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## **Editor's Note**

Another yearly volume of *Treubia* is published. I have only recently become involved in the publication of this journal and I can say that the research in this issue is increasingly interesting. I hope to remain actively involved in the publication of this journal and that we can continue to reach a larger audience as time goes on.

This volume of *TREUBIA* contains 5 papers of vertebrates and invertebrates. The contents of these papers vary widely from vocalizations of frogs to tropical forest spider communities. I can only hope in the future that we continue to receive interesting submissions from all areas of zoology of the Indo-Australian Archipelago.

Also this year two esteemed colleagues from LIPI retired from the service of science, Dr. Mas Noerdjito who studied the ecology of birds and Dr. Agustinus Suyanto who dedicated his life to the study of mammals.

Finally I would like to thank all of the co-editors, referees, computing assistants, secretaries and administrative assistants for their collaborative work without which this journal could not be published. I also acknowledge financial support from the Director of Research Center for Biology, LIPI to publish this essential journal.

Cibinong, December 2011

Chief Editor

## CHECKLIST OF VESPID SPECIES (INSECTA: HYMENOPTERA: VESPIDAE) OCCURRING IN INDONESIAN ARCHIPELAGO

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### ABSTRACT

A total of 383 vespid species belonging to 63 genera from Indonesia are listed, together with information of the type material deposited in the Museum Zoologicum Bogoriense (MZB). The references of their distribution in Indonesia are also provided.

**Keywords:** Hymenoptera, Vespidae, Eumeninae, Stenogastrinae, Polistinae, Vespinae, checklist, Indonesian Archipelago

### INTRODUCTION

The hymenopteran family Vespidae, with more than 5,000 species worldwide, is divided into six monophyletic subfamilies (Carpenter, 1981, 2003; Pickett and Carpenter, 2010). The phylogenetic relationships among the subfamilies are Euparagiinae + (Masarinae + (Eumeninae + (Stenogastrinae + (Polistinae + Vespinae))). The wasps in the clade Stenogastrinae–Vespinae are social, while those in the three basal subfamilies are solitary (Carpenter, 1981). Except for the masarines, the vespid wasps are predaceous on terrestrial insects, and they are more or less at higher positions in a food-web of terrestrial arthropods. The masarines are anthophilic and have been shown to be pollinators. The vespid wasps in the other subfamilies, though they are predaceous, also visit various flowers for nectar as their own energy source and thus are, at least potentially, pollinators of many plants (Kojima, 1993; Carpenter and Wenzel, 1999). These considerations suggest that the vespid wasps play important roles in an ecosystem, and thus they can be good bio-indicators for environmental conditions and/or habitat

perturbation. Also, because of their predaceous habits, the vespid wasps have the potentiality to be effective biological control agents.

In Southeast Asia and the Papuan region, where several biodiversity hotspots are recognized, four of the six vespid subfamilies occur. Eumeninae are cosmopolitan and include more than 3,500 described species (Pickett and Carpenter, 2010: table 1), however, the tropical faunas are very poorly known. Stenogastrinae, with 58 currently valid species in seven genera, are distributed from India in the west to New Guinea in the east. Polistinae are cosmopolitan, with slightly less than 1,000 species in 25 genera; the subfamily is divided into the following four tribes: cosmopolitan Polistini (= *Polistes*; 218 species), New World endemic Mischocyttarini (= *Mischocyttarus*; 246 species) and Epiponini (234 species in 19 genera), and Old World endemic Ropalidiini (269 species in four genera). The subfamily Vespinae, with 67 species in four genera, is more northern in distribution than its sister-group, the Polistinae; *Dolichovespula* (18 species) and *Vespula* (24 species) are predominantly holarctic, *Vespa* (22 species) is Palearctic and Oriental, and *Provespa* (3 species) occurs only in Southeast Asia.

Indonesia is an archipelago country consisting of about 17,500 islands spreading eastward from Sumatra to New Guinea, and also known as a country of megabiodiversity. As the basis for intensive study on the species-level biodiversity of the Vespidae in Indonesia, the present checklist provides basic taxonomic information and distribution records for the vespid wasps so far recorded from Indonesia. Simply because all the borders with Malaysia on Borneo Island, with East Timor on Timor Island and with Papua New Guinea on New Guinea Island may have no biological meaning, the species so far recorded only from Sarawak and Sabah of Malaysia, Brunnei, East Timor or Papua New Guinea are also included in the list.

In each subfamily, the genera are listed alphabetically and species are numbered, with a sub-number for each subspecies, if any. Species and subspecies names are listed alphabetically in each genus insofar they are considered as valid in the most recent citation. Each species-group taxon name so far considered is accompanied by the original citation, followed by primary synonym(ies). Sex(es) if mentioned and locality(ies) in the original citation are given together with the depository(ies) of name-bearing type specimen(s) in parentheses. Distributional data are summarized under "Distribution:" by country, with references only for records from Indonesia. "Papua" refers to the Indonesian part of New Guinea, formerly known as Irian Jaya. Notes on the type material deposited in the Museum Zoologicum Bogoriense (MZB) are also provided.

The accronyms of the museums/institutions in which the type material is deposited and was checked during this study are as follows

- ANIC : Australian National Insect Collection, CSIRO, Canberra.  
BMNH : The Natural History Museum, London.  
BPBM : Bernice P. Bishop Museum, Honolulu.  
ETHZ : Entomologisches Institut, Technische Hochschule, Zürich.  
HNHM: Hungarian Natural History Museum, Budapest.  
IRSNB: Institut Royal des Sciences Naturelles de Belgique, Brussels.  
IUNH : Natural History Collection at Ibaraki University, Mito.  
LACM: Natural History Museum of Los Angeles County, Los Angeles, California.  
MAP : Musée d'Anthropologie préhistorique, Monte Carlo, Monaco.  
MCVR: Museo Civico di Storia Naturale, Verona.  
MCZ : Museum of Comparative Zoology, Harvard University, Cambridge, U.S.A.  
MHN : Museum d'Histoire Naturelle, Genève.  
MNCN: Museo Nacional de Ciencias Naturales, Madrid.  
MNHN: Museum National d'Histoire Naturelle, Paris.  
MRSN : Museo Regionale di Scienze Naturali, Torino.  
MSNG: Museo Civico di Storia Naturale di Genova Giacomo Doria, Genova.  
MSNUF: Museo di Storia Naturale dell'Università, Florence.  
MTKD: Staatliche Naturhistorische Sammlungen Dresden, Museum für Tierkunde, Dresden.  
MVEN: Museo Civico di Storia Naturale, Venice.  
MZB : Museum Zoologicum Bogoriense, Cibinong, Bogor.  
NHMB: Naturhistorisches Museum, Basel.  
NHMW: Naturhistorisches Museum, Zoologische Abtheilung, Wien.  
NHRM : Naturhistoriska Riksmuseet, Stockholm.  
NMSF : Natur-Museum Senckenberg, Frankfurt.  
OLM : Oberösterreichischen Landesmuseum, Linz.  
OUM : Oxford University Museum, Oxford.  
RMNH : Nationaal Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke Historie), Leiden.  
SAM : South Australian Museum, Adelaide.  
SMNS : Staatliches Museum für Naturkunde, Stuttgart.  
UMHU: University Museum, Hokkaido University, Sapporo.  
UMZ : University Museum of Zoology, Cambridge, UK.  
UPLB : University of the Philippines at Los Baños, Los Baños.  
USNM: National Museum of Natural History, Washington, D.C.  
ZMA : Zoölogisch Museum, Amsterdam.

- ZMB : Zoologisches Museum der Humboldt Universität, Berlin.  
ZMM : M. V. Lomonosov Moscow State University, Zoological  
Museum, Moscow.  
ZMUC: Universitets København, Zoologisk Museum, København.  
ZMUU: Zoological Museum, Uppsala University, Uppsala.  
ZSI : Zoological Survey of India, Calcutta.  
ZSM : Zoologische Staatssammlung München, München.

**List of Genera and Species**  
Subfamily **Eumeninae**  
Genus ***Abispa*** Mitchell, 1838  
Subgenus *Abispa* Mitchell, 1838

- (1) *laticincta melanopleura* van der Vecht, 1960  
*Abispa laticincta melanopleura* van der Vecht, 1960, Nova Guinea, Zool.  
6: 98, ♂♀ (in subgenus *Abispa*), “New Guinea: Papua, ... Fly River,  
Kiunga” (holotype ♀, BPBM).  
Distribution: Papua New Guinea.
- (2-1) *splendida maculicollis* (Cameron, 1911)  
*Abispa maculicollis* Cameron, 1911, Nova Guinea 9 (2), Zool.: 190, ♀,  
“Bivak Island” (lectotype ZMA).  
*Abispa splendida maculicollis*; van der Vecht, 1960, Nova Guinea, Zool.  
6: 96 (key), 99, fig. 1d (in subgenus *Abispa*; designation of lecto-  
type; distribution in New Guinea).  
Distribution: Papua New Guinea; **Indonesia: Papua** (Cameron, 1911;  
Giordani Soika, 1941; van der Vecht, 1960).
- (2-2) *splendida odyneroides* (Perkins, 1912)  
*Abispa odyneroides* Perkins, 1912, Ann. Mag. Nat. Hist. (8)9: 120, ♂,  
“New Guinea” (type BMNH, no. 18.240).  
*Abispa splendida odyneroides*; van der Vecht, 1960, Nova Guinea, Zool.  
6: 96 (key), 100 (in subgenus *Abispa*).  
Distribution: **Indonesia: Papua** (suspected from “Vogelkop” ?Sorong)  
(Perkins, 1912; van der Vecht, 1960).

Subgenus *Parabispa* van der Vecht, 1960

- (3-1) *eximia eximia* (Smith, 1865)  
*Pterochilus eximius* Smith, 1865, J. Proc. Linn. Soc. Zool. 8: 89, pl. 4  
fig. 4, “♂”[♀!], “New Guinea” (OUM).

*Abispa eximia eximia*; van der Vecht, 1960, Nova Guinea, Zool. 6: 100  
(in subgenus *Parabispa*; type is female not male).

Distribution: **Indonesia: Papua** (Smith, 1865; van der Vecht, 1960).

(3-2) *eximia tricineta* van der Vecht, 1960

*Abispa (Parabispa) eximia tricineta* van der Vecht, 1960, Nova Guinea  
6: 100 (key), 101, 3♀, “New Guinea: Torricelli Mts., Sugoitei Vill.,  
900 m” (holotype BPBM; paratype RMNH); also from Bomberi,  
Vogelkop.

Distribution: Papua New Guinea; **Indonesia: Papua** (Vogelkop) (van  
der Vecht, 1960).

(4) *ruficornis* van der Vecht, 1960

*Abispa (Parabispa) ruficornis* van der Vecht, 1960, Nova Guinea 6: 100  
(key), 101, ♀♀, “New Guinea: Hollandia” (holotype RMNH); para-  
types RMNH, AMNH, MZB, BMNH; also from Idenburg River,  
Ifar.

**MZB:** paratype (1♀, Hollandia=Jayapura, July 1938, Neth. Ind.-Amer.  
New Guinea Exp., coll. Toxopeus, preserved dry, MZB.Hymn.  
0182).

Distribution: **Indonesia: Papua** (van der Vecht, 1960).

#### Genus *Acarozumia* Bequaert, 1921

(5) *nigroflava* Borsato and Giordani Soika, 1995

*Acarozumia nigroflava* Borsato and Giordani Soika, 1995, Boll. Mus.  
Civ. Stor. Nat. Venezia 44: 85, figs. 1-2, holotype ♂, “Indonesia,  
Irian Jaya, Cyclops Mts., Jambatan dua Waena, 21 Km W  
Jayapura” (LACM); also from two other localities.

Distribution: **Indonesia: Papua** (Borsato and Giordani Soika, 1995).

#### Genus *Allorhynchium* van der Vecht, 1963

(6) *argentatum* (Fabricius, 1804)

*Vespa argentata* Fabricius, 1804, Syst. Piez.: 260, “Sumatra”, ♂ (type  
ZMUC).

Distribution: Pakistan; India; Thailand; Singapore; **Indonesia: Sumatra,  
Java, Bali, Borneo, Sulawesi** (Fabricius, 1804; Smith, 1859a; Cam-  
eron, P. 1905a; Dammerman, 1948; Gusenleitner, 1991, Giordani  
Soika, 1993a).



(7) *concolor* van der Vecht, 1963

*Allorhynchium concolor* van der Vecht, 1963, Zool. Verh., Leiden 60:  
61, fig. 3, a, b, fig. 5c, ♀♂, “West Java, Djasinga, Toge” (holotype  
♀, RMNH), also from other localities in Java.

Distribution: **Indonesia: Java** (van der Vecht, 1963).

(8) *iridipenne* (Smith, 1861)

*Rhynchium iridipenne* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5:  
128, ♀, “Amboyna” (OUM).

Distribution: Australia; **Indonesia: Moluccas, Sulawesi** (Smith, 1861b,  
1871; von Schulthess, 1932).

(9-1) *laminatum laminatum* (Gribodo, 1892)

*Rhynchium laminatum* Gribodo, 1892, Boll. Soc. Ent. Ital. vol. 23  
(1891): 288, ♂, “Minahasa (Celebes)” (MSNG).

Distribution: **Indonesia: Sulawesi** (Gribodo, 1892; van der Vecht,  
1963).

(9-2) *laminatum nigrescens* van der Vecht, 1963

*Allorhynchium laminatum nigrescens* van der Vecht, 1963, Zool. Verh.,  
Leiden 60: 59 (key), 71, ♀♂, “Rantepao, Malakadji, Todjambu,  
Samanga” holotype not indicated (RMNH).

Distribution: **Indonesia: Sulawesi** (van der Vecht, 1963; Giordani  
Soika, 1993a).

(10) *metallicum* (de Saussure, 1852)

*Ryngchium metallicum* de Saussure, 1852a, Ét. Fam. Vesp. 1: 114, pl. 14  
fig. 8, ♀♂, “Bengal” (lectotype ♀, MNHN); designation of lectoty-  
pe by Giordani Soika (1992).

*Rhynchium maldivense* Cameron, 1901a, in Gardiner, Fauna Geogr. Mal-  
dive Archip. 1: 57, ♀♂, “Hulule Male Atoll, Goidu, Goidufehendu  
Atoll, Maldives; Minikoi, Laccadives” (BMNH, no. 18.456 a -c).

Distribution: India; Sri Lanka; Maldives; Myanmar; **Indonesia:  
Moluccas** (Smith, 1864, 1865).

(11) *obscurum* (Smith, 1858)

*Rhynchium obscurum* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 110, ♀,  
“Borneo (Sarawak)” (OUM).

Distribution: Malaysia: Sarawak; **Indonesia: Kalimantan, Sumatra**  
(van der Vecht, 1937, 1963; Giordani Soika, 1991).

- (12-1) *snelleni imitator* van der Vecht, 1963  
*Allorhynchium snelleni imitator* van der Vecht, 1963, Zool. Verh.,  
Leiden 60: 59 (key), 69, fig. 3e, f, ♀♂, “Mt. Tjampea” (holotype ♀,  
RMNH), also from other localities in Java.  
Distribution: **Indonesia: Java** (van der Vecht, 1963), **Krakatau** (new  
record).
- (12-2) *snelleni javanum* (de Saussure, 1862)  
*Rhynchium (Prorhynchium) javanum* de Saussure, 1862, 1862, Stettin.  
Entomol. Ztg. 23: 186, ♀, “Java” (RMNH).  
Distribution: **Indonesia: Java** (de Saussure, 1862; van der Vecht, 1963).
- (12-3) *snelleni snelleni* (de Saussure, 1862)  
*Rhynchium snelleni* de Saussure, 1862, 1862, Stettin. Entomol. Ztg. 23:  
185, ♀ (in subgenus *Prorhynchium*), “Borneo” (RMNH).  
*Odynerus (Ancistrocerus) aurivillianus* von Schulthess, 1913a, Ark.  
Zool. Stockholm 8 (17): 4, figs. 3-5, ♀♂, “Philippinen, Mindanao,  
Insel Biliton, ö. Sumatra” (lectotype ♂ from Linggang, Billiton,  
NHRM).  
Distribution: **Indonesia: Sumatra** (Bangka, Biliton, Pulu (=Pulau)  
Sangijang, Sunda Straits), **Java** (including Karimunjawa, Bawean  
and Kangean Islands), **Kalimantan** (de Saussure, 1862; Cameron,  
1905b; von Schulthess, 1913a; van der Vecht, 1963).
- (13-1) *tigrinum atripenne* Giordani Soika, 1986  
*Allorhynchium concolor atripenne* Giordani Soika, 1986b, Boll. Mus.  
Civ. Stor. Nat. Venezia 35: 86, ♀♂, “Timor” (holotype ♂, MVEN);  
also from Java.  
Distribution: **Indonesia: Java, Bali, Timor** (Giordani Soika, 1986b,  
1991).
- (13-2) *tigrinum tigrinum* van der Vecht, 1963  
*Allorhynchium argentatum tigrinum* van der Vecht, 1963, Zool. Verh.,  
Leiden 60: 60, ♀♂, “Sumba, Lokojengo, 26 Sept. 1949, Dr. Bühler  
and Dr. Sutter, Swiss Sumb Expedition” (holotype ♀, NHMB).  
Distribution: **Indonesia: Sumba** (van der Vecht, 1963).
- (14) *vollenhoveni* (de Saussure, 1862)  
*Rhynchium (Prorhynchium) vollenhoveni* de Saussure, 1862, 1862,  
Stettin. Entomol. Ztg. 23: 184, ♀[♂], “Java” (holotype ♀, RMNH).  
[the male associated with this female by Saussure belongs to a

different species-*A. snelleni imitator*].

*Rhynchium (Pararhynchium) mamillatum* von Schulthess, 1931, Mitt. Schweiz. Ent. Ges. Vol. 15: 51, ♂, fig. 1, “Java, Batavia” [=Jakarta], (ETHZ: coll. von Schulthess).

Distribution: Thailand; **Indonesia: Java, Bali** (de Saussure, 1862; von Schulthess, 1931; van der Vecht, 1963).

Genus *Ancistrocerus* Wesmael, 1836

(15) *borneanus* Giordani Soika, 1996

*Ancistrocerus borneanus* Giordani Soika, 1996, Boll. Mus. Civ. Stor. Nat. Venezia 45: 43, ♀♂, “Borneo: Sabah, Mt. Kinabalu, 500 ft” (holotype ♀, MVEN); also from another locality.

*Ancistrocerus borneomontanus* Gusenleitner, 1997, Linz. Biol. Beitr. 29 (1): 95, ♀, “Borneo -Sabah, Mt. Kinabalu Park, Park headquarters, power station road, 1600-1800 m” (SMNS).

Distribution: Malaysia: Sabah.

(16) *handschini* (von Schulthess, 1935)

*Odynerus handschini* von Schulthess, 1935, Rev. Suisse Zool. 42: 300, ♂ (in subg. *Ancistrocerus*), “Flores: Kelimotoe, 1000 m” (lectotype MVEN).

Distribution: **Indonesia: Flores** (von Schulthess, 1935; Giordani Soika, 1996).

Genus *Antamenes* Giordani Soika, 1957

Subgenus *Antamenes* Giordani Soika, 1957

(17) *annulatus* Giordani Soika, 1994

*Antamenes annulatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 222 (key), 227, ♀, “Nuova Guinea: Papua, S. Highlands, Dimifa, SE mt Giluwe, 2200 m” (RMNH).

Distribution: Papua New Guinea.

(18-1) *tridens tridens* Giordani Soika, 1994

*Antamenes tridens* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 221 (key), 223, fig. 51, ♀, “Nuova Guinea: Papua, S. Highlands, N of Mendi, 1800 m” (RMNH).

Distribution: Papua New Guinea.

(18-2) *tridens trifasciatus* Giordani Soika, 1994

*Antamenes tridens trifasciatus* Giordani Soika, 1994a, Ann. Mus. Civ.

Stor. Nat. "G. Doria" 90: 221 (key), 224, ♀, "Nuova Guinea: Finschhafen" (MVEN).

Distribution: Papua New Guinea.

(19) *tridentatus* Giordani Soika, 1994

*Antamenes tridentatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 221 (key), 222, fig. 50, ♀♂, "Nuova Guinea" (holotype not indicated, RMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (Giordani Soika, 1994).

(20-1) *unicornis flaviculus* Giordani Soika, 1994

*Antamenes unicornis flaviculus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 222 (key), 226, ♀, "Nuova Guinea: Hight Highlands, Aiyura, 1900 m" (RMNH).

Distribution: Papua New Guinea.

(20-2) *unicornis unicornis* Giordani Soika, 1994

*Antamenes unicornis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 221 (key), 225, fig. 49, ♀, "Nuova Guinea: Purosa, 20-26 Km SE Okapa, 1800-2020 m" (RMNH); also from two other localities.

Distribution: Papua New Guinea.

### Genus *Antepipona* de Saussure, 1855

(21) *bipustulata* (de Saussure, 1855)

*Odynerus bipustulatus* de Saussure, 1855a, Ét. Fam. Vesp. 3: 277, ♀♂, pl. 12 fig. 10 (syn.: ? *Vespa biguttata* Fabr.), no locality (MNHN).

Distribution: China; India; Sri Lanka; Myanmar; Thailand; Malaysia: Peninsular Malaysia; Singapore; **Indonesia: Sumatra** (including Riau Islands), **Java** (von Schulthess, 1914; Giordani Soika, 1982).

(22-1) *brunnipes atratulus* (van der Vecht, 1937)

*Odynerus brunnipes* var. *atratulus* van der Vecht, 1937, Treubia vol. 16: 280 (key), 281, ♀♂, "Timor" (holotype ♀, RMNH).

Distribution: **Indonesia: Timor** (van der Vecht, 1937; Giordani Soika, 1982).

(22-2) *brunnipes brunnipes* (Fabricius, 1804)

*Vespa brunnipes* Fabricius, 1804, Syst. Piez.: 265, "Sumatra" (ZMUC).

*Odynerus javanus* de Saussure, 1867, Reise Novara, Zool. 2(1): 12, pl. I, fig. 7, ♀ [Batavia (=Jakarta), Java] (type depository unknown).

Distribution: **Indonesia: Sumatra, Java, Bali** (Fabricius, 1804; de Saussure, 1867).

(22-3) *brunnipes ignobilis* (Smith, 1861)

*Odynerus ignobilis* Smith, 1861, Jl. Proc. Linn. Soc. Zool. 5: 87, ♀, "Makassar" (OUM).

*Odynerus armatus* de Saussure, 1862, Stettin. Entomol. Ztg. 23: 202, ♀♂ (in subgenus *Odynerus* division *Epsilon*), "Les Iles de Sonde, Célèbes" (RMNH).

Distribution: **Indonesia: Sulawesi, Moluccas** (Aru Islands) (Smith, 1861a; de Saussure, 1862; van der Vecht, 1937; Gusenleitner, 1991; Giordani Soika, 1993a).

(22-4) *brunnipes pocilloides* van der Vecht, 1981

*Antepipona brunnipes pocilloides* van der Vecht, 1981, Proc. K. Ned. Akad. Wet., Ser. C, 84: 443, 455, ♀♂, "Langgaliru on the Indonesian island of Sumba" (holotype ♀, NHMB); also from elsewhere on Sumba.

Distribution: **Indonesia: Sumba** (van der Vecht, 1981).

(22-5) *brunnipes pocillum* (de Saussure, 1862)

*Odynerus pocillum* de Saussure, 1862, Stett. Ent. Ztg. 23: 204, ♂ (in subgenus *Odynerus* division *Antepipona*), "L'Ile de Timor" (RMNH).

Distribution: **Indonesia: Timor, Wetar Island** (de Saussure, 1862; van der Vecht, 1937).

(23) *guttata diffinis* (de Saussure, 1855)

*Odynerus diffinis* de Saussure, 1855a, Ét. Fam. Vesp. 3: 274, pl. 14 fig. 2, ♀ (in subgenus *Odynerus* division *Epsilon*), "Indes Orientales" (BMNH, type no. 18.280).

Distribution: India; Myanmar; **Indonesia: Sumatra** (Dalla Torre, 1904).

(24) *rufescens* (Smith, 1857)

*Odynerus rufescens* Smith, 1857, Cat. Hym. Brit. Mus. 5: 61, ♀, "Ceram" (BMNH, type no. 18.335).

Distribution: China; Thailand; Myanmar; Malaysia: Peninsular Malaysia; **Indonesia: Java** (including Kangean Islands), **Sumatra, Sulawesi, Moluccas** (Smith, 1857; de Saussure, 1862; Giordani Soika, 1982).

Genus *Anterhynchium* de Saussure, 1863  
Subgenus *Dirhynchium* van der Vecht, 1963

- (25) *flavolineatum flavolineatum* (Smith, 1857)  
*Odynerus flavolineatus* Smith, 1857, Cat. Hym. Br. Mus. vol. 5: 60, ♀,  
“Java” (type BMNH, no. 18.454).  
*Anterhynchium flavolineatum flavolineatum*; van der Vecht, 1963, Zool.  
Verh., Leiden 60: 78 (key), 84 (in subgenus *Dirhynchium*).  
Distribution: India; Myanmar; Malaysia: Peninsular Malaysia;  
**Indonesia: Sumatra, Java, Kalimantan, Sumba, Flores** (Smith,  
1857; de Saussure, 1862; Maindron, 1882; van der Vecht, 1937,  
1963; Giordani Soika, 1991).
- (26-1) *flavomarginatum flavonigrans* van der Vecht, 1963  
*Anterhynchium flavomarginatum flavonigrans* van der Vecht, 1963,  
Zool. Verh., Leiden 60: 78 (key), 82, ♀♂, “Mt. Tjisuru, Djampang  
Tengah, W. Java, 600-800 m” (holotype ♀, RMNH); also from  
other localities in West, Central and East Java.  
Distribution: **Indonesia: Java** (van der Vecht, 1963).
- (26-2) *flavomarginatum papuanum* Giordani Soika, 1996  
*Anterhynchium flavomarginatum papuanum* Giordani Soika, 1996, Boll.  
Mus. Civ. Stor. Nat. Venezia 45: 40, ♀ (in subgenus *Dirhynchium*),  
“Nuova Guinea: Manus” (MVEN).  
Distribution: Papua New Guinea.
- (26-3) *flavomarginatum silvaticum* van der Vecht, 1963  
*Anterhynchium flavomarginatum silvaticum* van der Vecht, 1963, Zool.  
Verh., Leiden 60: 78 (key), 81, ♀♂, “Sumatra: Benkulen, Muara  
Tenam” (holotype ♀, RMNH); also from Malaya.  
Distribution: Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (van  
der Vecht, 1963).
- (27-1) *hamatum aruense* van der Vecht, 1963  
*Anterhynchium hamatum aruense* van der Vecht, 1963, Zool. Verh.,  
Leiden 60: 78 (key), 88, ♀, “Aru Islands: Aru, leg.  
Rosenberg” (RMNH).  
Distribution: **Indonesia: Moluccas** (Aru Islands) (van der Vecht, 1963).
- (27-2) *hamatum hamatum* van der Vecht, 1963  
*Anterhynchium hamatum* van der Vecht, 1963, Zool. Verh., Leiden 60:

78 (key), 87, [♂♂!] ♀♂, “New Guinea: Bewani Mountains near Hollandia” (holotype ♀, RMNH). also from Cyclops Mountains and South New Guinea, Tanah Merah (Digoel).

Distribution: **Indonesia: Papua** (van der Vecht, 1963).

Subgenus *Epidynerus* Giordani Soika, 1958

(28-1) *fulvipenne aureum* (de Saussure, 1862)

*Odynerus aureus* de Saussure, 1862, Stettin. Entomol. Ztg. 23: 197, ♀, “L’ile de Timor” (RMNH). [in subgen. *Odynerus*, div. *Epsilon*].

Distribution: **Indonesia: Timor** (de Saussure, 1862).

(28-2) *fulvipenne fulvipenne* (Smith, 1859)

*Odynerus fulvipennis* Smith, 1859, Jl. Proc. Linn. Soc. Zool. vol. 3: 22, ♂, “Celebes” (OUM).

Distribution: Indonesia: **Java** (Including Kangean Islands), **Sulawesi, Flores, Alor** (Smith, 1859a; de Saussure, 1862; van der Vecht, 1963; Giordani Soika, 1993a).

(28-3) *fulvipenne perpulchrum* van der Vecht, 1963

*Anterhynchium fulvipenne perpulchrum* van der Vecht, 1963, Zool. Verh., Leiden 60: 89 (key), 90, ♀♂, “Sumba, Prai Jawang” (holotype ♀, NHMB); also from other localities on Sumba.

Distribution: **Indonesia: Sumba** (van der Vecht, 1963).

(28-4) *fulvipenne venustum* van der Vecht, 1963

*Anterhynchium fulvipenne venustum* van der Vecht, 1963, Zool. Verh., Leiden 60: 89 (key), 92, ♀♂, “New Guinea: Hollandia, Pim” (holotype ♀, RMNH); also from other localities in New Guinea.

Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht, 1963).

(29-1) *nigrocinctum meraukense* (Cameron, 1906)

*Odynerus meraukensis* Cameron, 1906c, Tijdschr. Entomol. 49: 224, ♀, “Merauke”, South New Guinea (ZMA).

Distribution: **Indonesia: Papua** (Cameron, 1906c; van der Vecht, 1963).

(29-2) *nigrocinctum nigrocinctum* (de Saussure, 1853)

*Odynerus nigrocinctus* de Saussure, 1853a, Ét. Fam. Vesp. 1: 152 (in

key), 201, ♂ (in subgen. *Leionotus*), “La Tasmanie” (MNHN).  
Distribution: Papua New Guinea (including Bismarck Islands); Solomon  
Islands; Australia; **Indonesia: Papua** (van der Vecht, 1963).

Genus *Apodynerus* Giordani Soika, 1993

(30) *diffinis* Giordani Soika, 1996

*Apodynerus diffinis* Giordani Soika, 1996, Boll. Mus. Civ. Stor. Nat.  
Venezia 45: 36, ♂, “Sulawesi: Patunuang” (MVEN).

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1996).

(31) *gregaroides* (Giordani Soika, 1986)

“*Pachymenes*” *gregaroides* Giordani Soika, 1986b, Boll. Mus. Civ. Stor.  
Nat. Venezia 35: 79, ♀♂, “Leyte: Palo” (holotype ♂, IUNH); also  
from Luzon.

Distribution: Philippines; **Indonesia: Sumba** (Giordani Soika, 1994a).

(32) *icarioides* (Bingham, 1897)

*Odynerus icarioides* Bingham, 1897, Fauna Brit. India, Hym. 1: 363  
(key), 372, fig. 109, ♀, “Tenasserim” (BMNH, type no. 18.972).

Distribution: India; Myanmar; Malaysia: Sarawak, Sabah.

(33) *rufipes* Giordani Soika, 1994

*Apodynerus rufipes* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat.  
“G. Doria” 90: 207 (key), 214, ♀, “Flores: Ruteng” (RMNH); also  
from two other localities.

Distribution: **Indonesia: Flores** (Giordani Soika, 1994a).

(34-1) *troglydites baliensis* (Giordani Soika, 1987)

“*Pachymenes*” *troglydites baliensis* Giordani Soika, 1987, Boll. Mus.  
Civ. Stor. Nat. Venezia 37: 145, figs. 3-4, ♀♂, “Bali: Samur” (?  
Sanur) (holotype ♀, MVEN).

Distribution: **Indonesia: Bali** (Giordani Soika, 1987).

(34-2) *troglydites karimonensis* (van der Vecht, 1937)

*Pachymenes fragilis* var. *karimonensis* van der Vecht, 1937, Treubia 16:  
278, ♀♂, “Karimon Djawa Islands, North of Java” (holotype ♀,  
MZB).

**MZB**: holotype (♀, Karimon Djawa, Indonesia, 22-30 Nov. 1930, coll.  
Lieftinck, preserved dry, MZB.Hymn.0180); allotype (♂, Karimon  
Djawa, Indonesia, 22-30 Nov. 1930, coll. Lieftinck, preserved dry,  
MZB.Hymn.0181).

Distribution: **Indonesia: Karimunjawa Islands** (van der Vecht, 1937).



