

List of the primary types of social wasps (Hymenoptera: Vespidae) deposited in the Nationaal Natuurhistorisch Museum, Leiden, and the Zoölogisch Museum, Amsterdam

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The primary types of social wasp subfamilies Vespinae, Polistinae and Stenogastrinae housed in the Nationaal Natuurhistorisch Museum in Leiden and the Zoölogisch Museum in Amsterdam are listed. Their complete label data are given unless they are available elsewhere. Lectotypes of *Polistes snelleni* de Saussure, 1862, *P. malayanus* Cameron, 1906, *P. melanopterus* Cameron, 1911, *P. javanicus* Cameron, 1905, *Icaria capensis* de Saussure, 1862, *I. plebeja* de Saussure, 1862, *Stenogaster micans* de Saussure, 1852, and *Ischnogaster foveatus* du Buysson, 1907, are designated.

Introduction

Although the method of type designation is well defined in the International Code of Zoological Nomenclature (ICZN), we sometimes encounter problems with respect to the types. Some of them bear a lecto- or holotype label, but the selection has never been published and is therefore invalid. Further, it is not rare that only part of the label data of a type is given in the original description, which makes it more difficult to identify it. During a one year stay of the senior author in the Netherlands, we examined the types of social wasps deposited in the Nationaal Natuurhistorisch Museum in Leiden and the Zoölogisch Museum in Amsterdam. In the present paper only the primary types are listed.

Species names are followed by the original reference, the sex of the primary type, the type locality (as cited in the original description), and the category of the type. Complete label data are then given unless available in the original descriptions or elsewhere (van der Vecht, 1941, 1962, 1968, 1975; Richards, 1978; Hensen & Blommers, 1987; Kojima, 1996a, van der Vecht & Kojima, 1996a; Kojima & Carpenter, 1997). Finally the currently valid names are given.

Among the syntypes of *Polistes malayanus* Cameron, 1906, *P. javanicus* Cameron, 1905, *Stenogaster micans* de Saussure, 1852, and *Ischnogaster foveatus* du Buysson, 1907, are specimens bearing lectotype labels. However, the designations of the lectotypes for these species have never been published. In order to avoid future confusion, we here designate them. Lectotypes of *Icaria capensis* de Saussure, 1862, *I. plebeja* de Saussure, 1862, *Polistes snelleni* de Saussure, 1862, and *P. melanopterus* Cameron, 1911, are also designated.

Types in the Nationaal Natuurhistorisch Museum, Leiden

Subfamily Vespinae Latreille, 1802

Genus *Provespa* Ashmead, 1903

Provespa nocturna van der Vecht, 1935: 41; ♀, "Sumatra"; holotype. "Palemb. Bovenl., 5 u 6/78"; "Provespa nocturna v.d.V., ♀, Holotype, det. J.v.d.Vecht 1975"; "♀".

Valid name: *Provespa nocturna* van der Vecht, 1935.

Genus *Vespa* Linnaeus, 1758

Vespa affinis archboldi van der Vecht, 1957: 32; ♀, "New Guinea, Hollandia"; holotype. "Neth. Ind.-Amer. New Guinea Exp. 1938-39., Hollandia, vii. [19]38, L.J. Toxopeus leg."; "Vespa affinis archboldi v.d.V., Type"; "Type, V. affinis archboldi".

Valid name: *Vespa affinis archboldi* van der Vecht, 1957

Vespa affinis moluccana van der Vecht, 1957: 32; ♀, "Saparua I. near Amboina"; holotype. "S. Moluccas Saparua I., 22.x.1949, M.A. Lieftinck"; "Type, V. affinis moluccana v.d. Vecht".

Valid name: *Vespa affinis moluccana* van der Vecht, 1957.

Vespa affinis rufonigrans van der Vecht, 1957: 29; ♀, "North West Celebes, Palu"; holotype. "Paloe (Celebes), Jan. 1937, leg. Native collected"; "V. affinis subsp. rufonigrans v.d.V., ♀"

Valid name: *Vespa affinis rufonigrans* van der Vecht, 1957.

Vespa multimaculata pendleburyi van der Vecht, 1957: 44; ♀, "N. Malaya, Kedah"; holotype. "Malay Penin., Kedah nr. Jitra Catchment Area, 11.iv.1928, H.M. Pendlebury coll. F.M.S. Museum"; "V. multimaculata pendleburyi v.d.Vecht, ♀, det. J.v.d. Vecht 1956"; "Type, V. multimaculata pendleburyi v.d.Vecht".

Valid name: *Vespa multimaculata pendleburyi* van der Vecht, 1957.

Vespa tropica leefmansi van der Vecht, 1957: 19; ♀, "Sumatra, Padang, Solok"; holotype. "P.O. Stolz, Solak, Padang boven"; "Museum Leiden, Vespa tropica L., det. J.Q. Bequaert 1933"; "Cat. No. 26"; "Type, Vespa tropica leefmansi v.d.V."

Valid name: *Vespa tropica leefmansi* van der Vecht, 1957.

Vespa tropica trimeres van der Vecht, 1957: 22; ♀, "West Celebes, Palu"; holotype. "W. Celebes, Paloe, Dec. 1936, native coll."; "Type, V. tropica trimeres v.d.Vecht"; "Museum Leiden ex. coll. J. v.d.Vecht".

Valid name: *Vespa tropica trimeres* van der Vecht, 1957.

Vespa velutina floresiana van der Vecht, 1957: 40; ♀, "Flores, Labuan Badjo, Flores"; holotype. "W. Flores I., J.K. de Jong, vi.1937, Laboean Badjo"; "Type, V. velutina floresiana v.d.Vecht".

