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## Distributional Checklist of Species of the Genus *Polistes* (Hymenoptera: Vespidae; Polistinae, Polistini)

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### ABSTRACT

A distributional checklist of the species of the paper wasp genus *Polistes* is presented. New synonyms are *multipictus* Smith, 1860, non Haliday, 1836, = *stigma maculipennis* Saussure, 1853; *stigma* var. *thoracica* Buysson, 1913, non Fox, 1898, also = *stigma maculipennis* Saussure, 1853; *tepidus* var. *minor* Schulthess, 1932, non Palisot

de Beauvois, 1818, = *tepidus malayanus* Cameron, 1906; and *arthuri vechti* Petersen, 1990, non Das and Gupta, 1989, = *arthuri* Cameron, 1901. Two new replacement names are proposed: *intermedius* Kojima, for *medius* Kojima, 1988, non Palisot de Beauvois, 1818; and *torresae* Silveira, for *occultus* Silveira, 1994, non Kojima, 1988.

### INTRODUCTION

*Polistes* is the only cosmopolitan genus of social wasps, and, with 203 presently recognized extant species, one of the most species-rich. The lack of an adequate catalog or checklist for all the species of the genus *Polistes* has led to a number of taxonomic errors in recent time, as well the perpetuation of other problems. There have been no comprehensive listings since the catalogs of Dalla Torre (1894, 1904), which of course are now too far out of date to be of general use. Use-

ful regional catalogs and revisions have been published in the intervening 90 years (Liu, 1937; Bequaert, 1938; Guiglia, 1972; Richards, 1978a, b; Krombein, 1979; Cardale, 1985; Das and Gupta, 1989; Starr, 1992), but these works have not been integrated, and significant gaps remain. Yoshikawa (1962) attempted a world checklist, but, as Richards (1973: 85) put it, he did so "somewhat imperfectly." His list had many omissions and misspellings, and the fact that

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he often eschewed citations of original references limited its taxonomic usefulness.

The present listing redresses this situation. Nevertheless, it is a successor to Yoshikawa's work, in the sense that it is a distributional checklist. Following the citation of the original description and synonymy for each species, the distribution is given. The distribution is listed using current political entities (so far as they can be determined), because they are unambiguous compared to more generalized terms for areas, which may be idiosyncratic, and would require detailing the geographical definition. Where political division could not be determined precisely from the literature, terms such as "New Guinea" are used. Citations given at the end of the distribution are to the most recent summary. If there has been no report of a range extension since the description, no further reference is given.

The format of the synonymies is standard in taxonomic catalogs, with each reference given in abbreviated form, to expedite tracking it down. Misspellings are indicated by exclamation points in brackets. The format for dates lists the true date of publication, so far as can be determined. Where two dates are listed, the first is the true date of publication, and the second, in parentheses, is that printed on the publication. The status given each taxon generally follows the decision of the most recent author to treat that taxon. This authority may typically be determined from the citations given for the distribution. However, there are several cases where I have deviated from this practice. Articles 31(b) and 34(b) of the International Code of Zoological Nomenclature have been followed with respect to agreement in gender of generic and specific names, necessitating correction of *Vespa nimpha* Christ to *nimphus*, to agree with *Polistes*, which is masculine. However, I agree with Bohart and Menke (1974) and Krombein (1979) that *Vespa carolina* Linnaeus should be treated as a noun in apposition, hence it does not have to agree in gender, and so Richards' (1978a) use of *carolinus* is incorrect (I here treat *Vespa stigma* Fabricius likewise, contra Carpenter, 1996).

With respect to the use of the subspecies category, I agree that it has no place in a phylogenetic system: species-group taxa that

can be diagnosed are species (Nelson and Platnick, 1981; Nixon and Wheeler, 1990). But this means that taxa currently recognized as subspecies are either species or synonyms, and moreover there must be a mixture. Without careful study on a case by case basis, the proper status of subspecific taxa cannot be determined. I have applied this approach elsewhere to some groups of Vespidae (Carpenter, 1988; Carpenter and van der Vecht, 1991), Archer (1991, 1992, 1994, 1995) has done so for various species of *Vespa*, and Snelling (1983) has followed this course for a few species of *Polistes*. Until such studies can be undertaken for *Polistes*, I am unwilling to proceed with wholesale changes in status of subspecific taxa. Furthermore, I believe that such changes are best done as part of a revision, rather than in a catalog or checklist, so that adequate explanation of each decision may be supplied. Therefore, I have generally maintained subspecies, or treated varieties as subspecies, if the most recent author did so—a total of 103 additional names. The cases where I did not are as follows.

Bequaert (1938) reduced many Ethiopian species to varieties of a few species (he did so with many American species as well in other works). Bequaert's varieties of American species were first simply treated as subspecies (Bohart, 1951), and now many are treated as species (Richards, 1978a; Krombein, 1979). I agree with Giordani Soika (1991) that, likewise, many of the Ethiopian taxa treated as varieties by Bequaert (1938) merit species status. Thus I have followed a classification of the Ethiopian species more like that of Schulthess (1921) with respect to the rank given.