- (34-3) *troglodytes troglodytes* (de Saussure, 1855)  
*Odynerus troglodytes* de Saussure, 1855a, Ét. Fam. Vesp. 3: 249, ♂, “le Senégal” (MRSN).  
*Odynerus fragilis* Smith, 1857, Cat. Hym. Brit. Mus. 5: 61, ♂, “Borneo” (BMNH, type no. 18.306).  
*Odynerus petulans* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 89, ♀, “Makassar” (OUM).  
*Odynerus lybas* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 114, ♀, “Sarawak” (BMNH, type no. 18.333, specimen without head).  
*Odynerus drescheri* Cameron, 1905b, Tijdschr. Entomol. 48: 77, ♀ (in division *Leionotus*), “Tjandi, near Semarang” (BMNH, type no. 18.289).  
*Odynerus brooksii* Cameron, 1908, Dtsch. Entomol. Z. 1908: 561, ♂, “Kuching, Sarawak, Borneo” (type depository unknown).  
Distribution: India; Andaman Islands; China; Hong Kong; Myanmar; Thailand; Laos; Malaysia: Peninsular Malaysia, Sarawak; Sabah; Singapore; **Indonesia: Sumatra, Java** (including Kangean Islands), **Sulawesi, Moluccas** (Smith, 1860a, 1862; Cameron, 1905b; von Schulthess, 1934; Dammernan, 1948; Gusenleitner, 1991; Giordani Soika, 1991, 1993a), **Kalimantan**.

- (35) *yayeyamensis quadricolor* Giordani Soika, 1994  
*Apodynerus yayeyamensis tricolor* [!] Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 209 (key).  
*Apodynerus yayeyamensis quadricolor* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 215, ♀♂, “C. Sumba: Loko-jengo” (holotype ♂, RMNH).  
Distribution: **Indonesia: Sumba** (Giordani Soika, 1994a).

Genus *Aruodynerus* Giordani Soika, 1993

- (36) *aruanus* (Gribodo, 1892)  
*Odynerus multipictus* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 165, ♀, “Aru” (OUM) [junior primary homonym of *O. multipictus* Smith, 1858].  
*Odynerus aruanus* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 297, note [replacement name].  
Distribution: **Indonesia: Moluccas** (Aru Islands), **Papua** (Smith, 1859, 1865; Gribodo, 1892; Giordani Soika, 1994a).

- (37) *excellens* Giordani Soika, 1993  
*Aruodynerus excellens* Giordani Soika, 1993b, Boll. Mus. Civ. Stor. Nat. Venezia 42: 138, ♂, “Nuova Guinea: Irian Jaya, Cyclops Mts., Jambatan dua Waena, 21 Km W Jayapura” (LACM).

Distribution: **Indonesia: Papua** (Giordani Soika, 1993c).

Genus *Calligaster* de Saussure, 1852

(38) *cyanoptera* de Saussure, 1852

*Calligaster cyanoptera* de Saussure, 1852a, Ét. Fam. Vesp. 1: 23, pl. IX figs. 7, 7a, ♀, “Java” (?RMNH).

*Zethus javanus* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 261, ♂ (in subgenus *Calligaster*), “Kalipare, Giava orientale” (MSNG).

“*Zethus erythrostomus* Cameron” Meade-Waldo, 1914, Ann. Mag. Nat. Hist. (8) 14: 404, “Java” (London), as a synonym of *Calligaster cyanopterus* de Saussure. Available under Article 11.6.1 of the International Code of Zoological Nomenclature.

Distribution: **Indonesia: Java, Sumatra** (de Saussure, 1852a; Maindron, 1882; Gribodo, 1892; Meade-Waldo, 1914; van der Vecht, 1937).

(39) *etchellsii* (Cameron, 1909)

*Zeuthus*[!] *etchellsii* Cameron, 1909, Entomologist 42: 206, ♂, “Kuching, Borneo” (BMNH).

Distribution: Malaysia: Sarawak.

(40) *viridipennis* Giordani Soika, 1960

*Calligaster viridipennis* Giordani Soika, 1960 (1958), Boll. Mus. Civ. Stor. Nat. Venezia 11: 72, fig. 11 (nos. 7-8), 74, ♂, “Celebes: Enrekang” (ZMB).

Distribution: **Indonesia: Sulawesi** (Smith, 1859a; Giordani Soika, 1960).

Genus *Coeleumenes* van der Vecht, 1963

(41-1) *impavidus conformis* van der Vecht, 1963

*Coeleumenes impavidus conformis* van der Vecht, 1963, Zool. Verh., Leiden 60: 50, holotype ♀, “Radjamandala, 350 m, 20 Dec. 1940, J. Olthof” (RMNH).

Distribution: **Indonesia: Java** (van der Vecht, 1963).

(41-2) *impavidus impavidus* (Bingham, 1897)

*Montezumia impavida* Bingham, 1897, Fauna Brit. India, Hym. Vol. 1: 351, ♀, “Burma; Tenasserim” [type ♀, Thaungyin Valley, Tenasserim (BMNH, no. 18.210)].

Distribution: India; Srilanka; Myanmar; Malaysia: Peninsular Malaysia;  
Singapore; **Indonesia: Kalimantan** (van der Vecht, 1963).

(42) *multicolor* (Giordani Soika, 1935)

*Pareumenes multicolor* Giordani Soika, 1935, Ann. Mus. Civ. Stor. Nat.  
Genova vol. 57: 138, ♀ (in subgenus *Pareumenes*), “Sumbawa:  
Tambora” (lectotype, MSNG).

Distribution: **Indonesia: Sumba, Sumbawa** (Giordani Soika, 1935; van  
der Vecht, 1963).

(43) *ruficrus* van der Vecht, 1963

*Coeleumenes ruficrus* van der Vecht, 1963, Zool. Verh., Leiden 60: 56,  
♀♂, “Southern Moluccas: Ambon, Laha” (holotype ♀, RMNH).

Distribution: **Indonesia: Moluccas** (van der Vecht, 1963).

(44) *secundus* (Dalla Torre, 1889)

*Odynerus fallax* Smith, 1862, Jl. Proc. Linn. Soc. Zool. Vol. 6: 58, ♀,  
“Gilolo”, Northern Moluccas, leg. Wallace (OUM).

*Odynerus secundus* Dalla Torre, 1889, Wien. Entomol. Ztg 8: 125  
[replacement name, on account of secondary homonymy with *Lep-  
tochilus fallax* de Saussure, 1852, a species which Dalla Torre con-  
sidered to belong to *Odynerus*].

Distribution: **Indonesia: Moluccas** (Smith, 1862; van der Vecht, 1963).

(45) *timorensis* van der Vecht, 1963

*Coeleumenes timorensis* van der Vecht, 1963, Zool. Verh., Leiden 60:  
52, ♀♂, “Timor” (holotype ♀, RMNH).

Distribution: **Indonesia: Timor** (van der Vecht, 1963).

(46) *vindex* (Smith, 1859)

*Eumenes vindex* Smith, 1859a, Jl. Proc. Linn. Soc. Zool. Vol. 3: 20, ♂,  
“Celebes” (OUM).

*Eumenes artifex* Smith, 1861a, Jl. Proc. Linn. Soc. Zool. Vol 5: 86, ♀ (in  
division *Pareumenes*), “Makassar” (OUM).

Distribution: **Indonesia: Sulawesi** (Smith, 1859a, 1861a; van der Vecht,  
1963; Giordani Soika, 1993a).

#### Genus *Delta* de Saussure, 1855

(47-1) *campaniforme campaniforme* (Fabricius, 1775)

*Vespa campaniformis* Fabricius, 1775, Syst. Entomol.: 371, “Nova Hol-  
landia” (holotype ♀, BMNH).

Distribution: Nepal; Thailand; Philippines; Papua New Guinea; Australia; adventive in U. S. A.: Hawaii; **Indonesia: Sumatra, Java, Moluccas, Papua** (Fabricius, 1775; Smith, 1861; Bequaert, 1926; von Schulthess, 1935; Giordani Soika, 1991, 1992), **Bawean Island** (new record).

(47-2) *campaniforme gracilior* Giordani Soika, 1986

*Delta campaniforme gracilior* Giordani Soika, 1986b, Boll. Mus. Civ. Stor. Nat. Venezia 35: 88, ♀♂, “Luzon: Matnog, Sorsogon” (holotype ♀, IUNH); also from Palawan.

Distribution: India; Myanmar; Thailand; Malaysia: Peninsular Malaysia; Singapore; Philippines; Australia; **Indonesia: Sumatra, Java, Kangean Islands, Borneo, Sulawesi, Moluccas, Lombok, Bali, Sumba, Sumbawa, Timor** (Giordani Soika, 1987, 1992, 1993a), **Bawean Island** (new record).

(47-3) *campaniforme keyense* Giordani Soika, 1972

*Delta campaniformis keyensis* Giordani Soika, 1972, Boll. Soc. Entomol. Ital. 104: 108, ♀♂, “Isola Key: Tocal” (holotype ♂, MAP).

Distribution: **Indonesia: Moluccas** (Kei Islands) (Giordani Soika, 1972).

(47-4) *campaniforme megalospilus* (Cameron, 1911)

*Eumenes megalospilus* Cameron, 1911, Nova Guinea 9 (2), Zool.: 194, ♀, “Bivak Island”, New Guinea (type depository unknown).

Distribution: **Indonesia: Papua** (Cameron, 1911).

(47-5) *campaniforme nigriculum* Giordani Soika, 1986

*Delta campaniforme nigriculum* Giordani Soika, 1986b, Boll. Mus. Civ. Stor. Nat. Venezia 35: 77, ♀♂, “Sumba (Indonesia): Mel-lolo” (holotype ♀, MVEN).

Distribution: **Indonesia: Sumba, Flores** (Giordani Soika, 1986b, 1991).

(47-6) *campaniforme rendalloide* Giordani Soika, 1993

*Delta campaniforme rendalloide* Giordani Soika, 1993b, Boll. Mus. Civ. Stor. Nat. Venezia 42: 162, ♀, “Is. Sumba: Laluku” (RMNH).

Distribution: **Indonesia: Sumba** (Giordani Soika, 1993b).

(47-7) *campaniforme urvillei* (de Saussure, 1852)

*Eumenes urvillei* de Saussure, 1852a, Ét. Fam. Vesp. 1: 59, ♀♂, “voyage de Dumont -d’Urville, la femelle de l’Ile de Banda, le mâle de Triton Bay, côte de la Nouvelle-Guinée” (?MNHN).

Distribution: **Indonesia: Papua, Moluccas** (de Saussure, 1852a; Smith, 1862, 1864).

(48) *eremnum* (van der Vecht, 1959)

*Eumenes eremnus* van der Vecht, 1959, Zool. Verh., Leiden 41: 5 and 13

(key), 51, fig. 3f, 4 (34), 5j, 7 (34), ♀♂, “Labuan Badjo, Flores” (holotype ♀, RMNH).

**MZB:** paratypes (1♀, Laora, 100 m, N.W. Sumba, Apr. 1925, coll. Dammerman, preserved dry, MZB.Hymn.0038; 1♀, Labuan Badjo, Flores, June 1937, coll. de Jong, preserved dry, MZB.Hymn.0039; 1♀, Mau Marru, O. Sumba, Swiss. Exp. 1949, 22 Jul. 1949, coll. Bühler and Sutter, preserved dry, MZB.Hymn.0040; 1♀, Mau Marru, O. Sumba, 450 m, May 1925, coll. Dammerman, preserved dry, MZB.Hymn.0041).

Distribution: **Indonesia: Sumba, Flores** (van der Vecht, 1959).

(49) *latreillei petiolare* (Schulz, 1905)

*Eumenes latreillei petiolaris* Schulz, 1905 (1904), Berl. Entomol. Zeitschr. 49: 217, ♀, “Finschhafen, New Guinea” (?MTKD); also from Woodlark Island.

Distribution: Papua New Guinea; Admiralty Is.; Trobriand Is.; Solomon Islands; adventive in U. S. A.: Hawaii; **Indonesia: Papua** (van der Vecht, 1960).

(50-1) *pyriforme butonense* (Schulz, 1905)

*Eumenes latreillei butonensis* Schulz, 1905 (1904), Berl. Entomol. Zeitschr. 49: 218, ♀, “Insel Buton” (lectotype MVEN). Bequaert, 1926, Ann. S. Afr. Mus. 23: 562 [synonym of “*Eumenes maxillosus* var. *circinalis* (Fabricius)"].

Distribution: Thailand; **Indonesia: Sulawesi** (including Buton Island), **Moluccas** (Schulz, 1904; Gusenleitner, 1991; Giordani Soika, 1993a, 1993b).

(50-2) *pyriforme circinale* (Fabricius, 1804)

*Eumenes circinalis* Fabricius, 1804, Syst. Piez.: 286, “Sumatra” (ZMUC).

Distribution: India; Myanmar; Thailand; Malaysia: Peninsular Malaysia; Philippines; **Indonesia: Sumatra, Java, Bali, Borneo, Sulawesi, Moluccas, Timor** (Fabricius, 1804; de Saussure, 1852a; Smith, 1859a, 1861, 1862, 1864, 1865; Maindron, 1882; Cameron, 1905b; von Schulthess, 1932, 1935; Dammerman, 1948; Dover, 1929; Giordani Soika, 1987), **Krakatau, Bawean Island, Kangean Islands** (new record).

(50-3) *pyriforme malayanum* (Giordani Soika, 1958)

*Eumenes circinalis malayanus* Giordani Soika, 1958 (1957), Boll. Mus. Civ. Stor. Nat. Venezia 10: 201, ♀, “Sumatra, Deli” (MVEN).

Distribution: **Indonesia: Sumatra** (von Schulthess, 1914; Giordani Soika, 1958, 1991).

(50-4) *pyriforme miraculum* Gusenleitner, 2008

*Delta pyriforme miraculum* Gusenleitner, 2008, Linz. Biol. Beitr. 40(1):

765, 769, 770, ♀, “Indonesia, S. Yamdena Isl., 20 km NE Saumlaki, 150 m” (OLM).

Distribution: **Indonesia: Tanimbar Islands** (Gusenleitner, 2008).

(50-5) *pyriforme nigrocinctum* Giordani Soika, 1993

*Delta pyriforme nigrocinctum* Giordani Soika, 1993b, Boll. Mus. Civ. Stor. Nat. Venezia 42: 161, ♀♂, “Sumba: Melolo” (holotype ♀, NHMB); also from another locality.

Distribution: **Indonesia: Sumba** (Giordani Soika, 1993b).

(50-6) *pyriforme novaeguineae* (Giordani Soika, 1935)

*Eumenes pyriformis* var. *novaeguineae* Giordani Soika, 1935, Ann. Mus. Civ. Stor. Nat. Genova 57: 132, ♀ (in subgenus *Delta*), “Nouva Guinea” (MVEN).

*Eumense*[!] *pyriformis novaeguineae*; Giordani Soika, 1973a, Boll. Mus. Civ. Stor. Nat. Venezia 24: 15 (information on type).

Distribution: Papua New Guinea.

(50-7) *pyriforme rufonigerrimum* Giordani Soika, 1973

*Delta circinale rufonigerrimum* Giordani Soika, 1973b, Boll. Mus. Civ. Stor. Nat. Venezia 24: 131, ♀♂, “Amboina” (holotype ♀, MNHN).

Distribution: **Indonesia: Moluccas** (Giordani Soika, 1973b; van der Vecht, 1981).

(51) *rumphii* (van der Vecht, 1959)

*Eumenes rumphii* van der Vecht, 1959, Zool. Verh., Leiden 41: 10 (key), 67, fig. 1i, 2i, 5m, 7 (47), ♂, “Amboina” (MSNG).

Distribution: **Indonesia: Moluccas** (van der Vecht, 1959, 1981).

(52) *sciarum* (van der Vecht, 1959)

*Eumenes sciarum* van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 20, fig. 1c, g, 2c, 4 (4), 5b, 6 (4), ♀♂, “Labuan Badjo, Flores” (holotype ♀, RMNH); also from Sumbawa, Komodo, Sumba.

**MZB:** paratypes (1♀, Komodo Island, July 1937, coll. de Jong, preserved dry, MZB.Hymn.0056; 1♀, Mau Marru, O. Sumba, 22 Jul. 1949, coll. Bühler and Sutter, preserved dry, MZB.Hymn.0057; 1♂, Mboera, Flores Island, Jun. 1937, coll. de Jong, preserved dry, MZB.Hymn.0058; 1♀, Waimangura, W. Sumba, 22 Aug. 1949, coll. Bühler and Sutter, preserved dry, MZB.Hymn.0059; 1♀, Laboean Badjo, Flores Island, Jun. 1937, coll. de Jong, preserved dry, MZB.Hymn.0060; 1♂, Komodo Island, Jun. 1953, coll. Hoogerwerf, preserved dry, MZB.Hymn.0061).

Distribution: **Indonesia: Sumba, Sumbawa, Komodo Island, Flores** (van der Vecht, 1959, 1961).

(53) *viridipenne* (van der Vecht, 1959)

*Eumenes viridipennis* van der Vecht, 1959, Zool. Verh., Leiden 41: 12  
(key), 18, fig. 1a, f, 4 (2), 6 (2), ♀, “Durian Island, Riouw  
Archipelago” (RMNH).

Distribution: **Indonesia: Sumatra** (Riau Islands) (van der Vecht, 1959).

(54) *wieneckeii* (van der Vecht, 1959)

*Eumenes wieneckeii* van der Vecht, 1959, Zool. Verh., Leiden 41: 12  
(key), 22, fig. 4 (5), 6 (5), ♀, “Timor” (RMNH).

Distribution: **Indonesia: Timor** (van der Vecht, 1959).

Genus *Ectopioglossa* Perkins, 1912

(55) *henseni* Gusenleitner, 1990

*Ectopioglossa henseni* Gusenleitner, 1990, Linz. Biol. Beitr. 22 (2): 572,  
♀, “Thailand, 20 km W Phatthalung, 50 m” (RMNH); also from  
Borneo.

Distribution: Thailand; Borneo: Baret-Sekadu, ?West Kalimantan  
(Gusenleitner, 1990).

(56) *mediana* (Smith, 1864)

*Eumenes medianus* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 38,  
♂, “Ceram” (OUM).

Distribution: **Indonesia: Moluccas** (Ceram Island) (Smith, 1864).

(57) *mutata* Gusenleitner, 1991

*Ectopioglossa mutata* Gusenleitner, 1991, Linz. Biol. Beitr. 23 (1): 257,  
262, ♀♂, “NE -Sulawesi, 47 km WSW Kotamobagu, Dumoga -  
Bone N. Pk., Toraut (forest edge), 211 m” (holotype ♀, BMNH);  
also from another locality.

Distribution: **Indonesia: Sulawesi** (Gusenleitner, 1991).

(58) *palustris* van der Vecht, 1963

*Ectopioglossa palustris* van der Vecht, 1963, Zool. Verh., Leiden 60: 30  
(key), 37, ♀, “Java: West Java, Dungus Iwul” (RMNH).

Distribution: **Indonesia: Java** (van der Vecht, 1963).

(59-1) *polita polita* (Smith, 1861)

*Eumenes politus* Smith, 1861, Jl. Proc. Linn. Soc. Zool. Vol. 5: 127, ♀,  
“Bachian” (OUM).

Distribution: **Indonesia: Moluccas** (Bacan Island) (Smith, 1861b; Main-  
dron, 1882; van der Vecht, 1963).

(59-2) *polita volatilis* (Smith, 1864)

*Eumenes volatilis* Smith, 1864, Jl. Proc. Linn. Soc. Zool., vol. 7: 38, ♀,  
“Mysol” (OUM).

Distribution: Papua New Guinea; **Indonesia: Papua** (including Misool  
Island), **Moluccas** (Aru Islands) (Smith, 1864, 1865; van der Vecht,  
1937, 1963).

(60) *sublaevis* (Smith, 1857)

*Eumenes sublaevis* Smith, 1857, Cat. Hym. Br. Mus. Vol. 5: 23, ♀,  
“Borneo (Sarawak)” (type BMNH, no. 18.197).

Distribution: Malaysia: Sarawak; Philippines; **Indonesia: Sumatra,**  
**Java, Kalimantan** (Smith, 1857; van der Vecht, 1937, 1963).

(61) *sumbana* van der Vecht, 1963

*Ectopioglossa sumbana* van der Vecht, 1963, Zool. Verh., Leiden 60: 30  
(key), 36, ♀, “Sumba: ... West Sumba, Kodi” (NHMB).

Distribution: **Indonesia: Sumba** (van der Vecht, 1963).

#### Genus *Elimus* de Saussure, 1852

(62) *papuanus* Borsato and Giordani Soika, 1995

*Elimus papuanus* Borsato and Giordani Soika, 1995, Boll. Mus. Civ.  
Stor. Nat. Venezia 44: 86, ♀, “NE Nuova Guinea, Morobe Distr.  
Kilolo Ck. 1070 m. 7 Km. W. Wau” (RMNH).

Distribution: Papua New Guinea.

#### Genus *Epsilon* de Saussure, 1855

(63) *incola* Giordani Soika

*Epsilon incola* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G.  
Doria” 90: 271 (key), 277, fig. 59, ♀, “Papua Nuova Guinea:  
Finschhafen” (MVEN).

Distribution: Papua New Guinea.

(64) *laboriosum* (Smith, 1864)

*Odynerus laboriosus* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 41,  
♂, “Mysol” (OUM).

*Odynerus waigeuensis* Cameron, 1913a, Bijdr. Dierk. 10: 79, ♀,  
“Waigeu Island” (ZMA).

Distribution: Papua New Guinea: Bismarck Islands, New Ireland; **Indo-**  
**nesia: Papua** (Smith, 1864, 1865; Cameron, 1913a; Giordani  
Soika, 1994a).



(65-1) *manifestum crassipunctatum* Gusenleitner, 1991  
*Epsilon manifestum crassipunctatum* Gusenleitner, 1991, Linz. Biol.  
Beitr. 23 (1): 257, 259, ♀, “NE -Sulawesi, 47 km WSW Kotamo-  
bagu, Dumoga-Bone Natl. Park, Toraut (forest edge), 211  
m” (BMNH).

Distribution: **Indonesia: Sulawesi** (Gusenleitner, 1991; Giordani Soika,  
1993a).

(65-2) *manifestum manifestum* (Smith, 1858)  
*Odynerus manifestus* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 110, ♂,  
“Borneo” (OUM).

Distribution: Singapore; Malaysia: Sabah, Sarawak; Brunei; **Indonesia:**  
**Java** (Giordani Soika, 1994a)

(66) *vechti* Giordani Soika, 1994  
*Epsilon vechti* Giordani Soika, 1993a, Lavori Soc. Venez. Sci. Nat. 18:  
28, “Sulawesi: Lindu, 600 m”. (Nomen nudum).

*Epsilon vechti* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G.  
Doria” 90: 270 (key), 283, fig. 63, ♀, “Sulawesi: Lindu, 600 m, 1°  
14’S 120°21’E, presso Tongoa” (RMNH); also from another  
locality.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

#### Genus *Erodynerus* Giordani Soika, 1993

(67) *maculipennis* (Smith, 1858)  
*Odynerus maculipennis* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 111,  
♀, “Borneo (Sarawak)” (OUM).

*Odynerus kuchingensis* Cameron, 1905a, J. Straits Branch R. Asiat. Soc.  
44: 161, ♀, Sarawak: “Kuching,” (BMNH, type no. 18.288).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; **Indonesia:**  
**Sumatra, Kalimantan** (van der Vecht, 1937; Giordani Soika,  
1994a).

#### Genus *Eudiscoelius* Friese, 1904

(68) *elegans elegans* (Smith, 1861)  
*Pachymenes elegans* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5:  
131, ♀, “Bachian” (OUM).

*Eumenes elegantula* Dalla Torre, 1894, Cat. Hym.: 23 (replacement  
name for *Eumenes elegans* (Smith), non *E. elegans* de Saussure,  
1852).

*Euchalcomenes elegans*; Turner, 1908, Trans. Entomol. Soc. Lond.  
1908: 90.

Distribution: **Indonesia: Moluccas** (Bacan Island) (Smith, 1861b, 1862;  
Giordani Soika, 1994a).

(69) *rechbergi* (Meade-Waldo, 1910)

*Nortonia viridis* von Schulthess, 1903, Verh. Zool. Bot. Ges. Wien 53: 362, ♀, “Neu-Guinea” (RMNH); junior secondary homonym of *E. viridis* (Smith, 1859).

*Nortonia rechbergi* Meade-Waldo, 1910, Ann. Mag. Nat. Hist (8) 5: 49. Replacement name for *Nortonia viridis* von Schulthess.

Distribution: **Indonesia: Moluccas** (Aru Islands), **Papua** (including Misool Island) (von Schulthess, 1903; Giordani Soika, 1994a).

(70) *violaceus* (von Schulthess, 1903)

*Nortonia violacea* von Schulthess, 1903, Verh. Zool. Bot. Ges. Wien 53: 361, ♂♀, “Asiatischer Archipel: Key-Inseln” (ETHZ).

*Eudiscoelius metallicus* Friese, 1904, Zeitschr. Hymenopterol. Dipterol. 4: 16, ♂♀, “Tenimber-Larat”, (?ZMB, ETHZ).

Distribution: **Indonesia: Moluccas** (Kei and Tanimbar Islands) (von Schulthess, 1903; Friese, 1904; Giordani Soika, 1994a, Gusenleitner, 2008).

(71) *viridipes* (Cameron, 1911)

*Nortonia viridipes* Cameron, 1911, Nova Guinea 9, Zool. 2: 192, [♂!], “New Guinea”, Lorentz Expedition (ZMA).

*Pachymenes coeruleus* Giordani Soika, 1943, Mem. Soc. Entomol. Ital. 22: 103, 116, ♀, “Nuova Guinea: Finshhafn” (MVEN).

Distribution: **Indonesia: Papua**; Papua New Guinea (Cameron, 1911; Giordani Soika, 1994a).

(72) *viridis* (Smith, 1859)

*Pachymenes viridis* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 163, ♀, “Aru” (OUM).

*Leptochilus jacinthae* Gribodo, 1894, Misc. Entomol. 2: 23, ♂, Humboldt Bay, Nova Guinea (MSNG).

Distribution: **Indonesia: Moluccas** (Aru Islands), **Papua** (Smith, 1859; Gribodo, 1894; Giordani Soika, 1994a).

#### Genus *Eumenes* Latreille, 1802

(73) *achterbergi* Giordani Soika, 1992

*Eumenes achterbergi* Giordani Soika, 1992, Lavori Soc. Ven. Sci. Nat. 17: 41, 63, ♀♂, “Sulawesi: Dumoga Bone, 220 m, Base Camp, Toraut Riv., 0°34'N 123°54' E” (holotype ♀, RMNH); also from Sanggona.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1992, 1993a).

(74) *affinissimus* de Saussure, 1852

*Eumenes affinissima* de Saussure, 1852a, Ét. Fam. Vesp. 1: 37, ♂, “Indes Orientales” (OUM).

*Eumenes coelestimontana* Kostylev, 1940, Bull. Soc. Nat. Moscou, Sect.

Biol. (N. S.) 49 (3/4): 140, ♀♂ (in subgenus *Eumenes*), [Kyrgyzstan] “Rivière Petite Almatinka, Tian-chan, Alatau Transilien” (holotype ♀, ZMM).

Distribution: Kyrgyzstan; India; Myanmar; Malaysia: Peninsular Malaysia; **Indonesia: Java** (von Schulthess, 1935).

(75) *agillimus* Dalla Torre, 1894

*Eumenes agilis* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 127, ♀, “Amboyna” (OUM); 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 37 (Ceram) [junior primary homonym of *Eumenes agilis* de Saussure, 1852].

*Eumenes agillima* Dalla Torre, 1894, Cat. Hym. 9: 17 (cat., replacement name).

Distribution: **Indonesia: ?Papua, Moluccas** (Smith, 1860b, 1864; ? Meade-Waldo, 1912; Giordani Soika, 1935).

(76) *architectus* Smith, 1859

*Eumenes architectus* Smith, 1858b (1859), J. Proc. Linn. Soc. Zool. 3: 20, ♀♂, “Celebes” (OUM).

Distribution: India; China; Myanmar; Malaysia: Peninsular Malaysia; Singapore; Philippines; **Indonesia: Sulawesi, Java** (including Krakatau), **Sumatra, Moluccas** (Smith, 1858b; de Saussure, 1862; von Schulthess, 1927, 1932; Dammerman, 1948; Gusenleitner, 1991; Giordani Soika, 1993a).

(77) *batantanensis* Nugroho, 2010

*Eumenes batantanensis* Nugroho, in Nugroho *et al.*, 2010, Raffl. Bull. Zool. 58(2): 179, 180, ♀♂, figs. 1–4, 9–10, 13, 15–16, “West Papua, Raja Ampat, Batanta Island, Yenanas, 00°50'09.8"S 130°53'18.5"E” (holotype ♀, MZB).

**MZB:** Holotype (♀, INDONESIA, West Papua, Raja Ampat, Batanta Island, Yenanas, 00°50'09.8"S 130°53'18.5"E, alt. 9 m, coll. H. Nugroho & R. Ubaidillah”, reared from a nest collected on 27 Apr. 2008, MZB. Hymn. 19211); paratype (1♂, INDONESIA, Papua, Raja Ampat, Batanta Island, Samsen, Alt. 29 m, 00°53'44.6"S 130°33'18.0"E, coll. H. Nugroho & R. Ubaidillah, 2 May 2008, MZB. Hymn. 19212).

Distribution: **Indonesia: Papua** (Batanta Island) (Nugroho *et al.*, 2010).

(78-1) *blandus blandus* Smith, 1861

*Eumenes blandus* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 127, ♀, “Bachian” (OUM).

Distribution: **Indonesia: Moluccas** (Smith, 1860b, 1862; de Saussure, 1862; Maindron, 1882).

(78-2) *blandus sumbanus* Giordani Soika, 1992

*Eumenes blandus sumbanus* Giordani Soika, 1992, Lavori Soc. Ven. Sci. Nat. 17: 41, 65, ♀♂, "C. Sumba: Lokojengo" (holotype ♀, RMNH); also from seven other localities on Sumba.

Distribution: **Indonesia: Sumba** (Giordani Soika, 1992).

(79) *dichrous* Maindron, 1882

*Eumenes dichrous* Maindron, 1882, Ann. Soc. Entomol. France (6) 2: 274, ♂, pl. 3 fig. 1, 2, "l'île de Tidore" (?MNHN).

*Eumenes erythropoda* Cameron, 1898, Mem. Proc. Manchr. Lit. Philos. Soc. 42 (11): 38, ♀, "Malacca" [error based on indistinct label "Moluccas"!]. (OUM: coll. Rothney). NEW SYNONYMY.

Distribution: **Indonesia: Moluccas** (Smith, 1861b, 1862; Maindron, 1882; Giordani Soika, 1935).

(80) *diligens* Smith, 1864

*Eumenes diligens* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 39, ♀, "Bouru" (OUM).

Distribution: **Indonesia: Moluccas** (Buru Island) (Smith, 1864; Giordani Soika, 1935).

(81) *dorycus* Maindron, 1882

*Eumenes dorycus* Maindron, 1882, Ann. Soc. Entomol. France (6) 2: 273, ♀, pl. 3 fig. 3-6, "de Dorey et d'Andaie", New Guinea (MNHN).

Distribution: Papua New Guinea; **Indonesia: Papua** (Maindron, 1882; Cameron, 1906a, 1911).

(82) *floralis* Smith, 1859

*Eumenes floralis* Smith, 1858b (1859), J. Proc. Linn. Soc. Zool. 3: 20, ♂, "Celebes" (OUM).

Distribution: **Indonesia: Sulawesi** (Smith, 1858b; Giordani Soika, 1935, 1993a; Gusenleitner, 1991).

(83) *inconspicuus* Smith, 1858

*Eumenes inconspicua* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 109, ♀, "Borneo (Sarawak)" (OUM).

*Eumenes conformis* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 38, ♀, "Ceram" (OUM).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; Thailand; **Indonesia: Sumatra, Java** (including Krakatau), **Bali, Kalimantan, Sulawesi, Moluccas, Papua** (von Schulthess, 1914; Giordani Soika, 1987; Nugroho *et al.*, 2010).

(84) *insolens* Smith, 1865

*Eumenes insolens* Smith, 1865, J. Proc. Linn. Soc. Zool. 8: 88, ♀, "Gilolo" (type depository unknown) [not in OUM].

Distribution: **Indonesia: Moluccas** (Smith, 1865).

(85) *koriensis* Giordani Soika, 1992

*Eumenes koriensis* Giordani Soika, 1992, Lavori Soc. Ven. Sci. Nat. 17: 41, 64, ♀♂, “*Is. Sumba: Mata Kori, Waimangura*” (holotype ♀, RMNH); also from Pogobina.

Distribution: **Indonesia: Sumba** (Giordani Soika, 1992).

(86) *macrops* de Saussure, 1852

*Eumenes macrops* de Saussure, 1852a, Ét. Fam. Vesp. 1: 41, ♂, “*LaCaroline du nord*” (BMNH); [locality of type is incorrect: Oriental species distributed from Madras to Bali (Giordani Soika, 1941)]

*Eumenes vishnu* Cameron, 1898, Mem. Proc. Manchr. Lit. Philos. Soc. 42 (11): 36, ♀, India: “*Allahabad*” (OUM).

