Review of the *Phaonia pallida* group (Diptera: Muscidae)

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КЛЮЧЕВЫЕ СЛОВА: *Phaonia*, Muscidae, Diptera, Палеарктика.

ABSTRACT. New and detailed key for the *Phaonia pallida* group is offered. The variability of species of the *P. pallida* group is considered. Hitherto unknown female of *P. kowarzii* Schnabl, 1887 is described. The distribution of several species of the *P. pallida* group is specified.

РЕЗЮМЕ. Предложен новый и подробный ключ для видов группы *Phaonia pallida*. Рассмотрена вариабельность видов группы *P. pallida*. Описана неизвестная самка *P. kowarzii* Schnabl, 1887. Уточнено распространение рассмотренных видов.

Introduction

Hennig [1963] included in the *Phaonia pallida* group six Palaearctic species: *Phaonia pallida* Fabricius, 1787; *P. bitincta* Rondani, 1866; *P. kowarzii* Schnabl, 1887; *P. regalis* Stein, 1900; *P. rufiventris* Scopoli, 1763 (= *populi* Meigen, 1826) and *P. subventa* Harris, 1780 (= *variegata* Meigen, 1826).

Zinovjev [1981] added to the group *P. luteovittata* Shinonaga et Kano, 1971. In the present review we include one more species *P. rubriventris* Emden, 1965. The species was described from N Burma and N India from altitudes of 2000 m or more, it is the border between the Oriental and Palaearctic regions, this species is also recorded for China [Ma et al., 2002]. Thus, totally eight species are considered.

Chinese authors include in the *P. pallida* group six more species from mountainous localities in Chinese Sichuan and Guizhou provinces [Ma et al., 2002], namely: *P. brunneabdomina* Xue et Cao, 1989; *P. fasciaurea* Xue et Fang, 1986; *P. lucidula* Fang et Fan, 1993; *P. luteovittatoida* Feng et Ma, 2002; *P. menghansensis* Feng, 1993 and *P. subluteovittata* Ma et Deng, 2002. The short key for Chinese species available in English does not clarify enough the situation. Note also that these species are described from very limited series or only from single holotype, so the variability is unknown. Therefore we do not consider those Chinese species in our paper.

The monophyly of the *P. pallida* group seems to us doubtful. Its only apomorphy is a yellow colour of the abdomen, while other characters are very diverse. We prefer to use generally accepted interpretation of the *P. pallida* group till molecular phylogenetic clarifies the relationship between species of *Phaonia* Robineau-Desvoidy, 1830.

The main task of the present review of the *P. pallida* group is to offer a completely new and detailed key and we hope that our colleagues will found it useful. We also characterize the variability and give direct comparison of two of the most common and at the same time the most variable species *P. rufiventris* and *P. subventa*. A hitherto unknown female of *P. kowarzii* is described. The distribution of several species of the *P. pallida* group in the eastern part of Palaearctic is specified. Some information on imaginal ecology of species of the group is given.

Material and methods

The specimens examined in this study are deposited in the following institutions:

- BMNH — Natural History Museum, London, UK;
- ISEA — Institute of Systematics and Ecology of Animals, Novosibirsk, Russia;
- OUMNH — Oxford University Museum of Natural History, UK;
- ZIN — Zoological Institute, St-Petersburg, Russia;
- ZMUC — Zoological Museum, University of Copenhagen, Denmark;
- ZMUM — Zoological Museum of Moscow University, Russia.

Localities are given as follows: country, region, geographical coordinates in the decimal degrees format.

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The following generally accepted abbreviations for morphological structures are used: $f_1, f_2, f_3$, $t_1, t_2, t_3$ = fore-, mid-, hind-femur or tibia respectively; $ac$ = acrostichal setae; $dc$ = dorso-central setae; $a, p, d, v$ = anterior, posterior, dorsal, ventral setae(s); $prst$ = presutural, post = postsutural. YPT = yellow pan trap.

Taxonomical account

*Phaonia bitincta* Rondani, 1866

Figs 8–10.

*Phaonia bitincta* Rondani, 1866. Type locality: “in the hills of the Parma countryside” (Pont, 1886).