I have also not recognized any subspecies in the Palearctic species *biglumis* (Linnaeus), *dominulus* (Christ) or *gallicus* (Linnaeus), synonymizing all, for two reasons. Firstly, some taxa have even recently been recognized as "forms" or "varieties" of subspecies (e.g., *Polistes biglumis bimaculatus* var. *arduinoi* in Guiglia, 1972, with *bimaculatus* var. *nigrinotum* a synonym), but formal recognition of any taxon below subspecies has not been permitted through three revisions of the International Code of Zoological Nomenclature, since 1961. To the extent that such taxa are used to divide subspecies, they are

nothing more than synonyms anyway. Secondly, there has been considerable confusion in the application of the proper names to *dominulus* and *gallicus* for most of this century, encompassing the time when most of the subspecies were described. As shown by Day (1979), Kohl (1898) misidentified *gallicus*, with the result that he described it anew as *foederata*. Subspecies described under *foederata* must consequently now be transferred to *gallicus*, but those described under *gallicus* must be transferred to *dominulus*. I propose to obviate any attendant confusion by simply synonymizing these subspecies; those that I have examined appear to be neither constant nor distinct in the color characters supposed to distinguish them. This also applies to the commonly recognized subspecies *biglumis bimaculatus*, which does not differ from typical *biglumis* (contra Blüthgen, 1955: 398, who separated the nominotypical Scandinavian form from the supposedly more richly yellow-marked *bimaculatus*; see also Guiglia, 1972: 59).

The last four cases where I have not recognized subspecies despite previous treatment are the varieties *stigma* var. *thoracica* Buysson, 1913; and *tepidus* var. *minor* Schulthess, 1932; *multipictus* Smith, 1860 (all treated as subspecies of *stigma* by Petersen, 1987); and *arthuri vechti* Petersen, 1990. All four names are preoccupied in *Polistes*: *stigma* var. *thoracica* by *thoracicus* Fox, 1898 (and *cavapyta* var. *thoracica* Buysson, 1906), *tepidus* var. *minor* by *minor* Palisot de Beauvois, 1818, *multipictus* by *multipictus* Haliday, 1836 (now placed in the genus *Agelaia*), and *vechti* by *rothneyi vechti* Das and Gupta, 1989. Rather than propose replacement names for what are probably synonyms anyway (the taxa were described or are separated primarily based on color, but this intergrades), I treat the names as synonyms. NEW SYNONYMY is as follows: *stigma* var. *thoracica*, described from New Guinea, and *multipictus*, described from "Java, et l'Afrique méridionale" but corrected by Petersen (1987) to New Guinea, are both synonymized with the common New Guinean subspecies of *stigma* (see Petersen, 1987), viz., *maculipennis* Saussure, 1853. The New Guinean *tepidus* var. *minor* is likewise synonymized with the common New

Guinean subspecies of *tepidus* (see Petersen, 1990), *malayanus* Cameron, 1906. NEW STATUS for the subspecies *arthuri vechti* is as a synonym of nominotypical *arthuri*.

The only other taxonomic changes are the proposal of two replacement names. The first new name is for *medius* Kojima, 1988, preoccupied in *Polistes* by *media* Palisot de Beauvois, 1818. The latter name is a synonym of *crinitus* (Felton); it was recorded as a synonym of *americanus* (Fabricius) by Saussure (1853), but unfortunately the name was not mentioned in the revision by Richards (1978a). Dr. Kojima has supplied a replacement name for *medius* Kojima: *intermedius* Kojima, NEW NAME. The second new name is for *occultus* Silveira, 1994, preoccupied in *Polistes* by *occultus* Kojima, 1988. Sr. Silveira has supplied a replacement name for *occultus* Silveira: *torresae* Silveira, NEW NAME.

Finally, regarding higher classification, *Polistes* is the sole genus in the tribe Polistini (Carpenter, 1993), and the subgeneric system followed is that presented in Carpenter (1996). That system recognizes only four subgenera: nominotypical *Polistes*, *Gyrostoma*, *Aphanilopterus*, and *Polistella*. These four subgenera are monophyletic groups; the system of Richards (1973), with two genera, *Polistes* and *Sulcopolistes*, and 11 subgenera in *Polistes*, included several paraphyletic groups. But Richards' system also recognized some monophyletic groups not given formal names in my system (see Carpenter, 1996: fig. 17), and to assist future investigations of phylogenetic relationships among species, I indicate the subgenera into which Richards placed species since transferred. Some species were never assigned to a subgenus in Richards' system, and are listed as I would have assigned them (see also Carpenter, 1996). I also indicate the species groups used by Richards (1973, 1978a) for some New World species, and the species groups used by Carpenter (1996) for some of the Old World species. The following codes are used to indicate the taxa in Richards' system:

- A *Aphanilopterus* sensu Richards
- E *Epicnemius*
- F *Fuscopolistes*

- G *Gyrostoma* sensu Richards  
 M *Megapolistes*  
 N *Nygmopolistes*  
 O *Onerarius*  
 PA *Palisotius*  
 PE *Polistella* sensu Richards  
 PO *Polistes* sensu Richards  
 ST *Stenopolistes*  
 SU *Sulcopolistes*

A, groups 1–6 and E, groups 1–3 denote the species groups of Richards (1973, 1978a) for *Aphanilopterus* sensu Richards (1978a) and *Epicnemius*, respectively.

PE, “*adustus* group,” “*sagittarius* group,” and “*stigma* group” denote the species groups recognized within *Polistella* sensu Richards (1973) by Das and Gupta (1989), as modified by Carpenter (1996).

M, “*olivaceus* group” and “*stenopus* group” are the species groups within *Megapolistes* sensu Richards (1973) used by Carpenter (1996).