Valid name: *Vespa velutina floresiana* van der Vecht, 1957.

Vespa velutina karnyi van der Vecht, 1957: 38; ♀, "Sumatra, Bandar Baru, Deli"; holotype. "Fulmek u. Karny, Sumatra No. 19, Baudar Boroe, 9.x.1925"; "V. velutina, det. Schulthess 33"; "V. velutina karnyi v.d.V., ♀, det. J. v.d.Vecht 1954"; "Type, V. velutina karnyi vdV".

Valid name: *Vespa velutina karnyi* van der Vecht, 1957.

Vespa velutina sumbana van der Vecht, 1957: 40; ♀, "E. Sumba, Kananggar"; holotype. "Dammerman, O. Soemba, 700 m, Kananggar, v.1925"; "Vespa velutina sumbana v.d.V., ♀, det. J. v.d.Vecht 1954".

Valid name: *Vespa velutina sumbana* van der Vecht, 1957.

Vespa velutina variana van der Vecht, 1957: 37; ♀, "North Siam, Doi Hua Mot"; holotype. "Doi Hua Mot, N. Siam, 3000ft, 8.34, H.M. Smith"; "variana n. subsp."; "Type, *V. velutina variana* v.d.V."

Valid name: *Vespa velutina variana* van der Vecht, 1957.

Subfamily Polistinae Lepeletier, 1836
Tribe Polistini Lepeletier, 1836

Genus *Polistes* Latreille, 1802

Polistes rothneyi engeli van der Vecht, 1968: 108; ♀, "Sumatra, Padang"; holotype.

Valid name: *Polistes rothneyi engeli* van der Vecht, 1968.

Polistes rothneyi gressitti van der Vecht, 1968: 106; ♀, "Formosa, Taihanroku"; holotype.

Valid name: *Polistes rothneyi gressitti* van der Vecht, 1968.

Polistes rothneyi helvenacus van der Vecht, 1968: 109; ♀, "West Java, Mt. Gedeh"; holotype.

Valid name: *Polistes rothneyi helvenacus* van der Vecht, 1968.

Polistes snelleni de Saussure, 1862: 140; ♀, "Japon"; lectotype here designated. "v. Siebold, Japan"; "Museum Leiden, *Polistes snelleni* Sauss.".

Valid name: *Polistes snelleni* de Saussure, 1862.

Note.— Although de Saussure (1862) referred to colour variations, indicating that his description was based on more than one specimen, we could not find any other type specimen in RMNH.

Tribe Mischocytarini Carpenter, 1993

Genus *Mischocyttarus* de Saussure, 1853

Mischocyttarus alboniger Richards, 1978: 411; ♀, "Surinam, Nassau Mts."; holotype.

Valid name: *Mischocyttarus alboniger* Richards, 1978.

Mischocyttarus vredeni Richards, 1978: 417; ♀, "Surinam, Santa Boma"; holotype.

Valid name: *Mischocyttarus vredeni* Richards, 1978.

Tribe Ropalidiini Bequaert, 1918

Genus *Ropalidia* Guérin-Méneville, 1831

Icaria capensis de Saussure, 1862: 139; ♀, "le Cap de Bonne Espérance"; lectotype here designated.

"♀"; "Pr. C. Sp.", "Mus. Leiden"; "Typus" (blue); "Typus, *Ropalidia capensis* Sauss., ♀".

Valid name: *Ropalidia capensis* (de Saussure, 1862).

Note.— Although de Saussure provided the range for body length indicating that he examined more than one specimen from the Leiden Museum, we could find only the type specimen listed above.

Icaria copiaria de Saussure, 1862: 135; ♂, "Java"; holotype (unique). "♂"; "Muller, Java"; "Holotypus" (blue); "Museum Leiden *Ropalidia copiaria* De Saussure, ♂, Det. De Saussure".

Valid name: *Ropalidia copiaria* (de Saussure, 1862).

Icaria jacobsoni du Buysson, 1908: 123; ♀, "Batavia"; lectotype according to Article 74(b) by van der Vecht (1941: 157). "Java, Moeara Antjol (Batavia), Dec. [19]07. Edw. Jacobson"; "♀"; "Holotypus"; "Icaria jacobsoni" Buiyss., type, R. du Buysson det., 1908"; "Museum Leiden, *Ropalidia jacobsoni* du Buysson, Det. v.d.Vecht, '33".

Valid name: *Ropalidia jacobsoni* (du Buysson, 1908).

Note.— Van der Vecht (1941: 157) stated "1♀, Batavia, Antjol...(holotype, Mus. L.); 1♂, Batavia...1937, author (allotype, coll. m)". Although presumably inadvertently, van der Vecht referred to the specimens as the holotype and gave the label data for it. However, du Buysson's description was based on several specimens (i.e. syntypes) collected in the environs of Batavia by P. Serre and in Moeara Antjol by M.E. Jacobson. So, van der Vecht's designation of the Leiden specimen as holotype was based on (incorrect) inference, and according to article 74(b) of the ICZN this specimen is therefore to be considered the lectotype. Four other specimens in the Museum National d'Histoire Naturelle in Paris are paralectotypes.

Icaria plebeja de Saussure, 1862: 138; ♀, "Celebes, Gorontalo"; lectotype here designated. "♀"; "Forsten, Gorontalo"; "Holotype" (blue); "Museum Leiden, *Ropalidia plebeja* Sauss., Det."

Valid name: *Ropalidia plebeja* (de Saussure, 1862).

Note.— De Saussure described this species based on the specimen(s) in the Leiden museum where we traced only a single specimen labelled "Gorontalo". Yet, judging from the facts that de Saussure gave a range for the measurement of body length and that he stated "Variat", de Saussure should have available more than one specimen.