**DISTRIBUTION.** Europe, the easternmost known record is listed above: Krasnodar region, S Ozeleevka (37.63°E). **DISCUSSION.** *P. bitincta* is a rare European species. For example, Hennig (1963) had seen apart from the holotype one more specimen (collected by Paul Stein in Germany, Bad Kissingen). The only character used in Hennig’s [1963] key to separate *P. bitincta* from *P. subventa* was the length of the arista hairs. The difference in the scutal pattern was firstly offered by d’Assis-Fonseca [1968]. Gregor et al. [2002] used the number of setae on $t_2$ and yellow pedicel in *P. biticta* males. We found all these characters more or less useful, add several more and summarized them in the key given below. Considering that our material of *P. bitincta* is very limited, we asked Dr. Verner Michelsen, Denmark and Dr. Adrian Pont, UK to check the key characters against available material of *P. bitincta* in ZMUC and OUMNH respectively (there are 3 specimens in ZMUC collection: 1° from France, Alsace prov., 2° from Spain, Cuenca prov. and 2° from UK in OUMNH collection). Our colleagues kindly confirmed that the key characters works on their specimens too. The presence of the golden setae on the lower occiput in *P. bitincta* was reported by Dr. Michelsen (pers. com.).

*Phaonia kowarzii* Schnabl, 1887

Figs 11–12.

*Phaonia kowarzii*. Schnabl, 1887. Type locality: Belarus, Mogilev region (presently Vitebsk reg., Liozno distr., Zachernya vill. (54.92°N 30.77°E), 14.07.2001, K. Tomkovich, 1° (ZIN); Khabarovsk reg.: Khabarovsk Isl., Yuzhno-Kurilsk (44.68°N 145.8°E), 17.06.1979, A. Zinoviev, 3° (ZIN); Sakhalin reg.: Sopka Dva Brata (43.02°N 134.12°E), 28.08.1948, V. Gussakovsky, 1° (ZIN); Lazovsky NP., Tatschanka Bay (43.02°N 134.12°E), 28.08.1948, V. Gussakovsky, 1°; Khanka Lake, 45.06°N 131.99°E, 15–19.06.2014, N. Vihkrev, 1° (all ZMUM); Vladivostok, Sedanka, 43.2°N 132.0°E, 1.06–17.09.1979, A. Zinoviev, 8° (all ZIN); Anisimovka env., 43.17°N 132.79°E, 17.06.1979, A. Zinoviev, 2° (all ZIN); Sakhalin reg.: Kunashir Isl., Yuzhno-Kurilsk env. (44.68°N 145.8°E), 4–7.07.1979, A. Zinoviev, 8° (all ZIN); Sakhalin Isl., 12 km S of Khomls, Pravda (46.94°N 142.01°E), 25.07.1971, E. Nurchuk, 2° (all ZIN); Za-bakalsky reg., Soktuy env. (50.08°N 117.78°E), 19.07.1958, K. Grunin, 1° (ZIN).

**DISTRIBUTION.** From W Europe to Japan, but probably absent in Siberia. It seems that *P. kowarzii* prefers cool oceanic climate like that in Scandinavia or the Pacific Far East. This point of view is indirectly confirmed by our observations in Moscows region where only 3 specimens were collected in period 2008–2016, whereas the year 2017, with abnormally rainy and cold summer, provided a large series of *P. kowarzii*. **DESCRIPTION OF FEMALE.** In contrast to an usual situation, females of *P. kowarzii* are less represented in ZMUM and ZIN collections than males.

A small *Phaonia* with body length 5.5–6.0 mm. **Head.** Eyes covered with short and sparse hairs. Frons broad, 1/3 head width, dark; without interfrontal setae. Fronto-orbital plates, parafacial plates, face and gena dark grey dusted. Fronto-orbital plates with 3–4 incisive and 2 reclinata setae, outer rows with 4–6 short hairs. Pedicel and base of postpedicel dirty yellowish, the rest of postpedicel dark, sometimes antenna entirely dark. Arista yellow in basal 1/3, the rest dark; longest arista hairs as long as or slightly longer than width of postpedicel. Mouldedge not protruding. Palpi yellow, at apex as wide as width of postpedicel. **Thorax.** Disc of scutum mostly black with a pair of submedian grey vitae inside of dc rows; sides of scutum outside the intraalar rows typically yellow to translucent yellow. Scutellum usually entirely yellow, sometimes dark at base. Upper pleura (anepisternum and anepimeron) mostly yellow, lower pleura (katepisternum and meron) mostly dark (Fig. 12). Dark specimens with only postpronotal lobe yellow (as in male) are also not rare (about 30% females). Thoracic spiracles yellow, posterior one small, shorter than width of katepimeron. Prosternum, notopleuron, katepimeron and meron brown; dc 2+3, all strong; ac 0+1; prealar seta shorter than posterior notopleural. Wings with a slight yellow tint; veins bare; crosstines not infuscated; calyptrae and halter yellow. Legs, including coxae, yellow, only tarsi dark. $t_1$ without setae. $t_2$ with 3 p setae, $t_3$ with 3–4 av near apex. $t_3$ with 3–4 av, 2 ad and 1 pd setae. **Abdomen** yellow with thin whitish dusting and indistinct narrow median vitta; apex of abdomen may be more or less darkened. Sternite 1 bare. Tergite 4 and 5 with distinct discal and marginal setae.