The subgenera are listed in phylogenetic order, from the phyletically sequenced classification given in Carpenter (1996: appendix 2). Within subgenera, species are listed alphabetically. Fossil species and unrecognized taxa are listed separately.

#### TRIBE POLISTINI LEPELETIER, 1836

##### GENUS *POLISTES* LATREILLE

##### SUBGENUS *GYROSTOMA* KIRBY

*Gyrostoma* Kirby, 1828, in Kirby and Spence, *Introd. Entomol.* Ed. 5 (of whole work), Ed. 2 (of vol. 3): 36, 631, replacement name for *Cyclostoma* Kirby, 1826, non Lamarck, 1799.

*Cyclostoma* Kirby, 1826, in Kirby and Spence, *Introd. Entomol.* Ed. 1, 3: 36, 633, genus. non *Cyclostoma* Lamarck, 1799 (Pisces).

Type species: *Cyclostoma gigas* Kirby, 1826, by monotypy.

*Megapolistes* van der van der Vecht, 1968, *Bijdr. Dierk.* 38: 97, subgenus of *Polistes* Latreille.

Type species: *Vespa olivacea* DeGeer, 1773, by original designation.

*Nygmopolistes* Richards, 1973, *Rev. Bras. Entomol.* 17: 91, 93, 98, subgenus of *Polistes* Latreille.

Type species: “*Polistes sulcatus* Smith, 1852 (= *P. rugifrons* Cameron, 1900),” by original designation.

*Megapostes* [!]; Lee, 1982, *Hornets Agric. Regions China*: 122, 124, 126.

##### *arthuri* Cameron

*Polistes arthuri* Cameron, 1901, *Proc. Zool. Soc. London* 1901: 241.

*Polistes tepidus novae-pomeraniae* Schulz, 1905, *Berlin Entomol. Z.* 49: 227.

*Polistes novae pomerania* [!]; Cheesman, 1951, *Ann. Mag. Nat. Hist.* (12)4: 985.

*Polistes tepidus novae-pomeraniae* [!]; Yoshikawa, 1962, *J. Biol. Osaka City Univ.* 13: 39.

*Polistes novopomeraniae* [!]; Richards, 1973, *Rev. Bras. Entomol.* 17: 100.

*Polistes arthuri vechti* Petersen, 1990, *Entomol. Scand.* 21: 65, non Das and Gupta, 1989. NEW STATUS.

DISTRIBUTION: Bismarck Archipelago: New Britain, New Ireland – (Petersen, 1990, *Entomol. Scand.* 21).

M, “*olivaceus* group.”

##### *balder* Kirby

*Polistes balder* Kirby, 1888, *Proc. Zool. Soc. London* 1888: 552.

*Polistes bader* [!]; Richards, 1978, *Aust. J. Zool., Suppl. Ser.*, 61: 1.

DISTRIBUTION: Australia: Christmas Is., Cocos Is. – (Richards, 1978, *Aust. J. Zool., Suppl. Ser.*, 61).

M, “*olivaceus* group.”

##### *diabolicus* Saussure

*Polistes diabolicus* Saussure, 1853, *Ét. Fam. Vesp.* 2: 68.

DISTRIBUTION: Indonesia: Java, Lombok, Flores, Timor, Kai Is. – (Schulthess, 1935, *Rev. Suisse Zool.* 42).

M, “*stenopus* group.”

##### *erythrinus* Holmgren

*Polistes erythrinus* Holmgren, 1868, *K. Svenska Fregat. Eugenies Resa Omkring Jorden, Zool.* 1, *Insect., Hym.*: 440.

DISTRIBUTION: Australia: Queensland, New South Wales, A. C. T., Victoria, South Australia – (Richards, 1978, *Aust. J. Zool., Suppl. Ser.*, 61).

M, “*olivaceus* group.”

***facilis*** Saussure

*Polistes facilis* Saussure, 1853, Ét. Fam. Vesp. 2: 53.

DISTRIBUTION: Australia: Queensland – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

M, “*olivaceus* group.”

***fordi*** van der Vecht

*Polistes fordi* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 92.

DISTRIBUTION: Solomon Is.: Bougainville.

M, “*olivaceus* group.”

***gigas*** (Kirby)

*Cyclostoma gigas* Kirby, 1826, in Kirby and Spence, Introd. Entomol. Ed. 1, 3: 36.

*Polistes orientalis* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 519.

*Polistes gyrostoma* Saussure, 1854, Ét. Fam. Vesp. 2: 104.

*Gyrostoma orientalis* “Kirby” Saussure, 1854, Ét. Fam. Vesp. 2: 104, as synonym of *Polistes gyrostoma* Saussure. Unavailable under Art. 11(e) of the International Code of Zoological Nomenclature.

*Polistes confusus* Smith, 1857, Cat. Hym. Br. Mus. 5, Vesp.: 102.

DISTRIBUTION: India: Sikkim; southern China; Taiwan – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

G.

***hebridensis erromangensis*** Giordani Soika

*Polistes hebridensis erromangensis* Giordani Soika, 1981 (1980), Boll. Mus. Civ. Venezia 31: 118.

DISTRIBUTION: Vanuatu: Erromango.

M, “*olivaceus* group.”

***hebridensis hebridensis*** Giordani Soika

*Polistes hebridensis* Giordani Soika, 1981 (1980), Boll. Mus. Civ. Venezia 31: 117.

DISTRIBUTION: Vanuatu: Anatom.

M, “*olivaceus* group.”