Icaria socialis de Saussure, 1862: 136; ♀, "Probablement l'archipel indien"; holotype.

Valid name: *Ropalidia socialis* (de Saussure, 1862).

Note.— Van der Vecht (1941: 133) listed the specimens he examined as "Timor: Wienecke, holo-, allo- and paratypes of *Icaria socialis* Sauss. (Mus. L., coll. m)". This is not valid as the designation of the lectotype. De Saussure described only the female and said "Tout l'insecte", which suggests that his description was based on a single specimen.

Ropalidia artifex fuscata van der Vecht, 1941: 136; ♀, "N. Sumatra, Toba Lake"; holotype. "Dr. B. Hagen, Tobameer (Sumatra inter)"; "Nest in Erd und Baumlöchern"; "*Ropalidia artifex* (De Saussure) var. *fuscata* m., ♀, det. J. v.d.Vecht, '40".

Valid name: *Ropalidia artifex fuscata* van der Vecht, 1941.

Ropalidia bidens van der Vecht, 1996, in van der Vecht & Kojima, 1996: 99; ♀, "NW New Guinea, Klamono Oilfds"; holotype.

Valid name: *Ropalidia bidens* van der Vecht, 1996.

Ropalidia clypeata Kojima, 1996, in van der Vecht & Kojima, 1996: 103; ♂, "Papua New Guinea, Sivipi near Sacombata"; holotype.

Valid name: *Ropalidia clypeata* Kojima, 1996.

Ropalidia flavopicta extrema van der Vecht, 1962: 60; ♀, "Luzon, Atimonan"; holotype.

Valid name: *Ropalidia extrema* van der Vecht, 1962 (see Kojima (1982: 112)).

Ropalidia flavopicta javanica van der Vecht, 1962: 54; ♀, "East Java, Blawan"; holotype.

Valid name: *Ropalidia javanica* van der Vecht, 1962 (see Kojima (1996a: 334)).

Ropalidia granulata borneensis van der Vecht, 1941: 190; ♀, "Bottutan near Sandakan"; holotype.
Valid name: *Ropalidia granulata borneensis* van der Vecht, 1941.

Ropalidia granulata van der Vecht, 1941: 189; ♀, "Malay Peninsula, Pahang, Kuala Teku"; holotype.
"R. granulata v.d.Vecht, ♀"; "Museum Leiden ex. coll. J. v.d.Vecht"; "Malay Penin., Pahang,
F.M.S., Kuala Teku, 500, Dec. 7th 1921, H.M. Pendlebury".
Valid name: *Ropalidia granulata* van der Vecht, 1941.

Ropalidia hongkongensis juncta van der Vecht, 1941: 141; ♀, "Tjiboerial near Buitenzorg, W.-Java";
holotype. "Buitenzorg, Java, 250 m, Tjiboerial, 19.4.1935, J. v.d.Vecht"; "Museum Leiden ex. coll.
J. v.d.Vecht"; "R. hongkongensis subsp. n. juncta, det. J. v.d.Vecht 1941".
Valid name: *Ropalidia hongkongensis juncta* van der Vecht, 1941.

Ropalidia laticincta floresiana van der Vecht, 1962: 17; ♂, "Flores, Boa Wae, 450 m"; holotype.
Valid name: *Ropalidia laticincta floresiana* van der Vecht, 1962.

Ropalidia lepida van der Vecht, 1962: 66; ♀, "Luzon, Damalon"; holotype.
Valid name: *Ropalidia lepida* van der Vecht, 1962.

Ropalidia luzonensis Kojima, 1996a: 343; ♀, "Philippines, Montalba"; holotype.
Valid name: *Ropalidia luzonensis* Kojima, 1996.

Ropalidia marginata sundaica van der Vecht, 1941: 122; ♀, "Koeripan, between Batavia and Buitenzorg,
W. Java"; holotype. "W. Java, Koeripan, 19-8-34, Dr. J. v.d.Vecht"; "Museum Leiden ex. coll.
J. v.d.Vecht"; "Museum Leiden, *Ropalidia marginata sundaica* v.d.Vecht, 1941".
Valid name: *Ropalidia marginata sundaica* van der Vecht, 1941.

Ropalidia mathematica binotata van der Vecht, 1941: 131; ♀, "W. Java, Tapos on Mt. Gedeh"; holotype.
"W. Java, 800 m, Mt. Gedeh, Tapos, 1-16-viii-1936, J. v.d.Vecht"; "Museum Leiden ex. coll. J.
v.d.Vecht"; "R. mathematica subsp. *binotata* v.d.Vecht, det. J. v.d.Vecht".
Valid name: *Ropalidia mathematica binotata* van der Vecht, 1941.

Ropalidia nigerrima van der Vecht, 1962: 39; ♀, "Berangas, South East Borneo"; holotype.
Valid name: *Ropalidia nigerrima* van der Vecht, 1962.

Ropalidia pseudomalayana Kojima, 1996b: 356; ♀, "Borneo: Sarawak, Sarikei Dist., Rejang Delta";
holotype.
Valid name: *Ropalidia pseudomalayana* Kojima, 1996.

Ropalidia spatulata van der Vecht, 1962: 9; ♂, "S. India, Kerala State, Walayar Forest, 700 ft."; holotype.
"S. India, Kerala State, Walayar Forests, 700 ft, x.1959, P. Susai Nathau"; "*Ropalidia spatulata*
v.d.Vecht, ♂, det. J. v.d.Vecht, 1961".
Valid name: *Ropalidia spatulata* van der Vecht, 1962.