**Male** (Fig. 11) differs from female as follows: Fronto-orbital plates touching except for in anterior and posterior quarters; 3–4 incisive setulae restricted to anterior quarter of frons, reclinata setae absent. Anterior facets of eyes enlarged. Postpedicel remarkably yellowish-white. Palpi narrower, half as wide as postpedicel. Scutum and pleura dark, only postpronotal lobe translucent yellow; scutellum darkened basally.

*Phaonia luteovittata* Shinonaga et Kano, 1970

Figs 2–3.

*Phaonia luteovittata* Shinonaga et Kano, 1971. Type locality: Japan, Hokkaido.

**MATERIAL.** Russia: Chelyabinsk reg., Taganay Mts (55.22°N 97.74°E), 18–24.07.2008, K. Tomkovich, 1° (ZMUM); Kemerovo reg., Teba (53.64°N 88.57°E), 9.07.1962, K. Grunin, 1° (all ZIN); Perm reg., Kungur, Uchleshko = Preduralie NP (presently abolished), 57.36°N 57.14°E, A. Zinoviev, 21–30.06.1979, 1°; 9.07.1979, 2° (all ZIN); Primorsky reg., Kamenushka env. (43.62°N 132.23°E), 7.06.1979, A. Zinoviev, 1°; 12.08.1984, A. Shatalkin, 1°; 14.06.1985, A. Ozorov, 1°; Lazovsky NP., Ta-Changtou Bay (43.02°N 134.12°E), 28.08.1948, V. Gussakovsky, 1°; Khanka Lake, 45.06°N 131.99°E, 15–19.06.2014, N. Vihkrev, 1° (all ZMUM); Vladivostok, Sedanka, 43.2°N 132.0°E, 1.06–17.09.1979, A. Zinoviev, 8° (all ZIN); Anisimovka env., 43.17°N 132.79°E, 17.06.1979, A. Zinoviev, 2° (all ZIN); Sakhalin reg.: Kunashir Isl., Yuzhno-Kurilsk env. (44.68°N 145.8°E), 4–7.07.1979, A. Zinoviev, 8° (all ZIN); Sakhalin Isl., 12 km S of Khomls, Pravda (46.94°N 142.01°E), 25.07.1971, E. Nurchuk, 2° (all ZIN); Za-bakalsky reg., Soktuy env. (50.08°N 117.78°E), 19.07.1958, K. Grunin, 1° (ZIN).
abolished, 57.36°N 57.14°E, 16.07.1979, A. Zinovjev, 1° (ZIN); Primorsky reg.: 20 km S of Oblachnaya Mt (43.69°N, 134.21°E), 8.08.1963, E. Nurchuk, 1° (ZMUM); SW bank of Khanka L. (45.00°N 132.00°E), 26.07.1969, M. Kandybina, 1° (ZIN); Sakhalin reg.: Kanusir Isl., Tretjakovskoy env., 43.99°N 145.60°E, 13–22.09.2009, I. Melnik, 1°, ♂♂, Kanusir Isl., Peschanoe Lake, 43.950°N 145.593°E, 1–5.08.2008, I. Melnik, 1°; Kordon Filatovskoy env. (44.194°N 146.027°E), 1–29.09.2009, I. Melnik, 2♂ (all ZMUM); Kanusir Isl., Lagunatnaya (44.05°N 145.775°E), Viavlovich, 17–23.05.1995, 1°, ♂ (ZIN); Sakhalin Isl., Novoaleksandrskoy (47.05°N 142.72°E), 22.07.1968, E. Nurchuk, 1° (ZIN); Shikotan Isl., Tserkovny Bay, 43.75°N 146.70°E, Yu. Sundukov, 11–17.06.2012, 1°, 23–30.08.2013, 1° (all ZMUM).