*Eumenes salai* Dusmet, 1930, Bol. Soc. Entomol. Esp. 13: 103, ♂, India: “*Khandala*” (MNCN).

Distribution: India; Malaysia: Peninsular Malaysia; **Indonesia: Bali** (Giordani Soika, 1941).

(87) *multipictus* de Saussure, 1855

*Eumenes multipictus* de Saussure, 1855b, Rev. Mag. Zool. (2) 7: 372, ♂, “*Sumatra*” (type depository unknown).

*Eumenes acus* Giordani Soika, 1935 (1934), Ann. Mus. Civ. Stor. Nat. Genova 57: 116 (key), 126, pl. 2 fig. 2, ♀♂ (in subgenus *Eumenes*), “*Borneo: Sarawak*” (holotype ♀, MVEN); also from Marang, Sumatra; Kalipare, Java.

Distribution: Malaysia: Peninsular Malaysia, Sarawak; Singapore; China; **Indonesia: Sumatra** (including Bangka Island), **Java, Kalimantan** (de Saussure, 1855b; Giordani Soika, 1935; van der Vecht, 1937).

(88) *piriformis* de Saussure, 1862

*Eumenes piriformis* de Saussure, 1862, Stettin. Entomol. Ztg 23: 177, ♀, “*Java, Sumatra*” (lectotype, RMNH).

Distribution: Nepal; Philippines; Thailand; **Indonesia: Sumatra, Java, Sulawesi** (de Saussure, 1862; Giordani Soika, 1993a).

(89-1) *pius nigrorufus* Giordani Soika, 1992

*Eumenes pius nigrorufus* Giordani Soika, 1992, Lavori Soc. Ven. Sci. Nat. 17: 41, 65, ♀♂, “*O. Sumba: Lokojengo*” (holotype ♀, RMNH); also from six other localities on Sumba.

Distribution: **Indonesia: Sumba** (Giordani Soika, 1992).

(89-2) *pius pius* Giordani Soika, 1986

*Eumenes pius pius* Giordani Soika, 1986, Lavori Soc. Ven. Sci. Nat. 11: 77, 81, ♀♂, “*Timor*” (holotype ♀, MVEN).

Distribution: **Indonesia: Timor** (Giordani Soika, 1986a).

(90) *simplicilamellatus* Giordani Soika, 1935

*Eumenes simplicilamellatus* Giordani Soika, 1935 (1934), Ann. Mus. Civ. Stor. Nat. Genova 57: 117 (key), 124, pl. 2 fig. 4, ♀♂ (in subgenus *Eumenes*), “Nouva Guinea: Kapakapa” (holotype ♀, MSNG); also from other localities in New Guinea and Australia: Cairns.

Distribution: Papua New Guinea; Australia; **Indonesia: Papua** (Borsato and Giordani Soika, 1995).

(91) *tricolor* Smith, 1861

*Eumenes tricolor* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 87, ♀ (in division *Alpha* de Saussure), “Makassar” (OUM).

Distribution: **Indonesia: Sulawesi, Moluccas** (Smith, 1860a, 1864; Giordani Soika, 1935).

(92) *truncatus* Nugroho, 2010

*truncatus* Nugroho, 2010, in Nugroho *et al.*, 2010, Raffl. Bull. Zool. 58 (2): 179, 182, ♀♂, figs. 5–8; 11–12, 14, 17–18, “Papua, Sentani, forest edge, 100–150 m” (holotype ♀, MZB).

**MZB:** Holotype (♀, INDONESIA, Papua, Sentani, forest edge, 100–150 m, I. J., 26 Mar.1973, MZB. Hymn. 19213); paratype (1♂, INDONESIA, Papua, Manokwari, Ambau, 110 m, Irian Jaya expedition, 13 May 1973, MZB. Hymn. 19214).

Distribution: **Indonesia: Papua** (Nugroho *et al.*, 2010).

#### Genus *Euodynerus* Dalla Torre, 1904

(93) *trilobus* (Fabricius, 1787)

*Vespa triloba* Fabricius, 1787, Mant. Insect. 1: 290, sex not stated, “China” (ZMUC).

Distribution: British Indian Ocean Territories; Mauritius; Réunion; China; Vietnam; Malaysia: Peninsular Malaysia; Taiwan; Japan: Ryûkyû Islands; **Indonesia: Java** (Giordani Soika, 1994a).

#### Genus *Flavoleptus* Giordani Soika, 1992

(94) *flavobalteatus* (Cameron, 1903)

*Montezumia flavobalteata* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 164, ♀, [Sarawak] “Penrissen” (BMNH, no. 18. 215).

Distribution: Malaysia: Sarawak, Sabah.

#### Genus *Gribodia* Zavattari, 1912

(95) *confluenta* (Smith, 1857)

*Odynerus confluentus* Smith, 1857, Cat. Hym. Brit. Mus. 5: 60, ♀, “Sumatra” (BMNH, type no. 18.305).

*Monobia cavifrons* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 267, ♀♂, “Pulo-Laut” [island southeast of Borneo] (holotype ♀, MSNG).

*Odynerus hyades* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 112, ♀, “Sarawak” (BMNH, type no. 18.330).

Distribution: Myanmar; Malaysia: Sarawak; **Indonesia: Sumatra** (including Mentawai Islands), **Java, Kalimantan** (Smith, 1857; Bingham, 1897; Gribodo, 1892; Zavattari, 1912; van der Vecht, 1937).

(96) *guichardi* Giordani Soika, 1974

*Gribodia guichardi* Giordani Soika, 1974, Boll. Soc. Entomol. Ital. 106: 107 (key), 111, ♂♀, “N-E Borneo: Sabah, Ulu Dusun” (holotype ♂, MVEN); also from elsewhere on Borneo.

Distribution: Borneo Island.

(97) *javana* Giordani Soika, 1974

*Gribodia javana* Giordani Soika, 1974, Boll. Soc. Entomol. Ital. 106: 108 (key), 109, figs. 2-3, ♂♀, “E. Giava: Lawang” (holotype ♂, BMNH); also from elsewhere on Java.

Distribution: **Indonesia: Java** (Giordani Soika, 1974).

#### Genus *Hirtocoelius* Giordani Soika, 1992

(98) *aureoniger* (Giordani Soika, 1960)

*Eumenes aureoniger* Giordani Soika, 1960 (1958), Boll. Mus. Civ. Stor. Nat. Venezia 11: 89, ♀, “New Guinea: Aiyura” (BMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (Giordani Soika, 1992).

#### Genus *Irianmenes* Giordani Soika, 1993

(99) *schneideri* (Giordani Soika, 1943)

*Pachymenes schneideri* Giordani Soika, 1943, Mem. Soc. Entomol. Ital. 22: 102, 108, ♀, “Nouva Guinea: But” (MVEN).

Distribution: **Indonesia: Papua** (Giordani Soika, 1943).

#### Genus *Kennethia* Giordani Soika, 1994

This name is a junior homonym of *Kennethia* De Dekker, 1979 (Ostracoda), and hence it is not available. *Kennetia* Giordani Soika, 1994, is an incorrect original spelling of *Kennethia* Giordani Soika, 1994. Furthermore in p. 290, Giordani Soika gave etymology for a genus

name: “Dedicato al mio collaboratore ed amico Kenneth Guichard”. Although the spelling *Kennetia* was used under the heading of new genus, this would seem to be internal evidence of an inadvertent error, and so *Kennetia* is not available (Art. 32.5.1.1). We here list *Kennethia* Giordani Soika, 1994 for the purpose of cataloging.

(100) *bicolorata* Giordani Soika, 1994

*Kennethia bicolorata* Giordani Soika, 1994, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 291 (key), 300, ♀, “Is. Ambon: M. Salahutu, 600 m” (RMNH).

Distribution: **Indonesia: Moluccas** (Giordani Soika, 1994).

(101) *inversa* Giordani Soika, 1994

*Kennethia inversa* Giordani Soika, 1994, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 291 (key), 296, figs. 64, 67, ♀, “Borneo: Sabah, Tuaran” (MVEN).

Distribution: Malaysia: Sabah.

(102) *javana* Giordani Soika, 1994

*Kennethia javana* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 291 (key), 299, ♀, “Giava: Gedeh Tjibodas, 1400 m” (RMNH); also from another locality.

Distribution: **Indonesia: Java** (Giordani Soika, 1994a).

(103) *sabahensis* Giordani Soika, 1994

*Kennethia sabahensis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 292 (key), 293, fig. 65, ♂♀, “Borneo: Sabah, Ulu Dunun” (holotype ♂, MVEN); also from two other localities.

Distribution: Malaysia: Sabah.

#### Genus *Knemodynerus* Blüthgen, 1940

(104) *circumspectus circumspectus* (Smith, 1861)

*Odynerus circumspectus* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 88, ♀ (in subgenus *Ancistrocerus*), “Makassar” (OUM).

Distribution: **Indonesia: Sumatra, Sulawesi, Moluccas** (Ambon, Buru, Kei Islands) (Smith, 1860a; Giordani Soika, 1994a).

(105) *complanatus complanatus* Giordani Soika, 1994

*Knemodynerus complanatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 258 (key), 263, ♀♂, “Borneo: Sabah, Tu-



aran” (holotype ♀, MVEN); also from Kangean; Java; Singapore.  
Distribution: Malaysia: Sabah; Singapore; **Indonesia: Java** (including Kangean Islands) (Giordani Soika, 1994a).

(106) *imitatus* Gusenleitner, 2010

*Knemodynerus imitatus* Gusenleitner, 2010, Linzer biol. Beitr. 42(1): 695, 698, 705, ♀, “Indonesia, Thalaud-Isl. Pulau Sara Ketil, N 03° 57.205' E 126°42.465'” (holotype, OLM)

Distribution: **Indonesia: Talaud Islands.** (Gusenleitner, 2010).

(107) *tanimbarensis* Gusenleitner, 2008

*Knemodynerus tanimbarensis* Gusenleitner, 2008, Linzer biol. Beitr. 40 (1): 765, 768, 770, ♀, “Indonesia, S.Yamdena Isl. 21 km NE Saumlaki, 150 m” (OLM).

Distribution: **Indonesia: Moluccas** (Gusenleitner, 2008).

#### Genus *Labus* de Saussure, 1867

(108) *amoenus* van der Vecht, 1935

*Labus armatus* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 536, ♂, “Khasia Hills-Assam” (OUM) [junior secondary homonym of *Labus armatus* (Gribodo, 1891)].

Distribution: India: Assam; **Indonesia: Java, Sumatra** (including Bangka Island) (van der Vecht, 1935).

(109) *angularis* van der Vecht, 1935

*Labus angularis* van der Vecht, 1935, Treubia 15: 161, 164, fig. 1g–h, ♂♀, “West-Java: Tapos on Mt. Gedeh, 700 m” (holotype ♂, RMNH).

Distribution: India; Thailand; **Indonesia: Java** (van der Vecht, 1935).

(110) *clypeatus* van der Vecht, 1935

*Labus clypeatus* van der Vecht, 1935, Treubia 15: 166, fig. 1l–m, ♂♀, “Semarang” (holotype ♂, RMNH).

Distribution: **Indonesia: Java** (van der Vecht, 1935).

(111) *rufomaculatus* van der Vecht, 1963

*Labus rufomaculatus* van der Vecht, 1963, Zool. Verh., Leiden 60: 8, ♀, “Pogobina” [on Sumba] (NHMB).

Distribution: **Indonesia: Sumba** (van der Vecht, 1963).

(112) *spiniger* de Saussure, 1867

*Labus spiniger* de Saussure, 1867, Reise Novara, Zool. 2 (1), Hym.: 4, pl. I figs. 1, 1a - 1d, ♂, "Java: Batavia" (type depository unknown).

Distribution: **Indonesia: ?Sumatra, Java** (de Saussure, 1867; von Schulthess, ?1914; van der Vecht, 1935; Gusenleitner, 1988).

(113) *sumatrensis* Giordani Soika, 1991

*Labus sumatrensis* Giordani Soika, 1991, Boll. Mus. Civ. Stor. Nat. Verona 15: 163, ♂, "Sumatra: Babahrot" (MCVR).

Distribution: **Indonesia: Sumatra** (Giordani Soika, 1991).

(114) *vandervechti* Giordani Soika, 1960

*Labus vandervechti* Giordani Soika, 1960 (1958), Boll. Mus. Civ. Stor. Nat. Venezia 11: 83, ♀♂, W. Sumbawa (holotype ♀, ZMB) [type locality and sex of holotype, not indicated].

Distribution: **Indonesia: Sumbawa, Flores** (Giordani Soika, 1960; van der Vecht, 1963).

#### Genus *Latimenes* Giordani Soika, 1992

(115) *latipennis* (Smith, 1858)

*Odynerus latipennis* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 112, female (in subgenus *Symmorphus*), "Borneo (Sarawak)" (OUM).

Distribution: Malaysia: Sarawak, Sabah.

#### Genus *Leptomenoides* Giordani Soika, 1962

(116) *nitidissimus* Giordani Soika, 1988

*Leptomenoides nitidissimus* Giordani Soika, in Giordani Soika and Kojima, 1988, Boll. Mus. Civ. Stor. Nat. Venezia 38: 175, fig. 1, ♀, "Papua New Guinea: Mount Manki, Bulolo" (ANIC).

Distribution: Papua New Guinea.

#### Genus *Lissepipona* Giordani Soika, 1994

(117) *variabilis* Giordani Soika, 1994

*Lissepipona variabilis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 285, ♂♀, "Sulawesi: Toli Toli" (holotype ♂, MVEN); also from another locality.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a; Gusenleitner, 2002).

Genus *Lissodynerus* Giordani Soika, 1993

(118-1) *agilis agilis* (Smith, 1859)

*Odynerus agilis* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 164, ♂, “Aru” (OUM).

*Odynerus lucasius* Maindron, 1882, Ann. Soc. Entomol. France (6) 2: 282, pl. 3 fig. 11, ♀ (in subgenus *Ancistrocerus*), “Mancinam (Nouvelle-Guinée)” (MNHN).

Distribution: Papua New Guinea; **Indonesia: Moluccas** (Aru and Kei Islands), **Papua** (Smith, 1859, 1864, 1871; Giordani Soika, 1941, 1994).

(118-2) *agilis cursor* Giordani Soika, 1988

*Trichodynerus agilis cursor* Giordani Soika, 1988, in Giordani Soika and Kojima, Boll. Mus. Civ. Stor. Nat. Venezia 38: 178, ♀♂, “Papua New Guinea: Wau, foot of Mt. Missim” (holotype ♀, ANIC).

Distribution: Papua New Guinea.

(118-3) *agilis novaeguineae* (Giordani Soika, 1941)

*Ancistrocerus agilis novaeguineae* Giordani Soika, 1941, Boll. Soc. Venez. Stor. Nat. 2 (3): 240, ♂♀ (in subgenus *Ancistrocerus*), “New Guinea: Humboldt Bay” (holotype ♀, MVEN); also from Dilo and Kupakapa.

Distribution: Papua New Guinea; **Indonesia: Papua** (Giordani Soika, 1941, 1994a).

(119) *impulsus* (Smith, 1865)

*Odynerus impulsus* Smith, 1865, J. J. Proc. Linn. Soc. Zool. 8: 88, ♀, “Morty Island” (OUM).

Distribution: **Indonesia: Moluccas** (Morotai Island) (Smith, 1865; Giordani Soika, 1994a).

(120-1) *laminiger laminiger* (Gribodo, 1892)

*Odynerus laminiger* Gribodo, 1892 (1891), boll. Soc. Entomol. Ital. 23: 299, ♂, “Liangtélan (Borneo)” (MSNG).

*Ancistrocerus bilaminatus* van der Vecht, 1937, Treubia 16: 292, ♂♀, “Ranau-Sumatra” (holotype ♂, RMNH); also from Malaya; Borneo; Java.

**MZB:** paratype of *A. bilaminatus* (1♀, Siberut Island, west of Sumatra, Sept. 1924, coll. Kloss and Smedley, preserved dry, MZB.Hymn.0179).

Distribution: Malaysia: Sarawak, Sabah; Singapore; **Indonesia:**

**Kalimantan, Sumatra, Java** (Gribodo, 1892; van der Vecht, 1963; Giordani Soika, 1993a, 1994a).

(120-2) *laminiger ruficauda* Giordani Soika, 1994

*Lissodynerus laminiger ruficauda* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 302 (key), 307, ♀♂, "Borneo: Sandakan" (sex of holotype not indicated, USNM).

Distribution: Malaysia: Sabah.

(121) *nigripennis* Giordani Soika, 1993

*Lissodynerus nigripennis* Giordani Soika, 1993b, Boll. Mus. Civ. Stor. Nat. Venezia 42: 136, ♀, "Nuova Guinea: Irian J., 20 Km SE Sorong, 50 ft, 0°56'S 131°23'E" (RMNH).

Distribution: **Indonesia: Papua** (Giordani Soika, 1993b).

(122-1) *septemfasciatus flavithorax* Giordani Soika, 1994

*Lissodynerus septemfasciatus flavithorax* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 304 (key), 316, ♀, "Sumatra: SW Lampongs, Mt. Tanggamoos" (RMNH).

Distribution: **Indonesia: Sumatra** (Giordani Soika, 1994a).

(122-2) *septemfasciatus septemfasciatus* (Smith, 1858)

*Odynerus septem-fasciatus* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 111, ♂, "Borneo (Sarawak)" (OUM).

Distribution: India; Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra, Java** (Gribodo, 1892; Giordani Soika, 1994a).

(123) *trilaminatus* Giordani Soika, 1994

*Lissodynerus trilaminatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 303 (key), 309, fig. 72, ♀, "Bachian" (MVEN).

Distribution: **Indonesia: Moluccas** (Bacan Island) (Giordani Soika, 1994a).

(124) *wilhelmi* Giordani Soika, 1996

*Lissodynerus wilhelmi* Giordani Soika, 1996, Boll. Mus. Civ. Stor. Nat. Venezia 45: 37, ♀, "K. (eiser) William Land: Bongu" (MVEN).

Distribution: Papua New Guinea.

Genus *Nestocoelius* Giordani Soika, 1992

(125) *petiolatus* (Smith, 1859)

*Odynerus petiolatus* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 164, ♀,

“Aru” (OUM).

*Eumenes spilonotus* Cameron, 1906a, Nova Guinea 5, Zool. 1: 65, ♂,  
“Manokwari” (BMNH, lectotype no. 118193); also from Sentani.

Distribution: Malaysia: Peninsular Malaysia, Sarawak, Sabah;  
Singapore; **Indonesia: Moluccas** (Aru Islands), **Papua** (Smith,  
1859, 1861; Maindron, 1882; Cameron, 1906a; Giordani Soika,  
1992).

Genus *Nortozumia* van der Vecht, 1937

(126) *pulchella* (Smith, 1858)

*Gayella pulchella* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 108, pl. 2  
fig. 9-11, ♀, “Borneo (Sarawak)” (OUM).

*Montezumia ? forticeps* Cameron, 1902a, J. Straits Branch R. Asiat. Soc.  
37: 109, ♀, “Mt. Matang, Sarawak” (? BMNH).

*Montezumia pulchella*; Meade-Waldo, 1914, Ann. Mag. Nat. Hist. (8)  
14: 404 (syn.: *Zethus rufofemoratus* Cam.).

Distribution: Malaysia: Sarawak.

(127) *rufofemorata rufofemorata* (Cameron, 1903)

*Zethus rufofemoratus* Cameron, 1903, J. Straits Branch R. Asiat. Soc.  
39: 165, sex not stated, “Kuching” (BMNH).

Distribution: Malaysia: Sarawak.

Genus *Omicroides* Giordani Soika, 1935

(128) *singularis* (Smith, 1858)

*Eumenes singularis* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 109, ♀,  
“Borneo (Sarawak)” (OUM).

Distribution: Malaysia: Sarawak; Myanmar; Thailand; Singapore;  
**Indonesia: Sumatra, Kalimantan** (Giordani Soika, 1991; van der  
Vecht, 1937).

Genus *Orancistrocerus* van der Vecht, 1963

(129-1) *bicoloripennis bicoloripennis* (Gribodo, 1892)

*Rygchium bicoloripenne* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital.  
23: 286, ♂, “Pulo-Laut” [island southeast of Borneo] (MSNG).

*Odynerus moultoni* Meade-Waldo, 1910, Ann. Mag. Nat. Hist. (8)6: 101,  
♂ (in subgenus *Leionotus*), “Kuching (Sarawak)” (BMNH, type no.  
18. 284).

Distribution: Malaysia: Sarawak; **Indonesia: Kalimantan** (Gribodo,  
1892; van der Vecht, 1963).

(129-2) *bicoloripennis matangensis* (Cameron, 1903)

*Rhynchium matangense* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 170, ♂, “Matang” (BMNH, type no. 18461).

*Orancistrocerus bicoloripennis* var. *matangensis*; van der Vecht, 1963, Zool. Verh., Leiden 60: 109.

Distribution: Malaysia: Sarawak.

### Genus *Pachodynerus* de Saussure, 1870

(130) *nasidens* (Latreille, 1817)

*Odynerus nasidens* Latreille, 1817, in Humboldt and Bonpland, Voy.

Reg. Equin. Zool. 2 (10): 112, pl. 15 figs. 1-2, ♀ (lectotype ♂, MRSN).

*Odynerus simplicicornis* de Saussure, 1855a, Ét. Fam. Vesp. 3: 253, ♂ (in subgenus *Odynerus*, division *Epsilon*), “L’île de Cuba” (MNHN).

*Odynerus auratus* de Saussure, 1858, Rev. Mag. Zool. (2) 10: 166, ♀ (in subgenus *Odynerus* division *Epsilon*), “Le Mexique” (type depository unknown).

*Odynerus nasidens* var. *minor* de Saussure, 1875, Smithson. Misc. Coll. 254: 233, ♂♀, “Mexico” (MNHN).

*Odynerus Magdalenae* Kriechbaumer, 1900, Berl. Entomol. Z. 45: 98, 105, pl. 1 fig. 8, ♀, “‘Puerto Berrio am R. Magdalena’ (Columbien)” (ZSM).

Distribution: U. S. A.; Mexico; Guatemala; Belize; Honduras; El Salvador; Nicaragua; Costa Rica; Panama; Bahamas; Cuba; Jamaica; Cayman Is.; Haiti; Dominican Republic; Puerto Rico; St. Thomas; Dominica; Colombia; Venezuela; Trinidad; Guyana; Suriname; French Guiana; Ecuador; Peru; Brazil; Bolivia; Paraguay; Uruguay; Argentina; adventive in U. S. A.: Hawaii; Guam; Enewetak Atoll; Kwajalein Atoll; Majuro; Chuuk, Yap; Makatea; Marshall Islands; Tonga; Christmas I.; Phoenix Is.; Cook Islands; Samoa; Nauru; Easter I.; French Polynesia; Canton Atoll; Hull Atoll; Nauru; Japan: Volcano Is.; Wallis; New Caledonia; Tahiti; Ascension; **Indonesia: Papua** (introduced; Willink and Roig-Alsina, 1998).

### Genus *Paralastor* de Saussure, 1856

(131) *apicatus* (Smith, 1859)

*Alastor apicatus* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 166, “♂” [♀], “Aru” (OUM).

*Odynerus lorentzii* Cameron, 1911, Nova Guinea 9 (2), Zool.: 191, ♀, “Bivak Island” (type depository unknown).

Distribution: **Indonesia: Moluccas** (Aru Islands), **Papua** (Smith, 1859; Cameron, 1911).

(132) *cognatus* (Smith, 1861)

*Alastor cognatus* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 129, ♂, “Dory” [=Manokwari], New Guinea (OUM) (“may possibly be the male” of *Alastor fraternus* de Saussure).

Distribution: **Indonesia: Moluccas, Papua** (Smith, 1860b; Maindron, 1882).

(133) *hirtiventris* (Cameron, 1911)

*Alastor hirtiventris* Cameron, 1911, Nova Guinea 9 (2), Zool.: 193, ♀, [New Guinea] “Heuvel Bivak” (a specimen with the label “type” in Cameron’s handwriting in Amsterdam is a male).

Distribution: **Indonesia: Papua** (Cameron, 1911; Parkins, 1914).

(134) *unifasciatus* (Smith, 1859)

*Alastor unifasciatus* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 165, ♀, “Aru” (OUM).

Distribution: **Indonesia: Moluccas** (Aru Islands) (Smith, 1859; Parkins, 1914)

#### Genus *Paraleptomenes* Giordani Soika, 1970

(135) *communis* Giordani Soika, 1994

*Paraleptomenes communis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 124 (key), 129, ♀♂, “*Giava: Pasoeroean*” (holotype ♀, MVEN); also from numerous other localities; and India; Thailand; Malaysia; Singapore; Bali.

Distribution: India; Thailand; Malaysia: Peninsular Malaysia; Singapore; **Indonesia: Java, Bali** (Giordani Soika, 1994a).

(136) *guichardi* Giordani Soika, 1994

*Paraleptomenes guichardi* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 124 (key), 128, ♀, “*Borneo: Sarawak, Kanowit*” (MVEN); also from another locality.

Distribution: Malaysia: Sarawak.

#### Genus *Parancistrocerus* Bequaert, 1925

(137-1) *androcles androcles* (Meade-Waldo, 1910)

*Odynerus androcles* Meade-Waldo, 1910, Ann. Mag. Nat. Hist. (8) 6: 103, ♀ (in subgenus *Ancistrocerus*), “Shillong, Assam” (BMNH).

*Ancistrocerus horni* Sonan, 1938, Arb. Morph. Taxon. Entomol. Berl. 5: 262, figs. 4-6, ♂, “Kandy, Ceylon” (ZMB).

Distribution: India; Sri Lanka; Myanmar; Thailand; Vietnam; Malaysia: Peninsular Malaysia, Sabah; Singapore; Philippines; **Indonesia: Sumatra, Java, Sulawesi** (Giordani Soika, 1994a).

(137-2) *androcles sulawensis* Giordani Soika, 1993

*Parancistrocerus androcles sulawensis* Giordani Soika, 1993a, Lavori Soc. Venez. Sci. Nat. 18: 25, 26, ♀♂, “N Sulawesi: Dumoga Bone N. P., 220 m, near Toraut Bank Cl., 0°34’N 123°54’E” (holotype ♀, RMNH); also from another locality.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1993a).

(137-3) *androcles sumbanus* Giordani Soika, 1994

*Parancistrocerus androcles sumbanus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 159 (key), 198, ♀♂, “Is. Sumba: Lokojengo” (holotype ♀, RMNH); also from two other localities.

Distribution: **Indonesia: Sumba** (Giordani Soika, 1994a).

(138) *citropictus* Giordani Soika, 1994

*Parancistrocerus citropictus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 155 (key), 170, ♀, “Sulawesi: Reg. SW Berg Tangke Salokko, 1500 m” (MVEN); also from another locality.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

(139) *cylindricus* (de Saussure, 1862)

*Odynerus cylindricus* de Saussure, 1862, Stettin. Entomol. Ztg 23: 193, ♀ (in subgenus *Ancistrocerus* division *Ancistrocerus*), “L’île de Celebes” (RMNH).

Distribution: **Indonesia: Sulawesi** (de Saussure, 1862; Giordani Soika, 1994a).

(140) *cylindroides* Giordani Soika, 1994

*Parancistrocerus cylindroides* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 155 (key), 169, ♀, “N. Sulawesi: Madoindino, 1060 m” (RMNH).

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

(141-1) *difformis difformis* Giordani Soika, 1994

*Parancistrocerus difformis* Giordani Soika, 1993a, Lavori Soc. Venez.



- Sci. Nat. 18: 26, "Borneo: Sabah, near Lon Pa Sia (West), 1010 M ... 1200 m ... 1500 m.". (Nomen nudum).
- Parancistrocerus difformis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 157 (key), 193, ♀, "Borneo: Sabah, near Long Pa Sia (West), 1010 m" (RMNH); also from another locality.  
Distribution: Malaysia: Sabah.
- (141-2) *difformis nigerrimus* Giordani Soika, 1994  
*Parancistrocerus difformis nigerrimus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 157 (key), 194, ♀, "Borneo: Sabah, near Danum Valley, Field C, 150 m" (RMNH).  
Distribution: Malaysia: Sabah.
- (142) *gracilior* Giordani Soika, 1995  
*Parancistrocerus gracilior* Giordani Soika, 1995, Boll. Mus. Civ. Stor. Nat. Venezia 44: 98, ♀, "S. Sulawesi: Bua -Kraeng, 500 Ft" (MVEN).  
Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1995).
- (143) *inflaticeps* Giordani Soika, 1994  
*Parancistrocerus inflaticeps* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 159 (key), 181, ♀, "W Giava: Tjikadjang, Bandjarwangi, 800-900 m" (RMNH); also from another locality.  
Distribution: **Indonesia: Java** (Giordani Soika, 1994a).
- (144) *kennethianus* Giordani Soika, 1994  
*Parancistrocerus kennethianus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 158 (key), 178, ♀, "Borneo: Sabah, Ulu Dusun" (MVEN).  
Distribution: Malaysia: Sabah.
- (145) *nigriventris* Giordani Soika, 1994  
*Parancistrocerus nigriventris* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 154 (key), 165, fig. 42, ♀, "Borneo: Sabah, Tuaran" (MVEN).  
Distribution: Malaysia: Sabah.
- (146) *pseudodynerus* (Dalla Torre, 1889)  
*Odynerus exiguus* de Saussure, 1862, Stettin. Entomol. Ztg 23: 194, ♀♂ (in subgenus *Ancistrocerus*, division *Pseudodynerus*), "Java" (RMNH); Junior secondary homonym of *Leptochilus exiguus* de Saussure, 1852.

*Odynerus pseudodynerus* Dalla Torre, 1889, Wien. Entomol. Ztg 8: 125 (replacement name for *O. exiguus* de Saussure, 1862, *non O. exiguus* (de Saussure, 1852).

Distribution: **Indonesia: Java** (de Saussure, 1862; Giordani Soika, 1994a), **Kangean Islands** (new record).

(147) *pseudallodynerus* Giordani Soika, 1994

*Parancistrocerus pseudallodynerus* Giordani Soika, 1993a, Lavori Soc. Venez. Sci. Nat. 18: 26, “Borneo: Sabah, Kinbalu Park, H.Q., 1600 m”. (Nomen nudum).

*Parancistrocerus pseudallodynerus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 159 (key), 183, ♀, “Borneo: Sabah, Kinabalu Park, H.Q., 1600 m” (RMNH).

Distribution: Malaysia: Sabah.

(148-1) *robertianus javanus* Giordani Soika, 1994

*Parancistrocerus robertianus javanus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 158 (key), 177, ♂, “Giava: Mt. Gedeh, Tapos, 800 m” (RMNH).

Distribution: **Indonesia: Java** (Giordani Soika, 1994a).

(148-2) *robertianus robertianus* Cameron, 1903

*Odynerus robertianus* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 169, ♀ [Malaysia, Sarawak] “Kuching” (BMNH, type no. 18.328).

*Odynerus matangensis* Cameron, 1905a, J. Straits Branch R. Asiat. Soc. 44: 162, ♂, “Matang” (BMNH, no. 18.326).

Distribution: Malaysia: Sarawak; **Indonesia: Sumatra** (Giordani Soika, 1994a).

(149-1) *triconcavus rufipes* Giordani Soika, 1994

*Parancistrocerus triconcavus rufipes* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 157 (key), 189, ♀, “Is. Sumba: Lokojengo” (RMNH).

Distribution: **Indonesia: Sumba** (Giordani Soika, 1994a).

(149-2) *triconcavus triconcavus* Giordani Soika, 1994

*Parancistrocerus triconcavus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 157 (key), 188, fig. 40, ♀, “S Sulawesi: Patunuang” (MVEN).

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

Genus *Pareumenes* de Saussure, 1855

(150) *nigerrimus* van der Vecht, 1963

*Pareumenes nigerrimus* van der Vecht, 1963, Zool. Verh., Leiden 60: 24, fig. I, d-h, ♀♂, 3♀, “Flores: West Flores, Reo” (holotype ♀, NHMB; paratypes RMNH and NHMB).

Distribution: **Indonesia: Sumba, Flores** (van der Vecht, 1963).

(151) *pullatus* (Smith, 1864)

*Eumenes pullatus* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 39, ♀, “Ceram” (OUM).

Distribution: **Indonesia: Moluccas** (Ceram Island) (Smith, 1864).