Ropalidia variegata dichroma van der Vecht, 1941: 157; ♀, "Timor"; holotype.
Valid name: *Ropalidia variegata dichroma* van der Vecht, 1941.

Genus *Parapolybia* de Saussure, 1854

Parapolybia nodosa van der Vecht, 1966: 39; ♀; "Formosa, Pilam"; holotype. "Pilam, 1-15.I.08"; "H.
Sautar, Formosa, acq 1908 (a. 58)"; "Holotype"; "*Parapolybia nodosa* m, ♀ det. J. v.d.Vecht 1965".
Valid name: *Parapolybia nodosa* van der Vecht, 1966.

Genus *Belonogaster* de Saussure, 1854

Belonogaster ambiko Hensen & Blommers, 1987: 14; ♂, "Madagascar (Tamat), Périnet"; holotype.

Valid name: *Belonogaster ambiko* Hensen & Blommers, 1987.

Belonogaster brunnea Ritsema, 1874: 202; holotype. "♀"; "Piaget. v. Woerden, Congo"; "Holotype" (blue); "Mus. Leiden"; "*Belonogaster brunneus* Rits., type".

Valid name: *Belonogaster brunnea* Ritsema, 1874.

Belonogaster keiseri Richards, 1982: 104; ♂, "Madagascar, Diego-Suarez"; holotype. "MADAGASCAR, D.-S. Joffreville, 25.v.[19]58 F. Keiser"; "*Belonogaster longistilis* Sauss., ♂, det. J. v.d.Vecht 1962"; "♂ n.sp. [in Richards' handwriting]"; "*Belonogaster keiseri* Richards, ♂, Holotype [in Richards' handwriting]".

Valid name: *Belonogaster keiseri* Richards, 1982.

Belonogaster libera Richards, 1982: 86; ♂, "Liberia, Robertsport"; holotype. "Mus. Leiden, A.F. Demery, Robertsport, Liberia, Mrt. 1890"; "*Belonogaster libera* Richards, Holotype, ♂ [in Richards' handwriting]".

Valid name: *Belonogaster libera* Richards, 1982.

Belonogaster tipuliformis Hensen & Blommers, 1987: 28; ♀, "Madagascar (Tamat), Périnet"; holotype.

Valid name: *Belonogaster tipuliformis* Hensen & Blommers, 1987.

Tribe Epiponini Bequaert, 1918

Genus *Apoica* Lepeletier, 1836

Apoica flavissima van der Vecht, 1972c: 741; ♂, "Dirkshoop, west of Paramaribo, in Surinam"; holotype. "Suriname, Dirkshoop, 21 May 1963, J. v.d.Vecht"; "EX NEST 21-5-2"; "Holotype"; "*Apoica flavissima* v.d.Vecht, ♂, det. J. v.d.Vecht 1971".

Valid name: *Apoica flavissima* van der Vecht, 1972.

Apoica gelida van der Vecht, 1972c: 741; ♂, "Albina, N. E. Surinam"; holotype. "Suriname, Albina, 2 June 1965, J. Belle"; "Holotype"; "*Apoica gelida* vdV, ♂, det. J. v.d.Vecht 1970".

Valid name: *Apoica gelida* van der Vecht, 1972.

Genus *Metapolybia* Ducke, 1905

Metapolybia acincta Richards, 1978: 185; ♀, "SURINAM: Republiek"; holotype. "Suriname, Republiek, 10 May 1963, J. v.d.Vecht"; "Museum Leiden, nest no 73"; "Holotype" (circular); "*Metapolybia acinctus* Rich., ♀, holotype [in Richards' handwriting]".

Valid name: *Metapolybia acincta* Richards, 1978.

Metapolybia nigra Richards, 1978: 190; ♀, "SURINAM: Upper Corantijn Riv., Coeroeni"; holotype. Not examined.

Valid name: *Metapolybia nigra* Richards, 1978.

Note.—Holotype specimen was probably allocated but not labelled as such by Richards.

Genus *Polybia* Lepeletier, 1836

Polybia dimorpha Richards, 1978: 57; ♀, "SURINAM: Zanderij savanna"; holotype. "Suriname, Zanderij

savanne, 3-6 aug. 1964, D. C. Geiskses"; "MALAISE-TRAP"; "*Polybia dimorpha* Richards, 1978".
Valid name: *Polybia dimorpha* Richards, 1978.

Note.—Three females in the museum have label data as given by Richards for the holotype.

Polybia scrobalis surinama Richards, 1970: 303; ♀; Surinam; holotype. "Mus. Leiden, Suriname, Paloeume Pepejoe, 17.v.1954, D.C. Geyskes"; "op licht n.m. 8 uur 1619"; "*Polybia scrobalis surinama* Rich., ♀, dt. J. v.d.Vecht 1972"; "*Polybia scrobalis* Rich. ssp. *surinama* Rich., ♀, holotype".

Valid name: *Polybia scrobalis surinama* Richards, 1970.

Polybia spinifex Richards, 1978: 119; ♀, "SURINAM: Sarakreek, Afobaka"; holotype. "Suriname, Sarakreek, Afobaka, 15 oct. 1964, D. C. Geiskses"; "in little clay-nest with tubercle"; "Type" (circular); "Museum Leiden, *Polybia spinifex* Rich., det J. v.d.Vecht, 1973"; "*Polybia spinifex* Rich., ♀, holotype [in Richards' handwriting]".

Valid name: *Polybia spinifex* Richards, 1978.

Subfamily Stenogastrinae Bequaert, 1918 (= Ischnogastrinae Ashmead, 1902)

Genus *Anischnogaster* van der Vecht, 1972

Anischnogaster dubia van der Vecht, 1972a: 247; ♀, "N.W. New Guinea, Araucaria Camp, 800 m"; holotype. "Neth. Ind.-American New Guinea Exped., Araucaria Camp, 800 m, 27.iii.1939, L.J. Toxopeus"; "*Anischnogaster dubia* sp. n., ♀, det. J. v.d.Vecht, 1972".

