventrally dark-brown; fore, middle legs and metatibia, 6 distal antennal segments reddish-brown, metafemora darker; 3 basal antennal segments reddish-yellow.

Head from lateral view flat, eyes rather small, weakly convex, widely spaced, weakly elongated. Vertex very large and wide, flat; punctures rather small, smaller than pronotal, shallow, sparse, not very distinct; distance between punctures at least 2

diameters of punctures, often 3–4; interspaces flat with shagration distinct, moderately large. Ocular sulci shallow and indistinct, similar to elongated shallow impressions above upper margins of eyes, their margins from vertex side almost flat, from eye side slightly more distinct and steep; reached convex inner margins of eyes and frontal calli apices; where situated some not large setiferous pores, almost not forming impression. Frontal calli narrow, flat or almost flat, their surface almost smooth to finely shagreened, separated from the vertex by supracallinal sulci, separated from the frons by distinct supraantennal sulci, apices elongated and narrow, slightly impressed, joined with convex inner margins of eyes above antennal sockets. Frontal ridge rectangular (almost square), wide, flat, with fine shagration, almost smooth, encircled at sides by rows of setiferous pores. Anterofrontal ridge very wide and flat, with the same sculpture as frontal ridge; anterior edge of frons above labrum not deep, clearly concave. Antennal grooves wide, rather shallow, with bottom flat, large shagration. Antennal sockets situated widely apart, shallow, distance between sockets and inner margins of eye about 1 diameter of socket, interspace not very convex, shagreened. Labrum not long, broadly transverse, 4 medial setiferous pores well developed, large and deep, interspace between 2 inner pores convex.



27-31. *Psylliodes* spp. Tegmen, dorsal view, lateral view. 27 – *Psylliodes cucullatus* (ILLIGER); 28 – *Psylliodes heydeni* WEISE; 29 – *Psylliodes agropyri* PALII; 30 – *Psylliodes olgae* n. sp.; 31 – *Psylliodes macellus* (WEISE)

Pronotum weakly transverse, rather convex, not narrowed anteriorly; anterior angles and anterior half of lateral margins not visible from above; sides weakly rounded, and weakly converging dorsally; anterior and posterior margins weakly convex at view from above; anterior border thin and flat, posteriorly wider and more convex; lateral margin narrow and smooth, moderately arched at lateral view; anterolateral callosity poorly developed, weakly swollen, slightly protruding from contour, at setiferous pore rounded, not forming denticle, setae short, not reached posterolateral callosity; sides above lateral margins rather convex; punctation small, rather smaller than elytral, shallow, distance between punctures at disc about 2 times their diameters; interspaces with smooth shagrination; sides with punctures slightly larger and shagrination more distinct.

Elytra moderately elongated and convex, weakly rounded medially; punctures in striae large, deep, distance between punctures less than half its diameter, not forming furrows; distance between striae at disc about 1.5 times of puncture diameter, interspace rather slightly convex; secondary punctation large, less deep, punctures form more or less regular stria or more confused 2 striae; interspaces almost smooth. Elytral apices not rounded to suture, slightly concave, sutural angle forms minute denticle.

Metatibia slightly curved inward at view from above, weakly curved in lateral view, apical third rather weakly widened; inner ridge with small denticle (fig. 17); metatarsal segment 1 curved, at basal second quarter slightly widened (fig. 24).

Spermatheca – fig. 34, vaginal palpi – fig. 39, female pygidium – fig. 48.

Measurements. Female (n=3): length – 2.23–2.30 mm; width – 1.06–1.09 mm; PI – 1.47–1.51 (1.49); EI – 3.08–3.21 (3.13); LI – 2.84–2.88 (2.86); BI – 2.08–2.16 (2.11).

DIAGNOSIS

Psylliodes pyrenaeus is closely related to *P. heydeni* from which differs in the structure of genitalia, vertex larger and flatter, eyes smaller, anterofrontal ridge more straight, setiferous impression and shagrination of vertex less developed, and shape of metatibia.

DISCUSSION

DOGUET & TEMPÈRE (1975) had changed the status of *Psylliodes schwarzi pyrenaeva* to a distinct species based on spermatheca and aedeagus structure and pointed out that latter differs distinctly from *Psylliodes schwarzi* and is close to *Psylliodes cucullata heydeni*. *P. pyrenaeus* undoubtedly belongs to the *cucullatus* species group on the basis of the structure of the head, pronotum, spermatheca (nodulus small, collo narrow and sharpened apically, duct short, fig. 34), metatibia (slightly curved inward, proximal third slightly widened, fig. 17), metatarsal segment 1 (widened at basal third and curved outward, fig. 24).