(152-1) *quadrispinosus interjectus* van der Vecht, 1937

*Pareumenes quadrispinosus* var. *intermedius* van der Vecht, 1937, Treubia 16: 270, fig. 3c, ♀♂, “Borneo, Sarawak, Kuching” (holotype ♀, OUM); also from Sumatra [secondary junior homonym of *Pareumenes (Nortonia) intermedius* (de Saussure), 1869].

Distribution: Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra** (van der Vecht, 1937).

(152-2) *quadrispinosus javanus* van der Vecht, 1937

*Pareumenes quadrispinosus* var. *javanus* van der Vecht, 1937, Treubia vol. 16: 270, ♀♂, fig. 3c', “S.W. Java, Wijnkoopsbay” (holotype ♀, RMNH); also from 2 other localities.

Distribution: **Indonesia: Java** (van der Vecht, 1937, 1963).

Genus *Phimenes* Giordani Soika, 1992

(153-1) *arcuatus amboinensis* (van der Vecht, 1959)

*Eumenes arcuatus amboinensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 14 and 15 (key), 56, fig. 4 (37), 7 (37), ♀♂, “Amboina” (holotype ♀, RMNH); also from elsewhere on Amboina; and Saparua; Ceram.

Distribution: **Indonesia: Moluccas** (van der Vecht, 1959).

(153-2) *arcuatus arcuatus* (Fabricius, 1775)

*Vespa arcuata* Fabricius, 1775, Syst. Entomol.: 371, “Nova Hollandia” (BMNH).

Distribution: Papua New Guinea; Australia; **Indonesia: Moluccas** (Damma, Aru and Kei Islands), **Papua** (including Raja Ampat Is-

lands, Biak Island) (Fabricius, 1775, 1804; Kirby, 1894; Cameron, 1906a; du Buysson, 1913; Meade-Waldo, 1912; van der Vecht, 1959, 1960).

(153-3) *arcuatus buruanus* (van der Vecht, 1959)

*Eumenes arcuatus buruanus* van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 58, ♀, fig. 4 (38), 7 (38), “Buru, Station 15, 1922” (RMNH); also from elsewhere on Buru.

Distribution: **Indonesia: Moluccas** (Buru Island) (van der Vecht, 1959).

(153-4) *arcuatus lyratus* (van der Vecht, 1959)

*Eumenes arcuatus lyratus* van der Vecht, 1959, Zool. Verh., Leiden 41: 14 (key), 58, fig. 3h, 5o, 7 (39), ♀♂, “Halmahera, Tuguaer-Tasoa, 150 m” (holotype ♀, RMNH); also from elsewhere on Halmahera; and Morotai; Ternate; Kaioa; Batjan; Gebeh.

**MZB:** paratypes (1♀, Dodinga, sea-level, Halmahera Island, Moluccas, 2-4 Nov. 1951, local collector, preserved dry, MZB.Hymn.0031; 1♀, Wajaua, Batjan Island, Moluccas, June-July 1953, coll. Wegner, preserved dry, MZB.Hymn.0032; 1♀, Salawaku River, Batjan Island, Moluccas, coll. Wegner, preserved dry, MZB.Hymn.0033).

Distribution: **Indonesia: Moluccas** (van der Vecht, 1959).

(153-5) *arcuatus obiensis* (van der Vecht, 1959)

*Eumenes arcuatus obiensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 14 (key), 60, fig. 4 (40), 6 (40), ♀♂, “Obi Lake, 160-260 m, Obi Island” (holotype ♀, RMNH); also from other localities in Obi Island.

**MZB:** paratypes (1♀, Anggai, 0-50 m, northwest Obi, Moluccas, July-Nov. 1953, coll. Wegner, preserved dry, MZB.Hymn.0034; 2♀, Obi Lake, 160-260 m, West Obi, Moluccas, July-Nov. 1953, coll. Wegner, preserved dry, MZB.Hymn.0035 and 0036).

Distribution: **Indonesia: Moluccas** (Obi Island) (van der Vecht, 1959).

(153-6) *arcuatus transilis* (van der Vecht, 1959)

*Eumenes arcuatus transilis* van der Vecht, 1959, Zool. Verh., Leiden 41: 14 and 15 (key), 56, fig. 4 (36), 7 (36), ♀, “Misool: Fakal” (RMNH).

**MZB:** paratype (1♀, Waigama, Misool Island, northwest of Papua, Sept/Oct 1948, coll. Lieftinck, preserved dry, MZB.Hymn.0037).

Distribution: **Indonesia: Papua** (Misool Island) (van der Vecht, 1959).

(154-1) *curvatus sangirensis* (van der Vecht, 1959)

*Eumenes sangirensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 26, fig. 4 (9), 5d, 6 (9), ♀♂, "Tahulandang, Sangir Islands" (holotype ♀, RMNH).

Distribution: **Indonesia: Sulawesi** (Sangir Islands) (van der Vecht, 1959).

(154-2) *curvatus talaudense* (van der Vecht, 1959)

*Eumenes curvatus talaudensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 25, fig. 4 (8), 6 (8), ♀, "Kiami, Talaud Is." (RMNH); also other localities on Talaud Is.

Distribution: **Indonesia: Sulawesi** (Talaud Islands) (van der Vecht, 1959; Giordani Soika, 1972).

(155-1) *flavopictus baweanus* (van der Vecht, 1959)

*Eumenes flavopictus baweanus* van der Vecht, 1959, Zool. Verh., Leiden 41: 12 (key), 49, fig. 5i, 6 (31), ♂, "Bawean Island" (RMNH).

Distribution: **Indonesia: Bawean Island** (north coast of Java) (van der Vecht, 1959).

(155-2) *flavopictus blanchardi* (de Saussure, 1852)

*Eumenes blanchardi* de Saussure, 1852a, Ét. Fam. Vesp. 1: 66, pl. 12 fig. 2, ♀, "les Indes-Orientales, Pondichéry" "MNHN" [labels erroneous

*Phi flavopictum blanchardi*; Giordani Soika, 1991, Boll. Mus. Civ. Stor. Nat. Verona 15: 166 (Flores).

Distribution: **Indonesia: Java** (including Panaitan I., Karimunjawa and Kangean Islands), **Bali, Lombok, Sumbawa, Sumba, Komodo, Flores** (Cameron, 1905b; Zimmermann, 1931; von Schulthess 1935; van der Vecht, 1959; Giordani Soika, 1991).

(155-3) *flavopictus continentalis* (Zimmermann, 1931)

*Eumenes arcuata continentalis* Zimmermann, 1931, Z. Morph. Ökol. Tiere 22: 205, 224, 226, fig. 26 no. 3, ♀♂, "Sikhim" (holotype ♀, ZMB); India to Canton; Sumatra; erroneously recorded from Borneo.

*Eumenes flavopictus continentalis*; van der Vecht, 1959, Zool. Verh. (Leiden) 41: 15 (key), 36, fig. 3b, 4 (19), 5e, 7 (19) (India; Burma; China; Indo-China; Siam; Malaya; Sumatra; Sunda Straits).

Distribution: India; Nepal; China; Myanmar; Thailand; Vietnam; Malay-

sia: Peninsular Malaysia; **Indonesia: Sumatra, Krakatau** (Zimmermann, 1931; van der Vecht, 1937, 1959; Dammerman, 1948; Giordani Soika, 1991).

(155-4) *flavopictus dammae* (Dalla Torre, 1904)

*Eumenes walkeri* Kirby, 1894, Ann. Mag. Nat. Hist. 14(6): 108, ♂, “Damma Island” [not female] (BMNH). [junior primary homonym of *E. walkeri* Ritsema, 1874].

*Eumenes dammae* Dalla Torre, 1904, Gen. Ins. 19: 22 (replacement name for *walkeri* Kirby non Ritsema).

Distribution: **Indonesia: Moluccas** (Kei Islands, Damma Island) (Kirby, 1894; van der Vecht, 1959).

(155-5) *flavopictus engganensis* (van der Vecht, 1959)

*Eumenes flavopictus engganensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 15 (key), 44, fig. 4 (27), 7 (27), ♀♂, “Meok, Enggano”, May-July 1936, coll. de Jong (holotype ♀, RMNH).

**MZB:** paratypes (4♀, Meok, Enggano Island, May-July 1936, coll. de Jong, MZB.Hymn.0028, 0042, 0043, 0044; 2♀, Boeah-boeah, Enggano-central part, May-July 1936, coll. de Jong, preserved dry, MZB.Hymn.0045, 0046).

Distribution: **Indonesia: Sumatra** (Enggano Island) (van der Vecht, 1959).

(155-6) *flavopictus kalimantenus* (van der Vecht, 1959)

*Eumenes flavopictus kalimantenus* van der Vecht, 1959, Zool. Verh., Leiden 41: 15 (key), 45, fig. 1j. 3c, 4 (28), 7 (28), ♀♂, “Samarinda, Muara Kaman, East Borneo”, Sept. 1950, coll. Wegner (holotype ♀, RMNH); also from elsewhere on Borneo.

**MZB:** paratypes (1♀, Mentawir River, Balikpapan, E. Kalimantan, Oct. 1950, coll. Wegner, preserved dry, MZB.Hymn.0047; 1♀, Bengen River, Tabang, E. Kalimantan, 31 Aug. 1956, coll. Wegner, preserved dry, MZB.Hymn.0048; 1♂1♀, Midden Ost Borneo, 26 Nov. 1925, coll. Siebers, preserved dry, MZB.Hymn.0049 and 0050; 1♀, Gunung Sari, E. Kalimantan, 21 Aug. 1956, coll. Wegner, preserved dry, MZB.0051; 1♀, Bengen River, Tabang, E. Kalimantan, 6 Sept. 1956, coll. Wegner, preserved dry, MZB.Hymn.0052; 1♀, Wain River, Balikpapan, E. Kalimantan, Nov. 1950, coll. Wegner, preserved dry, MZB.Hymn.0053; 1♀, Kembang Djangut, E. Kalimantan, 30 Nov. 1956, coll. Wegner, preserved dry, MZB.Hymn.0054; 1♀, Bengen River, Tabang, E. Kalimantan, 21

Oct. 1956, coll. Wegner, preserved dry, MZB.Hymn.0055).  
Distribution: Malaysia: Sarawak; **Indonesia: Kalimantan** (van der Vecht, 1959).

(155-7) *flavopictus maidli* (Giordani Soika, 1934)  
*Eumenes arcuatus maidli* Giordani Soika, 1934 (1933), Mem. Soc. Entomol. Ital. 12: 223, ♀, [Malaysia:] “Padang” (NHMW).  
Distribution: Malaysia: Peninsular Malaysia; **Indonesia: Mentawai Islands** (west coast of Sumatra) (van der Vecht, 1959).

(155-8) *flavopictus simalurensis* (Giordani Soika, 1934)  
*Eumenes arcuatus simalurensis* Giordani Soika, 1934 (1933), Mem. Soc. Entomol. Ital. 12: 222, ♀♂, “Sumatra: Simalur, Sina-bang” (lectotype ♀, USNM).  
*Eumenes flavopictus simalurensis*; van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 41, fig. 4 (23), 5f, 7 (23).  
Distribution: **Indonesia: Simalur Island** [=Simeleue Island, Aceh, northwest of Sumatra] (Giordani Soika, 1934).

(155-9) *flavopictus telonus* (van der Vecht, 1959)  
*Eumenes flavopictus telonus* van der Vecht, 1959, Zool. Verh., Leiden 41: 13 (key), 43, fig. 4 (25), 7 (25), ♀, “Batu Islands: Pulau Tello” [=Telo Island] (RMNH).  
Distribution: **Indonesia: Batu Islands** (west coast of Sumatra) (van der Vecht, 1959).

(155-10) *flavopictus timorensis* (van der Vecht, 1959)  
*Eumenes flavopictus timorensis* van der Vecht, 1959, Zool. Verh., Leiden 41: 15 (key), 49, fig. 1k, 1, 4 (32), 7 (32), ♀♂, “Timor” (holotype ♀, RMNH); also from Wetar.  
Distribution: **Indonesia: Timor, Wetar Island, Tanimbar Islands** (Yamdena Island) (van der Vecht, 1959; Gusenleitner, 2008).

(155-11) *flavopictus umbripennis* (van der Vecht, 1959)  
*Eumenes flavopictus umbripennis* van der Vecht, 1959, Zool. Verh., Leiden 41: 15 (key), 42, fig. 7 (24), ♀, “Mt. Sitoli, Nias” (RMNH).  
Distribution: **Indonesia: Nias Island** (west coast of Sumatra) (van der Vecht, 1959).

(156-1) *fulvipennis fulvipennis* (Smith, 1857)

*Eumenes fulvipennis* Smith, 1857, Cat. Hym. Brit. Mus. 5: 24, ♀♂, “Celebes” (holotype ♀, BMNH).

Distribution: **Indonesia: Sulawesi** (including Buton Island), **Moluccas** (Sula Islands) (Smith, 1857, 1865; Zavattari, 1911; Zimmermann, 1931; van der Vecht, 1959; Gusenleitner, 1991; Giordani Soika, 1993a).

(156-2) *fulvipennis niasanus* (Zimmermann, 1931)

*Eumenes arcuata niasana* Zimmermann, 1931, Z. Morph. Ökol. Tiere 22: 207, fig. 26 no. 9, ♀♂, “Nias” (holotype ♀, ZMB).

Distribution: **Indonesia: Nias Island** (west coast of Sumatra) (Zimmermann, 1931).

(156-3) *fulvipennis saleyerensis* (Zimmermann, 1931)

*Eumenes arcuata saleyerensis* Zimmermann, 1931, Z. Morph. Ökol. Tiere 22: 207, 224, ♀, “Saleyer Is.” (ZMB).

Distribution: **Indonesia: Selayar Islands** (South of Sulawesi) (Zimmerman, 1931).

(157-1) *incola aruensis* (Giordani Soika, 1935)

*Eumenes incola* var. *aruensis* Giordani Soika, 1935 (1934), Ann. Mus. Civ. Stor. Nat. Genova 57: 137, ♀ (in subgenus *Delta*), “Isole Aru: Wokan” (MSNG).

Distribution: **Indonesia: Moluccas** (Aru and Kei Islands, near Papua) (Giordani Soika, 1935; van der Vecht, 1959); Australia.

(157-2) *incola incola* (Giordani Soika, 1935)

*Eumenes incola* Giordani Soika, 1935 (1934), Ann. Mus. Civ. Stor. Nat. Genova 57: 134, fig. III, ♀ (in subgenus *Delta*), “Nuova Guinea: Moroka” (lectotype MCG).

*Phi incola incola*; Giordani Soika and Kojima, 1988, Boll. Mus. Civ. St. Nat. Venezia 38: 181.

Distribution: Papua New Guinea.

(157-3) *incola mauritsi* (van der Vecht, 1959)

*Eumenes incola mauritsi* van der Vecht, 1959, Zool. Verh., Leiden 41: 8 (key), 29, fig. 6 (12), ♀, “Sorong, North West New Guinea” (RMNH).

Distribution: **Indonesia: Papua** (van der Vecht, 1959).



(157-4) *incola octomaculatus* (van der Vecht, 1959)

*Eumenes incola octomaculatus* van der Vecht, 1959, Zool. Verh., Leiden 41: 8 (key), 29, fig. 6 (13), ♀, “Fakal, Misool” (RMNH); non *Eumenes octomaculatus* Cameron, 1912.

Distribution: **Indonesia: Misool Island** (Northwest of Papua) (van der Vecht, 1959).

(157-5) *incola zonites* (van der Vecht, 1959)

*Eumenes incola zonites* van der Vecht, 1959, Zool. Verh., Leiden 41: 8 (key), 29, figs. 1m -o, 2a, 6 (14), ♀♂, “Hollandia, North New Guinea” (holotype ♀, RMNH); also from elsewhere in N. New Guinea.

*Eumenes incola cyclops* Giordani Soika, 1960 (1958), Boll. Mus. Civ. Stor. Nat. Venezia 11: 91, ♀, “New Guinea: Cyclops Mount., Monte Lima, Monte Sabon” (BMNH).

**MZB:** paratypes of *E. incola zonites* van der Vecht (♀♂, Hollandia, July 1938, Neth. Ind.-Amer. New Guinea Exp. 1938-1939, coll. Toxopeus, MZB.Hymn.0029, 0030).

Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht, 1959; Giordani Soika, 1960).

(158) *perplexus* (Smith, 1864)

*Eumenes perplexus* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 39, ♀, “Bouru” (?OUM); probably a var. of *arcuatus* (?).

Distribution: **Indonesia: Moluccas** (Buru Island) (Smith, 1864; van der Vecht, 1959).

(159) *violaceipennis* (van der Vecht, 1959)

*Eumenes violaceipennis* van der Vecht, 1959, Zool. Verh., Leiden 41: 12 (key), 19, fig. 4 (2), 6 (3), ♀♂, “W. Java, Radjamandala” (holotype ♀, RMNH); also from Bali.

Distribution: **Indonesia: Java, Bali** (van der Vecht, 1959).

(160) *zamenes* (van der Vecht, 1959)

*Eumenes zamenes* van der Vecht, 1959, Zool. Verh., Leiden 41: 9 (key), 27, fig. 4 (11), ♀, “Mt. Bugason, 300 m, N. Celebes” (RMNH); also from elsewhere on Celebes; and Sula.

Distribution: **Indonesia: Sulawesi, Moluccas** (Sula Islands) (van der Vecht, 1959; Giordani Soika, 1993a).

Genus *Pseudabispa* van der Vecht, 1960

(161) *abispoides* (Perkins, 1912)

*Odynerus abispoides* Perkins, 1912, Ann. Mag. Nat. Hist. (8) 9: 121, ♂,  
“New Guinea” (BMNH, type no.18.971).

Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht, 1960).

(162) *confusa* van der Vecht, 1960

*Pseudabispa confusa* van der Vecht, 1960, Nova Guinea, Zool. 6: 103  
(key), 104, fig. 2b, ♀ ?♂, “Australia: ‘Nlle Galles du Sud’ (=New  
South Wales)” (IRSNB); also from Mackay; S. New Guinea.

Distribution: Australia; **Indonesia: Papua** (van der Vecht, 1960).

Genus *Pseudalastor* Giordani Soika, 1962

(163) *xanthozonellus* van der Vecht, 1981

*Odynerus xanthozonus* Cameron, 1911, Nova Guinea 9; Zool. 2: 191, ♂,  
[New Guinea] “Bivak Island” (ZMA or BMNH) [junior primary  
homonym of *O. xanthozonus* Cameron, 1908].

*Pseudalastor xanthozonellus* van der Vecht, 1981, Proc. K. Ned. Akad.  
Wet., Ser. C, 84: 443, 454 [replacement name for *O. xanthozonus*  
Cameron, 1911, non *O. xanthozonus* Cameron, 1908].

Distribution: **Indonesia: Papua** (Cameron, 1911).

Genus *Pseudozumia* de Saussure, 1875

(164-1) *indica borneana* Giordani Soika, 1960

*Pseudozumia indica borneana* Giordani Soika, 1960 (1958), Boll. Mus.  
Civ. Stor. Nat. Venezia 11: 92, ♀, “Borneo, Monte Dulit” (ZMB).

Distribution: Malaysia; Borneo: Sarawak.

(164-2) *indica indica* (de Saussure, 1855)

*Montezumia indica* de Saussure, 1855a, Ét. Fam. Vesp. 3: 167, pl. 9, fig.  
4, 4a, ♀ (in division *Parazumia*), “Java” (lectotype, MRSN).

Distribution: India; Sri Lanka; China; Taiwan; Malaysia: Peninsular  
Malaysia; Vietnam; **Indonesia: Java, Bali, Lombok** (de Saussure,  
1855a; Giordani Soika, 1960; van der Vecht, 1963).

(164-3) *indica wallacei* (Meade-Waldo, 1910)

*Montezumia wallacei* Meade-Waldo, 1910, Ann. Mag. Nat. Hist. (8) 5:

47, ♀, “Sumatra” (BMNH).

Distribution: **Indonesia: Sumatra** (Meade-Waldo, 1910).

(165) *orientalis* (Gribodo, 1892)

*Montezumia orientalis* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital.  
23: 272, ♀, “Pulo-Laut” (island southeast of Borneo) (MSNG).

Distribution: **Indonesia: Kalimantan** (Gribodo, 1892; van der Vecht,  
1963).

(166) *viridipennis* Giordani Soika, 1960

*Pseudozumia viridipennis* Giordani Soika, 1960 (1958), Boll. Mus. Civ.  
Stor. Nat. Venezia 11: 92, ♀♂, “Celebes: Patunuang” (holotype ♀,  
MVEN); also from two other localities.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1960, 1993a; van  
der Vecht, 1963).

#### Genus *Pseumenes* Giordani Soika, 1935

(167-1) *depressus hamanni* van der Vecht, 1963

*Pseumenes depressus hamanni* van der Vecht, 1963, Zool. Verh., Leiden  
60: 28, ♂, “Celebes: Central Celebes, Palu” (holotype, RMNH).

Distribution: **Indonesia: Sulawesi** (van der Vecht, 1963).

(167-2) *depressus insignis* van der Vecht, 1963

*Pseumenes depressus insignis* van der Vecht, 1963, Zool. Verh., Leiden  
60: 27, ♀♂, “Sumba: Central Sumba, Lindiwatju” (holotype ♀,  
NHMB); also from Langgaliru, Lokojengo.

Distribution: **Indonesia: Sumba** (van der Vecht, 1963).

(167-3) *depressus pictifrons* (Smith, 1861)

*Eumenes pictifrons* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 86,  
♀ (in division *Pareumenes*), “Makassar” (OUM).

*Pareumenes depressus* var. *pictifrons*; van der Vecht, 1937, Treubia 16:  
274 (in subgenus *Pseumenes*; notes on type).

Distribution: **Indonesia: Sulawesi** (Smith, 1860a).

(167-4) *depressus thoracicus* (van der Vecht, 1937)

*Pareumenes depressus* var. *thoracicus* van der Vecht, 1937, Treubia 16:  
273, ♀♂, fig. 3b<sup>1</sup> (p. 268) (in subgenus *Pseumenes*), “West  
Java” (RMNH).

Distribution: **Indonesia: Java, Bali** (van der Vecht, 1937, 1963).

(168-1) *eximius arcuatoides* van der Vecht, 1963

*Pseumenes eximius arcuatoides* van der Vecht, 1963, Zool. Verh., Leiden 60: 29, ♀♂, “N.W. New Guinea, Sorong” (holotype ♀, RMNH); also from elsewhere in New Guinea; Southern Moluccas: Ambon, Passo.

Distribution: **Indonesia: Moluccas, Papua** (van der Vecht, 1963).

(168-2) *eximius eximius* (Smith, 1861)

*Eumenes eximius* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 126, ♀ (in division *Pareumenes*), “Bachian” (OUM).

Distribution: **Indonesia: Moluccas** (Smith, 1860b; van der Vecht, 1963).

(169) *laboriosus* (Smith, 1861)

*Eumenes laboriosus* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 87, ♀ (in division *Pareumenes*), “Makassar” (OUM).

*Pareumenes laboriosus*; van der Vecht, 1937, Treubia 16: 275 (note on type; in subgenus *Pseumenes* ?).

Distribution: **Indonesia: Sulawesi** (Smith, 1860a).

#### Genus *Rhynchium* Spinola, 1806

(170) *annuliferum* (Boisduval, 1835)

*Rygchium annuliferum* Boisduval, 1835, Voyage Astrolabe Entomol. 2: 654, [♂], pl. 12 fig. 3, “havre Carteret”, New Ireland (MNHN).

*Rygchium zonale* de Saussure, 1852a, Ét. Fam. Vesp. 1: 113, ♂♀, “La Nouvelle-Guinée” (MNHN).

Distribution: ? Papua New Guinea; New Britain; New Ireland.

(171-1) *atrum atrum* (de Saussure, 1852)

*Rygchium atrum* de Saussure, 1852a, Ét. Fam. Vesp. 1: 109, ♀♂, “Les Indes Orientales, les Iles de la Sonde, la Nouvelle-Guinée, [Warou]” (neotype ♀, USNM).

Distribution: Philippines; **Indonesia: Sulawesi, Moluccas** (Ambon, Aru Islands) (Bingham, 1897; Gusenleitner, 1991; Giordani Soika, 1993a, 1994).

(171-2) *atrum jacobsoni* Giordani Soika, 1994

*Rhynchium atrum jacobsoni* Giordani Soika, 1994b, Lavori Soc. Venez. Sci. Nat. 19: 39 (key), 42, ♀, “Sumatra: Lasikin Sim” (RMNH); also from two other localities.

Distribution: **Indonesia: Sumatra** (Giordani Soika, 1994b).

(172) *bathyxanthum* van der Vecht, 1963

*Rhynchium haemorrhoidale bathyxanthum* van der Vecht, 1963, Zool. Verh., Leiden 60: 110, ♂♀, “Sumba: Mau Marru, 500 m” (holotype ♀, NHMB); also from several localities on Sumba.

Distribution: **Indonesia: Sumba** (van der Vecht, 1963).

(173) *brunneum brunneum* (Fabricius, 1793)

*Vespa brunnea* Fabricius, 1793, Entomol. Syst. 2: 264, “Tranquebariae” (ZMUC).

*Rynchium khandalense* Dusmet, 1930, Bol. Soc. Entomol. Esp. 13: 105, ♂♀, [India:] “Khandala” (holotype ♂, MNCN).

Distribution: India; Bangladesh; Myanmar; Thailand; Cambodia; Vietnam; Society Is.; Marquesas Is.; **Indonesia: Tanimbar Islands** (Gusenleitner, 2008).

(174) *claripenne* Giordani Soika, 1994

*Rhynchium claripenne* Giordani Soika, 1994b, Lavori Soc. Venez. Sci. Nat. 19: 37, 39 (key), 43, ♀, “Borneo: Sabah, Kalabakan” (MVN); also from five other localities; and Nias; Malaysia.

Distribution: Malaysia: Peninsular Malaysia, Sabah; **Indonesia: Nias Island** (west coast of Sumatra) (Giordani Soika, 1994b).

(175-1) *haemorrhoidale dohertyi* Schulz, 1905

*Rhynchium haemorrhoidale dohertyi* Schulz, 1905 (1904), Berl. Entomol. Zeitschr. 49: 223, ♀, “Insel Sula Besi im Sula-Archipel, zwischen Celebes und Halmahera” (type depository unknown).

Distribution: **Indonesia: Moluccas** (Sula Islands) (Schulz, 1904).

(175-2) *haemorrhoidale haemorrhoidale* (Fabricius, 1775)

*Vespa haemorrhoidalis* Fabricius, 1775, Syst. Entomol.: 366, “ad Cap. b. Spei” (BMNH).

*Odynerus dimidiatus* Guérin-Méneville, 1834, in Bèlanger, Voyage Indes-Orient. Zool.: 503, pl. 4 fig. 4, “Côte du Coromandel” (type depository unknown).

*Ryngchium haemorrhoidale*; de Saussure, 1852a, Ét. Fam. Vesp. 1: 109 (♂♀; syn.: *O. dimidiatus* Guérin-Méneville)

*Ryngchium parentissimum* de Saussure, 1852a, Ét. Fam. Vesp. 1: 111, ♂♀, “Java” (MNHN).

Distribution: Myanmar; Thailand; Cambodia; Vietnam; Malaysia: Peninsular Malaysia, Sarawak, Sabah; Singapore; **Indonesia: Sumatra, Java** (including Krakatau and Bawean Island), **Bali, Sumbawa, Papua** (Bingham, 1897; Cameron 1905b, 1906, 1911; von Schulthess, 1935; Dammerman, 1948; Giordani Soika, 1991, 1994).

(175-3) *haemorrhoidale sanguineum* de Saussure, 1852

*Rhynchium sanguineum* de Saussure, 1852a, Ét. Fam. Vesp. 1: 110, ♀♂, “Java” (MNHN).

Distribution: Malaysia: Sarawak; **Indonesia: Java, Kalimantan** (de Saussure, 1852a; Giordani Soika, 1994b).

(175-4) *haemorrhoidale umeroater* Gusenleitner, 1991

*Rhynchium umeroater* Gusenleitner, 1991, Linz. Biol. Beitr. 23 (1): 257, 260, ♀♂, “NE –Sulawesi, 47 km WSW Kotamobagu, Dumoga-Bone N. Pk, Toraut (base camp), 211 m, cleared forest” (holotype ♀, BMNH); also from three other localities.

Distribution: **Indonesia: Sulawesi** (Gusenleitner, 1991; Giordani Soika, 1993a).

(176) *medium* (Maindron, 1882)

*Rygchium haemorrhoidale* var. *medium* Maindron, 1882, Ann. Soc. Entomol. France (6) 2: 278, pl. 5 fig. 1-5 [excl. fig. 4 ?], ♂ [“♀”], “Nouvelle-Guinée” (MNHN).

*Rygchium künckeli* Maindron, 1882, Ann. Soc. Entomol. France (6) 2: 279, pl. 5 figs. 6-7, ♂, “montagnes d’Amberbaki (Nouvelle-Guinée)” (MNHN).

Distribution: Papua New Guinea, D’Entrecasteaux Isl., Woodlark I; **Indonesia: Papua** (Maindron, 1882; Cameron, 1906a, 1911, 1913; Meade-Waldo, 1912; van der Vecht, 1960).

(177-1) *mirabile biakense* (van der Vecht, 1960)

*Rygchium mirabile biakense* van der Vecht, 1960, Nova Guinea, Zool. 6: 110, ♂♀, “Biak Island” (holotype ♀, RMNH); also from Schouten Islands.

Distribution: **Indonesia: Papua** (Biak Island, Schouten Islands) (van der Vecht, 1960).

(177-2) *mirabile expolitum* (van der Vecht, 1960)

*Rygchium mirabile expolitum* van der Vecht, 1960, Nova Guinea, Zool. 6: 109, ♂♀, “Northern New Guinea Hollandia” (holotype ♀, RMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht, 1960).

(178-1) *rubropictum nigriventre* Giordani Soika, 1994

*Rhynchium rubropictum nigriventre* Giordani Soika, 1994b, Lavori Soc. Venez. Sci. Nat. 19: 37, 50, ♀♂, “Ambon: Amboina” (holotype ♀, MSNG); also from three other localities.

Distribution: **Indonesia: Moluccas** (Giordani Soika, 1994b).

- (178-2) *rubropictum rubropictum* Smith, 1861  
*Rhynchium rubropictum* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool.  
5: 128(? var. of *haemorrhoidale*), ♂♀, locality not stated (OUM).  
Distribution: **Indonesia: Moluccas** (Smith, 1860b, 1862, 1865; Main-  
dron, 1882; Schulz, 1904; Giordani Soika, 1994b).
- (178-3) *rubropictum tenimberense* Giordani Soika, 1994  
*Rhynchium rubropictum tenimberense* Giordani Soika, 1994b, Lavori  
Soc. Venez. Sci. Nat. 19: 37, 40 (key), 49, ♀♂, “*Tenimber:*  
*Larat*” (holotype ♀, MVEN); also from two other localities.  
Distribution: **Indonesia: Moluccas** (Tanimbar Islands) (Giordani Soika,  
1994b).
- (179) *superbum* de Saussure, 1852  
*Rhynchium superbum* de Saussure, 1852a, Ét. Fam. Vesp. 1: 113, ♀, “*la*  
*Nouvelle Hollande*” (MNHN).  
Distribution: Australia; **Indonesia: Moluccas** (Aru and Kei Islands),  
**Papua** (Smith, 1859; Maindron, 1882; von Schulthess, 1932).

Genus *Rugomenes* Giordani Soika, 1992

- (180) *rugifrons* (Cameron, 1903)  
*Odynerus rugifrons* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39:  
167, ♀, “*Kuching*” (BMNH, type no. 18.332).  
Distribution: Borneo: Sarawak, Brunei; **Indonesia: Kalimantan**  
(Giordani Soika, 1992).

Genus *Stenodyneriellus* Giordani Soika, 1962

- (181) *apicatimimus* Giordani Soika, 1996  
*Stenodyneriellus apicatimimus* Giordani Soika, 1996, Boll. Mus. Civ.  
Stor. Nat. Venezia 45: 35, ♀, “*Nuova Guinea: Da Bulolo a*  
*Lae*” (MVEN).  
Distribution: Papua New Guinea.
- (182) *auricomus* Gusenleitner, 2008  
*Stenodyneriellus auricomus* Gusenleitner, 2008, Linzer biol. Beitr. 40  
(1): 765, 767, 770, “*Indonesia, S.Yamdena Isl. 21 km NE Saumlaki,*  
*150 m*” (OLM).  
Distribution: **Indonesia: Tanimbar Islands** (Gusenleitner, 2008).
- (183) *birostratus* Giordani Soika, 1994  
*Stenodyneriellus birostratus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor.  
Nat. “*G. Doria*” 90: 53 (key), 83, fig. 26, ♀♂, “*Borneo: Sabah,*  
*Kalambakan*” (holotype ♀, MVEN); also from two other localities;  
and Thailand; Malaysia.