Valid name: *Anischnogaster dubia* van der Vecht, 1972.

Anischnogaster laticeps van der Vecht, 1972a: 249; ♀, "North West New Guinea, Araucaria Camp, 800 m"; holotype. "Neth. Ind.-American New Guinea Exped., Araucaria Camp, 800 m, 7.iii.1939, L.J. Toxopeus"; "*Anischnogaster laticeps* sp. n., ♀, det. J. v.d.Vecht, 1972".

Valid name: *Anischnogaster laticeps* van der Vecht, 1972.

Ischnogaster coriaceus du Buysson, 1907: 79; ♂, "Nouvelle Guinée"; holotype. "Bernstein, N. Guine"; "Holotype ♂"; "Mus. Leiden"; "♂"; "*Ischnogaster coriaceus* Buyss., ♂, type, R. du Buysson det., 1904"; "*Stenogaster iridipennis* Lep., det. J. v.d.Vecht".

Valid name: *Anischnogaster iridipennis* (Smith, 1859) (see van der Vecht (1972a: 243)).

Genus *Eustenogaster* van der Vecht 1969

Stenogaster micans de Saussure, 1852: 24; ♀, "Java"; lectotype here designated. "♀"; "K. & v. H [= Kühl & van Hasselt], Java"; "Museum Leiden *Stenogaster micans* Sauss. DET."; "Lectotype desig. by J. v.d.Vecht, 1957" "*Eustenogaster micans* (Sauss.) det. J. v.d.Vecht 1957".

Valid name: *Eustenogaster micans* (de Saussure, 1852).

Note.—The designation of the lectotype has never been published by van der Vecht.

Genus *Parischnogaster* von Schulthess, 1914

Ischnogaster foveatus du Buysson, 1907: 80; ♂, "Salawatti"; lectotype here designated. "Bernstein, Salawatti"; "Holotype"; "Museum Leiden, *Parischnogaster striatulus* Buyss., ♂, Det. J.v.d.Vecht"; "*Ischnogaster foveatus* Buyss., ♂, type, R. DU BUYSSON det. 1904"; "Lectotype, *Ischnogaster foveata* Du Buysson, By C.K. Starr, 1988"

Valid name: *Parischnigaster striatula* (du Buysson, 1905) (syn. by von Schulthess (1927: 82))

Note.—The designation of the lectotype has never been published by Starr. Two

♂♂ (both badly damaged and headless) in Nationaal Natuurhistorisch Museum, Leiden, with the same collection data as the lectotype are paralectotypes.

Genus *Stenogaster* Guérin-Méneville, 1831

Stenogaster adusta van der Vecht, 1975: 291; ♀, "Misool, Fakal"; holotype.
Valid name: *Stenogaster adusta* van der Vecht, 1975.

Stenogaster decorata van der Vecht, 1975: 293; ♀, "Misool, Fakal, 0-75 m"; holotype.
Valid name: *Stenogaster decorata* van der Vecht, 1975.

Stenogaster licina van der Vecht, 1975: 295; ♀, "N.W. New Guinea, Road Ajamaru-Teminabuan"; holotype. "Mus. Leiden, L.B. Byongeysma en W.J. Rooselyp, Weg. Ajamaroe, Taminoboean Km 1.8, 7-vi-52"; "*Stenogaster licina* sp. n., ♀, det. J. v.d.Vecht, 1974".
Valid name: *Stenogaster licina* van der Vecht, 1975.

Stenogaster macilenta van der Vecht, 1975: 306; ♀, "N.W. New Guinea, Lower Mist Camp, 1550 m"; holotype. "Neth. Ind.-Amer. New Guine Exp., Lowen Mist Camp, 1550 m, 31.i.1939, L.J. Toxopeus leg.); "*Stenogaster macilenta* sp. nov., ♀, det. J. v.d.Vecht, 1974".
Valid name: *Stenogaster macilenta* van der Vecht, 1975.

Types in the Zoölogisch Museum, Amsterdam

Subfamily Polistinae Lepeletier, 1836 Tribe Polistini Lepeletier, 1836

Genus *Polistes* Latreille, 1802

Polistes javanicus Cameron, 1905: 68; ♀, "Tjandi near Semarang, Java"; lectotype here designated. "Tjandi bij Semarang, iv-v.[19]04 Drescher"; "*Polistes javanicus* Cam. Type, Java [in Cameron's handwriting], Holotype by designation J. v.d.Vecht 33, ♀ [in van der Vecht's handwriting]"; "*Polistes tenebricosus* Lep., ♀, det. Bequaert '33".
Valid name: *Polistes tenebricosus* (Lepeletier, 1836) (syn. by Bequaert (1934: 8)).

Note.— Paralectotypes are 1♀ + 2♂ in the Zoölogisch Museum with the same locality label as the lectotype.

Polistes malayanus Cameron, 1906a: 60; ♀, ♂, "Manokwari"; lectotype here designated. "Manokwari, 23 mei '03"; "*Polistes malayanus* Cam. Type, New Guinea [in Cameron's handwriting], ♂, HOLOTYPE by designation J. v.d.Vecht '33 [in van der Vecht's handwriting]".
Valid name: *Polistes tepidus malayanus* Cameron, 1906 (see van der Vecht (1972b: 90)).

Note.— A male with the same collection data as the lectotype is a paralectotype. Although Cameron described this species from "Manokwari", a female in Zoölogisch Museum labelled "Humboltbaai, 22 maart '03" was most probably used for the description of the female and is a paralectotype.