DISTRIBUTION. Known from Japan (Hokkaido and Honshu) and Russia: from the Far East (Primorsky and Sakhalin reg.) to Ural (Chelyabinsk and Perm reg.).

DISCUSSION. The original description of *P. luteovittata* was reproduced in a more accessible source [Shinonaga, 2003: 163]. We have 2 specifications to the description: katepimeron bare [Shinonaga, 2003] or with setula (in about 40% of males 2); all females have no bare m, YPT, K. Tomkovich, 17–25.06.2009, 2

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Shikotan Isl., Tserkovny Bay, 43.75°N 146.70°E, Yu. Sundukov, 11–17.06.2012, 1°, 23–30.08.2013, 1° (all ZMUM).

Palaearctic. Further collecting can clarify the problem.

Phaonia pallida Fabricius, 1877

Figs 13–15.

*Phaonia pallida* Fabricius, 1877. Type locality: Copenhagen, Denmark.

MATERIAL. ABKHAZIA, Sukhumi (43°N 41°E) env., 9.06.1932, B. Rodendorf, 1° (ZMUM); ARMENIA: Abastumani, pine forest, 30.06.1970, K. Gorodkov, 3♂ (ZIN); GANDZAKAR (40.84°N 45.17°E), 23.07.1969, V. Rikhter, 4♂, 3♀, 5♂ (ZIN); AIZERBAIJAN: Lankoran, Xanbulan Reservoir env. (38.65°N 48.78°E), 19–27.10.2008, N. Vikhrev, 2♂; YPT, 22–28.05.2009, K. Tomkovich, 1°, 2♂ (all ZMUM); BELARUS: Brest prov., Karusav (41.03°N 30.79°E), 15.06.2010, N. Vikhrev, 1♂; Zonguldak prov., Alap env. (41.14°N 31.36°E), 28.08.2009, N. Vikhrev, 1♂ (all ZMUM); UKRAINE: Zakarpatsky reg., Turya Poliana (47.8°N 22.8°E), 25–29.06.1964, L. Zimina, 3♂, 1♀ (ZMUM); Voronezh reg., Salinovskoye (49.84°N 33.90°E), 06–17.09.1998, Guilebrant, 2♂, 3♀, 3♂ (ZIN).

DISTRIBUTION. All over Europe; Iran and Israel [Pont, 1986]. The only Siberian record (Tyumen reg., Russia [Veselkin, 1966]) seems to us doubtful and we had not found any specimens of *P. pallida* among bequest to ZMUM Veselkin’s collection. During several years of intensive collecting in Altai Mts and Novosibirsk region *P. pallida* was never recorded. Thus the easternmost reliable record is W Ural, Perm region, 75°E.

REMARKS. Normally *P. pallida* has entirely yellow pleura and scutum (the latter with some whitish dusting) as on Figs 14–15, but barely pleura and scutum may be extensively darkened as on Fig. 13.

Phaonia regalis Stein, 1900

*Phaonia regalis* Stein, 1900. Type locality: Tiflis = Tbilisi, Georgia.

MATERIAL. GEORGIA: Tiflis = Tbilisi distr., Kojori, 41.66°N 44.71°E, 20.06.1916, Andrievsky, 1° (ZIN); Abkhazia, pine forest with oak, 41.75°N 42.88°E, 10.09.1982, D. Kasparyan, 1° (ZIN); Mangisili (41.69°N 44.42°E), 1–10.08.1990, S. Zacharov, 1° (ZIN); GEORGE, *C. Macedonoe*, Kerkini L. env., Wine Trap, 41.285°N 33.90°E, 475 m, 9–15.06.2008, G. Ramel, 1°, 2♂ (ZMUM).

DISTRIBUTION. An uncommon species known from few localities in SW Palaearctic: Austria, Bulgaria, Greece, Georgia and Turkey.

REMARKS. Female from Greece has 1 pair of rather weak but distinct prst ac.

Phaonia rubriventris Emden, 1965

Figs 16–17.

*Phaonia rubriventris* Emden, 1965. Type locality: N Burma (Myanmar), Kambaiti and N India, Darjeeling.


DISTRIBUTION. Known from N India, N Burma, N Vietnam (new record) and China [Ma et al., 2002].

REMARKS. We could add to detailed Emden’s [1965] description only that in *P. rubriventris* both meron and katepimeron are bare; prealar seta is strong; radial node of
REMARKS. The variability in comparison with P. subventa is given below.