***hebridensis malekulensis*** Giordani Soika

*Polistes hebridensis malekulensis* Giordani Soika, 1981 (1980), Boll. Mus. Civ. Venezia 31: 119.

DISTRIBUTION: Vanuatu: Malakula.

M, “*olivaceus* group.”

***hebridensis vilensis*** Giordani Soika

*Polistes hebridensis vilensis* Giordani Soika,

1981 (1980), Boll. Mus. Civ. Venezia 31: 119.

DISTRIBUTION: Vanuatu: Port-Vila.

M, “*olivaceus* group.”

***jadwigae*** Dalla Torre

*Polistes japonicus* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 417, non Saussure, 1858.

*Polistes jadowigae* Dalla Torre, 1904, Genera Insect. 19: 70. Replacement name for *japonicus* Cameron, 1900, non Saussure, 1858.

*Polistes perkinsi* Kohl, 1908, Denkschr. Akad. Wiss., Wien 81: 313.

*Polistes okinawensis* Matsumura and Uchida, 1926, Insect. Matsum. 1(1): 34.

*Polistes macaensis tahitensis* Cheesman, 1928, Ann. Mag. Nat. Hist. (10)1: 180.

*Polistes perkinsii* [!]; Liu, 1937, Peking Nat. Hist. Bull. 11(3): 313.

*Polistes fadwigae* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 20.

*Polistes okinawaensis* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 33.

DISTRIBUTION: India; China; Mongolia; Korea; Japan, including Ryukyu Is.; Taiwan; Society Islands: Bora Bora, Tahiti; Tuamotu Archipelago: Napuka; introduced U.S.A.: Hawaii – (Richards, 1978, Soc. Wasps Am.; Kim, 1980, Distr. Atlas Insect. Korea, Ser. 3, Hym. Dipt.; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).

M, “*olivaceus* group.”

***legnotus*** van der Vecht

*Polistes legnotus* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 100.

DISTRIBUTION: Solomon Is.: Guadalcanal.

M, “*olivaceus* group.”

***olivaceus*** (DeGeer)

*Vespa olivacea* DeGeer, 1773, Mem. Hist. Insect. 3: 582, pl. 29 fig. 9.

*Vespa hebraea* Fabricius, 1787, Mant. Insect. 1: 292.

*Vespa undata* Olivier, 1792, Encyc. Méthod. 6: 684.

*Vespa macaensis* Fabricius, 1793, Entomol. Syst. 2: 259.

? *Polistes flavipennis* Saussure, 1853, Ét. Fam. Vesp. 2: 52.

*Polistes hebreus* [!]; Radoszkowski, 1871, Horae Entomol. Soc. Ross. 8: 195.

*Polistes olivaceus* [!]; Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33(242–243): 467, 477.

DISTRIBUTION: Madagascar; Réunion; Mauritius; Tanzania: Zanzibar; Amirantes; Seychelles; Chagos Archipelago; Egypt; Oman; Iran; Afghanistan; India: Jammu and Kashmir, Assam, Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Sikkim, Tripura, Uttar Pradesh, West Bengal; Sri Lanka; Nepal; Myanmar; southern China; Japan: Okinawa; Philippines; Viet Nam; Laos; Cambodia; Thailand; Malaysia; Singapore; Indonesia: Borneo; Marianas; New Caledonia; Fiji; Tongas; Samoa; Society Is.: Tahiti; Tuamotu Archipelago: Fakarava; Marquesas: Tahuata, Hiva Oa; introduced Chile: Easter Is.; U.S.A.: Hawaii; Australia: Queensland; New Zealand – (Bequaert, 1918, Bull. Am. Mus. Nat. Hist. 39; Dover, 1929, Bull. Raffles Mus. 2; Giordani Soika, 1962, Vidensk. Medd. Dansk Naturh. Foren. 124; Richards, 1978, Soc. Wasps Am.; Richards, 1978, Aust. J. Zool., Suppl. Ser., 61.; Richards, 1985, Fauna Saudi Arabia 6; Das and Gupta, 1989, Orient. Insect. Monogr. 11).

Note: *Polistes flavipennis* Sasseur was described from the Cape of Good Hope, and has remained unrecognized. It may be based on a mislabeled, discolored specimen of *olivaceus*.

M, “*olivaceus* group.”

***penthicus ater*** Petersen

*Polistes penthicus ater* Petersen, 1990, Entomol. Scand. 21: 66.

DISTRIBUTION: Admiralty Is.: Manus.

M, “*olivaceus* group.”

***penthicus malaitensis*** van der Vecht

*Polistes penthicus malaitensis* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 92.

DISTRIBUTION: Solomon Is.: Malaita, Tulagi.

M, “*olivaceus* group.”

***penthicus penthicus*** van der Vecht

*Polistes penthicus penthicus* van der Vecht, 1972 (1971), Entomol. Essays to com-

memorate the retirement of Prof. K. Yasumatsu: 91.

DISTRIBUTION: Solomon Is.: Santa Isabel, Nggela, Tulagi, Guadalcanal.

M, “*olivaceus* group.”

***perflavus*** van der Vecht

*Polistes perflavus* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 93.

DISTRIBUTION: Solomon Is.: Guadalcanal.

M, “*olivaceus* group.”

***rothneyi carletoni*** van der Vecht

*Polistes rothneyi carletoni* van der Vecht, 1968, Bijdr. Dierk. 38: 100.