Polistes malayanus race *batjanensis* Cameron, 1911: 187; ♀, "Batjan"; holotype. "Batian 11.Dec. '09"; "Mevr. de Beaufort leg."; "*malayanus* r. *bamtiyensis* [in Cameron's handwriting]" (blue); "Holotype, *Polistes tepidus* F. race *batjanensis* Cam., ♀, Nova Guinea 9, p. 186, det. v.d.Vecht '33".
Valid name: *Polistes tepidus batjanensis* Cameron, 1911.

Polistes melanopterus Cameron, 1911: 187; ♀, "Lorentz River"; lectotype here designated. "Nieuw

Guinea, Noord riv. 13.v., Lorentz 1907"; "*melanopterus* [in Cameron's (?) handwriting]" (blue); "Holotype *Polistes melanopterus* Cam. sec. J. v.d.Vecht [in van der Vecht's handwriting]" (orange).
 Valid name: *Polistes melanopterus* Cameron, 1911.

Note.— Although the description of colour pattern was based on specimens collected in "May and September", Cameron indicated "Lorentz River, May" in front of the description of the morphology. The ♀ in the Zoölogische Museum, labelled "Z. Nieuw Guinea, Lorentz, 1909-10, Noordrivier, ix. 09" and "*melanopterus* [in Cameron's handwriting]" (blue), is a paralectotype.

Polistes varicornis Cameron, 1905: 67; ♂; holotype (unique). "Java, 1862"; "*Polistes varicornis* Cam. Type, Java [in Cameron's handwriting], HOLOTYPE desig. by J. v.d.Vecht, 1933 [in van der Vecht's handwriting]"; "*Polistes tenebricosus* Lep., det. Bequaert '33".
 Valid name: *Polistes tenebricosus* (Lepeletier, 1836) (syn. by Bequaert (1934: 8)).

Tribe Ropalidiini Bequaert, 1918

Genus *Ropalidia* Guérin-Méneville, 1831

Ancistrocerus catharinae Cameron, 1913: 78; ♀, "Waigeu"; lectotype designation by Kojima & Carpenter (1997: 4).
 Valid name: *Ropalidia nigra* (Smith, 1859) (syn. by van der Vecht (1934: 8)).

Icaria catharinae Cameron, 1913: 77; ♀, "Waigeu"; holotype. "Holotype" (red paper, detached metasoma being glued on it); "Waigeoe 29.xii.09"; "Mevr. de Beaufort leg."; "*Icaria Beauforti* Cam., type [in Cameron's handwriting] *Catharinae*, Holotype, sec. J vdV. '33 [in van der Vecht's handwriting]".
 Valid name: *Ropalidia catharinae* (Cameron, 1913).

Icaria dispila Cameron, 1913: 77; ♀, "Waigeu"; holotype.
 Valid name: *Ropalidia dispila* (Cameron, 1913).

Icaria insularis Cameron, 1911: 188; ♀, "Bivak Island"; holotype.
 Valid name: *Ropalidia conservator* (Smith, 1860) (syn. by van der Vecht (1934: 8)).

Icaria intermedia Cameron, 1905: 70; ♀, "Tjandi near Semarang"; lectotype designation by Kojima & Carpenter (1997: 4).
 Valid name: *Ropalidia fasciata* (Fabricius, 1804) (syn. of *Ropalidia picta* (de Saussure, 1854) [= *R. fasciata* (Fabricius)] by van der Vecht (1941: 104)).

Icaria longipetiolata Cameron, 1911: 189; ♀, "Lorentz River"; lectotype designation by Kojima & Carpenter (1997: 4).
 Valid name: *Ropalidia longipetiolata* (Cameron, 1911).

Icaria parvimaculata Cameron, 1911: 189; ♀, "Bivak Island"; lectotype designation by Kojima & Carpenter (1997: 5).
 Valid name: *Ropalidia conservator* (Smith, 1860) (syn. by van der Vecht (1934: 8)).

Icaria pruinosa Cameron, 1906b: 228; ♀, "New Guinea, Digoel"; lectotype designation by Kojima & Carpenter (1997: 5).
 Valid name: *Ropalidia marginata jucunda* (Cameron, 1898) (syn. by van der Vecht (1941: 104)).

Icaria rufoplagiata Cameron, 1905: 71; ♀, "Tjandi near Semarang"; lectotype designation by van der Vecht (1941: 167).

Valid name: *Ropalidia rufoplagiata* (Cameron, 1905).

Icaria serisea Cameron, 1911: 188; ♀, "Bivak Island"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia wollastoni* (Meade-Waldo, 1912) (syn. by Kojima & Carpenter (1997)).

Icaria sexmaculata Cameron, 1911: 188; ♀, "Bivak Island"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia sexmaculata* (Cameron, 1911).

Icaria spilocephala Cameron, 1906b: 230; ♀, "Etna Bay"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia gregaria spilocephala* (Cameron, 1906).

Icaria waigeuensis Cameron, 1913: 76; ♀, "Waigeu"; holotype.

Valid name: *Ropalidia conservator waigeuensis* (Cameron, 1913).

Icaria zonata Cameron, 1906a: 61; ♀, "Moaif"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia zonata* (Cameron, 1906).

Odynerus (Leionotus) fulvopruinosa Cameron, 1906b; ♀, "Etna Bay"; holotype.

Valid name: *Ropalidia fulvopruinosa* (Cameron, 1906).

Odynerus confraternus Cameron, 1911: 192; ♀, "Lorentz River"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia nigra* (Smith, 1959) (syn. by van der Vecht (1934: 8)).

