Results of entomological expeditions to Yamdena, Larat, Tandula, Selaru and Molu islands (Indonesia, Moluccas, Tanimbar islands) with the description of new genus, three new species and four new subspecies (Coleoptera: Cetoniinae)

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Taxonomy, new genus, new species, new subspecies, Coleoptera, Cetoniinae, Oriental and Australian regions

Abstract. Microdilochrosis boumai gen. et sp. n., Agestrata punctatostriata tanimbarica ssp. n., Ixorida (Mecinonota) venerea yamdena ssp. n. from Yamdena Island and Poecilopharis detanii sp. n., Protaetia (Pseudourbania) porloyi sp. n., Glycyphana (Euglycyphana) maculiceps moluana ssp. n. Protaetia (Netociomima) adspersa moluana ssp. n. from Molu Island are described, illustrated and compared with similar taxons. Dilochrosis bipustulata Moser, 1902 is raised from synonymy with Dilochrosis ebenina Butler, 1865 and confirmed as a bona species, its brief redescription is given.

INTRODUCTION

The Tanimbars or Tanimbar Islands (formerly Timor Laut) are lying in the southeast corner of the Indonesian Moluccas. The archipelago consists of the main Yamdena Island, surrounded by dozens of smaller islands at the north, west and south. It was the main Yamdena Island, where entomological research was provided during 2005-2007 by Czech entomologists. Additionally Indonesian, mainly Javanese local entomologists visited Tandula Island (W of SW Yamdena), Larat Island (near the northern tip of Yamdena), Selaru Island (south of Yamdena) and isolated Molu Island (far in the north of northern Yamdena). Islands are covered with relatively untouched monsoon forests. Vegetation is becoming green after first rains coming during the mid of November, latest beginning of December. During this period most of insects start to appear. Over January and February heavy rains continue and most of low lying forests (about 80%) are flooded. Dry season starts after change in winds direction, usually over April-May. Since this time, not much insects (especially Coleoptera) is left due to very dry climate and almost no moisture. Cetoniinae fauna of Tanimbars is mixture of Oriental and Australian regions. Together with Kei Islands, Clinteria Burmeister, 1842, Glycyphana (Euglycyphana) Mikšic, 1968, Protaetia (Pseudourbania) Mikšic, 1965 and Agestrata Eschschoitz, 1829 reaches here its eastern point of distributional area. On the other hand Poecilopharis Kraatz, 1880, Dilochrosis J. Thomson, 1888 are elements of Australian-Papuan fauna. Protaetia (Netociomima) Mikšic
1963, *Glycyphana (Glycyphaniola)* Mikšić, 1968 and *Ixorida (Mecinonota)* Kraatz, 1892 are widely distributed across Oriental region, transition zones of Indonesia to the Solomon Islands at the east. *Microdilochrosis boumai* gen. et sp. n. seems to be endemic genus of Schizorrhinini to the Tanimbar Islands.

**BIONOMY**

Immediately after first rains insects are awoke by first moisture and leave cocoons. During first two weeks, especially males are flying above ground surface looking for females. During these first days of activity, concentration is amazing at certain places. Two or three weeks later first certain trees start to bloom. At this time, copulation is almost over and insects start to move to the tops of blooming trees. Generally all species collected had always been attracted by blooms, except two species, particularly *Protaetia (Netociomima) adspersa* Moser, 1907 and *Agestrata punctatostriata tanimbarica* ssp. n. Blooming season lasts approximately one month, although there were always occasional trees with some flowers in February, March. Over first spring months concentration of live adults drops and approximately after mid of March the only surviving Cetoniinae are rubbed, old females. Such a kind of living cycle seems to be same for all species, except of *Agestrata punctatostrata tanimbarica* ssp. n., which first specimen was collected in May and the last one in June. At this time of the year all other species were completely gone.

During both expeditions, fruit banana and pineapple traps were used. Only two species have been attracted, concretely *Poecilopharis curtisi* Waterhouse and occasionally *Dilochrosis bipustulata* Moser.

Before first rains hit, several species were collected under the ground by digging of decomposed tree roofs, where many cocoons with fresh adults have been found, waiting first water. *Dilochrosis bipustulata* Moser, *Poecilopharis curtisi* Waterhouse, *Glycyphana (Glycyphaniola) varicorensis dammeriensis* Mikšić, *Glycyphana (Euglycyphana) maculiceps* Moser have been collected using this technique.

**HISTORY**

Most Cetoniinae flying in the Tanimbars were originally described from Larat Island serving as one of Dutch settlements in the region during the colonial era. This is the case of *Dilochrosis parvula*, Moser, 1902, *Poecilopharis minuta* Moser, 1901, *Glycyphana (Euglycyphana) maculiceps* Moser 1914, and others. Additional specimens and species have also been collected in Yamdena Island during 19th century. Since then, no serious collecting of Coleoptera was provided, except occasional, but not very professional collecting made by local collectors, concentrating mainly on day butterflies. Offshore islands of Yamdena and Larat had been probably never investigated at all.