DISTRIBUTION: Pakistan; India: Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh; Nepal – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

M, “*olivaceus* group.”

***rothneyi engeli*** van der Vecht

*Polistes rothneyi engeli* van der Vecht, 1968, Bijdr. Dierk. 38: 108.

DISTRIBUTION: Indonesia: Sumatra.

M, “*olivaceus* group.”

***rothneyi grahami*** van der Vecht

*Polistes rothneyi grahami* van der Vecht, 1968, Bijdr. Dierk. 38: 104.

DISTRIBUTION: China.

M, “*olivaceus* group.”

***rothneyi gressitti*** van der Vecht

*Polistes rothneyi gressitti* van der Vecht, 1968, Bijdr. Dierk. 38: 106.

DISTRIBUTION: Taiwan.

M, “*olivaceus* group.”

***rothneyi hainanensis*** van der Vecht

*Polistes rothneyi hainanensis* van der Vecht, 1968, Bijdr. Dierk. 38: 106.

DISTRIBUTION: China: Hainan Is.

M, “*olivaceus* group.”

***rothneyi helvenacus*** van der Vecht

*Polistes rothneyi helvenacus* van der Vecht, 1968, Bijdr. Dierk. 38: 109.

DISTRIBUTION: Indonesia: Java.

M, “*olivaceus* group.”

***rothneyi ingrami*** van der Vecht

*Polistes rothneyi ingrami* van der Vecht, 1968, Bijdr. Dierk. 38: 106.

DISTRIBUTION: Japan: Okinawa.

M, “*olivaceus* group.”

***rothneyi iwatai*** van der Vecht

*Polistes rothneyi iwatai* van der Vecht, 1968, Bijdr. Dierk. 38: 104.

DISTRIBUTION: China; Korea; Japan – (Lee, 1982, Econ. Insect. Fauna China Fasc. 30). M, “*olivaceus* group.”

***rothneyi koreanus*** van der Vecht

*Polistes rothneyi koreanus* van der Vecht, 1968, Bijdr. Dierk. 38: 104.

DISTRIBUTION: China; Korea. M, “*olivaceus* group.”

***rothneyi krombeini*** van der Vecht

*Polistes rothneyi krombeini* van der Vecht, 1968, Bijdr. Dierk. 38: 100.

DISTRIBUTION: India: Uttar Pradesh, Meghalaya, Karnataka, Tamil Nadu – (Das and Gupta, 1989, Orient. Insect. Monogr. 11). M, “*olivaceus* group.”

***rothneyi quatei*** van der Vecht

*Polistes rothneyi quatei* van der Vecht, 1968, Bijdr. Dierk. 38: 106.

DISTRIBUTION: Viet Nam. M, “*olivaceus* group.”

***rothneyi robinsoni*** van der Vecht

*Polistes rothneyi robinsoni* van der Vecht, 1968, Bijdr. Dierk. 38: 106.

DISTRIBUTION: Malaysia. M, “*olivaceus* group.”

***rothneyi rothneyi*** Cameron

*Polistes rothneyi* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 410.

*Polistes rufolineatus* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 411.

DISTRIBUTION: India: Delhi, Uttar Pradesh, West Bengal, Meghalaya; Nepal – (Das and Gupta, 1989, Orient. Insect. Monogr. 11; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).

M, “*olivaceus* group.”

***rothneyi sikkimensis*** van der Vecht

*Polistes rothneyi sikkimensis* van der Vecht, 1968, Bijdr. Dierk. 38: 102.

DISTRIBUTION: India: Sikkim, Bihar, West Bengal, Assam, Meghalaya – (Das and Gupta, 1989, Orient. Insect. Monogr. 11). M, “*olivaceus* group.”

***rothneyi tibetanus*** van der Vecht

*Polistes rothneyi tibetanus* van der Vecht, 1968, Bijdr. Dierk. 38: 102.

DISTRIBUTION: China: Tibet.

M, “*olivaceus* group.”

***rothneyi vechti*** Das and Gupta

*Polistes rothneyi vechti* Das and Gupta, 1984, Orient. Insect. 17: 410, nomen nudum.

*Polistes rothneyi vechti* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 58.

DISTRIBUTION: India: Manipur; Myanmar. M, “*olivaceus* group.”

***rothneyi yayeyamae*** Matsumura

*Polistes yayeyamae* Matsumura, 1908, in Kuroiwa, List Hym. Loochoo: 6, nomen nudum.

*Polistes yayeyamae* Matsumura, 1911, Thousand Insect. Japan, Suppl. 3: 106, pl. 39 fig. 5.

*Polistes yayeyamensis* [!]; Yasumatsu, 1935, Annot. Zool. Japan 15: 37.

*Polistes jokohamae* var. *yaeyamae* [!]; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3: 122.

DISTRIBUTION: Japan: Ryukyu Is. M, “*olivaceus* group.”

***schach*** (Fabricius)

*Vespa schach* Fabricius, 1781, Spec. Insect. 1: 461.

*Vespa schuch* [!]; Olivier, 1792, Encyc. Méthod. 6: 682.

DISTRIBUTION: Australia: Northern Territory, Queensland, New South Wales – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61). M, “*olivaceus* group.”

***semiflavus*** Holmgren

*Polistes semiflavus* Holmgren, 1868, K. Svenska Fregat. Eugenies Resa Omkring Jorden, Zool. 1, Insect., Hym.: 439.

DISTRIBUTION: Marianas, Guam – (Bequaert and Yasumatsu, 1939, Tenthredo 2(3)). M, “*olivaceus* group.”