_Phaonia rufiventris_ Scopoli, 1763

**Fig. 4.**

_Phaonia subventa_ Harris, 1780

**Figs 5–7.**
species are the most variable in the P. pallida group (P. pallida and P. kowarzii are variable only in colour pattern of the thorax, other species are known by very limited series).

P. rufiventris

Aristal hairs. $\square$: 0.75–1.3x as long as width of postpedicel.
Pedicel. $\square$: yellow or dark.
Interfrontal setae. $\square$: absent.
Inclinate frontal setae. $\square$: 5–6 pairs of inclinate frontal setae (either strong and weak ones) confined to lower third of frons.
Thoracic colour pattern. $\square$: In dark specimens (about 65%) the colour pattern is similar to yellowish males of P. subventa i.e. only postpronotal lobe yellow, scutellum usually darkened at base. In yellow specimens (about 35%) the sides of the scutellum outside the intraalar rows and pleurae somewhere yellow, scutellum usually yellow.
$\triangledown$: the colour pattern as in yellow males.
Fenstral and tibial setae. $\square$: 1 pair, rarely 2 pairs (6%). $\triangledown$: 1 pair or absent (30% specimens).
Katepimeron. $\square$: with 1–2 setae, rarely bare in 2% of accurately mounted specimens; more frequent in the specimens in bad condition or collected by YPT or Malaise trap.
$\triangledown$: with 1 hair or bare (40% specimens). The typical situation is that the setae are present or absent on the katepimeron on both sides of the thorax; specimens with the setulae presents on one side and absents on the other are rare. Such distribution indicates that the setulae on the katepimeron were not broken but were initially absent in almost half of females.
Meron. $\square$: bare.
Crosseveins on wing. $\square$: indistinctly infuscated.
$\triangledown$: without p seta.
t1. $\square$: without p seta.
t2. $\square$: with 3 rarely 4 (7%) p setae.

Ecology

No information was published on ecology of P. bitincta, P. luteovittata, P. regalis or P. rubrivenrnis, the authors of this paper also have never observed these species personally.
P. subventa is a typical visitor of excrements or carrion.

Other 3 species: P. kowarzii, P. pallida and P. rufiventris are not especially attracted to rotten organic, although can visit it occasionally. Their typical habitat is grass or low brushes in forest. P. pallida distinctly prefers grass, while P. kowarzii prefers leaves of bushes at a height of 1–2 m, P. rufiventris may be found either on grass or bushes.

Identification key for Palaearctic Phaonia pallida group

1. dc 2+3. (Strong prst ac always absent in both sexes. Meron and katepimeron always bare).................. 2
   dc 2+4 .......................................................... 3

2. Synthetic sternal scutum. (Katepimeron setulose as on Fig. 1b, meron bare.) $\square$: 4–6 pairs of inclinate frontal setae (either strong and weak ones) confined to lower third of frons. prst ac — 1(2) pairs. $\triangledown$: Frons without interfrontals. t1 without p. prst ac — 0–1 pairs .................................................. 6
   Synthetic sternal scutum. (Katepimeron setulose as on Fig. 1b, meron bare.) $\square$: 4–6 pairs of inclinate frontal setae (either strong and weak ones) confined to lower third of frons. prst ac — 1(2) pairs. $\triangledown$: Frons without interfrontals. t1 without p. prst ac — 0–1 pairs .................................................. 6
   Synthetic sternal scutum. (Katepimeron setulose as on Fig. 1b, meron bare.) $\square$: 4–6 pairs of inclinate frontal setae (either strong and weak ones) confined to lower third of frons. prst ac — 1(2) pairs. $\triangledown$: Frons without interfrontals. t1 without p. prst ac — 0–1 pairs .................................................. 6

3. Radial node on lower side of wing with 2–4 setae. Thorax normally entirely yellow with whitish dusting on scutum. (Katepimeron setulose as on Fig. 1b, meron bare.
$\square$: 0.75–1.3x as long as width of postpedicel.
Pedicel. $\square$: dark. $\triangledown$: dark, rarely (4%) yellow(ish).
Interfrontal setae. $\square$: present, sometimes (17%) absent. Inclinate frontal setae. $\square$: 7–10 pairs of inclinate frontal setae (either strong and weak ones) extend to middle of frons.