From 7 of hereunder described taxa, 3 belong to tribe Schizorrhinini, namely *Microdilochrosis boumai* genus et sp. n., *Agestrata punctatostrata tanimbarica* ssp. n. and *Poecilopharis detanii* sp. n. 3 to tribe Cetoniini, namely *Protaetia (Pseudourbania) porloyi* sp. n., *Protaetia (Netociomima) adspersa moluana* ssp. n. and *Glycyphana (Euglycyphana) maculiceps moluana* ssp. n., 1 to tribe Taenioderini, namely *Ixorida (Mecinonota) venerea yamdena* ssp. n.

**Poecilopharis** Kraatz, 1880. Genus was established by Kraatz in 1880 with the type species *Schizorrhina bouruensis* Wallace. After Allard Schizorrhinini 1 (1995) 31 species and 4 subspecies were known. 4 species and 3 subspecies were added in Schizorrhinini 3, published by Rigout & Allard (1997). No species has been described since then. *Poecilopharis detanii* sp. n. inhabits tiny Molu Island lying far at the north of Yamdena and Molu Islands.


**Protaetia (Pseudourbania)** Mikšić, 1965. The subgenus was established by Mikšić in 1965 with the type species *Protaetia guttulata* Burmeister, 1842, Mikšić accommodated 9 species and 1 subspecies for the subgenus. Since then, no species were described. Newly described *P. (Pseudourbania) porloyi* sp. n. seems to be endemic to Molu Island. Closest known species of the subgenus are coming from Moa Island, namely *P. (Pseudourbania) carinocollis* Moser, 1907, *P. (Pseudourbania) guttulata* Burmeister, 1842, and from Dammer Island, namely *P. (Pseudourbania) cupreola* Kraatz, 1899, which is several hundreds kilometres far in west part of the Moluccas.

**Protaetia (Netociomima)** Mikšić, 1963. Mikšić established the subgenus in 1963 with the type species *P. (Netociomima) taciturna* Guérin. 4 species and one subspecies were added also by Mikšić (1965). Since then, only 1 species was described by Antoine (1996). At this time, number of taxa stay on 24 species and 5 subspecies. Two species are dubious, namely *Protaetia handsini* Valck-Lucassen, 1936, and *Protaetia indecora* Kraatz, 1914. Newly described *P. (Netociomima) adspersa moluana* ssp. n. represents isolated subspecies *P. (Netociomima) adspersa* 1907, which nominotypical subspecies is widely distributed across Tanimbar main archipelago.

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Glycyphana (Euglycyphana) Mikšic, 1968. It was Mikšic, who established the subgenus in 1968. After this year only 1 species was described, also by Mikšic (1986). In Catalogue of Cetoniidae, Part I. (1998) Krajčík listed 9 species and 2 subspecies. But because G. aurocincta Arrow actually belongs to subgenus Glycyphaniola Mikšic, 1968, the recent amount stays on 8 species and 2 subspecies. Population of Euglycyphana Mikšic, 1968, from Molu Island belongs to G. (Euglycyphana) maculiceps Moser, 1914, but with some different characteristics, which can be classified as differences at the subspecies level. G. (Euglycyphana) maculiceps moluana ssp. n. will be described in this manuscript.

MATERIAL AND METHODS

All specimen sizes are from anterior margin of the clypeus to the apex of the elytra. Types are provided with red printed labels that give the name of the taxon, HOLOTYPUS (or ALLOTYPUS, or PARATYPUS), sex symbol (handwritten), number of the paratype (handwritten) and St. Jákl det. 2008. Genitalia of at least ten males (if available) were dissected. Type specimens of this study are deposited in the author’s collection.