Distribution: Thailand; Malaysia: Peninsular Malaysia, Sabah.

(184) *carinicollis carinicollis* (Cameron, 1903)

*Odynerus carinicollis* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 168, “♂” [♀!], “Kuching” (BMNH, type no. 18. 329).

*Ancistrocerus carinicollis*; van der Vecht, 1937, Treubia 16: 290 (re-description; Borneo).

Distribution: Malaysia: Sarawak.

(185) *celebensis* Giordani Soika, 1994

*Stenodyneriellus celebensis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 56 (key), 98, ♀, “C. Sulawesi: Luwuk Salodik, 400 m” (RMNH).

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

(186) *cilicioides* Giordani Soika, 1994

*Stenodyneriellus cilicioides* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 56 (key), 103, fig. 32, ♀♂, “Malaya: Singapore” (holotype ♀, USNM); also from Sumatra; Borneo; Java.

Distribution: Singapore; Malaysia: Sabah, Sarawak; **Indonesia: Sumatra, Java** (Giordani Soika, 1994).

(187) *cilicius* (Cameron, 1902)

*Odynerus cilicius* Cameron, 1902, J. Straits Branch R. Asiat. Soc. 37: 111, ♀, “Kuching, Sarawak” (BMNH).

Distribution: Malaysia: Sarawak; **Indonesia: Kalimantan** (Giordani Soika, 1994a).

(188) *convexus irianus* Giordani Soika, 1994

*Stenodyneriellus convexus irianus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 52 (key), 65, ♀♂, “Nuova Guinea: Irian J.: Jayapura, 200 m” (holotype ♀, RMNH); also from five other localities.

Distribution: **Indonesia: Papua** (Giordani Soika, 1994a).

(189) *duplostrigatus* (von Schulthess, 1934)

*Odynerus duplostrigatus* von Schulthess, 1934, Arb. Morph. Taxon. Entomol. Berl, 1: 96, ♀♂ (in subgenus *Lionotus*), “Philippinen, I. Bilaran, Luzon, Los Bannos” (ETHZ).

*Lionotus duplostrigatus*; Baltazar, 1966, Pacif. Ins. Monogr. 8: 302 (cat.).

Distribution: Malaysia: Sarawak; Philippines.

(190) *facilis* (Smith, 1861)

*Odynerus facilis* Smith, 1860a (1861), J. Proc. Linn. Soc. Zool. 5: 88, ♂ (in subgenus *Ancistrocerus*), “Makassar” (OUM).

Distribution: **Indonesia: Sulawesi** (Smith, 1860a).



(191) *guttulatus* (de Saussure, 1862)

*Odynerus guttulatus* de Saussure, 1862, Stettin. Entomol. Ztg 23: 200, ♀  
(in subgenus *Odynerus*, division *Epsilon*), “Sumatra” (RMNH)  
[regarded as identical to *O. multipictus* Smith, 1858, but de Saussure  
proposed to use this name for *O. multipictus* Smith, 1859, now *O.*  
*aruanus* Gribodo].

*Ancistrocerus megaspilus* Cameron, 1907a, Ann. Mag. Nat. Hist. (7) 20:  
85, ♀, “Kuching” (BMNH, type no. 18.286).

*Odynerus santubongensis* Cameron, 1908, Dtsch. Entomol. Z. 1908:  
562, ♂, “Santabong” (BMNH, type no. 18.287).

*Odynerus guttulatus* var. *nigradorsus* van der Vecht, 1937, Treubia 16:  
287, ♂♀, “Java” (holotype ♀, RMNH).

Distribution: India; Thailand; Myanmar; Malaysia: Peninsular Malaysia,  
Sarawak; Singapore; **Indonesia: Sumatra, Java** (de Saussure,  
1862; van der Vecht, 1937; Giordani Soika, 1991, 1994).

(192) *heterospilus* (Cameron, 1907)

*Odynerus heterospilus* Cameron, 1907a, Ann. Mag. Nat. Hist. (7) 20: 84,  
♀, “Kuching, Borneo” (BMNH, type no. 18.327) [error on label:  
“*erythrospilus*“].

Distribution: Thailand; Malaysia: Peninsular Malaysia, Sarawak;  
Singapore; **Indonesia: Sumatra, Java** (van der Vecht, 1937;  
Giordani Soika, 1994a).

(193) *hewittii* (Cameron, 1907)

*Odynerus hewittii* Cameron, 1907a, Ann. Mag. Nat. Hist. (7)20: 82, ♂,  
“Kuching, Borneo” (BMNH, type no. 18.285a).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; Singapore;  
**Indonesia: Kalimantan** (Giordani Soika, 1994a).

(194) *insularis* Smith, 1859

*Odynerus insularis* Smith, 1858b (1859), J. Proc. Linn. Soc. Zool. 3: 21,  
♂ (in subgenus *Leionotus*), locality not stated (OUM).

*Odynerus sobrinus* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 40,  
♀, “Ceram” (OUM).

Distribution: **Indonesia: Sulawesi, Moluccas** (Ceram Island) (Smith,  
1858b, 1864; Giordani Soika, 1993a; 1994a).

(195) *iriensis* Giordani Soika, 1995

*Stenodyneriellus iriensis* Giordani Soika, 1995, Boll. Mus. Civ. Stor.  
Nat. Venezia 44: 95, ♂, “Nuova Guinea: Irian J. 11 Km S. Bupul, 7°  
39’S 140°53’E” (RMNH).

Distribution: **Indonesia: Papua** (Giordani Soika, 1995).

(196) *longithorax* Giordani Soika, 1994

*Stenodyneriellus longithorax* Giordani Soika, 1993a, Lavori Soc. Venez.  
Sci. Nat. 18: 27- “Borneo: SW Sabah, near Long Pa Sia (East), 1000  
m”. (Nomen nudum).

*Stenodyneriellus longithorax* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 49, 56 (key), 113, fig. 33, ♀, "Borneo. Sabah, Tuaran" (MVEN); also from another locality.

Distribution: Malaysia: Sabah.

(197) *multipictus* (Smith, 1858)

*Odynerus multipictus* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 112, ♀, "Borneo (Sarawak)" (OUM).

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; Singapore; **Indonesia: Sumatra, Java** (van der Vecht, 1937; Giordani Soika, 1994a).

(198) *nitidissimus* Giordani Soika, 1995

*Stenodyneriellus nitidissimus* Giordani Soika, 1995, Boll. Mus. Civ. Stor. Nat. Venezia 44: 93, 94 (key), ♀, "NE Nuova Guinea: Waghi V., Kerowagi area, 1700 m" (RMNH).

Distribution: Papua New Guinea.

(199) *perpunctatus* Giordani Soika, 1994

*Stenodyneriellus perpunctatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 52 (key), 91, ♀, "Borneo: Sabah, Tuaran" (MVEN).

Distribution: Malaysia: Sabah.

(200) *rubroclypeatus* Giordani Soika, 1994

*Stenodyneriellus rubroclypeatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 53 (key), 78, figs. 25-25, ♀♂, "Sulawesi: S. Celebes" (holotype ♀, RMNH); also from another locality.

Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1994a).

(201) *sublamellatus* Giordani Soika, 1994

*Stenodyneriellus sublamellatus* Giordani Soika, 1993a, Lavori Soc. Venez. Sci. Nat. 18: 27, "Borneo: Sabah, near Long Pa Sia - Long Miao, 1000 m". (Nomen nudum).

*Stenodyneriellus sublamellatus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 55 (key), 68, ♀, "Borneo: near Long Pa Sia (West), 1010 m" (RMNH).

Distribution: Malaysia: Sabah.

(202) *tegularis* Giordani Soika, 1994

*Stenodyneriellus tegularis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. "G. Doria" 90: 52 (key), 66, fig. 22, ♂, "Borneo: Sandakan" (USNM).

Distribution: Malaysia: Sabah.

(203) *trimaculatus* Giordani Soika, 1988

*Stenodyneriellus trimaculatus* Giordani Soika, 1988, in Giordani Soika and Kojima, Boll. Mus. Civ. St. Nat. Venezia 38: 179, fig. 2, ♀,

“*Papua New Guinea*: Foot of Mt. Missim” (ANIC).  
Distribution: Papua New Guinea; **Indonesia: Papua** (Giordani Soika, 1994a).

(204) *unipunctatus* Giordani Soika, 1995  
*Stenodynerellus unipunctatus* Giordani Soika, 1995, Boll. Mus. Civ. Stor. Nat. Venezia 44: 96, ♀♂, “*Nuova Guinea*: Irian J., Merauke, 8°30’S 140°22’E” (holotype ♀, RMNH).  
Distribution: **Indonesia: Papua** (Giordani Soika, 1995).

Genus *Stenodynerus* de Saussure, 1863

(205) *bicolor* Giordani Soika, 1994  
*Stenodynerus bicolor* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 135 (key), 139, ♀, “*Sumatra*: Soekaranda” (MVEN); also from two other localities; and Java.  
Distribution: **Indonesia: Sumatra, Java** (Giordani Soika, 1994a).

(206) *brevis* Giordani Soika, 1994  
*Stenodynerus brevis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 136 (key), 143, ♂, “*Borneo*: Sabah, Mt. Kinabala, 5000 ft” (MVEN).  
Distribution: Malaysia: Sabah.

(207) *ignotus* Giordani Soika, 1994  
*Stenodynerus ignotus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 134 (key), 138, ♀♂, “*Giava occidentale*: Gedeh, Tjibodas, 1450 m” (holotype ♀, RMNH). also from five other localities; and Singapore; Malaysia.  
Distribution: Malaysia: Peninsular Malaysia; Singapore; **Indonesia: Java** (Giordani Soika, 1994a).

(208) *laetus* Giordani Soika, 1994  
*Stenodynerus laetus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 137 (key), 145, ♀, “*Borneo*: Sabah, Mt. Kinabalo, 5000 ft” (MVEN).  
Distribution: Malaysia: Sabah.

(209) *malayanus* Giordani Soika, 1994  
*Stenodynerus malayanus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 137 (key), 147, ♀♂, “*Borneo*: Sabah, Mt. Kinabalo, 5000 ft” (holotype ♀, MVEN); also from another locality.

Distribution: Malaysia: Sabah.

(210) *rufipes* Gusenleitner, 2000

*Stenodynerus rufipes* Gusenleitner, 2000, Linzer Biol. Beitr. 37 (2): 939, 942, ♀♂, “Indonesia, Bali, Gianyar” (holotype ♀, OLM). also from two other localities.

Distribution: **Indonesia: Bali** (Gusenleitner, 2000).

Genus *Subancistrocerus* de Saussure, 1855

(211) *angulicollis* Giordani Soika, 1994

*Subancistrocerus angulicollis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 13 (key), 21, ♀♂, “Sumatra: Deli” (holotype ♀, MVEN). also from Malaysia; Borneo.

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; **Indonesia: Sumatra** (Giordani Soika, 1994a).

(212) *clavicornis* (Smith, 1859)

*Odynerus clavicornis* Smith, 1858b (1859), J. Proc. Linn. Soc. Zool. 3: 21, ♂ (in subgenus *Ancistrocerus*), “Celebes” (OUM).

Distribution: New Ireland; **Indonesia: Sumatra, Java, Sumba, Sulawesi, Moluccas** (Smith, 1858b; von Schulthess, 1914; Gusenleitner, 1991; Giordani Soika, 1993a, 1994a).

(213) *giordanii* Castro, 2003

*Subancistrocerus nigrinus* Giordani Soika, 1993a, Lavori Soc. Venez. Sci. Nat. 18: 25, “SW Sabah: Long Pa Sia (West) 1010 m, Long Pa Sia (East), 1000 m”. (Nomen nudum).

*Subancistrocerus nigrinus* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 15 (key), 43, ♀, “Borneo: Sabah, near Long Pa Sia (West), 1010 m” (RMNH); also from another locality. Junior primary homonym of *Subancistrocerus monsticornis nigrinus* Giordani Soika, 1988.

Distribution: Malaysia: Sabah.

(214) *imbecillus* (de Saussure, 1852)

*Odynerus imbecillus* de Saussure, 1852a, Ét. Fam. Vesp. 1: 126, ♂, (in subgenus *Ancistrocerus*), “Java” (MNHN).

Distribution: **Indonesia: Java** (de Saussure, 1852a).

(215) *obiensis* Giordani Soika, 1994

*Subancistrocerus obiensis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 15 (key), 29, ♀, “Is. Molucche: Obi, Obi Lake, 160-260 m” (RMNH).

Distribution: **Indonesia: Moluccas** (Obi Island) (Giordani Soika, 1994a).

(216) *spinicollis* Giordani Soika, 1994  
*Subancistrocerus spinicollis* Giordani Soika, 1994a, Ann. Mus. Civ. Stor.  
Nat. "G. Doria" 90: 13 (key), 24, ♀, "Borneo: Ranav" (RMNH).  
Distribution: Borneo.

(217) *thalassarctos* (Dalla Torre, 1889)  
*Odynerus modestus* Smith, 1859, J. Proc. Linn. Soc. (Zool.) 3: 165, ♀,  
"Aru" (OUM).  
*Odynerus thalassarctos* Dalla Torre, 1889, Wien. Entomol. Ztg. 8: 125  
[replacement name for *Odynerus modestus* Smith, a secondary  
homonym of *Odynerus modestus* (de Saussure, 1852)].  
*Subancistrocerus monsticornis nigritus* Giordani Soika, in Giordani  
Soika and Kojima, 1988, Boll. Mus. Civ. St. Nat. Venezia 38: 178,  
♀♂, "Papua New Guinea: Wau" (holotype ♀, ANIC). also from  
another locality.  
Distribution: Papua New Guinea; **Indonesia: Sulawesi, Moluccas** (Aru  
Islands), **Papua** (Smith, 1859; Giordani Soika, 1941, 1993c).

#### Genus *Symmorphus* Wesmael, 1836

(218) *alkimus dialeukus* Cumming, 1989  
*Symmorphus alkimus dialeukus* Cumming, 1989, Mem. Entomol. Soc.  
Can. 148: 3, 5, 21 (key), 28, ♀ (in subgenus *Symmorphus*), "N Su-  
matra/Sibolangit, 500 m" (RMNH).  
Distribution: **Indonesia: Sumatra** (Cumming, 1989).

#### Genus *Zethus* Fabricius, 1804

(219) *celebensis* Giordani Soika, 1960  
*Zethus celebensis* Giordani Soika, 1960 (1958), Boll. Mus. Civ. Stor.  
Nat. Venezia 11: 75, 76 (key), 78, ♀, "Celebes: Latimodjong, Uru,  
800 m.s.m" (ZMB).  
Distribution: **Indonesia: Sulawesi** (Giordani Soika, 1960, 1973, 1993a;  
Gusenleitner, 1991).

(220) *mandibularis* Giordani Soika, 1995  
*Zethus mandibularis* "(v. d. Vecht i. l.)" Giordani Soika, 1995, Boll.  
Mus. Civ. Stor. Nat. Venezia 44: 93, ♂, "Flores: Tolo  
Odsa" (RMNH); also from Sumba.  
Distribution: **Indonesia: Flores, Sumba** (Giordani Soika, 1995).

(221) *quadridentatus* Cameron, 1902  
*Zethus quadridentata* Cameron, 1902, Entomologist 35: 314, ♂,  
"Borneo" (BMNH).  
Distribution: Borneo.

(222) *varipunctatus* Cameron, 1902  
*Zethus varipunctatus* Cameron, 1902, J. Straits Branch R. Asiat. Soc. 37:  
110, ♀, “Kuching, Sarawak” (BMNH).  
Distribution: Malaysia: Peninsular Malaysia, Serawak.

Subfamily **Stenogastrinae**

Genus *Anischnogaster* van der Vecht, 1972

(1) *dubia* van der Vecht, 1972  
*Anischnogaster dubia* van der Vecht, 1972, Zool. Meded. 47: 242, 247,  
♀♂, “N.W. New Guinea ... Araucaria Camp, 800 m” (holotype ♀,  
RMNH); also from other localities in Irian Jaya (= Papua).  
Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht,  
1972).

(2) *iridipennis* (Smith, 1859)  
*Ischnogaster iridipennis* Smith, 1859, J. Proc. Linn. Soc., Zool. 3: 166,  
♂, “Aru” (lectotype, OUM).  
*Ischnogaster malayaensis* Cameron, 1906c, Tijdschr. Entomol. 49: 231,  
♀, “Etna Bay” (ZMA).  
*Ischnogaster coriaceus* du Buysson, 1907, Notes Leyden Mus. 29: 79,  
♂, “Nouvelle Guinée” (RMNH).  
Distribution: Papua New Guinea; **Indonesia: Moluccas** (Aru Islands),  
**Papua** (including Misool and Waigeo Island) (van der Vecht, 1972).

(3) *laticeps* van der Vecht, 1972  
*Anischnogaster laticeps* van der Vecht, 1972, Zool. Meded. 47: 242, 249,  
♀♂, “North West New Guinea, Araucaria Camp, 800 m” (holotype  
♀, RMNH); also from other localities in New Guinea.  
Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht,  
1972).

(4-1) *loriai lorai* (du Buysson, 1909)  
*Ischnogaster loriai* du Buysson, 1909a, Ann. Mus. Civ. Stor. Nat.  
Genova 44: 313, ♂, “Nouvelle Guinée S. E. Moroka, 1300  
m” (MSNG).  
Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht,  
1972).

(4-2) *loriai maculata* van der Vecht, 1972  
*Anischnogaster loriai maculata* van der Vecht, 1972, Zool. Meded. 47:  
253, ♀♂, “N. E. New Guinea ... Mt. Kaindi, Nami Ck., 1700  
m” (holotype ♂, BPBM); also from other localities in Irian Jaya.  
Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht,  
1972).

(5) *spilapsis* (Cameron, 1913)

*Ischnogaster spilapsis* Cameron, 1913a, Bijdr. Dierk. 19: 78, ♂, “Waigeu” (ZMA).

Distribution: Papua New Guinea; **Indonesia: Papua** (including Waigeo Island) (van der Vecht, 1972).

Genus *Eustenogaster* van der Vecht, 1969

(6) *agilis* (Smith, 1860)

*Ischnogaster agilis* Smith, 1860, J. Proc. Linn. Soc., Zool. 5, Suppl.: 89, ♂, “Makassar” (OUM).

Distribution: **Indonesia: Sulawesi** (Smith, 1860; Saito and Kojima, 2007).

(7) *calyptodoma* (Sakagami and Yoshikawa, 1968)

*Stenogaster calyptodoma* Sakagami and Yoshikawa, 1968, Annot. Zool. Japon. 41 (2): 77, ♀, “Kampong Astana near Kuching, Sarawak, Malaysian Borneo” (UMHU).

Distribution: **Indonesia: Sumatra, Kalimantan** (Saito and Kojima, 2007); Malaysia: Peninsular Malaysia, Sarawak.

(8) *fulvipennis* (Cameron, 1902)

*Ischnogaster fulvipennis* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 106, ♀♂, “Mt. Penrissen, Sarawak” (BMNH).

? *Ischnogaster fuscipes* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 171, sex not stated, “Klackang” (BMNH).

Distribution: Malaysia: Sarawak.

(9) *gibbosa* Starr and van der Vecht, 2006

*Eustenogaster gibbosa* Starr and van der Vecht, in Hashim *et al.*, 2006, Tropical Zoology 19: 289, ♀, “Malaysia, Gombak FSC” (MSNUF).

Distribution: Malaysia: Peninsular Malaysia, Borneo; Singapore; **Indonesia: Kalimantan, Sumatra, Mentawai Islands, Krakatau, Java, Bangka Island** (Saito and Kojima, 2007).

(10) *latebricola* Saito, 2007

*Eustenogaster latebricola* Saito, in Saito and Kojima, 2007, Zootaxa 1556: 1, 6, 8, 13, 14, 17, 18, 25, ♀♂, (holotype ♀ from “S. Sumatra, 250 m, Res. Benkoelen, Mocara Tenam”, RMNH).

Distribution: Malaysia: Peninsular Malaysia, Borneo; **Indonesia: Kalimantan, Sumatra, Krakatau, Java, Bangka Island** (Saito and Kojima, 2007).

(11) *hauxwellii* (Bingham, 1894)

*Ischnogaster hauxwellii* Bingham, 1894, J. Bombay Nat. Hist. Soc. 8 (3): 386, pl. 1 fig. 4, ♀♂, “Tenasserim (Ataran and Ye Valleys)” (BMNH).

*Ischnogaster rufo-maculata* Bingham, 1894, J. Bombay Nat. Hist. Soc. 8: 385, ♀, “Tenasserim (Salween Valley, Tavoy)” (BMNH).

? *Stenogaster bicarinata* Dover and Rao, 1922, J. Asiat. Soc. Bengal (n. ser.) 18: 242, ♂, “Ten miles south of Kuching, Sarawak, Borneo” (ZSI).

Distribution: Myanmar; Thailand; Malaysia: Sarawak; Singapore; Philippines: Mindanao; **Indonesia: Java** (Saito and Kojima, 2007).

(12) *micans* (de Saussure, 1852)

*Ischnogaster micans* de Saussure, 1852b, Ann. Soc. Ent. France (2) 10: 24, ♀, “Java” (RMNH).

? *Ischnogaster ornatifrons* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 105, ♀, “Santubong, Kuching, Sarawak” (BMNH).

Distribution: (?) China: Yunnan; Myanmar; Thailand; Malaysia: Sarawak; Singapore; **Indonesia: Java, Sumatra** (de Saussure, 1852b; Saito and Kojima, 2007).

#### Genus *Liostenogaster* van der Vecht, 1969

(13) *campanulae* Turillazzi, 1999

*Liostenogaster campanulae* Turillazzi, 1999, Trop. Zool. 12: 350, ♀♂ (holotype ♂ from “Malaysian Peninsula. Genting Tea Estate, Genting Sempah (el. 610 m), Pahang State”, MSNUF).

Distribution: Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (Turillazzi, 1999).

(14) *flaviplagiata* (Cameron, 1902)

*Ischnogaster flaviplagiatus* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 104, ♀, “Kuching, Sarawak” (BMNH).

Distribution: Thailand; Malaysia: Sarawak; **Indonesia: Sumatra** (Turillazzi and Carfi, 1996; Carpenter and Kojima, 1997a).

(15) *flavolineata* (Cameron, 1902)

*Ischnogaster flavolineata* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 108, ♀, “Lingga, Sarawak” (BMNH).

*Ischnogaster butteli* von Schulthess, 1914, Zool. Jahrb. (Abt. Syst. Geogr. Biol. Tiere) 37 (3): 255, 257, ♀♂, “Malacca, Taiping Hills,...Maxwell's Hill, Taiping” (ZMB).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; Singapore; **Indonesia: Sumatra** (Carpenter and Kojima, 1997a).

(16) *nitidipennis* (de Saussure, 1853)

*Ischnogaster nitidipennis* de Saussure, 1853b, Ét. Fam. Vesp. 2: 10, ♂, “Selon l'étiquette, Cayenne!?? mais il est évident à mes yeux que cet insecte ne peut venir que de Java, de la Nouvelle-Guinée, ou de la



Polynésie” (MNHN).

Distribution: China: Yunnan; Myanmar; Thailand; Malaysia: Peninsular Malaysia; Singapore; Philippines: Luzon, Palawan; **Indonesia: Java, Bali, Kalimantan** (Carpenter and Kojima, 1997a; Kojima *et al.*, 2007).

(17) *pardii* Turillazzi and Carfi, 1996

*Liostenogaster pardii* Turillazzi and Carfi, 1996, Trop. Zool. 9 (1): 19, 20, figs. 1-22, ♀♂, “Malaysian Peninsula. Genting Sempah, Genting Tea Estate (elev. 610 m), Pahang State” (holotype ♂, MSNUF); also from Selangor and Sarawak

Distribution: Malaysia: Peninsular Malaysia, Sarawak.

(18) *picta* (Smith, 1860)

*Ischnogaster pictus* Smith, 1860, J. Proc. Linn. Soc., Zool. 5, Suppl.: 89, ♀, “Makassar” (OUM).

Distribution: **Indonesia: Sulawesi** (Carpenter and Kojima, 1997a).

(19) *topographica* Turillazzi, 1999

*Liostenogaster topographica* Turillazzi, 1999, Trop. Zool. 12: 336, ♀♂ (holotype ♂ from “Malaysian Peninsula. Genting Tea Estate, Genting Sempah (el. 610 m), Pahang State”, MSNUF).

Distribution: Malaysia: Peninsular Malaysia, Sarawak.

(20) *varipicta* (Rohwer, 1919)

*Stenogaster varipictus* Rohwer, 1919, Bull. Hawaii. Sugar Pltrs. Assoc. Exp. Stat., Ent. Ser. 14 (1): 3a, 15, ♀, “Los Baños, Luzon, P. I.” (USNM).

Distribution: Malaysia: Peninsular Malaysia; Singapore; Philippines: Palawan, Visayas, Mindanao, Luzon; **Indonesia: Sumatra, Kalimantan** (Carpenter and Kojima, 1997a).

(21) *vechti* Turillazzi, 1988

*Liostenogaster vechti* Turillazzi, 1988, Trop. Zool. 1: 193, 194, ♀♂, *Peninsular Malaysia*: Fraser Hill, Pahang State (holotype ♂, MSNUF); also from other localities in Malaysia.

Distribution: Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (Carpenter and Kojima, 1997a).

#### Genus *Metischnogaster* van der Vecht, 1977

(22) *cilipennis* (Smith, 1857)

*Ischnogaster cilipennis* Smith, 1857, Cat. Hym. Brit. Mus. 5, Vesp.: 92,

♂, “Malacca (Mount Ophir)” (lectotype, BMNH).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra, Kalimantan** (van der Vecht, 1977; Carpenter and Kojima, 1997a).

(23) *drewseni* (de Saussure, 1857)

*Ischnogaster drewseni* de Saussure, 1857, Ann. Soc. Ent. France (3) 5: 315, ♂, “Poulo-Pinang, île de l'Archipel Indien” [= Penang Island?] (MHN).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; Singapore; Philippines: Palawan; **Indonesia: Sumatra, Belitung, Java, Kalimantan** (van der Vecht, 1977; Carpenter and Kojima, 1997a).

#### Genus *Parischnogaster* von Schulthess, 1914

(24) *alternata* Sakagami, 1969

? *Stenogaster sarawakensis* Dover and Rao, 1922, J. Asiat. Soc. Bengal (n. ser.) 18: 240, ♀, “10 miles south of Kuching, Sarawak, Borneo” (ZSI).

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; Singapore.

(25) *aurifrons* (Smith, 1862)

*Ischnogaster aurifrons* Smith, 1862, J. Proc. Linn. Soc., Zool. 6: 58, ♀, “Celebes (Tondano)” (OUM).

Distribution: **Indonesia: Sulawesi** (Carpenter and Kojima, 1997a).

(26) *gracilipes* (van der Vecht, 1977)

*Holischnogaster gracilipes* van der Vecht, 1977, Tijdschr. Entomol. 120: 73, figs. 38-49, ♀♂, “Borneo: Sabah...Mt. Kinabalu, 5000 ft” (MSVN); also from other localities in Borneo and Sumatra.

Distribution: Malaysia: Sabah, Sarawak; **Indonesia: Sumatra** (van der Vecht, 1977; Carpenter and Kojima, 1997a).

(27) *jacobsoni* (du Buysson, 1913)

*Ischnogaster jacobsoni* du Buysson, 1913b, Bull. Mus. Hist. Nat. Paris 7: 436, ♂, “Java, Noesa Kambangan” (MNHN).

Distribution: China: Yunnan; Malaysia: Peninsular Malaysia, Sabah; **Indonesia: Sumatra, Java** (Carpenter and Kojima, 1997a).

(28) *mellyi* (de Saussure, 1852)

*Ischnogaster mellyi* de Saussure, 1852b, Ann. Soc. Ent. France (2) 10:

- 25, pl. 2 fig. 1, ♂, “Java” (MHN).  
*Ischnogaster nigrifrons* Smith, 1857, J. Proc. Linn. Soc., Zool.: 113, ♂,  
“Borneo (Sarawak)” (OUM).  
Distribution: India: Assam, Meghalaya, Sikkim; China: Yunnan; Myanmar; Vietnam; Thailand; Malaysia: Peninsular Malaysia, Sabah; Singapore; Philippines: Mindanao; **Indonesia: Sumatra, Java, Kalimantan** (Carpenter and Kojima, 1997a; Kojima *et al.*, 2007).
- (29-1) *nigricans nigricans* (Cameron, 1902)  
*Ischnogaster nigricans* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 105, ♀, “Kuching, Sarawak” (BMNH).  
Distribution: China: Yunnan; Malaysia: Peninsular Malaysia, Sarawak; Singapore; Philippines: Luzon; **Indonesia: Sumatra, Bangka, Krakatau, Java, Kangean** (Carpenter and Kojima, 1997a).
- (29-2) *nigricans serrei* (du Buysson, 1905)  
*Ischnogaster serrei* du Buysson, 1905b, Bull. Soc. Ent. France: 281, ♀♂, “Batavia” [= Jakarta] (MNHN).  
Distribution: **Indonesia: Java** (Carpenter and Kojima, 1997a).
- (30) *striatula* (du Buysson, 1905)  
*Ischnogaster striatulus* du Buysson, 1905b, Bull. Soc. Ent. France: 282, ♀, “Sumatra” (MNHN).  
? *Ischnogaster clypealis* Cameron, 1906b, J. Straits Branch R. Asiat. Soc. 46: 122, ♀, “Bidi...Kuching” (BMNH).  
*Ischnogaster foveatus* du Buysson, 1907, Notes Leyden Mus. 29: 80, ♂, “Salawatti” (RMNH).  
? *Ischnogaster levifoveatus* Meade-Waldo, 1914, Ann. Mag. Nat. Hist. (8) 14: 462, ♂, “BORNEO: Sarawak, Mt. Matang” (BMNH).  
? *Parischnogaster costulatus* von Schulthess, 1927, Suppl. Ent. 16: 82, ♀, “Sumatra, Lubuk Sulasih, 1000 m” (NHMW).  
Distribution: Thailand; Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra, Kalimantan, ?Papua** (Salawaty Island) (Carpenter and Kojima, 1997a).
- (31) *unicuspata* Reyes, 1988  
*Parischnogaster unicuspata* Reyes, 1988, Philipp. Ent. 7 (4): 387, 400 (key), figs. 1, 69-75, 82, 85, 91-92, 109, ♀♂, “Palawan National Agricultural College, Aborlan, Palawan” (holotype ♂, UPLB); also from other localities in Palawan and Malaysia.  
Distribution: Malaysia: Peninsular Malaysia, Sarawak; Singapore; Philippines: Palawan.

Genus *Stenogaster* Guérin, 1831

(32) *adusta* van der Vecht, 1975

*Stenogaster adusta* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 287 (key), 291, figs. 21-33, ♀♂, “Misool...Fakal” (holotype ♀, RMNH).

Distribution: **Indonesia: Papua** (including Misool Island) (van der Vecht, 1975).

(33) *canaliculata* (Cameron, 1911)

*Ichnogaster canaliculatus* Cameron, 1911, Nova Guinea 9 (2), Zool.: 190, ♀, “Bivak Island” (lectotype, ZMA).

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(34) *concinna* van der Vecht, 1975

*Stenogaster concinna* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 285, 286 (key), 295, figs. 1a-b, 53-80, ♀♂, “S.W. New Guinea...Wataikwa River” (holotype ♂, BMNH); also from other localities in New Guinea.

Distribution: Papua New Guinea; **Indonesia: Papua** (van der Vecht, 1975).

(35) *decorata* van der Vecht, 1975

*Stenogaster decorata* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 287 (key), 293, figs. 34-51, ♀♂, “Misool...Fakal” (holotype ♀, RMNH).

Distribution: **Indonesia: Papua** (Misool, Yapen Island) (van der Vecht, 1975).

(36) *flavifrons* van der Vecht, 1975

*Stenogaster flavifrons* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 298 (key), 303, figs. 94-103, ♀♂, “N.W. New Guinea...Japen, Mt. Baduri, 300 m” (BMNH).

Distribution: **Indonesia: Papua** (Yapen Island) (van der Vecht, 1975).

(37) *fulgipennis* Guérin-Méneville, 1831

*Stenogaster fulgipennis* Guérin-Méneville, 1831, in Duperrey, Voyage Coquille, Zool., Ins., Atlas: pl. 9 fig. 9, sex and locality not stated (holotype ♂, from “Dory, N. Guinea” MSNG).

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(38) *glabra* van der Vecht, 1975

*Stenogaster glabra* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 299 (key), 303, figs. 104-110, ♂, “N.W. Guinea...Cyclops Mts., 1100 m” (BMNH).