The lectotype of *P. pyrenaeus* was designated by BECHYNÉ (1956) and deposited in NHMB. Three specimens from HUB are belong to the type series and marked here as paralectotypes.

DISTRIBUTION

Spain (Avila), France (Pyrenees, Basses Alpes).

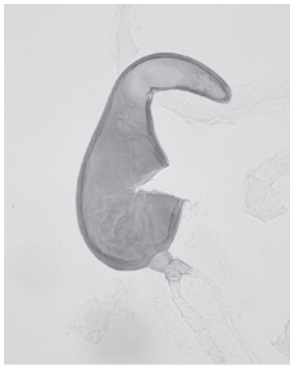
***Psylliodes agropyri* PALIJ, stat. resurr.**

Psylliodes agropyri PALIJ, 1961, Entomol. Obozr. 40: 390.

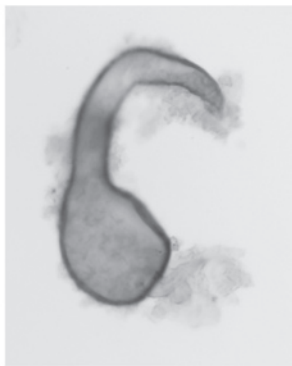
Psylliodes macella agropyri PALIJ (as subspecies): VORONOVA, 1977; GRUEV & DOBERL, 1997.

TYPE LOCALITY

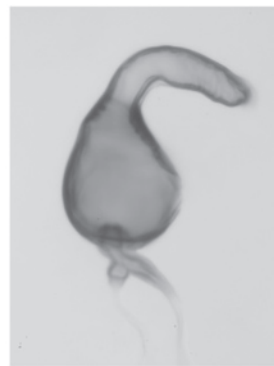
European part of Russia (Saratov Reg.).



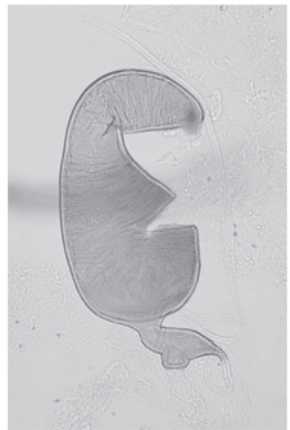
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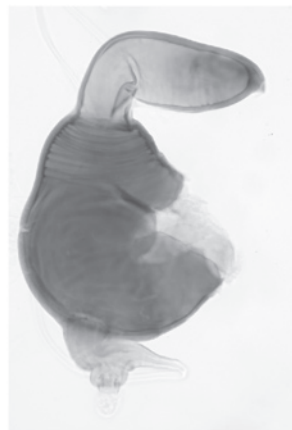
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32-37. *Psylliodes* spp. 32-36 – Spermatheca; 37 – Vaginal palpi. 32 – *Psylliodes cucullatus* (ILLIGER); 33 – *Psylliodes heydeni* WEISE; 34 – *Psylliodes pyrenaicus* HEIKERTINGER; 35 – *Psylliodes agropyri* PALIJ; 36 – *Psylliodes olgae* n. sp.; 37 – *Psylliodes cucullatus* (ILLIGER)

TYPE MATERIAL

Lectotype, ♀ (ZIN); Paralectotypes: 5 ♀♀ (ZIN).

ADDITIONAL MATERIAL EXAMINED

RUSSIA: "Sengilevskoe oz., Stavr. g. i u. Uvarov 26.V.1914" [Stavropol'skiy Reg. and Distr., Sengilevskoe Lake, leg. Uvarov], 4 ♂♂, 3 ♀♀ (ZIN).

REDESCRIPTION

Body narrow, elongated, sides subparallel, moderately convex (figs. 1, 2). Dorsally black, strongly shining, ventrally slightly lighter, piceous, less shining; fore, middle and hind tibia and tarsi, labrum and mandibles brown, femora piceous, metafemora almost black, 5 basal antennal segments yellow, apical brown.