RESULTS

YAMDENA ISLAND. Agestrata punctatostriata tanimbarica ssp. n.: see following description; Dilochrosis bipustulata Moser, 1902: 2 (♂♂) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 25.xi.-13.xii.2006, St. Jákl lgt.; 3 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 25.xi.-13.xii.2006, St. Jákl lgt.; 35 (♂♂) and 27 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 15.xii.06-10.i.07, St. Jákl lgt.; 12 (♂♂) and 13 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 10.i.-5.ii.2007, St. Jákl lgt.; Poecilopharis curtisi Waterhouse, 1884: 20 (♂♂) and 12 (♀♀) labelled: Indonesia, TANIMBAR ISL., S. Yamdena isl., MAM S VILL., 21 km NE of SAUMLAKI, 150 m, 27.xi.-11.xii.2005, St. Jákl lgt.; 4 (♂♂) and 3 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 25.xi-xi.2006, St. Jákl lgt.; 60 (♂♂) and 46 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 15.xii.-10.i.2007, St. Jákl lgt.; 5 (♂♂) and 2 females labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 150 m, 10.i.-5.ii.2007, St. Jákl lgt.; 15 (♂♂) and 34 (♀♀) labelled: Indonesia, Tanimbar
Figs 1-15. 1-5. *Agestrata punctatostriata tanimbarica* ssp. n.: 1- habitus dorsal aspect; 2- habitus lateral aspect; 3- habitus ventral aspect; 4- aedeagus; 5- aedeagus lateral aspect. 6-10. *Microdilochrosis boumai* gen. n., sp. n.: 6- habitus dorsal aspect; 7- habitus lateral aspect; 8- habitus ventral aspect; 9- aedeagus; 10- aedeagus lateral aspect. 11-15. *Poecilopharis detanii* sp. n.: 11- habitus dorsal aspect; 12- habitus lateral aspect; 13- habitus ventral aspect; 14- aedeagus; 15- aedeagus lateral aspect.
isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 10.i.-5.ii.2007, St. Jákl lgt.; *Glycyphana (Glycyphaniola) varicorensis dammeriensis* Mikšić, 1968: 15 (♂♂) and 12 (♀♀) labelled: Indonesia, TANIMBAR ISL., S. Yamdena isl., MAM S VILL., 21 km NE of SAUMLAKI, 150 m, 27.xi.-11.xii.2005, St. Jákl lgt.; 5 (♂♂) and 7 (♀♀) labelled: Indonesia, Tanimbar isl. isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 25.xi.-24.xii.2006, St. Jákl lgt.; 30 (♂♂) and 28 (♀♀) labelled: Indonesia, Tanimbar isl. isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 15.xii.2006-10.i.2007, St. Jákl lgt.; 3 (♂♂) and 7 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 10.i.-5.ii.2007, St. Jákl lgt.; *Protoetia (Netociomima) adspersa* Moser, 1907: 1 (♂) labelled: Indonesia, TANIMBAR ISL., S. Yamdena isl., MAM S VILL., 21 km NE of SAUMLAKI, 1°50 m, 27.xi.-11.xii.2005, St. Jákl lgt.; 108 (♂♂) and 23 (♀♀) labelled: Indonesia, Tanimbar isls., YAMDENA ISL., Lorulun vill. env., 23.xii.2006-10.i.2007, St. Jákl lgt.; *Clinteria dimorpha* Arrow, 1910: 12 (♂♂) and 4 (♀♀) labelled: Indonesia, TANIMBAR ISL., S. Yamdena isl., MAM S VILL., 21 km NE of SAUMLAKI, 150 m, 27.xi.-11.xii.2005, St. Jákl lgt.; 3 (♂♂) and 6 (♀♀) labelled: Indonesia, Tanimbar isl. isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 25.xi.-13.xii.2006, St. Jákl lgt.; 49 (♂♂) and 9 (♀♀) labelled: Indonesia, Tanimbar isl. isls., YAMDENA ISL., Lorulun vill. env., 20 km NE of Saumlaki, 150 m, 15.xii.2006-10.i.2007, St. Jákl lgt.; *Ixorida (Mecinonota) venerea yamdena* ssp. n.: see following description.

**LARAT ISLAND.** *Poecilopharis curtisi* Waterhouse, 1884: 10 (♂♂) and 5 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008, local collectors lgt.; *Dilochrosis bipustulata* Moser, 1902: 5 (♂♂) and 1 (♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., i.2008, local collectors lgt.; *Dilochrosis parvula* Moser, 1902: 2 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., ii.2008, local collectors lgt.; 58 (♂♂) and 2 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., i.2009, local collectors lgt.; *Glycyphana (Euglycyphana) maculiceps* Moser, 1914: 8 (♂♂) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008, local collectors lgt.; *Glycyphana (Glycyphaniola) varicorensis dammeriensis* Mikšić, 1968: 2 (♂♂) and 2 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008, local collectors lgt.; *Clinteria dimorpha* Arrow, 1910: 2 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008, local collectors lgt.; *Poecilopharis minuta* Moser, 1901: 45 (♂♂) and 62 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008, local collectors lgt.; *Protoetia (Pseudourbania) sp.:* 1 (♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., LARAT ISL., 0-50 m alt., xii.2008 local collectors lgt.

**TANDULA ISLAND.** *Poecilopharis curtisi* Waterhouse, 1884: 3 (♂♂) and 2 (♀♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., TANDULA ISL., ii.2008, local collectors lgt.; *Glycyphana (Euglycyphana) maculiceps* Moser, 1914: 1 (♂) and 1 (♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISL., TANDULA ISL., ii.2008, local collectors lgt.; *Glycyphana*
(Glycyphaniola) varicorensis dammeriensis Mikšic, 1968: 2 (♂♂) and 1 (♀) labelled: Indonesia, S. Moluccas, TANIMBAR ISLS., TANDULA ISL., ii.2008, local collectors lgt.

MOLU ISLAND. Dilochrosis bipustulata Moser, 1902: 20 (♂♂) and 12 (♀♀) labelled: Indonesia, S. Moluccas, Tanimbar Isls., MOLU IS., xii.2008, N of Larat isl., local collector lgt.; 45 (♂♂) and 35 (♀♀) labelled: Indonesia, S. Moluccas, Tanimbar Isls., MOLU IS., N of Larat isl., xii.2008, local collectors lgt.; Poecilopharis detanii sp. n.: see following description; Protaetia (Pseudourbania) porloyi sp. n.: see following description; Protaetia (Netociomima) adpersa moluana ssp. n.: see following description; Glycyphana (Euglycyphana) maculiceps moluana ssp. n.: see following description; Clinteria dimorpha Arrow, 1910: 1 (♂) labelled: Indonesia, S. Moluccas, Tanimbar Isls., MOLU IS., N of Larat isl., xii.2008, local collectors lgt.