***stenopus brandti*** van der Vecht

*Polistes stenopus brandti* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 98.

DISTRIBUTION: Solomon Is.: Buka, Bougainville, New Georgia Is., Santa Isabel. M, “*stenopus* group.”

***stenopus ganonganus*** van der Vecht

*Polistes stenopus ganonganus* van der Vecht, 1972 (1971), Entomol. Essays to com-

- memorate the retirement of Prof. K. Yasumatsu: 99.  
 DISTRIBUTION: Solomon Is.: Ranongga, Vella Lavella.  
 M, "*stenopus* group."
- stenopus manni*** van der Vecht  
*Polistes stenopus manni* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 98.  
 DISTRIBUTION: Solomon Is.: Malaita.  
 M, "*stenopus* group."
- stenopus stenopus*** van der Vecht  
*Polistes stenopus stenopus* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 93, 96.  
 DISTRIBUTION: Solomon Is.: Nggela, Tulagi, Guadalcanal, Russell Is.  
 M, "*stenopus* group."
- sulcatus*** Smith  
*Polistes sulcatus* Smith, 1852, Trans. Entomol. Soc. London 2: 38.  
*Polistes rugifrons* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 412.  
 DISTRIBUTION: India: Jammu and Kashmir, Uttar Pradesh, Sikkim, West Bengal, Assam, Meghalaya; Nepal; China; Taiwan; Indonesia: Java, Flores – (Schulthess, 1935, Rev. Suisse Zool. 42; Das and Gupta, 1989, Orient. Insect. Monogr. 11; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).  
 N.
- tenebricosus hoplitus*** Saussure  
*Polistes hoplitus* Saussure, 1853, Ét. Fam. Vesp. 2: 55.  
*Polistes hoplites* Saussure, 1854, Ét. Fam. Vesp. 2, Errata: 255, invalid emendation.  
 DISTRIBUTION: Viet Nam and Myanmar to Indonesia: Sumatra – (Das and Gupta, 1989, Orient. Insect. Monogr. 11)
- tenebricosus leopoldi*** Bequaert  
*Polistes tenebricosus* var. *leopoldi* Bequaert, 1934, Bull. Mus. R. Hist. Nat. Belg. 10 (28): 9.  
 DISTRIBUTION: Philippines: Negros.
- tenebricosus nigrosericans*** Bequaert  
*Polistes tenebricosus* var. (or subsp.) *nigrosericans* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 266.  
*Polistes tenebricosus nigrosericans* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 38.  
 DISTRIBUTION: Philippines: Luzon.
- tenebricosus sibuyanensis*** Bequaert  
*Polistes tenebricosus* var. (or subsp.) *sibuyanensis* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 266.  
 DISTRIBUTION: Philippines: Sibuyan.
- tenebricosus tenebricosus*** Lepelletier  
*Polistes tenebricosus* Lepelletier, 1836, Hist. Nat. Insect. Hym. 1: 529.  
*Polistes varicornis* Cameron, 1905, Tijdschr. Entomol. 48: 67.  
*Polistes javanicus* Cameron, 1905, Tijdschr. Entomol. 48: 68.  
 DISTRIBUTION: Indonesia: Sumatra, Java, Bali, Lombok, Flores, Borneo; Taiwan – (Bequaert, 1934, Bull. Mus. R. Hist. Nat. Belg. 10 (28); Das and Gupta, 1984, Orient. Insect. 17; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).  
 N.
- tepidus batjanensis*** Cameron  
*Polistes tepidus* race *batjanensis* Cameron, 1911, Nova Guinea, Zool. 9(2), Zool.: 186.  
 DISTRIBUTION: Indonesia: Moluccas: Bacan.  
 M, "*olivaceus* group."
- tepidus malayanus*** Cameron  
*Polistes malayanus* Cameron, 1906, Nova Guinea, Zool. 5: 60.  
*Polistes tepidus* var. *minor* Schulthess, 1932, Mém. R. Mus. Hist. Nat. Belg. hors série 4(5): 39, non Palisot de Beauvois, 1818.  
 NEW SYNONYMY.  
 ? *Polistes "religiosus"* Cheesm." Richards, 1973, Ren. Bras. Entomol. 17(13): 100, nomen nudum.  
 DISTRIBUTION: Indonesia: Aru, Kai Is.; New Guinea; Bismarck Archipelago: New Ireland, Djaul, Lavongai; Solomon Is.: Buka to Rennell; Vanuatu; introduced U.S.A.: Hawaii – (van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu; Richards, 1978, Aust. J. Zool., Suppl. Ser., 61; Petersen, 1990, Entomol. Scand. 21).  
 M, "*olivaceus* group."



***tepidus manusensis*** Petersen

*Polistes tepidus manusensis* Petersen, 1990, Entomol. Scand. 21: 63.

DISTRIBUTION: Admiralty Is.: Manus, Los Negros.

M, "*olivaceus* group."

***tepidus picteti*** Saussure

*Polistes picteti* Saussure, 1853, Ét. Fam. Vesp. 2: 69.

DISTRIBUTION: Indonesia: Moluccas: Ambon, Seram; New Guinea – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

M, "*olivaceus* group."

***tepidus speciosus*** Buysson

*Polistes tepidus* var. *speciosus* Buysson 1913 (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 227.

DISTRIBUTION: Indonesia: Moluccas: Ternate, Bacan – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

M, "*olivaceus* group."