Odynerus sariensis Cameron, 1906a: 63; ♀, "Siari"; lectotype designation by Kojima & Carpenter (1997: 5).

Valid name: *Ropalidia nigra* (Smith, 1859) (syn. by van der Vecht (1934: 8)).

Polistes albopalteatus Cameron, 1906a: 61; ♀, "Manokwari"; holotype.

Valid name: *Ropalidia albopalteata* (Cameron, 1906).

Note.— Although van der Vecht (1934: 8) synonymized *Polistes albopalteatus* Cameron, 1906, under *Ropalidia festina* (Smith, 1865), we concluded after examining the types of both species that they differ at species level.

Poliststratus cariniscutis Cameron, 1906a: 59; ♀, "Manokwari"; holotype.

Valid name: *Ropalidia brunnea* (Smith, 1859) (syn. by van der Vecht (1934: 8)).

Polybia papuana Cameron, 1913: 77; ♀, "Waigeu"; lectotype designation by Kojima & Carpenter (1997: 6).

Valid name: *Ropalidia papuana* (Cameron, 1913).

Genus *Belonogaster* de Saussure, 1854

Belonogaster discifera Hensen & Blommers, 1987: 18; ♂, "Rép. Malgache, Manjakandriana, Mandraka"; holotype.

Valid name: *Belonogaster discifera* Hensen & Blommers, 1987.

Belonogaster erythrocephala Hensen & Blommers, 1987: 19; ♂, "Rép. Malgache, Nosy Be, Dzamandzar"; holotype.

Valid name: *Belonogaster erythrocephala* Hensen & Blommers, 1987.

Belonogaster mandraka Hensen & Blommers, 1987: 23; ♀, "Rép. Malgache, Manjakandriana, Mandraka"; holotype.

Valid name: *Belonogaster mandraka* Hensen & Blommers, 1987.

Subfamily Stenogastrinae Bequaert, 1918 (= Ischnogastrinae Ashmead, 1902)

Genus *Anischnogaster* van der Vecht, 1972

Ischnogaster malayaensis Cameron, 1906b: 231; ♀, "Etna Bay"; holotype. "Nieuw Guinea Expeditie, 1904, Etna-baai"; "*Ischnogaster malayaensis* Cam., Type, New Guinea [in Cameron's handwriting]"; "Holotype, ♀, sec. J. v.d.Vecht '33 [in van der Vecht's handwriting]"; "*Anischnogaster iridipennis* (Sm.), ♀, det. J. v.d.Vecht 1972".

Valid name: *Anischnogaster iridipennis* (Smith, 1859) (syn. of *Ischnogaster iridipennis* by Meade-Waldo & Morley (1914: 405)).

Ischnogaster spilaspis Cameron, 1913: 78; ♂ (second to seventh metasomal segments missing), "Waigeo"; holotype. "Waigeoe, 30.xii.09"; "Mevr. de Beaufort leg.", "*Ischnogaster spilaspis* Cam., Type [in Cameron's handwriting]"; "Holotype"; "True Holotype *Ischnogaster spilaspis* Cam. 1913, ♂, det. J. Kojima, 1996".

Valid name: *Anischnogaster spilaspis* (Cameron, 1913).

Note.— A female of this species (metasoma missing) in the Zoölogisch Museum labelled "Waigeoe, 31.xii.09", "Mevr. de Beaufort leg.", "*Ischnogaster spilaspis* Cam., Type [in Cameron's handwriting], ♀!, not ♂, Holotype (♂) [in van der Vecht's handwriting]", "Holotype" and "*Anischnogaster spilaspis* (Cam), ♀, det. J.v.d.Vecht 1972" is neither the holotype nor a syntype, as Cameron did not describe the female.

Genus *Stenogaster* Guérin-Méneville, 1831

Ischnogaster canaliculatus Cameron, 1911: 190; ♀, "Bivak Island"; lectotype designation by van der Vecht (1975: 299). "Lectotype des. v.d.Vecht 1974"; "Z. Nieuw Guinea, Lorentz 1905-10, Bivak Eiland I.10"; "~~Eumenes~~ [cross out] *Ischnogaster canaliculatus* Cam., Type [in Cameron's handwriting], Holotype, ♀, sec. J.v.d.Vecht '33 [in van der Vecht's handwriting]"; "*Stenogaster canaliculata* (Cam.) ♀, det. J.v.d.Vecht 1974".

Valid name: *Stenogaster canaliculata* (Cameron, 1911).

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References

- Bequaert, J., 1934. Les races de coloration de *Vespa luctuosa* de Saussure et de *Polistes tenebricosus* Lepeletier.— Bull. Mus. r. Hist. nat. Belg. 10: 1-11.
 Buysson, R. du, 1905 (1904). Monographie des guêpes ou *Vespa*.— Annls Soc. ent. Fr. 73: 485-556, 565-634, pls. 5-15.