SELRU ISLAND. Dilochrosis parvula Moser, 1902: 6 (♂♂) and 6 (♀♀) labelled: Indonesia, S. Moluccas, Tanimbar Isls., SELARU ISL., S of Yamdena isl., xii.2008, local collectors lgt

Remarks. Protaetia (Pseudourbania) sp. from Larat island probably also belongs to a still not described taxon, but due to single female available, it seems better to wait possible additional material in future. The insect is close to P. (Pseudourbania) lorkovici Mikšic, 1965 and might also be another subspecies of it.

DESCRIPTIONS

Agestrata punctatostriata tanimbarica ssp. n.
(Figs 1-5)


Description. Holotype length 42.3 mm, maximum humeral width 22.1 mm. Green to bronze green with metallic reflection, body slender, parallel-sided.

Head. Frons grassy green with metallic reflection. Very finely, densely punctate, intermixed with larger and deeper, circularly shaped punctures. Frons separated from clypeus by an irregular, horizontal impression. Other, shallower impression is present at the mid part of lateral margins of the frons, not clearly confluent with horizontal impression. Clypeus green, widest at the base and narrowing to the apex. Punctuation of clypeus deeper, near apex almost granulated. Lateral margins elevated, apically sharply bilobed. Incision rather deep. Antennae dark brown, stalk with long reddish hairs, club with black, dense setation at the inner side. Club longer than stalk.

Pronotum. Bronze green with metallic reflection, completely, densely microsculptured, except lateral margins - here posteriorly and medially with wrinkles. Basal lobe with
indistinct line from the mid part to the apex. Laterally bordered, border is higher at the basal part. Apical margin, basal margin and basal lobe with purple reflection.

Scutellum. Small, entirely covered by the pronotum. Colour lighter green than pronotum. Finely microsculptured, mid part with deep circularly shaped impressions creating irregular, longitudinal mid furrow.

Elytra. Bronze green with metallic reflection, almost parallel-sided. Anterolateral margins blackish. Microsculptured throughout the length, except of the lateral margins, which are wrinkled in the apical half. Each elytron with 4 striolate lines. Humeral calli indistinct, apical calli small and obtuse. Sutural ridge elevated at the apical half, its termination not very sharp.

Pygidium. Base greenish, almost impunctate, reflected. The rest of surface redish-purpureous, uniformly and densely wrinkled. Termination with rather deep impression.

Abdomen. Metallic green with purpureous reflection. Medial furrow distinct, but very shallow. Lateral margins of each segment reddish, impunctate.

Metasternum. Same coloured as abdomen, finely and densely microsculptured. Mesometasternal process small, glabrous, reflected at the end rounded.


Genitalia. (Figs 4-5). Similar to Agestrata punctatostriata Lansberge (Flores population), but with small declivity at the outer parameres. In case of Agestrata punctatostriata outer parameres just wavelly shaped, not with declivity.

**Variation and sexual dimorphism.** Size of paratype No. 1 is 41.5 mm, for paratype No. 2 is 38.5 mm. Paratypes striolate lines less marked, other characteristics same. Female unknown.

**Differential diagnosis.** Due to uniformity of representatives of the genus, it is rather complicated to identify these insects as already mentioned by Allard, 1995 in his Schizorrhinini 2. External characteristics of species are uniform and between some species the shape of parameres is the only way for identification. Until now A. punctatostriata Lansberge, 1880 was recorded from Lombok, Sumbawa, Komodo, Flores and Sula archipelago. Populations from Sula islands (Taliabu, Sanana, Mangole) are in fact closer to A. orichalca Linnaeus, 1769 and should be revised in future. Various populations of A. punctatostriata Lansberge can be found on Lesser Sunda Islands, on Lombok in the west up to Tanimbar isl. in the east. Some groups of insects also follow this distribution model, creating species or subspecies on this chain of islands. Due to fact, that there are not yet records from Alor, Wetar and southwest Moluccas Islands (Moa, Dammer, Babar), author prefers to classify specimens from the Tanimbars as a new subspecies, but differences in parameres are rather significant and insects could be put to species level too.

Agestrata punctatostriata tanimbarica ssp. n. differs from the nominotypical subspecies in four main characteristics. 1) anterior margin of the clypeus just mildly emarginated (by the nominotypical subspecies almost straight, 2) striolate lines of elytra more distinct, 3) colour of the dorsum more dark, bronze, 4) outer paramere with mild declivity at the outer side (by the nominotypical subspecies that part just wavelly shaped.
Name derivation. Named after the name of the island.

Distribution. Indonesia, SE Moluccas, Tanimbar Islands, Yamdena Island.

Microdilochrosis gen. n.
(Figs 6-10)

Type species. Microdilochrosis boumai sp. n. by monotypy.


Differential diagnosis. Comparing with the big size of Dilochrosis J. Thomson, 1878 species it differs by the several characteristics. 1) using magnification 10 only the head is punctated, pronotum and elytra impunctate. Punctuation of Dilochrosis species is easily visible with 10 times magnification. 2) termination of elytral sutural ridge almost obtuse. By Dilochrosis species sutural ridge termination sharp, with dents. 3) Pronotum twice emarginated. (Pronotum of Dilochrosis sp. rounded at the first basal half and narrowing to the apex at the apical half). 4) Incision of the clypeus more widely opened. (Clypeal incision of Dilochrosis sp. very sharp). 5) Metatibia with long and dense black hairs at the inner side. (Dilochrosis only with short setae at the inner side of metatibia). 6) differently shaped parameres, basal part two times wider than apical part. (Parameres of Dilochrosis sp. gradually narrowing to their apices and never two times wider at its basal part than apical part.