***tepidus tepidus*** (Fabricius)

*Vespa tepida* Fabricius, 1775, Syst. Entomol.: 366.

DISTRIBUTION: Australia: Queensland, New South Wales, Victoria – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61; Petersen, 1990, Entomol. Scand. 21).

M, "*olivaceus* group."

***tepidus theodori*** Petersen

*Polistes tepidus theodori* Petersen, 1990, Entomol. Scand. 21: 64.

DISTRIBUTION: Indonesia: Kai Is.

M, "*olivaceus* group."

***wattii*** Cameron

*Polistes wattii* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 416.

*Polistes wattii* [!]; Dalla Torre, 1904, Genera Insect. 19: 71.

DISTRIBUTION: Afghanistan; Iran; Iraq; Saudi Arabia; United Arab Emirates; Oman; Mauritius; Pakistan; India: Himachal Pradesh, Punjab, Delhi, Uttar Pradesh, West Bengal, Meghalaya, Gujarat, Orissa; China – (Gusenleitner, 1972 (1971–72), Acta Mus. Morav. 56/57; Richards, 1985, Fauna Saudi Arabia 6; Das and Gupta, 1989, Orient. Insect. Monogr. 11).

M, "*olivaceus* group."

SUBGENUS *POLISTELLA* ASHMEAD

(phyletic sequence incertae sedis)

*Polistella* Ashmead, 1904, Proc. U.S. Natl. Mus. 28: 133, genus.

Type species: *Polistes manillensis* Saussure, 1853, by original designation. [Misidentification of *Protopolybia sedula* (Saussure) = *P. exigua* (Saussure).]

*Stenopolistes* van der van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 101, subgenus of *Polistes* Latreille.

Type species: *Polistes lateritius* Smith, 1857, by original designation.

***adustus*** Bingham

*Polistes adustus* Bingham, 1897, Fauna Br. India Hym. 1: 397.

*Polistes sordidus* Dover, 1925 (1924), J. Proc. Asiat. Soc. Bengal (N. S) 20: 303, nomen nudum.

*Polistes adustus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 20.

DISTRIBUTION: India: Himachal Pradesh, Delhi, Uttar Pradesh, Sikkim, Meghalaya, West Bengal; Nepal; China – (Lee, 1982, Econ. Insect. Fauna China Fasc. 30; Das and Gupta, 1989, Orient. Insect. Monogr. 11).

PE, "*adustus* group."

***albocalcaratus*** Buysson

*Polistes albocalcaratus* Buysson, 1905, Bull. Soc. Entomol. France 1905: 257.

DISTRIBUTION: Madagascar.

PE, "*sagittarius* group."

***aquilinus*** Buysson

*Polistes aquilinus* Buysson, 1905, Bull. Soc. Entomol. France 1905: 256.

DISTRIBUTION: Sierra Leone; Liberia; Cameroon; Congo; Zaire – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 134).

PE, "*sagittarius* group."

***assamensis*** Bingham

*Polistes assamensis* Bingham, 1897, Fauna Br. India Hym. 1: 397.

DISTRIBUTION: India: Sikkim, Assam – (Das and Gupta, 1984, Orient. Insect. 17).

PE, "*sagittarius* group."

***asterope arvidi*** Petersen

*Polistes asterope arvidi* Petersen, 1990, Entomol. Scand. 21: 61.

DISTRIBUTION: Bismarck Archipelago: Lavongai.

ST.

***asterope asterope*** Cameron

*Polistes asterope* Cameron, 1901, Proc. Zool. Soc. 1901: 243.

DISTRIBUTION: Bismarck Archipelago: New Britain – (Petersen, 1990, Entomol. Scand. 21).

ST.

***asterope narupi*** Petersen

*Polistes asterope narupi* Petersen, 1990, Entomol. Scand. 21: 61.

DISTRIBUTION: Bismarck Archipelago: New Ireland.

ST.

***bambusae bambusae*** Richards

*Polistes bambusae* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 118.

DISTRIBUTION: New Guinea.

PE, “*adustus* group.”

***bambusae humboldti*** Richards

*Polistes bambusae humboldti* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 120.

DISTRIBUTION: New Guinea.

PE, “*adustus* group.”

***bequaerti*** Schulthess

*Polistes bequaerti* Schulthess, 1921, Entomol. Mitt. 10: 123.

DISTRIBUTION: Zaire; Zambia – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 139).

PE, “*sagittarius* group.”

***bituberculatus*** Buysson

*Polistes bituberculatus* Buysson, 1905, Bull. Soc. Entomol. France 1905: 257.

DISTRIBUTION: Madagascar.

PE, “*sagittarius* group.”

***buruensis*** Petersen

*Polistes buruensis* Petersen, 1990, Entomol. Scand. 21: 58.

DISTRIBUTION: Indonesia: Moluccas: Buru.

ST.

***callimorphus*** Saussure

*Polistes callimorpha* Saussure, 1853, Ét. Fam. Vesp. 2: 71.

DISTRIBUTION: Indonesia: Timor, Kai Is. –

(Buysson, 1913 (1911), Abh. Senckenberg. Naturforsch. Ges. 34).

PE, “*stigma* group.”

***capnodes capnodes*** van der Vecht

*Polistes capnodes* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 102.

DISTRIBUTION: Solomon Is.: Guadalcanal.

ST.

***capnodes incomptus*** van der Vecht

*Polistes capnodes incomptus* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 104.