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(39) *licina* van der Vecht, 1975

*Stenogaster licina* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 287 (key), 295, fig. 52, ♀, “N.W. Guinea...Road Ajamaru-Teminabuan, km 1-8” (RMNH).

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(40) *macilenta* van der Vecht, 1975

*Stenogaster macilenta* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 298 (key), 306, figs. 1c-e, 117-131, ♀♂, “N.W. New Guinea...Lower Mist Camp, 1550 m” (holotype ♀, RMNH); also from other localities in Irian Jaya.

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(41) *pilosa* van der Vecht, 1975

*Stenogaster pilosa* van der Vecht, 1975, J. Aust. Ent. Soc. 14: 283, 299 (key), 305, figs. 111-116, ♂, “N.W. New Guinea...Cyclops Mts, Mt. Lina, 1100-1400 m” (BMNH).

Distribution: **Indonesia: Papua** (van der Vecht, 1975).

(42) *unicolor* (Smith, 1864)

*Ischnogaster unicolor* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 41, ♂, “Mysol; Waigiou” (lectotype, OUM).

Distribution: **Indonesia: Papua** (Waigeo, Misool Island) (Smith, 1864; van der Vecht, 1975).

### Subfamily **Polistinae**

#### Tribe **Polistini**

Genus ***Polistes*** Latreille, 1802

Subgenus *Gyrostoma* Kirby, 1828

(1) *diabolicus* de Saussure, 1853

*Polistes diabolicus* de Saussure, 1853b, Ét. Fam. Vesp. 2: 68, ♀, “Les Iles de Java, de Timor, etc.” (Spinola Collection, MNHN).

Distribution: **Indonesia: Java, Lombok, Sumbawa, Flores, Timor, Sumba, ?Moluccas** (Kei Is.) (Saito *et al.*, 2005; Kojima *et al.*, 2007).

(2) *olivaceus* (DeGeer, 1773)

*Vespa olivacea* DeGeer, 1773, Mem. Hist. Insect. 3: 582, pl. 29 fig. 9.

- ”Amérique” [incorrect labelling ?] (current depository unknown).  
*Vespa hebraea* Fabricius, 1787, Mant. Insect. 1: 292, “India orientali” (ZMUC).  
*Vespa undata* Olivier, 1792, Encyc. Méthod. 6: 684, “Indes orientales” (type depository unknown).  
*Vespa macaensis* Fabricius, 1793, Entomol. Syst. 2: 259, “Macao Indiae”.  
 ? *Polistes flavipennis* de Saussure, 1853b, Ét. Fam. Vesp. 2: 52, ♀, “Le cap de Bonne-Espérance” [incorrect labeling ?] (MNHN).  
 Distribution: Madagascar; Reunion; Mauritius; Tanzania; Amirantes; Seychelles; Chagos Archipelago; Egypt; Oman; Iran; Afghanistan; India; Sri Lanka; Nepal; Myanmar; southern China; Japan; Philippines; Vietnam; Laos; Cambodia; Thailand; Malaysia; Singapore; Marianas; New Caledonia; Fiji; Tongas; Samoa; Society Is.; Tuamotu Archipelago; Marquesas; introduced Chile: Easter Is.; U.S.A.: Hawaii; Australia; New Zealand (Carpenter, 1996); **Indonesia: Kalimantan**. Occurrence of this species in Kalimantan and Japan needs confirmation.

(3-1) *rothneyi engeli* van der Vecht, 1968

- Polistes rothneyi engeli* van der Vecht, 1968b, Bijdr. Dierk. 38: 108, ♀♂, **Sumatra**: “Padang, Alahan Pamdjamg ... West Sumatra” (holotype ♀, RMNH).  
 Distribution: **Indonesia: Sumatra** (van der Vecht, 1968b).

(3-2) *rothneyi helvenacus* van der Vecht, 1968

- Polistes rothneyi helvenacus* van der Vecht, 1968b, Bijdr. Dierk. 38: 109, ♀♂, “Mt. Gedeh, 1000 m, ... West Java: ... Central Java: Mt. Slamet” (holotype ♀ from “Mt. Gedeh, 1000m”, RMNH).  
**MZB**: paratypes (1♀, G[ungung =Mt.] Pantjar [near Bogor], i.1936, , preserved dry). 1♀ labeled “G. Pantjar, Feb. 1936” could be a paratype of *P. rothneyi helvenacus*, but van der Vecht (1968: 109) did not mention “Feb.” for the paratypes from Mt. Pantjar. van der Vecht (1968: 109) mentioned at least 1♀ collected at Djampang Tengah in West Java by Mrs. M. E. Walsh and 1♀ collected at Mt. Slamet, Baturraden, 800 m, in Central Java in December 1936 by F. C. Drescher were deposited in the MZB, but we failed to locate them in the MZB.  
 Distribution: **Indonesia: Java** (van der Vecht, 1968b).

(4) *tenebricosus* Lepeletier, 1836

- Polistes tenebricosus* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 529, sex not stated, “Ile de Java, Asie méridionale” (type depository unknown; MRSN?).

- Polistes sulcatus* Smith, 1852, Trans. Entomol. Soc. London (2) 2: 38, ♀♂, “near Ning-po-foo” [in China] (BMNH).
- Polistes hoplitus* de Saussure, 1853b, Ét. Fam. Vesp. 2: 55, ♀, “Indes Orientales” (MHN).
- Polistes rugifrons* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 412, ♀ - India: Meghalaya: “Khasi Hills” (OUM).
- Polistes varicornis* Cameron, 1905b, Tijdschr. Entomol. 48: 67, ♂ “Java” (ZMA).
- Polistes javanicus* Cameron, 1905b, Tijdschr. Entomol. 48: 68, ♀, “Tjandi near Semarang, Java” (lectotype, ZMA).
- Polistes tenebricosus* var. *leopoldi* Bequaert, 1934, Bull. Mus. R. Hist. Nat. Belg. 10 (28): 9, ♀, “Negros, Philippines” (IRSNB).
- Polistes tenebricosus* var. (or subsp.) *nigrosericans* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 266, ♀♂, “Los Banõs, Luzon, Philippine Islands” (holotype ♀, MCZ)
- Polistes tenebricosus* var. (or subsp.) *sibuyanensis* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 266, ♀, “Sibuyan Island, Philippine Islands” (MCZ).
- Distribution: India: Jammu and Kashmir, Uttaranchal, Sikkim, West Bengal, Assam, Meghalaya; Nepal; China; Taiwan; Vietnam; Myanmar; Philippines: Luzon, Negros, Sibuyan; **Indonesia: Sumatra, Java, Bali, Lombok, Flores, Sumba, Kalimantan, Sulawesi** (Saito *et al.*, 2005; Kojima *et al.*, 2007).

(5-1) *tepidus batjanensis* Cameron, 1911

*Polistes tepidus* race *batjanensis* Cameron, 1911, Nova Guinea, Zool. 9 (2), Zool.: 186, ♀, “Batjan” (ZMA).

Distribution: **Indonesia: Moluccas** (Bacan Island) (Carpenter, 1996).

(5-2) *tepidus malayanus* Cameron, 1906

*Polistes malayanus* Cameron, 1906a, Nova Guinea, Zool. 5: 60, ♀♂, “Manokwari” (lectotype ♂, ZMA).

*Polistes tepidus* var. *minor* von Schulthess, 1932, Mém. R. Mus. Hist. Nat. Belg. hors série 4 (5): 39, non Palisot de Beauvois, 1818. “Nouvelle-Guinée: Angi-Gita” (IRSNB?)

Distribution: New Guinea; Bismarck Archipelago: New Ireland, Djaul, Lavongai; Solomon Is.: Buka to Rennell; Vanuatu; introduced U.S.A.: Hawaii; **Indonesia: Moluccas** (Aru and Kei Islands) (Carpenter, 1996).

(5-3) *tepidus picteti* de Saussure, 1853

*Polistes picteti* de Saussure, 1853b, Ét. Fam. Vesp. 2: 69, ♀, “La Nou-

velle-Hollande” (MNHN, MHN).

Distribution: **Indonesia: Moluccas** (Ambon, Ceram Island) (Richards, 1978).

(5-4) *tepidus speciosus* du Buysson, 1913

*Polistes tepidus* var. *speciosus* du Buysson, 1913a (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 227, sex not stated, “Moluccas: Ternate, Morty etc.” (?NMSF)

Distribution: **Indonesia: Moluccas** (Ternate, Bacan Island) (Richards, 1978).

(5-5) *tepidus theodori* Petersen, 1990

*Polistes tepidus theodori* Petersen, 1990, Entomol. Scand. 21: 64, ♀, “Kai Islands, Tual” (holotype, ZMUC).

Distribution: **Indonesia: Moluccas** (Kei Islands) (Petersen, 1990).

#### Subgenus *Polistella* Ashmead, 1904

(6-1) *bambusae bambusae* Richards, 1978

*Polistes bambusae* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 118, ♀♂, “Morobe district, Wau, 4500 ft (1370 m)” (holotype ♀, BMNH); also from Central district (Mondo)

Distribution: Papua New Guinea.

(6-2) *bambusae humboldti* Richards, 1978

*Polistes bambusae humboldti* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 120, ♀, “Humboldt Bay (Teluk Irian) district, Bewani Mts.” (holotype, BMNH); also from W. of Tami River, Waigeu I., and Cyclops Mts.

Distribution: **Indonesia: Papua** (Richards, 1978).

(7) *buruensis* Petersen, 1990

*Polistes buruensis* Petersen, 1990, Entomol. Scand. 21: 58, ♀♂, “Moluccas, Buru” (holotype ♂, RMNH).

Distribution: **Indonesia: Moluccas** (Buru Island) (Petersen, 1990).

(8) *callimorpha* de Saussure, 1853

*Polistes callimorpha* de Saussure, 1853b, Ét. Fam. Vesp. 2: 71, ♀♂, “L’île de Timor” (MNHN).

Distribution: **Indonesia: Timor, Sumba, (?) Moluccas** (Kei Islands) (Saito *et al.*, 2005).



(9) *contrarius* Cheesman, 1951

*Polistes contrarius* Cheesman, 1951, Ann. Mag. Nat. Hist. (12) 4: 985,  
♀♂, “Papua, Mondo, 5000ft., ... Mafulu, 400 ft.” (holotype ♀ from  
”Mondo, 5000 ft.”, BMNH).

Distribution: Papua New Guinea.

(10) *elegans* Smith, 1859

*Polistes elegans* Smith, 1859, J. Proc. Linn. Soc., Zool. 3 (11): 169, ♀,  
“Aru; Key Island” (lectotype, OUM).

Distribution: **Indonesia: Moluccas** (Aru, Kei Islands); Papua New  
Guinea (Cheesman, 1951).

(11) *extraneus* Kirby, 1883

*Polistes extraneus* Kirby, 1883, Proc. Zool. Soc. London 1883: 344, ♀,  
“Maroe” (BMNH?)

Distribution: **Indonesia: ?Sumba** (Maru) ( Kirby, 1883).

(12) *flavobilineatus* (Cameron, 1902)

*Icaria flavo-bilineata* Cameron, 1902a, J. Straits Asiat. Soc. 37: 102,  
“Kuching, Sarawak” (OUM?).

Distribution: Myanmar; Thailand; Malaysia, Sarawak.

(13) *intermedius* Kojima, 1996

*Polistes medius* Kojima, in Kojima and Kojima, 1988, J. Aust. Entomol.  
Soc. 27: 74, [non Palisot de Beauvois, 1818], ♀♂, “PAPUA NEW  
GUINEA ... Wau, 1300 m, ... foot of Mt Missim, Wau” (holotype ♀  
from “Wau, 1300 m”, ANIC)

*Polistes intermedius* Kojima, 1996, in Carpenter, Am. Mus. Novitat.  
3188: 1, 12. Replacement name for *medius* Kojima, 1988, non  
Palisot de Beauvois, 1818.

Distribution: Papua New Guinea.

(14) *lateritius* Smith, 1857

*Polistes lateritius* Smith, 1857, Cat. Hym. Brit. Mus. 5, Vesp. 103, ♀♂,  
“Ceram” (BMNH)

*Polistes colonicus* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 129,  
♂, “Amboyna” (BMNH).

Distribution: **Indonesia: Moluccas** (Ambon, Ceram, Saparua Island)  
(Petersen, 1990).

(15) *meadeanus* (von Schulthess, 1913)

*Parapolybia meadeana* von Schulthess, 1913b, Mitt. Schweiz. Entomol.

Ges. 12: 161, ♀♂, “Kina Balu, Borneo ... Perak ..., Sarawak” (BMNH).

*Polybia andrei* du Buysson, 1913c, Bull. Soc. Entomol. France 1913: 296, ♂, “Malacca: Pérak” (MNHN).

*Polybia shelfordi* du Buysson, 1913c, Bull. Soc. Entomol. France 1913: 297, ♀, “Kuching (Borneo)” (OUM).

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; **Indonesia: Kalimantan** (van der Vecht, 1966).

(16) *melanopterus* Cameron, 1911

*Polistes melanopterus* Cameron, 1911, Nova Guinea, Zool. 9 (2), Zool.: 187, ♀, “Lorentz River” (lectotype, ZMA).

Distribution: **Indonesia: Papua** (Cameron, 1911).

(17) *mertoni* du Buysson, 1913

*Polistes mertoni* du Buysson, 1913a (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 227, ♀, “Aru, Kobroor” (NMSF).

Distribution: **Indonesia: Moluccas** (Aru Islands) (du Buysson, 1913a).

(18-1) *nigrifrons nigrifrons* Smith, 1859

*Polistes nigrifrons* Smith, 1859, J. Proc. Linn. Soc., Zool. 3 (11): 168, ♀, “Aru” (BMNH? OUM?)

Distribution: New Guinea; **Indonesia: Moluccas** (Aru Islands), **Papua** (Waigeo Island) (Carpenter, 1996).

(18-2) *nigrifrons obdurus* Cheesman, 1951

*Polistes nigrifrons obdurus* Cheesman, 1951, Ann. Mag. Nat. Hist. (12) 4: 989, ♀♂, “Dutch New Guinea, Humboldt Bay, Njaulimon” (holotype ♀, BMNH); also from Mt. Nomo, Cyclops Mts. (Sabron), Waigeu Is. (Mt. Nok), Japen Is. (Mt. Baduri), Humboldt Bay (Pukusan), and Bewani Mts.

Distribution: **Indonesia: Papua** (Cheesman, 1951).

(18-3) *nigrifrons stotheri* Meade-Waldo, 1916

*Polistes stotheri* Meade-Waldo, in Turner *et al.*, 1916 (1915), Rep. Coll. Br. Ornithol. Union Exped. Dutch New Guinea 1 (10): 14, pl. I fig. 9, ♀, [New Guinea] “Base Camp, sea-level, Setakwa River” (BMNH).

Distribution: **Indonesia: Papua** (Turner *et al.*, 1916).

(19) *occultus* Kojima, 1988

*Polistes occultus* Kojima, in Kojima and Kojima, 1988, J. Aust. Entomol. Soc. 27: 76, ♀♂, “PAPUA NEW GUINEA ... Mt Kaindi, 1600 m,

... Wau, 1200 m, ... Mt Missim, 1600 m, ... Mt Kaindi, 1400 m,  
Wau” (holotype ♀ from “Mt Kaindi, 1600 m”, ANIC)

Distribution: Papua New Guinea.

(20) *sagittarius* de Saussure, 1853

*Polistes sagittarius* de Saussure, 1853b, Ét. Fam. Vesp. 2: 56, ♀, “Les  
Indes-Orientales, le China” (Coll. Jurine, MHN, BMNH).

*Polistes sagittarius* var (or subsp.) *indonesicus* Bequaert, 1940, Trans.  
Am. Entomol. Soc. 66: 267, ♀♂, “Bandjar, Java” (holotype ♀,  
MCZ); also from West Java, Bali, Celebes [=Sulawesi], Philippines  
(Palawan)

*Polistes strigosus baliensis* Gusenleitner, 2000, Linzer Biol. Beitr. 37  
(2): 939, ♀♂, “Indonesia, Bali, Nusa Dua Beach” (holotype ♂,  
OLM); also from Celik.

Distribution: India: Himachal Pradesh, Delhi, Kerala, Uttaranchal,  
Sikkim, West Bengal, Assam, Nagaland, Manipur, Tripura; Nepal;  
China; Hong Kong; Myanmar; Thailand; Malaysia; Singapore;  
Philippines: Palawan; **Indonesia: Sumatra, Kalimantan, Java,  
Bali, Lombok, Flores, Sumbawa, Sumba, Sulawesi** (Saito *et al.*,  
2005; Kojima *et al.*, 2007).

(21-1) *simulatus halmaheirensis* Petersen, 1990

*Polistes simulatus halmaheirensis* Petersen, 1990, Entomol. Scand. 21:  
58, ♀♂, “Moluccas, Halmaheira” (holotype ♂ from “Mt. Sembilan,  
600 m”, RMNH)

Distribution: **Indonesia: Moluccas** (Halmahera) (Petersen, 1990).

(21-2) *simulatus morotaiensis* Petersen, 1990

*Polistes simulatus morotaiensis* Petersen, 1990, Entomol. Scand. 21: 58,  
♀♂, “Moluccas, Morotai” (holotype ♂ from “Morty Is.”, BMNH)

Distribution: **Indonesia: Moluccas** (Morotai Island) (Petersen, 1990).

(21-3) *simulatus obiensis* Petersen, 1990

*Polistes simulatus obiensis* Petersen, 1990, Entomol. Scand. 21: 57, ♀♂,  
“Moluccas, Obi” (holotype ♂, RMNH).

Distribution: **Indonesia: Moluccas** (Obi Island) (Petersen, 1990).

(21-4) *simulatus simulatus* Smith, 1860

*Polistes simulatus* Smith, 1860, J. Proc. Linn. Soc., Zool. 5 Suppl.: 130,  
♀, “Kaissa, Bachian” (BMNH).

Distribution: **Indonesia: Moluccas** (Bacan, Kayoa Island) (Petersen,  
1990).

(22-1) *stigma bernardii* (Le Guillou, 1841)

*Polistes bernardii* Le Guillou, 1841, Rev. Zool. 1841: 325, "Australie Septentrionale" (MNHN?).

*Polistes richardsi* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 23, ♀♂, "N. Territory: Roper Riv." (holotype ♀ SAM).

*Polistes bernardii duplicinctus* Richards, 1978., Aust. J. Zool., Suppl. Ser., 61: 28, ♀♂, "**Western Australia**, Millstream, 117°04'E., 21°35'S, ... 1 km NNE. Millstream, ... 3 km NW. by W. of Millstream, ... Hamersley Range, Fortescue River (practically same locality as Millstream), ... W. Kimberleys, c. 17°S., 126°E., ... Wotjulum" (holotype ♀ from "Millstream, 117°04'E., 21°35'S", ANIC).

*Polistes bernardii insulae* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 30, ♀♂, "Queensland, Dauan I., ... Banks I., ... Cooktown, ... Murray I., ... Thursday I. ... **New Guinea**: Western District, Morehead River" (holotype ♀ from "Queensland, Dauan I.", ANIC).

Distribution: Papua New Guinea; Australia: Western Australia, Northern Territory, Queensland; Society Is.: Tahiti.

(22-2) *stigma maculipennis* de Saussure, 1853

*Polistes maculipennis* de Saussure, 1853b, Ét. Fam. Vesp. 2: 61, ♀, "Java, et l'Afrique méridionale" (depository not mentioned).

*Polistes multipictus* Smith, 1860b (1861), J. Proc. Linn. Soc. Zool. 5: 130 [non Haliday, 1836], ♀, "Amboyna" (BMNH).

*Polistes stigma* var. *thoracica* du Buysson, 1913a (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 228 [non Fox, 1898], ♂, "Aru, Kobroor" (BMNH).

*Polistes comis* Cheesman, 1951, Ann. Mag. Nat. Hist. (12) 4: 991, ♀♂, "Papua, Owen Stanley Mts., Kokoda, 1200 ft." (holotype ♀, BMNH); also from several localities in Papua New Guinea and Papua.

Distribution: Papua New Guinea; **Indonesia: Moluccas** (Aru Islands, Ambon Island), **Papua** (Dorey [= Manokwari]) (Petersen, 1987).

(22-3) *stigma stigma* (Fabricius, 1793)

*Vespa stigma* Fabricius, 1793, Entomol. Syst. 2: 275, sex not stated, "India orientali" (type depository unknown).

Distribution: Thailand; Malaysia; Singapore; Taiwan; **Indonesia: Sumatra, Java, Bali, Lombok** (Dover, 1929; Petersen, 1987; Kojima and Yamane, 1990; Starr, 1992).

(22-4) *stigma tualensis* Petersen, 1987

*Polistes stigma tualensis* Petersen, 1987, Entomol. Scand. 18: 243, ♀,  
“Indonesia, KAI IS.” (holotype, ZMUC).

Distribution: **Indonesia: Moluccas** (Kei Islands) (Petersen, 1987).

(23) *tanimbaricus* Gusenleitner, 2008

*Polistes tanimbaricus* Gusenleitner, 2008, Linzer biol. Beitr. 40: 765,  
♀♂, “Indonesia, Tanimbar Islands, Yamdena Isl. 20 km NE  
Saumlaki, 150m” (holotype ♀, OLM).

Distribution: **Indonesia: Tanimbar** (Gusenleitner, 2008).

(24) *utakwae* Meade-Waldo, 1916

*Polistes utakwae* Meade-Waldo, 1916 (1915), in Turner *et al.*, Rep. Coll.  
Br. Ornithol. Union Exped. Dutch New Guinea 1 (10): 13, pl. I fig.  
8, ♀, [New Guinea] “Utakwa River, 2500-3000ft.” (BMNH).

Distribution: **Indonesia: Papua** (Turner *et al.*, 1916).

(25) *watutus* Kojima, 1988

*Polistes watutus* Kojima, in Kojima and Kojima, 1988, J. Aust. Entomol.  
Soc. 27: 72, ♀♂, “PAPUA NEW GUINEA: ... Wau, 1400 m, ... Mt  
Kaindi, 1600 m, Wau ... Mt Manki, 1000m, Bulolo” (holotype ♀  
from “Wau, 1400 m”, ANIC)

Distribution: Papua New Guinea.

### Tribe **Ropalidiini**

Of the four ropalidiine genera, *Ropalidia* (nearly 180 species) occurs throughout the Old World tropics and subtropics, and shows considerable divergence in Madagascar and Papuan region (Kojima and Carpenter, 1997). *Parapolybia*, with five species currently recognized as valid, is distributed from Middle East in the west to New Guinea in the east, and the wasps of the genus seem to be more abundant in terms of population density in subtropics and temperate regions than in tropics. *Polybioides*, with six species, shows a peculiar disjunct distribution pattern; two species are endemic to continental Africa and the remaining four species occur in Southeast Asia. The genus *Belonogaster* is African (including Madagascar), with one species recorded from India.

### **Genus Ropalidia** Guérin-Ménéville, 1831

(26) *albobalteata* (Cameron, 1906)

*Polistes albobalteatus* Cameron, 1906a, Nova Guinea 5, Zool. 1: 61, ♀,

“Manokwari” (ZMA).

*Polybia papuana* Cameron, 1913a, Bijdr. Dierkd. 19: 77, ♀,  
“Waigeu” (lectotype, ZMA).

Distribution: **Indonesia: Papua** (including Waigeo Island) (Kojima, 2001).

(27) *aristocratica* (de Saussure, 1853)

*Icaria aristocratica* de Saussure, 1853b, Ét. Fam. Vesp. 2: 37, ♀, “Les Indes Orientales. Pulo-Pinang” (MRSN).

Distribution: Thailand; Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (van der Vecht, 1962).

(28-1) *artifex artifex* (de Saussure, 1854)

*Icaria artifex* de Saussure, 1854, Ét. Fam. Vesp., 2: 236, ♀,  
“Java” (MHN, MRSN)

Distribution: Myanmar; Malaysia: Peninsular Malaysia; **Indonesia: Kalimantan, Java** (de Saussure, 1853b, 1854).

(28-2) *artifex fuscata* van der Vecht, 1941

*Ropalidia artifex* var. *fuscata* van der Vecht, 1941, Treubia 18: 136, ♀♂,  
“N. Sumatra, Toba Lake” (holotype ♀, RMNH); also from Malay Peninsula, Borneo.

Distribution: Malaysia: Peninsular Malaysia, Sabah; **Indonesia: Sumatra, Kalimantan** (van der Vecht, 1941).

(29) *australis* (de Saussure, 1853)

*Icaria australis* de Saussure, 1853b, Ét. Fam. Vesp. 2: 24, pl. 34 fig. 5,  
♀, “Dorey. Nouvelle-Guinée” [=Manokwari] (MNHN).

*Icaria bispinosa* Meade-Waldo, 1912, Ann. Mag. Nat. Hist. (8) 9: 448  
(key), 449, ♀, “Mimika River” (BMNH).

*Ropalidia fasciata erratica* Cheesman, 1952, Ann. Mag. Nat. Hist. (12)  
5: 2, 9, ♀, “Cyclops Mt.” (BMNH).

Distribution: **Indonesia: Papua** (de Saussure, 1853b; Meade-Waldo, 1912; Cheesman, 1952).

(30) *bambusae* Richards, 1978

*Ropalidia bambusae* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 122,  
123, ♀♂, “**New Guinea**: Morobe District, Wau” (holotype ♀,  
BMNH).

Distribution: Papua New Guinea.

(31) *bensoni* Richards, 1978

*Ropalidia bensoni* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 129,

130, ♀, “**New Guinea**: Morobe district, Wau” (holotype, BMNH).  
Distribution: Papua New Guinea.

(32) *bicolor* (Smith, 1865)

*Icaria bicolor* Smith, 1865, J. Proc. Linn. Soc. Zool. 8: 90, ♀, “New Guinea” (OUM).

Distribution: **Indonesia: Papua** (Smith, 1865); Papua New Guinea.

(33) *bicolorata* van der Vecht, 1962

*Paraicaria bicolor* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital. 23: 249, ♀, “Chan-Yoma (Alta Birmania)” (MSNG); preoccupied by *Ropalidia bicolor* (Smith) (= *Icaria bicolor* Smith, 1865).

*Ropalidia bicolorata bicolorata* van der Vecht, 1962, Zool. Verh., Leiden 57: 38, 39. Replacement name for *bicolor* (Gribodo), junior secondary homonym of *Ropalidia bicolor* (Smith, 1865).

*Ropalidia bicolorata parvula* van der Vecht, 1962, Zool. Verh., Leiden 57: 38, 39, ♀, “North Borneo, Bettotan near Sandakan” (BMNH).

*Ropalidia bicolorata shiva* Das and Gupta, 1989, Orient. Insects Monogr. 11: 153, 154, ♀, “INDIA: Tripura: Dharamnagar” (ZSI), also from Assam, Manipur.

Distribution: India (Assam, Manipur, Tripura); Myanmar; Thailand; Vietnam; China (Yunnan); Malaysia: Sarawak).

(34) *bidens* van der Vecht, 1996

*Ropalidia bidens* van der Vecht, *in* van der Vecht and Kojima, 1996, Zool. Meded., Leiden 70: 99, ♀♂, “N. W. New Guinea, Klamono Oilfds [1°08’S, 131°30’E]” (holotype ♀, RMNH)

Distribution: **Indonesia: Papua** (van der Vecht and Kojima, 1996).

(35) *binghami wegneri* van der Vecht, 1962

*Ropalidia binghami wegneri* van der Vecht, 1962, Zool. Verh., Leiden 57: 8, ♀, “East Borneo, Samarinda, 50 m, Muara Kaman” (RMNH).

Distribution: **Indonesia: Kalimantan** (van der Vecht, 1962).

(36) *brunnea* (Smith, 1859)

*Icaria brunnea* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 167, ♀, “Aru” (BMNH).

*Polistratus cariniscutis* Cameron, 1906a, Nova Guinea 5, Zool. 1: 59, ♀, “Manokwari” (ZMA).

*Ropalidia wudai* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 14, ♀, “Papua, Kokoda, 1200 ft” (BMNH); also from Owen Stanley Range.

*Ropalidia wudai trullissima* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 15, ♀, “Dutch New Guinea, Cyclops Mts., 930 ft.” (BMNH).

Distribution: Papua New Guinea; Indonesia: Moluccas (Aru Islands), Papua (including Misool Island) (Kojima and Carpenter, 1997; Kojima, 2001).

(37) *catharinae* (Cameron, 1913)

*Icaria catharinae* Cameron, 1913a, Bijdr. Dierkd. 19: 77, ♀, “Waigeo” (ZMA).

Distribution: **Indonesia: Papua** (Waigeo Island) (Cameron, 1913a).

(38) *celebensis* van der Vecht, 1941

*Ropalidia celebensis* van der Vecht, 1941, Treubia 18: 111 (key), 170, ♀, “S. Celebes: ... Bantoe Batoe District, Latimodjong Mts.” (MCZ).

Distribution: **Indonesia: Sulawesi** (van der Vecht, 1941; Kojima *et al.*, 2002).

(39) *clypeata* Kojima, 1996

*Ropalidia clypeata* Kojima, in van der Vecht and Kojima, 1996, Zool. Meded., Leiden 70: 103, ♀♂, “New Guinea, Sivipi near Sasambata, Popondetta subdist.” (holotype ♂, RMNH).

Distribution: Papua New Guinea.

(40) *conservator* (Smith, 1860)

*Icaria conservator* Smith, 1860 (1861), J. Proc. Linn. Soc. Zool. 5: 130, ♀, “Dory” [=Manokwari] (BMNH).

*Polybia limatula* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 43, ♀, “Mysol” (lectotype, OUM).

*Icaria parvimaclata* Cameron, 1911, Nova Guinea 9 (2), Zool.: 189, ♀, “Bivak Island” (lectotype, ZMA). Junior primary homonym of *I. parvimaclata* Cameron, 1907.

*Icaria insularis* Cameron, 1911, Nova Guinea 9 (2), Zool.: 188, ♀, “Bivak Island” (ZMA).

*Icaria waigeuensis* Cameron, 1913a, Bijdr. Dierkd. 19: 76, ♀, “Waigeu” (ZMA).

*Ropalidia conservator goodfellowi* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 16, ♀, “S. Dutch New Guinea, Mimika R.” (BMNH).

Distribution: **Indonesia: Papua** (including Misool, Bivak and Waigeo Island) (Kojima and Carpenter, 1997; Kojima, 2001).



(41) *conspicua* (Smith, 1863)

*Odynerus conspicuus* Smith, 1863 (1864), J. Proc. Linn. Soc. 7: 40, ♀,  
“Mysol” (OUM).

*Odynerus mysolicus* Dalla Torre, 1889, Wien. Entomol. Ztg. 8: 124. Un-  
necessary replacement name for *Odynerus conspicuus* Smith, 1863,  
non de Saussure.

*Ropalidia conspicua alleni* Cheesman, 1952, Ann. Mag. Nat. Hist. (12)  
5: 2, 13, ♀, “Mysol” (BMNH).

Distribution: **Indonesia: Papua** (Misool Island) (Kojima and Carpenter,  
1997; Kojima, 2001).

(42) *copiaria* (de Saussure, 1862)

*Icaria copiaria* de Saussure, 1862, Stettin. Entomol. Ztg. 23: 135, ♂,  
“Java” (RMNH).

Distribution: **Indonesia: Java** (van der Vecht, 1962).

(43) *crassa* van der Vecht, 1941

*Ropalidia crassa* van der Vecht, 1941, Treubia 18: 112 (key), 162, ♀,  
“Celebes: ... Palopo, Todjamboe (1000 m)” (RMNH) [?lost].

Distribution: **Indonesia: Sulawesi** (van der Vecht, 1941).

(44) *cristata* Kojima, 1989

*Ropalidia cristata* Kojima, 1989, Jpn. J. Entomol. 57: 143, ♀♂,  
“PAPUA NEW GUINEA ... Ower’s Corner, Sogeri, Central Prov-  
ince” (holotype ♀, ANIC).

Distribution: Papua New Guinea; **Indonesia: Batanta Island** (new re-  
cord).

(45) *curvilineata* (Cameron, 1908)

*Icaria curvilineata* Cameron, 1908, Dtsch. Entomol. Z. 1908: 564, ♀,  
“Inop. Borneo” (BMNH).

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; **Indone-  
sia: Sumatra** (van der Vecht, 1941).

(46) *cyathiformis* (Fabricius, 1804)

*Eumenes cyathiformis* Fabricius, 1804, Syst. Piez.: 289,  
“Java” (holotype ♀, ZMUC).