Etymology. The name originates from the combination of words very small and Dilochrosis.

Microdilochrosis boumai sp. n.
(Figs 6-10)

Type material. Holotype (♂) labelled: Indonesia, TANIMBAR ISL., S. Yamdena isl., MAM S VILL., 21 km NE of SAUMLAKI, 150 m, 27.xi.-11.xii.2005, St. Jákl lgt. Paratypes
Nos. 1-58 (♂♂) labelled: same as holotype. Paratypes Nos. 59-104 (♀♀) labelled: same as holotype. Paratypes Nos. 105-125 (♂♂) labelled: Indonesia, Tanimbar isls., Yamdena isl., 150 m alt., LORULUN VILL. env., 18.xii.-10.i.07, cca 20 km NE of Saumlaki, St. Jákl lgt. Paratypes Nos. 126-140 (♀♀) labelled: same as paratypes Nos. 105-125.

**Description.** Holotype length 15.5 mm, maximum humeral width 8.8 mm. Black, oval shaped, glabrous and strongly reflected.

Head. Frons black, shining, strongly reflected. Punctuation fine, rather dense. Clypeus with incision, which is deep and widely opened. Anterior lobes of clypeus rounded. Punctuation similar to frons punctuation, fine and dense. Antennae short, pedical black and longer than dark brown club.

Pronotum. Black, glabrous, strongly reflected. Punctuation much finer and thinner than at the head (hardly visible with magnification 20). Lateral margins with two emarginations, one deeper in front of posterolateral margins, second more shallower in front of anterolateral margins. Lateral borders developed at the anterior half and reach posterior emargination, but do not reach posterolateral margin.

Scutellum. Black, strongly reflected, triangular. Few small punctures present near the base, the rest impunctate. Apex with the shallow longitudinal impression.

Elytra. Black and shining, oval shaped. Each elytron with one vague striolate line beside the sutural ridge. Apex and apicolateral margins finely wrinkled, the rest of surface impunctate. Sutural ridge mildly elevated approximately at the 4 / 5 of the elytron length. Termination of elytron rounded, sutural ridge not protruding. Humeral calli indistinct, apical calli very flat and obtuse.

Pygidium. Black, less reflected, uniformly and densely wrinkled.

Abdomen. Black, reflected. Each segment with the medial, horizontal punctate line bearing brownish setae. Medial, longitudinal furrow deep and wide.


Legs. Tibia and tarsi black, medially long. Protibia tridentate. Apical dent sharp and long, second dent small, but sharp, posterior dent very small and obtuse. Mesotibia normally developed with black setae at the inner side. Metatibia mildly curved to inner side - here with brushes of long, black setae (approximately 3 times longer than at mesotibia).

Genitalia. *Dilochrosis* type, but with very wide basal part of parameres.

**Variation.** Size 12.8-16.0 mm. In all other aspects very uniform.

**Sexual dimorphism.** Size of females 13.5-16.8 mm. Generally wider and more robust. Protibia shorter and wider. All three dents big and sharp. Tarsi shorter. Abdominal furrow completely missing. In all other aspects including antennae, punctuation, setation same as males.

**Name derivation.** Patronymic, in honour of my friend, lepidopterologist Marcel Bouma (Rakovník, Czech Republic), who participated in both expeditions to Tanimbars and was the first of us, who collected first specimen of newly described species.
**Distribution.** Indonesia, SE Moluccas, Tanimbar Islands, Yamdena Island.

*IXORIDA (Mecinonota) venerea yamdena ssp. n.*

**Type material.** Holotype (♂) labelled: Indonesia, Tanimbar Isls., YAMDENA ISL., Lorulun vill. env, 21 N of Saumlaki, 150 m, 15.xii.-10.i.07, St. Jákl lgt. Paratypes Nos. 1-22 (♂♂) labelled: same as holotype. Paratypes Nos. 23-27 (♀♀) labelled: same as holotype.

**Description.** Holotype length 11.1 mm, maximum humeral width 6.5 mm. Black with reddish margins, pattern of tomentum yellow.

Head. Frons laterally black, mid part (between tomentum stripes) reddish. Black, lateral margins with deep irregularly shaped punctures, mid reddish area glabrous. Black lateral margins separated from the reddish area by two yellow tomentum stripes, bearing punctures with setae. Clypeus roundly bilobed, coloration reddish, laterally with tomentum stripes. Punctuation shallower than lateral margins of the frons, each punctate bears yellowish seta. Antennae same with yellowish hairs, coloration of pedical reddish, club darker reddish.

Pronotum. Black with reddish margins. Coloration of tomentum stripes dark yellow. Uniformly punctate, except of the basal margin. Each puncture with blackish or yellowish seta, when the punctate is placed in area of tomentum stripe. Lateral margins bordered, not reaching posterolateral margin.

Scutellum. Black, impunctate. Most of the surface covered by golden-yellow tomentum leaving untouched only lateral margins.