- Buysson, R. du, 1907. Nouvelles espèces d'*Ischnogaster* (Hyménoptères) appartenant au Musée de Leiden.— Notes Leyden Mus. 29: 79-80.
- Buysson, R. du, 1908. Deux Hyménoptères nouveaux de Java.— Notes Leyden Mus. 30: 123-126.
- Cameron, P., 1905. On the Malay Fossiliferous Hymenoptera and Vespidae of the Museum of the R. Zool. Soc. "Natura Artis Magistra" at Amsterdam.— Tijdschr. Ent. 48: 48-78.
- Cameron, P., 1906a. Hymenoptera I. [all families, except Apidae and Formicidae].— Nova Guinea, Résultats de l'Expedition scientifique Néerlandaise à la Nouvelle-Guinée en 1903, sous les auspices de Arthur Wickman, Chef de l'Expédition. 5, Livr 1: 41-65.
- Cameron, P., 1906b. Hymenoptera of the Dutch Expedition to New Guinea in 1904 and 1905. Part I: Thynnidae, Scoliidae, Pompilidae, Sphecidae and Vespidae.— Tijdschr. Ent. 49: 215-233.
- Cameron, P., 1911. Hymenoptera (except Anthophila and Formicidae).— Nova Guinea 9: 185-248.
- Cameron, P., 1913. On the Hymenoptera (exclusive of the Anthophila and Formicidae) collected by Mrs. de Beaufort in the Papuan Islands of Waigeu and Saonek.— Bijdr. Dierk. 19: 75-86.
- Hensen, R.V. & L.H.M. Blommers 1987. Revision of the Malagasy species of *Belonogaster* De Saussure (Hymenoptera; Vespidae).— Tijdschr. Ent. 130: 11-31.
- Kojima, J., 1996a. Taxonomy of the *Ropalidia flavopicta*-complex (Hymenoptera: Vespidae: Polistinae).— Zool. Med. Leiden 70: 325-347, figs 1-106.
- Kojima, J., 1996b. Reconsideration of the taxonomy of the *Ropalidia malayana*-complex (Hymenoptera: Vespidae: Polistinae). Zool. Med. Leiden 70: 349-359, figs 1-42.
- Kojima, J. & J. M. Carpenter, 1997. Catalog of the species in the polistine tribe Ropalidiini (Insecta: Hymenoptera: Vespidae).— Am. Mus. Nat. Novitates 3199: 1-96.
- Meade-Waldo, G. & C. Morley, 1914. Notes and synonymy of Hymenoptera in the collection of the British Museum.— Ann. Mag. nat. Hist. (8) 14: 402-410.
- Richards, O.W. 1970. Three new species of *Polybia* Lepeletier (Hymenoptera, Vespidae, polistinae).— Proc. K. ned. Akad. Wet. (C) 73: 302-306.
- Richards, O.W. 1978. The Social Wasps of the Americas excluding the Vespinae: i-vii, 1-580, 4 pls.— London.
- Richards, O.W., 1982. A revision of the genus *Belonogaster* de Saussure (Hymenoptera: Vespidae).— Bull. Brit. Mus. (Nat. Hist.), Ent. Ser. 44 (2): 31-114.
- Ritsema, C., 1874. Aanteekeningen betreffende eenne kleine collectie Hymenoptera van Neder-Guinea, en beschrijving van de nieuwe soorten.— Tijdschr. Ent. 17: 175-211, pl. 11.
- Schluthess, A. von, 1927. Fauna sumatrensis. (Beitrag Nr. 52). Vespidae (Hym.). Suppl. Ent. 16: 81-92.
- Saussure, H. de, 1852. Description du genre *Ischnogaster* (Hyménoptères de la famille des Vespides).— Annls Soc. ent. Fr. (2) 10: 19-27, pl. 2I.
- Saussure, H. de, 1862. Sur divers vespides Asiatiques et Africains du Musée de Leyden.— Stett. ent. Z. 23: 129-207.
- Vecht, J. van der, 1934. [Note on *Caligaster* and *Ropalidia* (Hymenoptera)].— Tijdschr. Ent. 77: 7-9.
- Vecht, J. van der, 1935. On a new species of *Provespa* Ashm.— Ent. Meded. Ned. Indië 1: 41-44.
- Vecht, J. van der, 1941. The Indo-Australian species of the genus *Ropalidia* (= *Icaria*) (Hym., Vespidae) (First part).— Treubia 18: 103-190.
- Vecht, J. van der, 1957. The Vepinae of the Indo-Malayan and Papuan areas (Hymenoptera, Vespidae).— Zool. Verh. Leiden 34: 1-83, pls. 1-6.
- Vecht, J. van der, 1962. The Indo-Australian species of the genus *Ropalidia* (*Icaria*) (Hymenoptera, Vespidae) (Second part).— Zool. Verh. Leiden 57: 1-72, pls 1-8.
- Vecht, J. van der, 1966. The east-Asiatic and Indo-Australian species of *Polybioides* du Buysson and *Parapolybia* de Saussure (Hym., Vespidae).— Zool. Verh. Leiden 82: 1-42, pls. 1-3.
- Vecht, J. van der, 1968. The geographic variation of *Polistes* (*Megapolistes* subg. n.) *rothneyi* Cameron.— Bijdr. Dierk. 38: 97-109.
- Vecht, J. van der, 1972a. A review of the new genus *Anischnogaster* in the Papuan region (Hymenoptera, Vespidae).— Zool. Med. Leiden 47: 240-256, pl. 1.
- Vecht, J. van der, 1972b (1971). The subgenera *Megapolistes* and *Senopolistes* in the Solomon Islands (Hymenoptera, Vespidae, *Polistes* Latreille). In: Entomological Essays to Commemorate the Retirement of Professor K. Yasumatsu: 87-106.— Tokyo.

- Vecht, J. van der, 1972c. The social wasps (Vespidae) collected in French Guyana by the mission du Museum national d'histoire naturelle with notes on the genus *Apocia* Lepeletier.— Annls Soc. ent. Fr. (N. S.) 8 (3): 735-743.
- Vecht, J. van der, 1975. A review of the genus *Stenogaster* Guérin (Hymenoptera: Vespidae).— J. Austr. ent. Soc. 14: 283-308.
- Vecht, J. van der & J. Kojima, 1996. Two new species of the genus *Ropalidia* from New Guinea (Hymenoptera: Vespidae: Polistinae).— Zool. Med. Leiden 70: 99-104.

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