*Icaria ceylonica* Cameron, 1898, Mem. Proc. Manchr. Lit. Philos. Soc.  
42 (11): 48, ♀, “Periyakullam, Ceylon” (OUM).

*Icaria cagayanensis* Ashmead, 1905, Can. Entomol. 37: 3, ♀,  
“Manila” (USNM).

*Icaria bilineata* Cameron, 1905b, Tijdschr. Entomol. 48: 72, ♀, “Tjandi near Semarang” [in Java] (lectotype, BMNH).

Distribution: Nepal; India; Sri Lanka; Myanmar; Malaysia: Peninsular Malaysia; Philippines; **Indonesia: Java, Lombok, Flores, Sumba, Sulawesi** (van der Vecht, 1941, 1962; Kojima *et al.*, 2005).

(47) *decorata* (Smith, 1858)

*Polybia decorata* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 114, ♀, “Borneo, (Sarawak)” (lectotype, OUM).

*Icaria xanthopoda* Cameron, 1902a, J. Straits Branch Asiat. Soc. 37: 103, ♀, “Borneo” (BMNH).

Distribution: Malaysia: Peninsular Malaysia, Sarawak, Sabah; **Indonesia: Sumatra** (van der Vecht, 1962; Kojima *et al.*, 2005).

(48) *deminutiva* Cheesman, 1952

*Ropalidia deminutiva* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 23, ♀, “S. of Humboldt Bay, inland 16 miles, Mt. Nomo” (BMNH).

*Ropalidia integra* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 22, ♀ “♂”, “Papua, Kokoda, 1200 ft” (holotype ♀, BMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (Kojima, 2001).

(49) *dichroma* van der Vecht, 1941

*Ropalidia variegata dichroma* van der Vecht, 1941, Treubia 18: 157, ♀♂, “Timor” (holotype ♀, RMNH).

Distribution: **Indonesia: Timor** (Kojima *et al.*, 2005).

(50) *dispila* (Cameron, 1913)

*Icaria fasciata* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 167, ♀, “Aru” (OUM) [junior secondary homonym of *Ropalidia fasciata* (Fabricius)].

*Icaria dispila* Cameron, 1913a, Bijdr. Dierkd. 19: 77, ♀, “Waigeu” (ZMA).

*Ropalidia fasciola* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 56. Replacement name for *Icaria fasciata* Smith, 1858, non *Eumenes* [= *Ropalidia*] *fasciata* Fabricius, 1804.

Distribution: **Indonesia: Moluccas** (Aru Islands), **Papua** (Waigeo Island) (Kojima, 2001).

(51) *erythrospila* (Cameron, 1908)

*Icaria erythrospila* Cameron, 1908, Dtsch. Entomol. Z. 1908: 563, ♀, “Borneo ... Kuching” (BMNH).

Distribution: Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra** (Kojima, 1996).

(52) *fasciata* (Fabricius, 1804)

*Eumenes fasciata* Fabricius, 1804, Syst. Piez.: 290, “Java” (syntype ♂, ZMUC).

*Polistes bioculata* Fabricius 1804, Syst. Piez.: 278, ♀, “nova Cambria” (ZMUC).

*Icaria picta* de Saussure, 1854, Ét. Fam. Vesp. 2: 238, ♀, “Le Bengale” [in India] (MNHN).

*Icaria maculifrons* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 172, ♀, “Santubong” [in Borneo] (BMNH).

*Icaria intermedia* Cameron, 1905b, Tijdschr. Entomol. 48: 70, ♀, “Tjandi near Semarang” [in Java] (lectotype, ZMA).

Distribution: Nepal; India; Myanmar; Thailand; Malaysia: Peninsular Malaysia, Sarawak; South China; Palawan; Taiwan; Ryukyu Islands; **Indonesia: Sumatra, Nias, Bangka I., Java, Karimunjawa Is., Bali, Komodo, Flores, Timor** (Kojima and Carpenter, 1997).

(53) *festina* (Smith, 1865)

*Icaria festina* Smith, 1865, J. Proc. Linn. Soc. Zool. 8: 90, ♀, “New Guinea” (OUM).

*Icaria zonata* Cameron, 1906a, Nova Guinea 5, Zool. 1: 61, ♀, “Moaiif” [New Guinea] (lectotype, ZMA); also from another locality in New Guinea.

Distribution: Papua New Guinea (?); **Indonesia: Papua** (Kojima and Carpenter, 1997).

(54) *flavopicta* (Smith, 1857)

*Icaria flavopicta* Smith, 1857, Cat. Hym. Brit. Mus. 5, Vesp.: 99, ♀, “Borneo (Sarawak)” (BMNH).

Distribution: Hong Kong; Vietnam; Malaysia: Peninsular Malaysia, Sabah, Sarawak; **Indonesia: Sumatra, Kalimantan** (van der Vecht, 1962).

(55) *fluviatilis* (Meade-Waldo, 1912)

*Icaria fluviatilis* Meade-Waldo, 1912, Ann. Mag. Nat. Hist. (8) 9: 449 (key), 451, ♀, “Mimika River” [in Papua]: Mimika River (? BMNH).

Distribution: **Indonesia: Papua** (Meade-Waldo, 1912).

(56) *fulvopruinosa* (Cameron, 1906)

*Odynerus (Leionotus) fulvopruinosa* Cameron, 1906c, Tijdschr. Entomol. 49: 225, ♀, “Etna Bay” [in Papua] (ZMA).

Distribution: Papua New Guinea; Australia: Queensland; **Indonesia: Papua** (Kojima and Carpenter, 1997).

(57) *gemmea* Cheesman, 1952

*Ropalidia gemmea* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 22, ♀♂, “Papua, Owen Stanley Mts., Kokoda, 1200 ft., Mondo, 5000 ft.” (holotype ♀ from “Kokoda, 1200 ft.”, BMNH); also from Mondo.

Distribution: Papua New Guinea.

(58) *gracilis* (Smith, 1859)

*Icaria gracilis* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 167, ♀, “Aru” (OUM).

*Icaria deceptor* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 42, ♀, “Mysol” (OUM).

Distribution: Papua New Guinea; Australia: North Queensland; **Indonesia: Moluccas** (Aru Islands), **Papua** (Kojima, 2001).

(59-1) *granulata borneensis* van der Vecht, 1941

*Ropalidia granulata borneensis* van der Vecht, 1941, Treubia 18: 190, ♀, “Borneo: ... Bettotan near Sandakan” (RMNH).

Distribution: Malaysia: Peninsular Malaysia, Sabah, Sarawak; **Indonesia: Kalimantan** (van der Vecht, 1962).

(59-2) *granulata granulata* van der Vecht, 1941

*Ropalidia granulata* van der Vecht, 1941, Treubia 18: 113 (key), 189, ♀, “Malay Peninsula, Pahang, Kuala Teku” (RMNH); also from Sumatra.

Distribution: Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (van der Vecht, 1941).

(60) *hongkongensis* (de Saussure, 1854)

*Icaria hongkongensis* de Saussure, 1854, Ét. Fam. Vesp. 2: 239, ♀, “La Chine. Hong-Kong” (BMNH).

*Ropalidia hongkongensis juncta* van der Vecht, 1941, Treubia 18: 141, ♀♂, “Tjiboerial near Buitenzorg [= Bogor], W.-Java” (holotype ♀, RMNH); also from Bangka; Myanmar; India.

Distribution: South China; Hong Kong; India (Meghayala); Myanmar; Vietnam; **Indonesia: Bangka, Java** (Nguyen *et al.*, 2006).

(61) *impetuosa* (Smith, 1860)

*Icaria impetuosa* Smith, 1860 (1861), J. Proc. Linn. Soc. Zool. 5: 131,  
♀, “Batchian; Amboyna” (lectotype, OUM).

*Icaria spilocephala* Cameron, 1906c, Tijdschr. Entomol. 49: 230, ♀,  
“Etna Bay” [in Papua] (lectotype, ZMA).

*Icaria cohni* du Buysson, 1909b, Bull. Soc. Entomol. France 1909: 306,  
♂, “Bougainville” (MNHN).

*Ropalidia gregaria inquieta* Cheesman, 1952, Ann. Mag. Nat. Hist. (12)  
5: 3, 20, ♀♂, “Papua, ... Mafulu, 4000 ft.” (lectotype ♂, BMNH);  
also from 3 other localities in New Guinea.

*Ropalidia gregaria* var. *tolerans* Cheesman, 1952, Ann. Mag. Nat. Hist.  
12 (5): 3 (as subspecies), 21 (as var.), ♀, “Cyclops Mts.  
Sabron” (lectotype, BMNH).

Distribution: Philippines excluding Palawan; Australia; Papua New  
Guinea; New Ireland; Solomon Islands; Fiji; **Indonesia: Sulawesi,**  
**Moluccas** (Ceram, Bacan, Ambon Island), **Papua** (van der Vecht,  
1941, 1962; Kojima, 2001).

(62) *incurva* Cheesman, 1952

*Ropalidia incurva* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 7,  
♀♂, “Papua, Mondo, 4000 ft” (holotype ♀, BMNH).

Distribution: Papua New Guinea.

(63) *irritata* (Smith, 1863)

*Icaria irritata* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 42, ♀,  
“Mysol” (OUM).

Distribution: **Indonesia: Papua** (Misool Island) (Kojima, 2001).

(64) *jacobsoni* (du Buysson, 1908)

*Icaria jacobsoni* du Buysson, 1908, Notes Leyden Mus. 30: 123, ♀,  
“aux environs de Batavia [=Jakarta]” (lectotype, RMNH).

*Ropalidia jacobsoni flavoscutellata* Das and Gupta, 1989, Orient. Insects  
Monogr. 11: 146, 147, fig. 28I, ♀♂, “INDIA: Assam: Ron-  
gooni” (holotype ♀, ZSI).

Distribution: India; Myanmar; **Indonesia: Bangka, Sumatra, Java,**  
**Sulawesi** (Kojima *et al.*, 2007).

(65) *jaculator* (Smith, 1871)

*Odynerus fallax* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 40, ♀,  
“Mysol” (OUM).

*Odynerus jaculator* Smith, 1871, Zool. J. Linn. Soc. 11: 377. Replacement name for *O. fallax* Smith, 1863, non 1861.

*Odynerus tertius* Dalla Torre, 1889, Wien. Entomol. Ztg. 8: 125.

Unnecessary replacement name for *Odynerus fallax* Smith, 1863, non 1861 and de Saussure, 1852.

*Ropalidia ivorina* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 25, ♀, “Papua, Kokoda, 1200 ft., ... Mafulu, 4000 ft.” (holotype from “Kokoda, 1200 ft.”, BMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (Misool Island) (Kojima, 2001).

(66) *javanica* van der Vecht, 1962

*Ropalidia flavopicta javanica* van der Vecht, 1962, Zool. Verh., Leiden 57: 49, 54, ♀♂, “East Java, Blawan” (holotype ♀, RMNH); also from Flores.

Distribution: **Indonesia: Java, Flores** (van der Vecht, 1962; Kojima *et al.*, 2005).

(67) *latebalteata* (Cameron, 1902)

*Icaria latebalteata* Cameron, 1902a, J. Straits Branch R. Asiat. Soc. 37: 100, ♀, “Kuching, Sarawak” (BMNH).

Distribution: Malaysia: Pensular Malaysia, Sarawak, Sabah; **Indonesia: Sumatra, Kalimantan** (Kojima and Carpenter, 1997; Kojima and van Achterberg, 1997b).

(68) *laticincta* van der Vecht, 1962

*Ropalidia laticincta laticincta* van der Vecht, 1962, Zool. Verh., Leiden 57: 14, ♀♂, “Sumba, Waikarudi” (holotype ♂, NHMB); also from Timor, Roti, Wetar, Roma, Kisar, Moluccas.

*Ropalidia laticincta floresiana* van der Vecht, 1962, Zool. Verh., Leiden 57: 16, ♀♂, “Flores, Boa Wae, 450 m” (holotype ♂, RMNH).

Distribution: **Indonesia: Bali, Sumba, Roti, Flores, Timor, Wetar, Romang, Kisar, Moluccas** (Kojima *et al.*, 2005).

(69) *lefebvrei* (Le Guillou, 1841)

*Polistes lefebvrei* Le Guillou, 1841, Rev. Zool. 1841: 325, ♀, “Triton-Bay” [in Papua] (MNHN).

Distribution: **Indonesia: Papua** (Triton Bay) (Kojima, 2001).

(70) *leopoldi* Bequaert, 1932

*Ropalidia leopoldi* Bequaert, 1932, Rés. Scient. Voyage Indes Or. Néerl.

Léopold de Belgique 4 (5): 47, ♀, “Nouvelle-Guinée hollandaise.  
Lac d’Angi-Gita [= Anggi Gita]” (IRSNB).

Distribution: **Indonesia: Papua** (Anggi Gita) (Kojima, 2001).

(71) *longipetiolata* (Cameron, 1911)

*Icaria longipetiolata* Cameron, 1911, Nova Guinea 9 (2), Zool.: 189, ♀,  
“Lorentz River” (lectotype, ZMA).

Distribution: Papua New Guinea; **Indonesia: Papua** (Lorentz River)  
(Kojima, 2001).

(72) *loriana* (du Buysson, 1909)

*Polybia loriana* du Buysson, 1909a, Ann. Mus. Civ. Stor. Nat. Genova  
(3) 4 [= 44]: 314, ♀, “Nouvelle Guinée S. E. Moroka 1300  
m” (MNHN).

Distribution: Papua New Guinea.

(73) *lugubris* (Smith)

*Icaria lugubris* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 115, ♀,  
“Borneo (Sarawak)” (lectotype, OUM).

*Ropalidia krishna* Dover and Rao, 1922, J. Asiat. Soc. Bengal (n. ser.)  
18: 246, ♀, “Calcutta and environs” (ZSI).

Distribution: India: West Bengal; Malaysia: Sarawak.

(74) *maculiventris* Guérin-Ménéville, 1831

*Ropalidia maculiventris* Guérin-Ménéville, 1831, in Duperrey, Voyage  
Coquille, Zool., Atlas, Ins.: pl. 9 fig. 8, “Dory” [= Manokwari]  
(MSNG).

*Ropalidia pratti* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2, 6, ♀♂,  
“Papua, Kokoda, ... Ekeikei (three days’ journey N.E. from Yule  
Is.)” (holotype ♀ from “Kokoda”, BMNH).

*Ropalidia maculiventris humboldti* Cheesman, 1952, Ann. Mag. Nat.  
Hist. (12) 5: 2, 5, ♀, “Hollandia [= Jayapura], ... Cyclops Mts.,  
Sabron, ... Njau-limon Village, ... Aitape, ... Waigeu Is., ... River  
Tami, Pukusan” (holotype from “Hollandia”, BMNH).

*Ropalidia mondoensis* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2,  
6, ♀, “Papua, Mafulu, 4000 ft., ... Mondo, 5000 ft.” (holotype from  
“Mafulu, 4000 ft.”, BMNH).

Distribution: Papua New Guinea; **Indonesia: Moluccas** (Aru Islands),  
**Papua** (Manokwari), **Salawaty Island** (Kojima, 2001), **Batanta  
Island** (new record).

(75) *malayana* (Cameron, 1903)

*Icaria malayana* Cameron, 1903, J. Straits Branch R. Asiat. Soc. 39: 171, ♀, “Sarawak” (BMNH).

*Icaria parvimaclata* Cameron, 1907b, J. Straits Branch R. Asiat. Soc. 48: 25, ♀, “Marup” [in North Borneo] (BMNH).

*Ropalidia delicata* Dover, 1931 (1930) J. Fed. Mal. St. Mus. 16: 257, ♀, “Kuala Lipis (Bencha Forest Reserve), Pahang, F.M.S.” (BMNH).

Distribution: Malaysia: Peninsular Malaysia, Borneo; **Indonesia: Sumatra; Sunda Shelf** (Kojima, 1996).

(76) *marginata* (Lepeletier, 1836)

*Vespa ferruginea* Fabricius, 1793, Entomol. Syst. 2: 280 – “India orientali” (ZMUC). Junior primary homonym of *Vespa ferruginea* Gmelin, 1790, and *Vespa ferruginea* Olivier, 1792.

*Epipona marginata* Lepeletier, 1836, Hist. Nat. Insectes Hym. 1: 541, male, female – “Inde” (coll. Serville, ? MRSN).

*Icaria jucunda* Cameron, 1898, Mem. Proc. Manchr. Lit. Philos. Soc. 42 (11): 46, ♀, “New Guinea” (OUM).

*Icaria pruinosa* Cameron, 1906c, Tijdschr. Entomol. 49: 228, ♀, “Digoel” [in Papua] (lectotype, ZMA).

*Ropalidia marginata indica* van der Vecht, 1941, Treubia 18: 121 (“holotype” from Amballa) [replacement name for *Vespa ferruginea* Fabricius, 1793]

*Ropalidia marginata sundaica* van der Vecht, 1941 Treubia 18: 122, ♀♂, “Koeripan, between Batavia [= Jakarta] and Buitenzorg [= Bogor], W. Java” (holotype ♀, RMNH); also from Mariana Is.; Malay Peninsula; Bangka; Borneo; Kariman Djawa Isl.

*Ropalidia canaria* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 19, ♂, “Papua, Kokoda” (BMNH).

Distribution: Pakistan; India; Sri Lanka; Myanmar; Thailand; Vietnam; Malaysia: Peninsular Malaysia, Sarawak; Philippines; Mariana Is.; Palau Is.; Volcano Is; Papua New Guinea; New Britain; Australia (Thursday Is., Queensland); **Indonesia: Bangka, Sumatra, Nias, Java, Karimunjawa Is., Kalimantan, Lesser Sunda Is., Sulawesi, Talud Is., Tukang Besi Is., Papua** (van der Vecht, 1941, 1962; Kojima and Carpenter, 1997; Kojima, 2001; Nguyen *et al.*, 2006).

(77) *mathematica* (Smith, 1860)

*Polybia mathematica* Smith, 1860 (1861), J. Proc. Linn. Soc. Zool. 5: 90, ♀, “Makassar” [in Sulawesi] (OUM).



*Icaria nigroplagiata* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 498, ♀,  
“Khasia Hills” (OUM).

*Ropalidia mathematica binotata* van der Vecht, 1941, Treubia 18: 131,  
♀♂, “W. Java, Tapos on Mt. Gedeh (800 m)” (holotype ♀,  
RMNH); also from Bali; Sumatra; Bangka.

*Ropalidia mathematica sumbaensis* van der Vecht, 1962, Zool. Verh.,  
Leiden 57: 20, ♀♂, “Sumba: Langgaliru” (holotype ♀, NHMB); ?  
also from Timor.

Distribution: India: Meghalaya; **Indonesia: Bangka, Sumatra, Java,  
Bali, Sumbawa, Flores, Karimunjawa, Straits Sunda Islands,  
Sulawesi, Lombok, Flores, Sumba, Timor** (Kojima *et al.*, 2005).

(78) *melania* Richards, 1978

*Ropalidia melania* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 122,  
126, ♀, “**New Guinea**: Morobe District, Wau” (BMNH).

Distribution: Papua New Guinea.

(79) *mimikae* (Meade-Waldo, 1912)

*Icaria mimikae* Meade-Waldo, 1912, Ann. Mag. Nat. Hist. (8) 9: 448  
(key), 450, ♀, “Mimika River” (BMNH).

Distribution: **Indonesia: Papua** (Kojima, 2001).

(80) *modesta* (Smith, 1858)

*Icaria modesta* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 115, ♀,  
“Borneo (Sarawak)” (OUM).

*Icaria fulvipennis* Gribodo, 1892 (1891), Bull. Soc. Entomol. Ital., 23:  
245, ♀, “Marang (Sumatra)” (MSNG).

*Icaria ungulata* Bingham, 1897, Fauna Br. India, Hym. 1: 387, 391, ♀,  
“Tenasserim” [in Myanmar] (BMNH).

Distribution: Myanmar; Thailand; Malaysia: Peninsular Malaysia,  
Sarawak; **Indonesia: Sumatra** (van der Vecht, 1941).

(81) *nigerrima* van der Vecht, 1962

*Ropalidia nigerrima* van der Vecht, 1962, Zool. Verh., Leiden 57: 38  
(key), 39, ♀, “Berangas, South East Borneo” (RMNH).

Distribution: **Indonesia: Kalimantan, Sumatra** (van der Vecht, 1962;  
Kojima and Carpenter, 1997).

(82) *nigra* (Smith, 1859)

*Icaria nigra* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 167, ♀,  
“Aru” (lectotype, OUM).

*Icaria morosa* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 42, ♀,

“Waigiou” (OUM).

*Icaria spilostoma* Cameron, 1906a, Nova Guinea 5, Zool. 1: 62, ♀♂,  
“Manokwari” (lectotype ♀, BMNH).

*Odynerus sariensis* Cameron, 1906a, Nova Guinea 5, Zool. 1: 63, ♀,  
“Siari” (lectotype, ZMA).

*Odynerus confraternus* Cameron, 1911, Nova Guinea 9 (2), Zool.: 192,  
♀, “Lorentz River” (lectotype, ZMA).

*Ancistrocerus catharinae* Cameron, 1913a, Bijdr. Dierkd. 19: 78, ♀,  
“Waigeu” (lectotype, ZMA).

*Ropalidia domestica* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 2,  
12, ♀♂, “Papua, Kokoda” (holotype ♂, BMNH).

*Ropalidia sepicana* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 57  
(list), 122 (key), 127, figs. 22, 27, ♀♂, “**New Guinea**: Sepik dis-  
trict, Sepik River, Kondanggei, ... Pagur, ... Korogo” (holotype ♀  
from “Kondanggei”, ANIC).

Distribution: Papua New Guinea; **Indonesia: Moluccas** (Aru Islands),  
**Papua** (including Waigeo Island) (Kojima, 2001).

(83) *nigrrior* Richards, 1978

*Ropalidia nigrrior* Richards, 1978, Aust. J. Zool. Suppl. Ser. 61: 63, 113,  
128, ♀♂, “**Queensland Q3**, Iron Range” (ANIC); also from two  
other localities in Queensland; and New Guinea (probably).

Distribution: Australia: Queensland; ?New Guinea (Richards, 1978).

(84) *novaeguineae* (von Schulthess, 1913)

*Parapolybia novaeguineae* “de Saussure nom. mus.” von Schulthess,  
1913 (April), Mitt. Schweiz. Entomol. Ges. 12: 154 (key), 162  
(description based on notes received from Meade-Waldo), “Neu-  
Guinea” (BMNH).

*Polybia novaeguineae* du Buysson, 1913c (July), Bull. Soc. Entomol.  
France 1913: 297, ♀, locality not stated, but evidently from New  
Guinea (OUM, BMNH).

Distribution: Papua New Guinea; **Indonesia: Papua** (von Schulthess,  
1913b).

(85) *ochracea* van der Vecht, 1962

*Ropalidia flavopicta ochracea* van der Vecht, 1962, Zool. Verh., Leiden  
57: 49, 56, ♀♂, “Central Sumba, Lokojengo” (holotype ♀, NHMB);  
also from elsewhere on Sumba.

Distribution: **Indonesia: Sumba** (van der Vecht, 1962).

(86) *opifex* van der Vecht, 1962

*Ropalidia opifex* van der Vecht, 1962, Zool. Verh., Leiden 57: 42, 68, ♀,  
“Malaya: Selangor ... Kuala Lumpur, Ampang” (BMNH); also from  
Borneo.

Distribution: ?China (Yunnan); Malaysia: Peninsular Malaysia, Sabah;  
**Indonesia: Kalimantan** (Kojima and Carpenter, 1997).

(87) *opulenta* (Smith, 1857)

*Icaria opulenta* Smith, 1857, Cat. Hym. Brit. Mus. 5, Vesp.: 99, ♀,  
“Borneo (Sarawak)” (lectotype, BMNH).

Distribution: Malaysia: Sarawak, Sabah; **Indonesia: Kalimantan**. (van  
der Vecht, 1962; Kojima and van Achterberg, 1997b).

(88) *ornatipes* (Cameron, 1908)

*Icaria ornatipes* Cameron, 1908, Dtsch. Entomol. Z. 1908: 564, ♀,  
“Borneo ... Kuching” (holotype, BMNH).

Distribution: Malaysia: Sarawak, Sabah; **Indonesia: Sumatra** (van der  
Vecht, 1941, 1962).

(89) *petulans* Cheesman, 1952

*Ropalidia fluviatilis petulans* Cheesman, 1952, Ann. Mag. Nat. Hist.  
(12) 5: 2 (*petulaus* [!]), 18, ♀, “Japen Is., Mt. Baduri, 1000  
ft.” (BMNH; lost?).

Distribution: **Indonesia: Papua** (Japen I.) (Kojima, 2001).

(90) *pilosa* (Smith, 1858)

*Icaria pilosa* Smith, 1858b (1859), J. Proc. Linn. Soc. Zool. 3: 22, ♂,  
“Celebes” (OUM).

Distribution: **Indonesia: Sulawesi** (Kojima and van Achterberg, 1997a).

(91) *plebeja* (de Saussure, 1862)

*Icaria plebeja* de Saussure, 1862, Stettin. Entomol. Ztg. 23: 138, ♀,  
“Gorontalo” [in Sulawesi] (lectotype, RMNH).

Distribution: **Indonesia: Sulawesi** (Kojima *et al.*, 2002).

(92) *principalis* Kojima, 2001

*Ropalidia principalis* Kojima, 2001, Nat. Hist. Bull. Ibaraki Univ. 5: 39,  
42, ♀♂, “**NW New Guinea** “Neth. Ind.-American/New Guinea Ex-  
pediit/Bernhard Camp [3°29'S, 139°13'E] B 100 m”” (holotype ♀,  
RMNH); also from Hollandia [= Jayapura], Mts. Bewani, Mam-  
beramo, Maffin Bay, and Lae.

**MZB:** paratypes (4♀, Bernhard Camp B 100m, 9. iv. 1939, Neth. Ind.-

Amer. New Guinea Exp., coll. Toxopeus, preserved dry, MZB.Hymn. 19530 - 19533).

Distribution: Papua New Guinea (Lae); **Indonesia: Papua** (Kojima, 2001).

(93) *pseudomalayana* Kojima, 1996

*Ropalidia pseudomalayana* Kojima, 1996, Zool. Meded., Leiden 70: 349, 356, 357, ♀, “Borneo: Sarawak, Sarikei Dist., Rejang Delta” (holotype, RMNH); also from two other localities in Borneo; Bangka.

Distribution: Malaysia: Sarawak; **Indonesia: Bangka, Kalimantan** (Kojima, 1996).

(94) *reactionalis* (de Saussure, 1853)

*Icaria reactionalis* de Saussure, 1853b, Ét. Fam. Vesp. 2: 28, ♀, “La Nouvelle-Guinée” (coll. Guérin-Méneville, current depository unknown).

Distribution: New Guinea (Kojima, 2001).

(95) *rufoplagiata* (Cameron, 1905)

*Icaria rufoplagiata* Cameron, 1905b, Tijdschr. Entomol. 48: 71, ♀♂, “Tjandi near Semarang” [in Java] (lectotype ♀, ZMA).

*Ropalidia gravelyi* Dover and Rao, 1922, J. Asiat. Soc. Bengal (n. ser.) 18: 244, ♀, “Kavalai, Cochin State, 1,000–3,000 ft.” (ZSI).

Distribution: India; Myanmar; Thailand; Malaysia: Peninsular Malaysia; **Indonesia: Sumatra, Bangka, Java, Sumbawa, Timor** (Kojima *et al.*, 2007).

(96) *semihyalinata* (Meade-Waldo, 1912)

*Icaria semihyalinata* Meade-Waldo, 1912, Ann. Mag. Nat. Hist. (8) 9: 449 (key), 451, ♀, “Mimika River” (BMNH).

*Ropalidia novaeguineae insolens* Cheesman, 1952, Ann. Mag. Nat. Hist. (12) 5: 3, 24, ♀, “Japen, Mt. Baduri, 1000 ft.” (lectotype, BMNH); also from Humboldt Bay and Waigeo.

Distribution: **Indonesia: Waigeo, Japen, Papua** (Humboldt Bay, Mimika River) (Kojima, 2001).

(97) *sexmaculata* (Cameron, 1911)

*Icaria sexmaculata* Cameron, 1911, Nova Guinea 9 (2), Zool.: 188, ♀, “Bivak Island” (lectotype, ZMA); also from another locality in New Guinea.

Distribution: Papua New Guinea; **Indonesia: Papua** (Kojima, 2001).

(98) *socialis* (de Saussure, 1862)

*Icaria socialis* de Saussure, 1862, Stettin. Entomol. Ztg. 23: 136, ♀,  
“Probablement l’archipel indien” (RMNH).

Distribution: Timor Leste; **Indonesia: Timor** (Kojima *et al.*, 2005).

(99) *stigma* (Smith, 1858)

*Polybia stigma* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 114, ♂,  
“Borneo (Sarawak)” (OUM).

*Ropalidia stigma nigrolineata* van der Vecht, 1962, Zool. Verh., Leiden  
57: 18, ♀♂, “Burma ... Shan States Road, 40 km east of  
Taunggyi” (holotype ♀, NHRM); also from Taunggyi.

*Ropalidia stigma rufa* van der Vecht, 1941, Treubia 18: 130, ♀, “N.E.  
Assam, Sadiya” (ZSI); also from (Dibrugarh), Maghalaya; and  
Hainan Is.

Distribution: India; Sri Lanka; Nepal; China (Hainan); Myanmar; Viet-  
nam; Thailand; Malaysia: Peninsular Malaysia, Sabah; Philippines;  
**Indonesia: Sumatra, Kalimantan, Java, Bali** (Kojima and Car-  
penter, 1997).

(100) *sumatrae* (Weber, 1801)

*Vespa sumatrae* Weber, 1801, Observ. Entomol. Kiliae: 103,  
“Sumatra” (?ZMB).

*Vespa mutillata* Illiger, 1802, Magaz. Insektenk. 1: 189,  
“Sumatra” (ZMB).

*Polistes pubescens* Fabricius, 1804, Syst. Piez.: 279, “Sumatra” (ZMUC)

*Eumenes formicaria* Fabricius, 1804, Syst. Piez.: 288, “America merid-  
ionali” (♀♂, ZMUC).

*Anthreneida coronata* White, 1841. Ann. Mag. Nat. Hist. (1) 7: 321, ♂,  
locality unknown (BMNH).

*Icaria speciosa* de Saussure, 1855b, Rev. Mag. Zool. (2) 7: 374, ♂,  
“Sumatra” (ZMUC).

*Icharia* [!] *marangensis* Gribodo, 1892 (1891), Boll. Soc. Entomol. Ital.  
23: 243, ♀, “Marang (Sumatra) ... Perak (Malacca)” (MSNG).

*Icaria rufinoda* Cameron, 1904, J. Straits Branch R. Asiat. Soc. 41: 121,  
♀, “Singapore” (BMNH).

Distribution: China (Yunnan); India: West Bengal; Myanmar; Vietnam;  
Thailand; Malaysia: Sabah; **Indonesia: Sumatra, Bangka Island**  
(Kojima and Carpenter, 1997).

(101) *timida* van der Vecht, 1962

*Ropalidia timida* van der Vecht, 1962, 42 (key), 62, plate 6, ♀♂, "Singapore" (holotype ♀, BMNH); also from Malaya; Borneo; Sumatra.

Distribution: Malaysia: Peninsular Malaysia, Sabah; **Indonesia: Sumatra, Kalimantan** (van der Vecht, 1962).

(102) *trimaculata* van der Vecht, 1962

*Ropalidia socialis trimaculata* van der Vecht, 1962, Zool. Verh., Leiden 57: 21, ♀, "Sumba, Pogobina" (NHMB).

Distribution: **Indonesia: Sumba** (van der Vecht, 1962).

(103) *unicolor* (Smith, 1859)

*Icaria unicolor* Smith, 1859, J. Proc. Linn. Soc. Zool. 3: 168, ♀, "Key Island" [= Kei] (OUM).

*Icaria torrida* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 42, ♀, "Ceram" (OUM).

Distribution: **Indonesia: Moluccas** (Ceram Island, Kei Islands) (Saito and Kojima, 2005).

(104) *variegata* (Smith, 1852)

*Epipona variegata* Smith, 1852, Ann. Mag. Nat. Hist. (2) 9: 48, ♀, "Poona" [in India] (BMNH).

Distribution: Pakistan; India (Punjab, Delhi, Uttar Pradesh, Bihar, West Bengal, Gujarat, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu); China; Nepal; Myanmar; Malaysia: Peninsular Malaysia; **Indonesia: Sulawesi** (Kojima and Carpenter, 1997).

(105) *wollastoni* (Meade-Waldo, 1912)

*Icaria wollastoni* Meade-Waldo, 1912, Ann. Mag. Nat. Hist. (8) 9: 448 (key), 449, ♀, "Mimika River" (BMNH).