Elytra. Black with yellow ornamentation. Epipleurae and the space between suture and elytral ridge brownish. Sutural ridge elevated approximately at the 2/3 of the elytra length. Humeral calli rather sharp, their coloration brownish to reddish. Apical calli indistinct, flat. Each elytron with 7 striolate lines running between suture and elytral ridge. Lateral parts, between elytral ridge and lateral margins with dense horizontal striolation. The colour of the abundant setosity depends on basic colour of elytral surface, yellow at the tomentum parts, black at the untomented parts.

Pygidium. Brownish, completely granulate with the circularly shaped golden-yellow tomentum placed at the basal mid part.

Ventrum. Abdomen black, reflected, strongly and densely punctate. Punctures bear yellow hairs. 1-4 segments decorated with horizontally running, golden-yellow tomentum. Medial furrow not developed.


**Variation.** Size 10.5-12.2 mm. Reddish elytral area of some specimens enlarged up to the elytral ridge. Tomentation, punctuation, striolation more or less same.
Sexual dimorphism. Size of females 10.5-12.1 mm. Females shorter and more robust, protibia shorter and wider.


Name derivation. Named after Yamdena Island, largest island of Tanimbars.

Distribution. Indonesia, SE Moluccas, Tanimbar Islands, Yamdena island.

Poecilopharis detanii sp. n.
(Figs 11-15)


Description. Holotype length 19.5 mm, maximum humeral width 11.0 mm. Dark plum, oval shaped, reflected.


Pronotum. Dark purple, reflected, ovally narrowing to the apex. Punctuation fine and thin near the base and discal area, diameters of punctures larger laterally, beside lateral margins striolated, mainly at the apical half. Laterally bordered, border not reaching posterolateral margins.

Scutellum. Big and sharp, purple, shining. Punctuation fine mainly at the basal half, lateral margins of the basal half striolated.

Elytra. Ovally shaped, coloration dark plum, than and less reflected than pronotum. Semicircularly shaped punctures creating 8-9 irregular longitudinally running lines at each elytron. Apex and posterior half of lateral margins densely wrinkled. Sutural ridge flat with the short and low laying elevation in front of the elytral apex. Termination of the sutural ridge not protruding, rounded. Humeral calli indistinct, apical calli very flat, but visible.

Pygidium. Purple, reflected, uniformly wrinkled.

Prosternum and mentum black with reddish hairs.

Legs. Femurs, tibia and tarsi black. Protibia tridentate. 1. and 2. dents of protibia close each other, the distance between 3. and 2. dents twice as long as between 1. and 2. dents. Meso- and metatibia with the reddish setation at the inner side.

Genitalia. (Figs 14-15). Similar to Poecilopharis curtisi Waterhouse but the tip of the parameres widening gradually to the apex.

Variation. Part of male specimens the colour is darker, almost black, but purplish lustre always visible. Several specimens just with 4-6 striolate lines. Size 19.0-23.0 mm.

Sexual dimorphism. Size 19.5-21.5 mm. Abdomen more arched. In all other aspects same as males.

Differential diagnosis. The single allied species, inhabiting Larat, Tandula and Yamdena Islands is Poecilopharis curtisi Waterhouse, 1884. Newly described insect differs in following aspects. 1) Presence of elytral striolate lines. (P. curtisi Waterhouse is without any elytral punctation, only with lateral striolation.) 2) Punctuation of the head and pronotum more developed, with larger diameters of punctures. 3) Dark purple coloration, the lustre not very strong. 4) Larger in size, 19.0-23.0 mm. (Poecilopharis curtisi Waterhouse 17.0-21.5 mm). 5) The tip of parameres widening gradually to the apex. (In case of Poecilopharis curtisi Waterhouse the tip of parameres widening not gradually, but just in front of the apex of parameres.).

Etymology. Patronymic, in honour of my friend Hiromi Detani (Bali, Indonesia), well known Japanese lepideptorologist, who supplied me with newly described species.

Distribution. Indonesia, SE Moluccas, Tanimbar Islands, Molu Island.

Protaetia (Pseudourbania) porloyi sp. n.
(Figs 16-20)

Type material. Holotype (♂) labelled: Indonesia, S. Moluccas, Tanimbar Isls., MOLU IS., xii.2008, N of Larat isl., local collectors lgt. Paratypes Nos. 1-6, Nos. 32-35 (♂♂) labelled: same as holotype. Paratypes Nos. 7-31, Nos. 36-51 (♀♀) labelled: same as holotype.

Description. Holotype length 16.8 mm, maximum humeral width 10.1 mm. Oval shaped, dark bronze coloured, entirely covered with chestnut brown to brown-purple tomentum. Abundant whitish tomentation consists of hundreds of tiny, irregularly shaped maculae.

Head. Parallelly developed with nicely visible lateral declivity at the apical half. Dark bronze, purpureously reflected. Punctuation strongly developed, at the basal half punctures bigger and denser. Discal part just with few punctures. Mid line obtusely elevated. Apex of the clypeus straight, border throughout the length. Antennae dark brown with yellowish setae.

Pronotum. Semicircular, with two mild emarginations, first at the mid length, second in
front of the apex. Coloration of the basal part, mid line, apex and lateral margins dark bronze, the rest dark purpureous. Laterally bordered almost throughout the length. Punctuation deep and dense, diameters of punctures semicircularly or circularly shaped, laterally with dense striolation. Mid line and basal part impunctate. Decorated with numerous whitish, small, irregularly shaped maculae, except of mid line and base.