Head large, flattened, eyes small, almost round, weakly convex, widely separated. Vertex wide, weakly convex, impunctate, covered with more or less distinct shagrination, sometimes gently smoothed. Ocular sulci above eyes poorly developed, represented by indistinct tracks in shagrination, surface near frontal calli sulci more distinct, represented by short, more or less deep, elongated impression or 2–3 punctures, with no impressed area formed by setiferous pores, large pore with a long seta is situated far from the upper margin of eye. Frontal calli oval, smooth, more or less convex, not separated distinctly from vertex, from frons separated by thin lines; vertex above calli more or less impressed; apices narrowed, joined with convex inner margin of eyes, juncture sometimes impressed. Frontal ridge short, wide, transverse or square, smooth to almost smooth, situated rather close to margin of frons, sides with 2–3 setiferous pores; anterior margin of frons narrow, medially concave, forms very wide, obtuse angle. Antennal grooves moderately deep, with bottom shagreened. Antennal sockets not large, spaced at a distance from inner margin of eyes slightly less than diameter of socket; interspace between sockets and eyes not impressed. Labrum large, wide, pentagonal, 4 setiferous pores well developed.

Pronotum weakly transverse, convex, almost not narrowed apically, distinctly narrower than base of elytra; anterior and posterior margins evenly rounded less and more respectively; posterior border slightly convex and wider than anterior, lateral margins narrow and smooth, weakly rounded; anterolateral callosity not large, weakly protruding from contour of pronotum; punctation of disc large (especially in males), smaller than in elytral, punctures deep, often with irregular shape; distance between punctures about half to 1.5 times their diameter (in males less than in females), spaces between punctures more or less smooth or covered with short, finest, sparse wrinkles; interspaces at disc often, at sides always convex, with a tendency to form short, wide wrinkles.

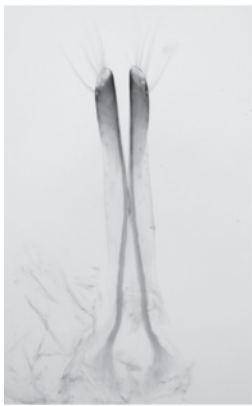
Elytra with basal 1/4 narrowed basally, two median quarters subparallel, apical 1/4 narrowed apically. Punctation large, punctures deep, striae more or less engraved, punctures sometimes slightly confused, especially at sutural area; distance between punctures about half of diameter of puncture, distance between striae is about 1.5 times of punctures diameter; interspaces convex; secondary punctures small, forming sparse confused striae; spaces between punctures smooth. Epipleura almost from base more or less densely pubescent. Elytral apices rounded to suture.

Metatibia long, narrow, slightly curved inward when viewed from above, apices rounded, not widened (fig. 20); beyond tarsal articulation with a short denticle at inner and outer margins; tarsi articulated close to middle; metatarsal segment 1 curved, widened basally (fig. 25).

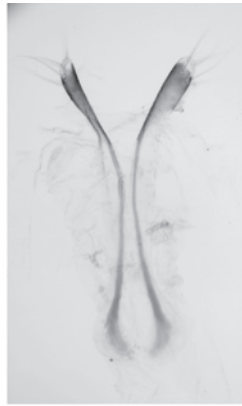
Aedeagus – fig. 12, tegmen – fig. 29; spermatheca – fig. 35, vaginal palpi – fig. 40, tignum – fig. 44, female pygidium – fig. 49.

Measurements. Male (n=3): length – 2.43–2.50 mm, width – 1.05–1.09 mm; PI – 1.24–1.32 (1.29); EI – 3.28–3.55 (3.41); LI – 2.63–2.97 (2.79); BI – 2.27–2.37 (2.31).

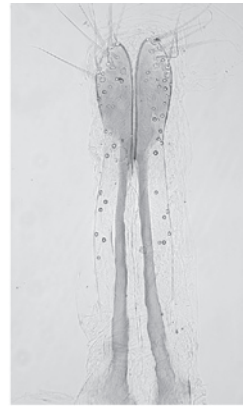
Female (n=6): length – 2.53–2.89 mm, width – 1.12–1.29 mm; PI – 1.28–1.31 (1.29); EI – 3.33–3.53 (3.43); LI – 2.82–3.08 (2.97); BI – 2.24–2.38 (2.29).