*Icaria sericea* Cameron, 1911, Nova Guinea 9 (2), Zool. 2: 188, ♀, "Bivak Island" (lectotype, ZMA).

Distribution: **Indonesia: Papua** (Kojima, 2001).

#### Genus *Polybioides* du Buysson, 1913

(106) *psecas* du Buysson, 1913

*Polybioides psecas* du Buysson, 1913c, Bull. Soc. Entomol. France 1913: 299, ♀, "indo-malaises" (MNHN).

*Polybia pendleburyi* Dover, 1927, Proc. R. Entomol. Soc. London

1: 40, ♀, “Bukit Kutu, Selangor, 3500 ft.” (BMNH).  
Distribution: Thailand; Malaysia: Peninsular Malaysia, Borneo; **Indonesia: Sumatra, Nias Island, Kalimantan** (van der Vecht, 1966).

(107) *raphigastra* (de Saussure, 1854)

*Polybia raphigastra* de Saussure, 1854, Ét. Fam. Vesp. 2: 204, ♀,  
“L’Amérique? Etiqueté par erreur de Pulo-Pinang (Asie)” [the  
original label was presumably correct] (lectotype, MRSN).

*Polybia sumatrensis* de Saussure, 1855b, Rev. Mag. Zool. (2) 7:  
374, “♂” [♀], “Sumatra” (holotype ♀, BMNH).

*Icaria leptogaster* Cameron, 1901b, Proc. Zool. Soc. London 1901  
(2): 29, ♀, “Patalung, Malay Peninsula” (UMZ).

*Icaria sulciscutis* Cameron, 1901b, Proc. Zool. Soc. London 1901 (2):  
30, ♀, “Bukit Tomah, Singapor” [Bukit Timah] (holotype, BMNH).

Distribution: Thailand; Malaysia: Peninsular Malaysia, Sabah, Sarawak;  
**Indonesia: Sumatra, Nias Island, Natuna Island, Kalimantan**  
(van der Vecht, 1966).

#### Genus *Parapolybia* de Saussure, 1854

(108-1) *varia furva* van der Vecht, 1966

*Parapolybia varia* subsp. (or var.?) *furva* van der Vecht, 1966, Zool.  
Verh., Leiden 82: 39, ♀♂, “New Guinea: West New Guinea,  
Vogelkop ... Kebar Val., West of Manokwari, 550 m” (holotype ♀,  
BPBM).

Distribution: **Indonesia: north western part of Papua** (van der Vecht,  
1966).

(108-2) *varia varia* (Fabricius, 1787)

*Vespa varia* Fabricius, 1787, Mant. Insect. 1: 293, “China” (ZMUC).

*Polybia orientalis* de Saussure, 1854, Ét. Fam. Vesp. 2: 208, pl. 26 fig.  
2, ♀, “La Chine” (BMNH).

*Polybia artifex* Smith, 1860 (1861), J. Proc. Linn. Soc. Zool. 5: 90, ♀,  
“Makassar” [in Sulawesi] (OUM).

*Icaria quadrimaculata* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 496,  
♂, “Bengal, probably Barrackpore” (OUM).

*Icaria carinata* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 499, ♂,  
“Khasia Hills” [India] (OUM). Junior primary homonym of *Icaria*  
*carinata* de Saussure, 1890.

*Icaria wroughtoni* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 500,  
“Poona” [in India] (holotype ♀, BMNH).

*Icaria fuscipennis* Cameron, 1900, Ann. Mag. Nat. Hist. (7) 6: 501, ♀,

“Khasia Hills” [in India] (OUM).

*Icaria cameroni* Dalla Torre, 1904, Genera Insectorum 19: 73, replacement name for *Icaria carinata* Cameron, 1900, non de Saussure, 1890.

*Icaria singapurensis* Cameron, 1904, J. Straits Branch R. Asiat. Soc. 41: 120, ♀, “Singapore” [the holotype by monotypy was mentioned in the Raffles Museum, which is currently the Zoological Reference Collection, Department of Zoology, National University of Singapore (RMZ), but JK failed to find it in the RMZ; the holotype could have been among those specimens that were brought to U.K. during the Second World War].

*Icaria carinifera* Schulz, 1906, Berl. Entomol. Zeitschr. 51: 328, replacement name for *Icaria carinata* Cameron, 1900, non de Saussure, 1890.

*Icaria annulipes* Cameron, 1913b, Ind. For. Rec. 4: 115, ♀♂, “Dehra Dun” [in India: Uttar Pradesh] (BMNH).

*Stelopolybia disticha* du Buysson, 1913c, Bull. Soc. Entomol. France 1913: 298, ♀, “Chine: Kiang-si ...; Chang-Hai” (MNHN).

Distribution: India; Nepal; Myanmar; Thailand; Malaysia: Peninsular Malaysia, Borneo; Philippine Is.; China; Korea; Japan; **Indonesia: Kalimantan, Sulawesi, Sumbawa, Sumba, Riouw-Archipelago [= Kepulauan Riau]** (van der Vecht, 1966).

### Subfamily **Vespinae**

#### Genus *Vespa* Linnaeus, 1758

For the species in the genus *Vespa*, only the original citations and synonyms described from Indonesian Islands (including non-Indonesian areas of Borneo, Timor and New Guinea) are listed.

(1) *affinis* (Linnaeus, 1764)

*Apis affinis* Linnaeus, 1764, Mus. Ludov. Ulricae : 417, “in *Calidis regionibus*” (holotype ♀, ZMUU).

*Vespa Alduini* Guérin-Méneville, 1831, in Duperrey, Voyage Coquille, Zool., Ins. Hym. Atlas: pl. 9 fig. 6; 1838, Texte 2 (2): 264, [Indonesia] “l’île de Bourou, l’une des Moluques” (holotype ♀, MSNG).

*Vespa cincta* var. *picea* du Buysson, 1905a (1904), Ann. Soc. Ent. France 73: 488 (key), 537, ♀, “Nouvelle-Guinée, Tupuseleia . . . ; Ile Yule . . . ; N-Guinée, Kapa-Kapa” (lectotype, MSNG).

*Vespa Indosinensis* Pérez, 1910, Act. Soc. Linn. Bordeaux 64: 8, ♀,



"Cochinchine; Annam (M. Boutan); Malacca; Célèbes septentrionalis; India" (lectotype, MNHN).

*Vespa affinis rufonigrans* van der Vecht, 1957, Zool. Verh., Leiden 34: 28 (key), 29, ♀♂, [Indonesia] "Palu, North West Celebes" (holotype ♀, RMNH); also from elsewhere on Sulawesi, nearby islands, Borneo, northern Moluccas, Misool, Salawati, Waigeo, New Guinea.

*Vespa affinis archboldi* van der Vecht, 1957, Zool. Verh., Leiden 34: 28 (key), 32, ♀, [Indonesia] "Hollandia" [= Jayapura] (RMNH); also from elsewhere in northern New Guinea.

*Vespa affinis moluccana* van der Vecht, 1957, Zool. Verh., Leiden 34: 28 (key), 32, ♀♂, [Indonesia] "Saparua I. near Ambolina" (holotype ♀, RMNH); also from southern Moluccas, Kai, Aru, New Guinea

**MZB:** paratypes of *Vespa affinis rufonigrans* (16♀, 4♂, Paloe (Celebes), i.1937, native collector; 4♀, Paloe (Celebes), ii.1937, coll. C. Frassen, preserved dry; 3♀, Ternate, 8.v.1951, coll. G.A.L. de Haan, preserved dry; 1♀, Ternate, 11.v.1951, coll. G.A.L. de Haan, preserved dry; 1♂, Kau, Halmahera I., 26-31.x.1951, coll. native collector, preserved dry; 3♀, Tolewang, 50 m, Halmahera I., 12-25.x.1951, coll. native collector, preserved dry; 1♀, Goa-Plains, 50-100 m, Halmahera I., 9-12.ix.1951, preserved dry; 8♀, Obi Lake, 160-260 m, W. Obi, Moluccas, vii-xi. 1953, coll. A.M.R. Wegner, preserved dry; 2♀1♂, Kasowari, 0-50 m, W. Obi, Moluccas, viii-ix. 1953, coll. A.M.R. Wegner, preserved dry; 5♀, Wajaloar, 0-50 m, SW. Obi, Moluccas, viii-ix. 1953, coll. A.M.R. Wegner, preserved dry; 6♀, Lake Riv, 0-50 m, W. Obi, Moluccas, vii-xi. 1953, coll. A.M.R. Wegner, preserved dry; 1♀, Obi, 1953, coll. A.M.R. Wegner, preserved dry; 4♀1♂, S. Batjan [= Bacan], 0 m, N. Moluccas, 22.vi.1953, coll. A.M.R. Wegner, preserved dry; 1♀, S. Batjan, 0 m, N. Moluccas, 12.vi.1953, coll. A.M.R. Wegner, preserved dry; 1♂, S. Batjan, 0 m, N. Moluccas, 24.vi.1953, coll. A.M.R. Wegner, preserved dry; 5♀, Wajava, S. Batjan, N. Moluccas, vi-vii.1953, coll. A.M.R. Wegner, preserved dry; 7♀, Salawaku R., S. Batjan, N. Moluccas, vi-vii.1953, coll. A.M.R. Wegner, preserved dry; 2♀, S. Batjan, N. Moluccas, vi-vii.1953, coll. A.M.R. Wegner, preserved dry; 3♀, Solal, 0-75 m, Misool I. (W.), 8.ix-20.x.1948, coll. M.A. Lieftinck, preserved dry; 1♀, Haitlal, 0-75 m, Misool I. (W.), 8.ix-20.x.1948, coll. M.A. Lieftinck, preserved dry; 1♀, Waima, 0-75 m, Misool I. (W.), 8.ix-20.x.1948, coll. M.A. Lieftinck, preserved dry; 1♀, Misaron, 0-75

m, Misool I. (W.), 8.ix-20.x.1948, coll. M.A. Lieftinck, preserved dry; 2♀, Waigeu I. [=Waigeo I.], 2-3.viii.1948, coll. M.A. Lieftinck, preserved dry; ); paratypes of *Vespa affinis archboldi* (5♀, Hollandia [=Jayapura], Neth. Ind. -Amer. New Guinea Exp. 1938-39, vii.1938, coll. L.J. Toxopeus, preserved dry; 1♀, Lake Sentani, Hollandia, Neth. Ind. -Amer. New Guinea Expe. 1938-39, 24.vi.1938, coll. L.J. Toxopeus, preserved dry; 3♀, Bernhard Camp 50 m, Neth. Ind. -Amer. New Guinea Expedit. 1938-39, vii-xi.1938, coll. J. Olthof, preserved dry; 1♀, Prauwenbiv., N. New Guinea, coll. W.C.v. Heurn, preserved dry); paratypes of *Vespa affinis moluccana* (8♀, Watai, Ceram, 20.iii.[19]17, coll. Denin, preserved dry; 1♀, Toboerarong, Strangeb. Koea, North M. Ceram, viii.[19]17, coll. Denin, preserved dry; 1♀1♂, Kaimana, S.W. New Guinea, 3.vi.1941, coll. E. Lundquist, preserved dry; 2♀, Argoenibaaï [=Argoen bay], Kambrau bis, S.W. New Guinea, 4.viii.1941, coll. E. Lundquist, preserved dry; 1♀, Kei I., 29.iv.1922, coll. E.

Latuhalat, preserved dry; 2♀, Soja, Ambon, S. Moluccas, iv.1941, coll. E. Lundquist, preserved dry; 1♀, Hocnoct, Ambon, S. Moluccas, iv.1941, coll. E. Lundquist, preserved dry; 1♀, Sei Waitoemoe, Ambon, S. Moluccas, iv.1941, coll. E. Lundquist, preserved dry; 1♀, Ambon, 27.viii.[19]16.).

Distribution: India; Sri Lanka; Myanmar; China; Taiwan; Japan in the Ryukyu Is. south of Miyako I.; Thailand; Laos; Vietnam; Malaysia: Peninsular Malaysia, Sabah, Sarawak; Singapore; Papua New Guinea, including New Britain and New Ireland; Philippines: Palawan, Dumarán, Labuan, Mindanao, Samar, Luzon; **Indonesia: Sumatra, Nias, Bangka, Java, Kalimantan, Sulawesi, Talaud Islands, Buton, Selayar, Sunda Islands** (Legundi, Sebesi, Sebuku I.), **Timor, Moluccas** (Morotai, Ternate, Tidore, Halmahera, Bacan, Buru, Ambon, Saparua, Haruku, Ceram, Kei Islands), **Papua** (Misool, Salawaty, Waigeo, Sorong, Yapen) (van der Vecht, 1957).

(2) *analís* Fabricius, 1775

*Vespa analis* Fabricius, 1775, Syst. Ent.: 363 – "in Cap. B. S." [error; probably Java] (BMNH).

*Vespa analis* var. *tenebrosa* du Buysson, 1905a (1904), Ann. Soc. Ent. France 73: 516, ♀, "Java, Goban ... Gondang" (lectotype, MNHN).

Distribution: India; Nepal; China; Myanmar; Thailand; Laos; Malaysia: Peninsular Malaysia; Singapore; Taiwan; Korea; Japan, including Ryukyu Is.; Russia: Amur, Primor'ye; **Indonesia: Sumatra, Bangka, Sunda Islands** (Sebesi, Sangiang, Sebuku, Sertung, Legundi, Rakata, Krakatau, Panaitan), **Java, Bawean, Bali, Madura, Lombok** (van der Vecht, 1957).

(3) *basalis* Smith, 1852

*Vespa basalis* Smith, 1852, Trans. Ent. Soc. Lond. (N. S.) 2 (2): 46, ♀, "Nepaul" (BMNH).

Distribution: Pakistan; India: Himachal Pradesh, West Bengal, Meghalaya, Sikkim, Assam; Nepal; China: Sichuan, Yunnan, Fujian; Taiwan; Myanmar; Thailand; Laos; Vietnam; **Indonesia: Sumatra** (van der Vecht, 1957).

(4) *bellicosa* de Saussure, 1854

*Vespa Bellicosa* de Saussure, 1854, Ét. Fam. Vesp. 2: 146, pl. XIV fig. 10, ♀, "Java" [error; Sumatra or Borneo] (lectotype, MRSN).

Distribution: Malaysia: Sarawak; **Indonesia: Sumatra, Bengkalis, Kalimantan** (van der Vecht, 1957).

(5) *fervida* Smith, 1859

*Vespa ferverida* Smith, 1858b, J. Proc. Linn. Soc. Zool. 3: 23, ♀, "Celebes" (BMNH).

Distribution: **Indonesia: Sulawesi, Selayar, Buton** (van der Vecht, 1957).

(6) *mocsaryana* du Buysson, 1905

*Vespa Mocsaryana* du Buysson, 1905a (1904), Ann. Soc. Ent. France 73: 490 (key), 537, pl. VII fig. 3, ♀♂, "Presqu'île de Malacca: Pérak . . . ; Sikkim . . . ; Assam: Khasia Hills . . . ; Tenasserim: Thagatâ" (HNHM, NHMW, BMNH, MSNG).

Distribution: India: Meghalaya, Sikkim, Assam; China: Sichuan, Fujian, Anhui; Myanmar; Thailand; Laos; Vietnam; Malaysia: Peninsular Malaysia; **Indonesia: Sumatra** (van der Vecht, 1957).

(7) *multimaculata* Pérez, 1910

*Vespa annulata* Smith, 1858a, J. Proc. Linn. Soc. Zool. 2: 116, ♀, "Borneo (Sarawak). Malacca." (lectotype OUM). Junior primary homonym of *Vespa annulata* Rossi, 1790.

*Vespa multimaculata* Pérez, 1910, Actes Soc. Linn. Bordeaux 64: 14, ♀,

“Brunei (Java)” [error; Borneo] (lectotype, MNHN).

*Vespa luctuosa* var. *malayana* Bequaert, 1934, Bull. Mus. R. Hist. Nat. Belg. 10 (28): 3 (key), 4. Replacement name for *Vespa annulata* Smith.

*Vespa multimaculata pendleburyi* van der Vecht, 1957, Zool. Verh., Leiden 34: 43, 44, ♀♂, "Catchment Area near Jitra, Kedah, N. Malaya" (holotype ♀, RMNH); also from elsewhere in Peninsular Malaysia; Thailand; Singapore; Indonesia: Sumatra.

**MZB:** paratypes of *Vespa multimaculata pendleburyi* (1♀, Bandar Baroe [=Bandar Baru], Sumatra, 9.x.1925, coll. Karny, preserved dry, MZB.Hymn. 191; 1♀, Bandar Baroe, 950 m, Sumatra, ii.1940; 1♀, Riouw Res., E[ast] Sumatra; 1♀, Pangkalan, Kasai, West Sumatra, iv.1939, coll. P. Buwalda, preserved dry; 4♀, Berapit, Kasai, West Sumatra, iv.1939, coll. P. Buwalda, preserved dry; 1♀, Moeara, Padjanki, West Sumatra, iv.1939, coll. P. Buwalda, preserved dry; 1♀, Pendeng, 400 m Atjeh, N. Sumatra, ii-iii.1937, coll. A. Hoogerwerf; 3♀, Loeboek Sikaping [=Lubuk Sikaping], 450 m, W. Sumatra, 1927, coll. L. Hundeshagen).

Distribution: Thailand; Malaysia: Peninsular Malaysia, Sarawak; Singapore; Brunei; **Indonesia: Sumatra, Kalimantan** (van der Vecht, 1957; Carpenter and Kojima, 1997b).

(8) *tropica* (Linnaeus, 1758)

*Sphex tropica* Linnaeus, 1758, Syst. Nat., ed. 10, 1: 571 – "in Indiis" (holotype ♀, ZMUU).

*Vespa unicolor* Smith, 1863 (1864), J. Proc. Linn. Soc. Zool. 7: 44, ♀, [Indonesia] "Bouru" (OUM). Junior primary homonym of *Vespa unicolor* Lichtenstein, 1796.

*Vespa affinis* var. *trisignata* Pérez, 1910, Actes Soc. Linn. Bordeaux 64: 8, ♀, "Timor" (MNHN).

*Vespa tropica leefmansii* van der Vecht, 1957, Zool. Verh., Leiden 34: 19, ♀♂, "Solok, Padang, Sumatra" (holotype ♀, RMNH); also from Vietnam; Thailand; Malaysia; and other islands in Indonesia.

*Vespa tropica trimeres* van der Vecht, 1957, Zool. Verh., Leiden 34: 19 (key), 22, ♀, "Palu, West Celebes" (RMNH); also from various localities in Sulawesi, Komodo, Sumba, Flores, North Moluccas, Waigeo, Aru and New Guinea Island.

**MZB:** paratypes of *Vespa tropica leefmansii* (2♀, Balikpapan, 20 m, E. Borneo, xi.[19]50, coll. A.M.R. Wegner, preserved dry; 1♀, Inderagiri, Riouw Res., E. Sumatra, iii.1939, coll. P. Buwalda, preserved dry; 1♀, Inderagiri, Riouw Res., E. Sumatra, 7.v.1939, coll. P. Bu-

waldi, preserved dry; 1♀, Deli Banda Baroe, N.E. Sumatra, 1.ii.1940, coll. J.C.v.d. Meer-Mohre, preserved dry; 1♀, Lampong, 50 m, S. Sumatra, vi.1953, coll. A. Sollaart, preserved dry); paratypes of *Vespa tropica trimeres* (1♂5♀, Nanggala, 900 m, Rante-pao, Zuid Celebes [=North Sulawesi], v.1938, coll. F.C.Drescher, preserved dry; 5♀, Paloe, Celebes, ii.1937, coll. C. Frassen, preserved dry; 1♀, Tooyanbae, Palopo, 1000 m, SW Celebes, viii.1936, coll. L.J. Toxopeus, preserved dry; 1♀, Masamba, Loe-woe, O. Celebes [=East Sulawesi], 16.v.1941, coll. H. & E. Vonk, preserved dry; 1♀, Bantimurung 50 m, S. Celebes, 9-18.viii.1949, coll. A. Djakonoff and Manis, preserved dry; 1♀, S. Batjan [=Bacan], 0 m, North Moluccas, 12.vi.1953, coll. A.M.R. Wagner, preserved dry; 6♀, S. Batjan, 0 m, North Moluccas, 22.vi.1953, coll. A.M.R. Wagner, preserved dry; 1♀, S. Batjan, 0 m, North Moluccas, 14. i.1953, coll. A.M.R. Wagner, preserved dry; 11♀, Wajaua, S. Batjan, 0 m, North Moluccas, vi-vii.1953, coll. A.M.R. Wagner, preserved dry; 1♀, S. Batjan, 0 m, North Moluccas, 5.vii.1953, coll. A.M.R. Wagner, preserved dry; 2♀, Obi Lake, 160-260 m, W. Obi, Moluccas, vii-xi.1953, coll. A.M.R. Wagner, preserved dry; 2♀, Laiwulo, 200 m, NW. Obi, Moluccas, ix-x.1953, coll. A.M.R. Wagner, preserved dry; 1♀, Bukunora, 50-100 m, Ternate I., 6-8.ix.1951, preserved dry; 1♀, Goa Plains, 50-100 m, Halmahera I., 9-12.ix.1951, preserved dry; 1♀, R[iver] Aindoca, S. Coast, S.W. New Guinea, 14.vii.1941, coll. E. Landquist, preserved dry; 2♀, Kaimana, S. Coast, S.W. New Guinea, 3.vi.1941, coll. E. Landquist, preserved dry; 1♀, R[iver] Arja, S. Coast, S.W. New Guinea, 26.vi.1941, coll. E. Landquist, preserved dry; 1♀, R[iver] Arja, S. Coast, S.W. New Guinea, 28.vi.1941, coll. E. Landquist, preserved dry; 1♀, Komodo I., vii.1953, coll. A. Hoogerwerf, preserved dry; 1♀, Mboera, W. Flores, vi.1937, coll. J.K. de Jong, preserved dry; 2♀, Laboan Bajo, W. Flores, vi.1937, coll. J.K. de Jong, preserved dry; 2♀, Kam-bera, N.O. Soemba [=North-Eastern Sunba], iii.1925, coll. Dammerman, preserved dry; 1♀, Kananggar, 700 m, O. Soemba, v.1925, coll. Dammerman, preserved dry; 1♀, Laora, 100 m, N.W. Soemba, iv.1925, coll. Dammerman, preserved dry; 1♀, Melolo, O. Sumba, 1.vi.1949, coll. Bühler & Sutter, preserved dry; ; 1♀, Melolo, O. Sumba, 26.v.1949, coll. Bühler & Sutter, preserved dry; ; 1♀, Melolo, O. Sumba, 29.v.1949, coll. Bühler & Sutter, preserved dry; 5♀, Laiwuhi, Melolo, O. Sumba, 16-18.vi.1949, coll. Bühler & Sutter, preserved dry; 1♀, Laewa, Melolo, O.

Sumba, 28.v.1949, coll. Bühler & Sutter, preserved dry).  
 Distribution: Afghanistan; Pakistan; India; Sri Lanka; Nepal; Bhutan;  
 China: Yunnan, Xianggang, Fujian; Myanmar; Thailand; Laos;  
 Cambodia; Vietnam; Malaysia: Peninsular Malaysia, Sarawak;  
 Papua New Guinea, including New Britain; Philippines; **Indone-**  
**sia: Anambas Islands, Sumatra, Nias, Batu, Enggano, Bangka,**  
**Belitung, Sunda Islands** (Sangiang, Sebesi, Sebuku, Legundi,  
 Krakatau, Panaitan), **Java, Bawean, Madura, Kangean Islands,**  
**Bali, Lombok, Sumbawa, Sumba, Komodo, Flores, Wetar,**  
**Timor, Kalimantan, Sulawesi, Selayar, Sula Islands, Moluccas**  
 (Morotai, Halmahera, Ternate, Tidore, Bacan, Obi, Buru, Ambon,  
 Haruku, Ceram, Banda, Aru), **Papua** (including Waigeo Island)  
 (van der Vecht, 1957; Carpenter and Kojima, 1997b).

(9) *velutina* Lepeletier, 1836

*Vespa velutina* "De Haan" Lepeletier, 1836, Hist. Nat. Ins. Hym. 1: 507,  
 ♀, "Inde: Java" (coll. Serville).

*Vespa fruhstorferi* Stadelmann, 1894, Sitz.-Ber. Ges. Naturf. Freunde  
 Berl. 1894 (3): 89, ♀, "in den alpinen Theilen von West-Java auf  
 dem Gunung-Gede . . . in einer Höhe von 8000 Fuss" (ZMB?).

*Vespa velutina* var. *ardens* du Buysson, 1905a (1904), Ann. Soc. Ent.  
 France 73: 550, ♀♂, "Lombok, Sapit (2000' . . . ); I. Sumbawa,  
 près Java" (NHMW, HNHM, ZSM, MNHN).

*Vespa auraria* var. *nigrithorax* du Buysson, 1905a (1904), Ann. Soc.  
 Ent. France 73: 553, ♀♂, *India*: "Dardjiling" (lectotype ♀,  
 MNHN); also from Sikkim; and Bhutan; China; Indonesia:  
 Sumatra, Sulawesi.

*Vespa velutina* var. *Celebensis* Pérez, 1910, Actes Soc. Linn. Bordeaux  
 64: 12, ♀, "Bua-Kraeng (Sud-Célèbes)" (holotype, MNHN).

*Vespa velutina sumbana* van der Vecht, 1957, Zool. Verh., Leiden 34:  
 34, 40, ♀♂, *E.* "Kananggar, E. Sumba, 700 m" (holotype ♀,  
 RMNH); also from elsewhere on Sumba.

*Vespa velutina karnyi* van der Vecht, 1957, Zool. Verh., Leiden 34: 35,  
 38, ♀♂, "Bandar Buru, Deli" (holotype ♀, RMNH); also from  
 elsewhere in Sumatra.

*Vespa velutina timorensis* van der Vecht, 1957, Zool. Verh., Leiden 34  
 35 (key), 40, ♀, "Mollo, 1350 m, Timor" (NHMB); also from  
 another locality on Timor.

*Vespa velutina floresiana* van der Vecht, 1957, Zool. Verh., Leiden 34:  
 35 (key), 40, ♀, "Labuan Badjo, Flores" (RMNH); also from else-  
 where on Flores, and Komodo.

**MZB:** paratypes of *Vespa velutina sumbana* (2♀, Wai Lekabe, Baing, O. Sumba [=East Sumba], 23-28.vi.1949, coll. Bühler and Sutter, preserved dry; 1♀, Mau Marru, O. Sumba, 18.vii.1949, coll. Bühler and Sutter, preserved dry; 2♀, Mau Marru, O. Sumba, 21.vii.1949, coll. Bühler and Sutter, preserved dry; 1♀, Mau Marru, O. Sumba, 22.vii.1949, coll. Bühler and Sutter, preserved dry; 2♀, Rua, O. Sumba, 31.viii.1949, coll. Bühler and Sutter, preserved dry; 1♀, Rua, O. Sumba, 1.ix.1949, coll. Bühler and Sutter, preserved dry; 1♀, Pogobina, W. Sumba, 17.ix.1949, coll. Bühler and Sutter, preserved dry; 1♀, Pogobina, W. Sumba, 29.viii.1949, coll. Bühler and Sutter, preserved dry); paratypes of *Vespa velutina karnyi* (2♀, Mt. Kemiri, 3200 m, Atjeh [=Aceh], Sumatra, 10.iii.1937, coll. J. van Steenis, preserved dry; 1♀, Mt. Leuser, 2000-2700 m, Atjeh [=Aceh], Sumatra, ii-ii.1937, coll. A. Hoogerwerf, preserved dry; 5♀, Laoet Tiga Sagi, Atjeh, Sumatra, 22.iii.1937, coll. J. van Steenis, preserved dry; 2♀1♂, Mt. Tanggamoos, 2100 m, Sumatra, 19-31.iii.1940, coll. M.A. Lieftinck, preserved dry; 2♀, S. Sibajak, 1800 m, Sumatra, 4.x.[19]29, coll. D.V.Leeuwer, preserved dry; 1♀, Brastagi, 1400 m, N. O. [north-east] Sumatra, 9-14.xi.1950, coll. M.A. Lieftinck, preserved dry; 2♀, Mt. Tanggamoos, 2100 m, S. Sumatra, 2.i.1935, coll. Lieftinck and Toxopeus, preserved dry; 1♀, Mt. Tanggamoos, 1600 m, S. Sumatra, 29.vi.[19]34, coll. L-J. Toxopeus, preserved dry; 1♀, Mt. Tanggamoos, 2100 m, S. Sumatra, 2. i.1935, coll. Lieftinck and Toxopeus, preserved dry.); paratypes of *Vespa velutina timorensis* (1♀, Koepang [=Kupang], S. Timor, v.1940, Gvt. Veerarts. Inst., preserved dry, MZB.Hymn 183; 12♀, Koepang, S. Timor, v.1940, Gvt. Veerarts. Inst., preserved dry); paratype of *Vespa velutina floresiana* (1♀, Laboan Badjo, W. Flores, vi.1937, coll. J.K. de Jong, preserved dry.) [van der Vecht (1957: 40) indicated the MZB as the depository of 1♀ paratype from Komodo, but we failed in locating it.]

Distribution: India: West Bengal, Sikkim, Assam; Bhutan; China: Sichuan, Jiangxi, Fujian, Hubei, Zhejiang, Xianggang; Taiwan; Myanmar; Thailand; Laos; Vietnam; Malaysia: Peninsular Malaysia; introduce to France; **Indonesia: Sumatra, Java, Bali, Lombok, Sumbawa, Komodo, Sumba, Flores, Timor, Sulawesi** (van der Vecht, 1957; Carpenter and Kojima, 1997b; Villemant et al. 2006).

Genus *Provespa* Ashmead, 1903

(10) *anomala* (de Saussure, 1854)

*Vespa anomala* de Saussure, 1854, Ét. Fam. Vesp. 2: 112, pl. XIV figs. 2, 2a, ♀, “l’île de Java” (MRSN, BMNH).

*Vespa dorylloides* de Saussure, 1854, Ét. Fam. Vesp. 2: 256, Errata. Unnecessary replacement name for *Vespa anomala* de Saussure.

Distribution: India: Uttar Pradesh, Sikkim; Myanmar; Thailand; Malaysia: Peninsular Malaysia, Sarawak; Singapore; **Indonesia: Sumatra, Bangka, Batu Islands, Java, Kalimantan** (Kojima *et al.*, 2005).

(11) *nocturna* van der Vecht, 1935

*Provespa nocturna* van der Vecht, 1935, Ent. Meded. Ned. Indië 1: 41, fig. 1, ♀♂, “Sumatra, Palembangsche Bovenlanden” (holotype ♀, RMNH); also from Borneo, ?Sulawesi.

**MZB:** paratypes (2♀, Muar Sipongt, Sumatra, 18.x.1925, coll. Fulmek & Karny, preserved dry, MZB.Hymn. 184 & 185; 1♀, Loeboek Sikaping, Sumatra, 1923-27, coll. FL. Hundeshagen, preserved dry, MZB.Hymn. 186; 1♀, Tinggi Radja, Deli, north-eastern Sumatra, 9.ix.[19]28, coll. J. C. v. d. Meer Mohr, preserved dry, MZB.Hymn. 187; 1♀, Tangga, north-eastern Sumatra, 2.viii.[19]28, coll. J. C. v. d. Meer Mohr, preserved dry, MZB.Hymn. 189; 1♀, Deli, [Sumatra], 1900, preserved dry, MZB.Hymn. 190; 1♀, O. [=east] Borneo, 8.viii.1925, coll. H. C. Siebers, preserved dry, MZB.Hymn. 188;).

Distribution: Vietnam; Malaysia: Peninsular Malaysia, Sarawak; **Indonesia: Sumatra, Bangka, Kalimantan** (Kojima *et al.*, 2005).

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## INSTRUCTIONS FOR AUTHORS

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- MacKinnon, J. & K. Phillips, 1993. *Field Guide to the Birds of Borneo, Sumatra, Java and Bali*. Oxford University Press, Oxford, 491 pp.
- Stork, N.E., 1994. Inventories of biodiversity: more than a question of numbers. In: Forey, P.L., C.J. Humphries & R.I. Vane-Wright (eds.), *Systematics and Conservation Evaluation*. Clarendon Press (for the Systematics Association), Oxford, pp. 81-100.
- Maddison, D.R., 1995. Hemiptera. True bugs, cicadas, leafhoppers, aphids, etc.. Version 01 January 1995 (temporary). <http://tolweb.org/Hemiptera/8239/1995.01.01>. In: The Tree of Life Web Project, <http://tolweb.org/> (accessed on 27 November 2007).
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