Elytra. Dark bronze between suture and elytral ridge, brownish at the apex and at sides. Decorated with abundant, whitish, tomentum spots throughout the length, except of prescutellar part. Punctuation thin and simple. Diameters of punctures small, simple at the inner side, semicircularly shaped at lateral parts. Posterior part, including humeral calli wrinkled. Apical calli not present, humeral calli flat and obtuse. Sutural ridge glabrous, purpureously coloured, in front of apex moderately elevated and sharply terminated.


Abdomen. Dark plum, strongly reflected. Lateral parts of each segment with white tomentum and setae. Punctuation thin and fine, areas with tomentum wrinkled. Medial impression not developed.

Metasternum. Same colour as abdomen, tomentum laterally more abundant, setation longer. Laterally striolated. Mesometasternal process rather big, semicircularly shaped, glabrous, purpureously reflected.

Legs. Femurs, tarsi purpureous to plum with the reflection. Tarsi black with violet lustre. Protibia bidentate. Meso- and metatarsi with abundant, yellowish setation.

Genitalia. With typical fork at the end, differently shaped compared to other representatives of the group (Figs 19-20).

Variation. Size 14.8-16.9 mm. In all other aspects including maculation of ventrum and dorsum, punctuation, setation very similar.

Sexual dimorphism. It is rather difficult to distinguish males and females. In all aspects same, except of protibia, which are 3- dentate in females and 2- dentate in males (posterior dent of males completely missing or very indistinct). Size of females 15.1-17.0 mm.

Differential diagnosis. In terms of distribution, the closest species are P. (Pseudourbania) carinicollis Moser, 1907 from Moa Island and P. (Pseudourbania) cupreola Kraatz, 1899 from Dammer Island. But both species have differently shaped parameres and different composition of ventrum and dorsum tomentation. Morphologically closest allied species is P. (Pseudourbania) guttulata Burmeister, 1842 inhabiting Timor, Moa and Kissar Islands. P. (Pseudourbania) porloyi sp. n. differs in following aspects: 1) Tomentation of the dorsum, especially pronotum and pygidium not as abundant as in P. (Pseudourbania) guttulata Burmeister. 2) Punctuation of the head, pronotum and elytra thinner and shallower. 3) striolate line at the apical half of elytra not developed. P. (Pseudourbania) guttulata Burmeister usually with 4- 5 striolate lines. 4) Apical elevation of the clypeus not very sharp and high,
apical margin straight. By *P. (Pseudourbania) guttulata* Burmeister the elevation of the apical margin of the clypeus sharp and higher, its margin emarginate at the midle. 5) Posterior dent of male protibia very small or missing. Posterior dent of protibia of *P. (Pseudourbania) guttulata* Burmeister small, but usually always present. 6) Parameres much more slender, the fork longer, inner dent of the fork missing.

**Etymology.** Named after my good friend Alexander Porloy (Moa, Indonesia), who organised two expeditions to Molu island.

**Distribution.** Indonesia, SE Moluccas, Tanimbar Islands, Molu Island.

*Protaetia (Netociomima) adspersa moluana* ssp. n.  
(Figs 21-25)

**Type material.** Holotype (♂) labelled: Indonesia, S. Moluccas, Tanimbar Isls., MOLU IS., xii.2008, N of Larat isl., local collectors lgt. Paratypes Nos. 1-8, Nos. 32-36 (♂♂) labelled: same as holotype. Paratypes Nos. 9-31 (♀♀) labelled: same as holotype.

**Description.** Holotype length 14.5 mm, maximum humeral length 9.1 mm. Medium sized, rather wide. Basic tomentum dark olive to dark brown with abundant ochre tomentation.  
Head. Dark olive, widening to apex. Punctuation dense and deep, almost rugose. Frons with copper, clypeus with green lustre. Lateral declivity at the clypeus clearly visible. Apical margin of clypeus elevated. Antennae short, dark brown, stalk with setation.  
Pronotum. Dark olive coloured, sharply narrowing to the apex, laterally with mild emargination. Densely, circularly punctated. Punctures simple but big and deep, each puncture decorated with ochre tomentum. The concentration of punctures denser near lateral margins, but present throughout the length. Lateral margins obtusely bordered.  
Scutellum. Lighter than pronotum, olive, sharply triangular, impunctate.  
Elytra. Wide and short, of same colour as pronotum. Entirely covered with the ochre tomentum, especially at lateral sides and apex. Punctuation dense, most of punctures with semicircled diameters, creating longitudinal lines throughout the elytra length. Some punctures covered by ochre tomentum. Sutural ridge flat at the anterior part, at the apical half elevated and carinate, protruding beyond elytral apex, the termination sharp. Epipleurae black, flat, at the apex covered with ochre tomentum. Humeral calli not present, elytral ridge obtuse, apical calli flat.  
Pygidium. Uniformly wrinkled and completely covered by ochre tomentum.  
Ventrum. Olive green with metallic lustre. Each segment of the abdomen covered with ochre tomentum throughout the length of anterior and lateral margins. Abdomen rugosely punctate, except of the mid part, here punctuation thinner and consisting of simple punctures. Anterior margins of each segment with yellow setation.  
Abdominal impression not developed. The coloration of the metasternum same, tomentation of lateral sides more abundant. Mesometasternal process small, anteriorly with typical horizontal furrow and yellow hairs. Prosternum and mentum black with abundant...
ochre tomentation and long brownish hairs.