Thoracic colour pattern. $\square$: Thorax entirely dark, including postpronotal lobe and dorsal surface of the scutellum, only sides of scutellum yellow (30%); or thorax dark, but postpronotal lobe yellow(ish) and dorsal surface of scutellum mostly yellow, only its base darkened (70%).
$\triangledown$: Thorax entirely dark, including postpronotal lobe and dorsal surface of the scutellum (14%) or thorax dark, but postpronotal lobe yellow(ish) (86%), in this form dorsal surface of scutellum mostly yellow, only its base darkened, rarely (2%) scutellum entirely yellow.

Presutural ac setae. $\square$: 2 or 3 (14%) pairs.
Katepimeron. $\square$: bare.
Meron. $\square$: with 1–5 setae along lower border of posterior spiracle (absent/broken in 3%). $\triangledown$: with 1–3 hairs or bare in 27%
Crosseveins on wing. $\square$: distinctly infuscated.
t1. $\square$: without p seta (or with 1 p: 19%); $\triangledown$: with 1(2) p, rarely without p setae (5%).
t2. $\square$: with 2 or 3 (10%) p setae.

Thus, we offer the direct comparison of P. rufiventris and P. subventa together with the data on variability from hundreds of examined specimens.

P. subventa

Aristal hairs. $\square$: 0.5–0.75x as long as width of postpedicel.
Pedicel. $\square$: dark. $\triangledown$: dark, rarely (4%) yellow(ish).
Interfrontal setae. $\square$: present, sometimes (17%) absent. Inclinate frontal setae. $\square$: 7–10 pairs of inclinate frontal setae (either strong and weak ones) extend to middle of frons.

Thoracic colour pattern. $\square$: Thorax entirely dark, including postpronotal lobe and dorsal surface of the scutellum, only sides of scutellum yellow (30%); or thorax dark, but postpronotal lobe yellow(ish) and dorsal surface of scutellum mostly yellow, only its base darkened (70%).
$\triangledown$: Thorax entirely dark, including postpronotal lobe and dorsal surface of the scutellum (14%) or thorax dark, but postpronotal lobe yellow(ish) (86%), in this form dorsal surface of scutellum mostly yellow, only its base darkened, rarely (2%) scutellum entirely yellow.

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Crosseveins on wing. $\square$: distinctly infuscated.
t1. $\square$: without p seta (or with 1 p: 19%); $\triangledown$: with 1(2) p, rarely without p setae (5%).
t2. $\square$: with 2 or 3 (10%) p setae.
Phaonia spp: 1–3 — *P. luteovittata*; 4 — *P. rufiventris*; 5–7 — *P. subventa*; 8–10 — *P. bitincta*. 1 — location of hypopleural hairs; 2 — habitus, male; 3–4 — cercal plate; 1a — on meron along the lower border of posterior spiracle, 1b — on katepimeron, S — posterior spiracle.

— *f1* yellow. Tergites yellow, at most slightly darkened somewhere. Disc with distinct grey dusting. Scutellum yellow or darkened at base.  
— Cercal plate with weak sclerotization, and halves of cerci bidental at apex (Fig. 4).  
— Strong prst ac usually present.  

**Rufiventris** Scopoli

7. Aristal hairs 1.5x as long as width of postpedicel. Back of the head (lower occiput and postgenae) covered with golden setulae. Scutum densely grey dusted, in posterior view on presutural part of scutum, the width of pair of black submedian vittae (together) 0.5x as wide as width of median grey vitta between them (Fig. 8). Abdomen evenly (though thinly) whitish dusted with distinct undusted median vitta. *t2* with 3(4) *p* setae.  
— Cheeks wide, 1.5–2x wider than width of *f1*.*f2* with spine-like ventral setae (Fig. 9). Pedicel yellowish.  
— Fronto-orbital plates and parafacies densely and evenly whitish dusted; frons thinly whitish dusted (Fig. 10).  

**Bitincta** Rondani

— Aristal hairs at most 0.75x as long as width of postpedicel. All occipital setulae black. Scutum thinly dusted, partly shining black, in posterior view on presutural part of scutum, the width of pair of black submedian vittae (together) wider than width of median grey vitta between them (Fig. 5). Abdomen mostly shining yellow (sometimes partly darkened), median vitta indistinct. *t2* with...
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Figs 16–17. *P. rubriventris*: 16 — female paratype (photo: Nigel Wyatt); 17 — male.
2(3) p setae. ♂: Cheeks narrower, about as wide as width of \( f1 . f2 \) with fine ventral setae (Fig. 6). Pedicel dark. ♀: Frons, fronto-orbital plates and parafacials dark (parafacials with whitish spot at level of pedicel (Fig. 7). ......

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