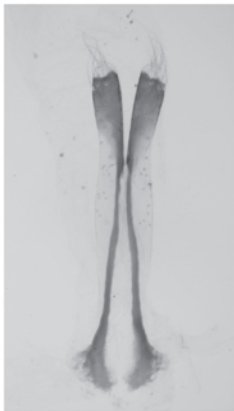
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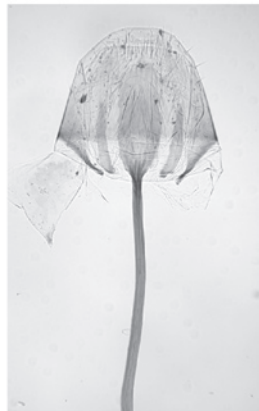
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42



43

38-43. *Psylliodes* spp. 38–41 – Vaginal palpi; 42, 43 – Tignum. 38 – *Psylliodes heydeni* WEISE; 39 – *Psylliodes pyrenaeus* HEIKERTINGER; 40 – *Psylliodes agropyri* Palij; 41 – *Psylliodes olgae* n. sp.; 42 – *Psylliodes cucullatus* (ILLIGER); 43 – *Psylliodes heydeni* WEISE

DISCUSSION

This species can easily be distinguished from other species of the group by the narrower and somewhat flatter body, head and prothorax smaller, elytral striae more engraved, punctures in striae larger, interspaces smooth.

Psylliodes agropyri originally was described by PALIJ (1961) as a distinct species. VORONOVA (1977) had included this species to the subgenus *Semicnema* WEISE and considered it as subspecies of *Psylliodes macellus* WEISE. However, *P. agropyri* is rather different from *P. macellus* in many important characters: structure of the male and female genitalia (figs. 12, 14, 35), structure of the head, the mandibles wide, slightly curved and not falciform, structure of metatibia and tarsal segment 1 (figs. 20, 25), and the tegmen (figs. 29, 31). These differences are significantly higher than is usually considered for subspecies and exceeds the differences between *Psylliodes reitteri* WEISE and *P. macellus*. Using these criteria, therefore, despite the superficial similarity, the present species should not be referred neither to subspecies of *P. macellus* nor to the subgenus *Semicnema*.

The structure of head: vertex wide, labrum of pentagonal shape, frontal ridge wide and longer than in species of *Semicnema*, frontal calli rather distinct, joined with area near the inner margins of eyes; metatibia curved inward, rounded at apices at view from above; metatarsal segment 1 curved, widened basally; spermatheca small, short, nodulus drop-shaped, collo and duct short, the latter not coiled – are the features shared with the species of *cucullatus* species group.

There are 6 specimens (all females) forming the type series in the collection of ZIN. These specimens were mounted 3 each on two pins and labelled (labels numbered): 1. “Saratovsk. obl. Krasnyi Kut zhitnyak iuyl’ 1952”, 2. “*Psylliodes agropyri* Palij”, 3. “Hololectotypus”; labels 1 and 2 the same, 3. “Paralectotypus”. One specimen designated here as lectotype and labelled “Lectotypus *Psylliodes agropyri* Palij K. Nadein des. 2006”. The other specimens labelled as paralectotypes.

DISTRIBUTION

Russia (southeast of the European part: Saratovskiy Reg.; northern Caucasus: Stavropol’skiy Terr.).

***Psylliodes olgae* n. sp.**

TYPE LOCALITY

Spain (Granja).

TYPE MATERIAL

Holotype ♂ (ISNB): “Coll. R.I.S.N.B. Espagne Granja 1000-1500^o 22-26 Mai Madon”. Paratypes 2 ♀♀ (ISNB): the same labels as holotype.

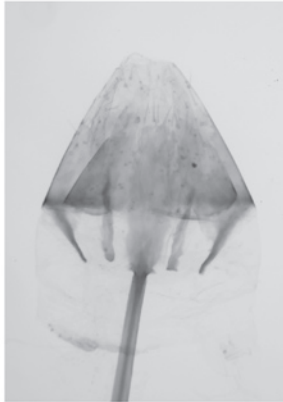
DESCRIPTION

Body oval-cylindrical, convex (fig. 8, 9). Black, shining, dorsally with metallic or bronzy lustre; fore, middle legs, metatibia brown, articulations lighter; metafemora piceous with metallic lustre, antennal segments 1-3 reddish-yellow, others darker.