Legs. Femurs dark olive, tibia purpureous with metallic lustre, tarsi black with lustre. Femurs and tarsi with whitish setae, especially abundant at the inner side of tibia. Protibia bidentate, both dents small and obtuse. Meso- and metatibia with one transversal carina.

Genitalia. (Figs 24-25). Similar to nominotypical subspecies.

Variation. Size 14.0-15.5 mm. The composition of hundreds of small maculae is more or less different by each specimen.

Sexual dimorphism. Size 12.3-15.8 mm. Generally females wider and more robust. Protibia and antennae shorter. Basic tomentum of some females darker, dark brown to almost black. In all other aspects similar to males.

Differential diagnosis. *P. (Netociomima) adspersa moluana* sp. n. differs from nominotypical subspecies by the general shape of body, which is wider and shorter, by more dark basic tomentum, which is dark olive to dark brown and some specimens almost black, by deeply semicircularly punctate elytra (elytral punctation of nominotypical subspecies thin and simple or completely missing), by rugosely punctate pronotum (nominotypical subspecies only simply, indistinctly punctate), by the less protruding and at the end rounded sutural ridge of elytra and also by minor differences in parameres, especially from profile view.

Name derivation. Named by the name of the Molu Island, isolated island, lying north of main Tanimbar archipelago.

Distribution. Indonesia, SE Moluccas, Tanimbar Islands, Molu Island.

*Glycyphana (Euglycyphana) maculiceps moluana* ssp. n.

(Figs 26-30)


Description. Holotype length 15.0 mm, maximum humeral width 8.8 mm. Black, shining, entirely covered with black tomentum. White tomentation almost missing.

Head. Black, shining, widest at the half of clypeal length. Punctuation of the frons dense and rugose, punctuation of the clypeus finer, but denser. Apex of the clypeus obtusely incised. Antennae black, short, the setation yellowish.

Pronotum. Black, shining, covered with blackish tomentum. At the basal half gently emarginate, sharply narrowing from the mid to the apex. Prescutellar emargination shallow. Moderately punctate, the concentration of punctures higher at the sides and apical margin. Basal margin almost impunctate. Laterally bordered at the apical half. Setation present throughout the lateral length. Posterolateral margins purplish coloured.
Scutellum. Black, sharply triangular, microsculptured, the apex bears grey tomentum.

Elytra. Almost parallelly developed, entirely covered with dark grey tomentum. Each elytron decorated with two tinny yellowish tomentum maculae, placed approximately at the 3/5 of the elytra length, between elytral ridge and lateral margin. Basal half with 3 striolate lines and 2 ribs running almost to the level of apical calli. Punctuation simple, rather deep, creating chains running longitudinally, mainly at the lateral sides. Between sutural ridge and lateral margins covered with blackish tomentum, apex of elytra with dark grey tomentum. Sutural ridge elevated approximately at the 2/5 of the length, protruding behind the apex. Humeral calli with impression, apical calli present, but very obtuse.

Pygidium. Black, uniformly, circularly wrinkled. Basic tomentum and maculation not developed. Covered with short yellowish setae, setation of the apex longer.


Genitalia. (Figs 29-30). Similar to nominotypical subspecies.

Variation. Size 13.6-15.1 mm. Several specimens with black-violet pronotum and scutellum. Beige tomentation also very variable. Several specimens with developed tomentation of pronotum, elytra, pygidium and also ventral tomentation, the composition varies from specimen to specimen.

Sexual dimorphism. Female unknown.

Differential diagnosis. *Glycyphana (Euglycyphana) maculiceps moluana* ssp. n. differs from nominotypical subspecies by the larger size, deeper punctuation of dorsum, shining appearance, just entirely tomented dorsum and more rounded apex of parameres of males.

Name derivation. Named after Molu Island, type locality of the subspecies.

Distribution. Indonesia, SE Moluccas, Tanimbar Islands, Molu Island.

*Dilochrosis bipustulata* Moser, 1902 bona sp.

Two species of *Dilochrosis* J. Thomson has been collected on Tanimbars. The smallest species of the genus *Dilochrosis parvula* Moser, 1902, described from Larat Island was collected again and confirmed for the island, later also collected in Selaru Island, but never in main Yamdena Island. Another big sized *Dilochrosis* J. Thomson collected in Yamdena and Molu Islands described as *Dilochrosis bipustulata* Moser, 1902 and later synonymized.
with Solomon Islands species *Dilochrosis ebenina* Butler, 1865. After the examination of the species and comparing it with *Dilochrosis ebenina* Butler author found several significant characteristics distinguishing these allied species.

1) shape of the head- semiovally shaped by *D. bipustulata* Moser, parallelly shaped by *D. ebenina* Butler
2) male protibia - posterior dent of protibia sharp by *D. bipustulata* Moser, posterior dent of protibia obtuse by *D. ebenina* Butler
3) shape of parameres - elongate in *D. bipustulata* Moser, not elongate in *D. ebenina* Butler
4) shape of elytra - narrowing to apex, elongate in *D. bipustulata* Moser, broad and parallelly shaped in *D. ebenina* Butler

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