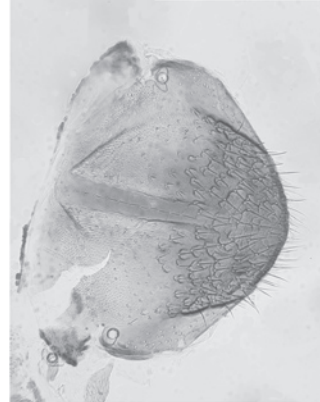
Head very large and wide, eyes not large, weakly convex. Vertex large and wide, with microsculpture reticulate, covered with small, often poorly visible punctures, punctures shallow, not dense, distance between punctures about 1.5–2 times the diameter of a puncture. Ocular sulci narrow, shallow, margins more or less even, close to



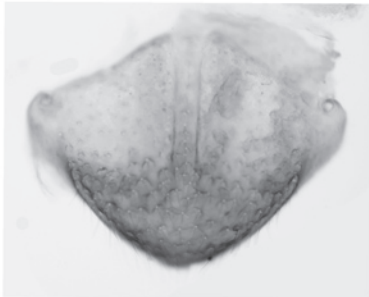
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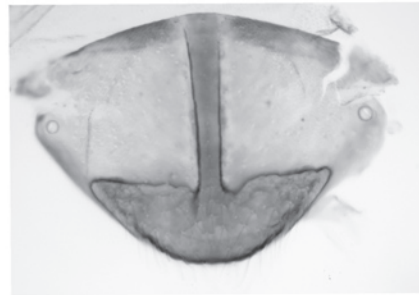
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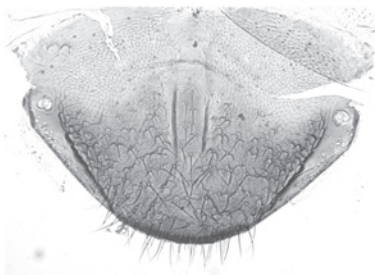
46



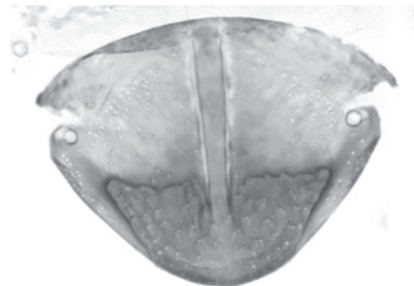
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44-50. *Psylliodes* spp. 44, 45 – Tignum; 46-50 – Pygidium, female, dorsal view. 44 – *Psylliodes agropyri* PALIJ; 45 – *Psylliodes olgae* n. sp.; 46 – *Psylliodes cucullatus* (ILLIGER); 47 – *Psylliodes heydeni* WEISE; 48 – *Psylliodes pyrenaicus* HEIKERTINGER; 49 – *Psylliodes agropyri* PALIJ; 50 – *Psylliodes olgae* n. sp.

frontal calli apices deeper and more distinct, above each sulcus the area of some setiferous pores not large and not forming deep impression joined with sulci. Frontal calli narrow, weakly convex, almost smooth, more or less distinctly separated from vertex and frons, apices narrow, elongated, joined with convex inner margin of eyes. Frontal ridge widely trapezoidal, weakly or almost not convex, almost smooth to smoothed shagrination, sides with row of setiferous pores. Anterofrontal ridge almost flat, wide with smoothed shagrination, sometimes with several punctures; anterior edge of frons shallow, concave, not forming distinct angle, with a row of setiferous pores at margin. Antennal grooves rather shallow with bottom shagreened. Antennal sockets about the distance of 1 socket between the inner margins of eyes, interspaces between them almost flat and shagreened. Labrum moderately large and long, 4 medial setiferous pores large and moderately deep.

Pronotum weakly transverse, convex; sides weakly converging; anterior and posterior margins weakly convex in dorsal view, evenly rounded; anterior border rather thin, posteriorly wider, more convex; lateral borders narrow, smooth, weakly rounded; anterolateral callosity poorly developed, almost not protruding contour of pronotum, only at setiferous pores slightly protruding, not forming angle and rounded; pronotal disc covered with not large, shallow punctation, sometimes somewhat irregular; distance between punctures 1–2.5 times their diameter, usually 1–2; interspaces flat, with smoothed to distinct shagrination; with punctures larger, distinctly shagreened, interspaces weakly convex.

Elytra elongated, not very narrowed laterally at apices; punctures in striae usually large and deep; distance between punctures about half their diameter; distance between striae is about 1.5–2 times as large as punctures; striae not engraved; interspaces between striae flat or rather weakly convex; secondary punctation moderately large, shallow, not distinct, punctures arranged in 1, sometimes 2 confused striae; spaces between punctures sometimes weakly convex, almost smooth, shining. Elytral apices rather weakly rounded to suture. Sutural angle slightly elongated, not rounded and not forming sharp denticle.

Metatibia not very widened apically; inner ridge with large, distinct denticle before tarsal articulation; outer ridge without denticle, smooth (fig. 21); metatarsal segment I slightly curved and widened basally (fig. 26).

Aedeagus – fig. 13, tegmen – fig. 30; spermatheca – fig. 36, vaginal palpi – fig. 41, tignum – fig. 45, female pygidium – fig. 50.

Measurements. Male: length – 2.03 mm; width – 1.04 mm; PI – 1.78; EI – 2.92; LI – 2.92; BI – 1.96. Female (n=2): length – 2.04–2.18 mm; width – 1.06–1.12 mm; PI – 1.53; EI – 2.84–2.90; LI – 2.84–2.90; BI – 1.92–1.95.

DIAGNOSIS

Similar to *P. heydeni* and closely related to *P. pyrenaicus* from which it differs in the structure of genitalia, body slenderer and narrower, head less wide, more convex, eyes larger, shagrination of the head and pronotum more distinct, frontal calli more delineated, frontal ridge and anterofrontal ridge less wide, legs darker, differs in the shape of metatibia, denticle at inner ridge of metatibia well developed.

DISTRIBUTION

Spain.

ETYMOLOGY

The species is named in honour of my wife Olga NADEINA.

KEY TO SPECIES OF *CUCULLATUS* SPECIES GROUP

1. Body elongated, not very convex (figs. 1, 2); pronotum not very large, anterior angles visible from above, punctation large with deep punctures, very dense, distance between punctures about half their diameter, interspaces convex; elytra medially parallel-sided, with striae moderately deep, width between striae about 1 diameter of punctures, convex; metatibia in lateral view not curved, narrow, serratiform (fig. 20); metatarsi articulated almost medially *P. agropyri*
- Body more rounded, oval and convex; pronotum large, convex, anterior angles not visible from above, punctation usually not very large or small, interspaces flat, almost smooth to weakly or moderately shagreened – if punctation large and interspaces moderately convex then they are more or less distinctly shagreened on disk, and sides shagreened strongly (*P. cucullatus*); elytra medially weakly rounded, with striae almost or not engraved, interspaces slightly convex or flat, distance between striae up to 2.5 times of puncture diameters; metatibia in lateral view curved, not serratiform, from above curved inward; metatarsi articulated at about basal third of metatibia length..... 2.
2. Pronotum usually distinctly narrowed, converging dorsally (fig. 15), punctation large, coarse, interspaces more or less convex with usually distinct shaggrination; ocular sulci poorly developed; elytral apices clearly rounded *P. cucullatus*
- Pronotum weakly narrowed dorsally or not (fig. 16); punctation, especially on disc small and shallow, interspaces flat, weakly shagreened to almost smooth; elytral apices weakly rounded 3.
3. Inner ridge of metatibia with distinct, large denticle before tarsal socket (fig. 21); vertex and pronotum with shagreen; eyes not very large; anterolateral callosity rather poorly developed *P. olgae* n. sp.
- Inner ridge of metatibia without large denticle (figs. 17, 19), at most with small and obtuse denticle; eyes rather small to moderately large 4.
4. Eyes moderately large and convex; vertex almost smooth with sculpture indistinct; frontal ridge not encircled marginally by setiferous pores; pronotum with anterolateral callosity more developed, distinctly protruding at setiferous pores, interspaces between punctures at disc almost smooth; metatibia as viewed from above more widened (fig. 19) *P. heydeni*
- Eyes small and weakly convex; vertex shagreened, more or less developed, not large; frontal ridge encircled by setiferous pores; pronotum with anterolateral callosity weakly developed, weakly protruding at setiferous pores, rounded, disc with smooth shaggrination; metatibia as viewed from above rather poorly widened (fig. 17) *P. pyrenaicus*

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