DISTRIBUTION: Solomon Is.: Malaita.

ST.

***capnodes quadrifasciatus*** van der Vecht

*Polistes capnodes quadrifasciatus* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 104.

DISTRIBUTION: Solomon Is.: Kolombangara, New Georgia.

ST.

***clavicornis*** van der Vecht

*Polistes clavicornis* van der Vecht, 1972 (1971), Entomol. Essays to commemorate the retirement of Prof. K. Yasumatsu: 105.

DISTRIBUTION: Solomon Is.: Bougainville, Choiseul, Santa Isabel.

ST.

***contrarius*** Cheesman

*Polistes contrarius* Cheesman, 1951, Ann. Mag. Nat. Hist. (12) 4: 985.

DISTRIBUTION: New Guinea.

ST.

***dawnae*** Dover and Rao

*Polistes dawnae* Dover and Rao, 1922, J. Proc. Asiat. Soc. Bengal (N. S) 18: 248.

DISTRIBUTION: Myanmar.

PE, “*adustus* group.”

***defectivus*** Gerstaecker

*Polistes defectivus* Gerstaecker, 1871, Arch. Naturgesch. 37: 351.

*Polistes waldoi* Dover, 1926, Entomologist 59: 36.

DISTRIBUTION: Zaire; Ethiopia; Tanzania; Malawi; Zimbabwe; Mozambique; South Africa: Eastern Transvaal, Kwazulu-Natal,

Western Cape Prov. – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 148; Giordani Soika, 1952, Riv. Biol. Colon. 11).  
PE, “*sagittarius* group.”

***delhiensis*** Das and Gupta

*Polistes delhiensis* Das and Gupta, 1984, Orient. Insect. 17: 410, nomen nudum.  
*Polistes delhiensis* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 63.  
DISTRIBUTION: India: Delhi.  
ST.

***diakonovi*** Kostylev

*Polistes diakonovi* Kostylev, 1940, Bull. Soc. Nat. Moscou, Sect. Biol. 49: 139.  
DISTRIBUTION: Russia: Ussuri.  
PE, “*sagittarius* group.”

***ebsohinus*** Sonan

*Polistes mandarinus* var. *ebsohinus* Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33 (242–243): 483.  
DISTRIBUTION: Taiwan – (Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).  
PE, “*sagittarius* group.”

***elegans*** Smith

*Polistes elegans* Smith, 1859, J. Proc. Linn. Soc., Zool. 3(11): 169.  
DISTRIBUTION: Indonesia: Aru, Kai Is.; New Guinea – (Cheesman, 1951, Ann. Mag. Nat. Hist. (12)4).  
ST.

***ellenbergi*** Buysson

*Polistes ellenbergi* Buysson, 1908, Bull. Soc. Entomol. France 1908: 64.  
DISTRIBUTION: Liberia; Cameroon; Equatorial Guinea; Congo – (Bequaert, 1918, Bull. Am. Mus. Nat. Hist. 39; Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 149).  
PE, “*sagittarius* group.”

***ephippium*** Cameron

*Polistes ephippium* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 415.  
DISTRIBUTION: India: Meghalaya – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).  
PE, “*adustus* group.”

***erythrocerus*** Cameron

*Polistes erythrocerus* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 418.  
DISTRIBUTION: Japan.  
PE, “*sagittarius* group.”

***extraneus*** Kirby

*Polistes extraneus* Kirby, 1883, Proc. Zool. Soc. London 1883: 344.  
DISTRIBUTION: Indonesia: Maru.  
PE.

***fastidiosus*** Saussure

*Polistes fastidiosus* Saussure, 1853, Ét. Fam. Vesp. 2: 60.  
DISTRIBUTION: Senegal; Guinea-Bissau; Ivory Coast; Benin; Nigeria; Zaire; Sudan; Somalia; Saudi Arabia; Yemen; Kenya; Tanzania, including Zanzibar; Zambia; Mozambique; South Africa: Transvaal, Cape Prov. – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 140; Richards, 1985, Fauna Saudi Arabia 6).  
PE, “*sagittarius* group.”

***flavobilineatus*** (Cameron)

*Icaria flavo-bilineata* Cameron, 1902, J. Straits Asiat. Soc. 37: 102.  
DISTRIBUTION: Myanmar; Thailand; Malaysia, Sarawak – (Dover, 1931, J. Fed. Malay Mus. 16).  
PE, “*stigma* group.”

***haugi*** Buysson

*Polistes haugi* Buysson, 1906, Bull. Soc. Entomol. France 1906: 189.  
DISTRIBUTION: Liberia; Nigeria; Cameroon; Equatorial Guinea; Congo; Zaire – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 149).  
PE, “*sagittarius* group.”

***huisunensis*** Kuo

*Polistes huisunensis* Kuo, 1987, in Kuo and Yeh, J. Natl. Chiayi Inst. Agric. 16: 80.  
DISTRIBUTION: Taiwan.  
PE, “*adustus* group.”

***humilis centrocontinentalis*** Giordani Soika

*Polistes humilis centrocontinentalis* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 20.  
DISTRIBUTION: central Australia.  
PE, “*sagittarius* group.”

***humilis humilis*** (Fabricius)

*Vespa humilis* Fabricius, 1781, Spec. Insect. 1: 461.  
*Polistes tasmaniensis* Saussure, 1853, Ét. Fam. Vesp. 2: 66.  
*Polistes tricolor* Saussure, 1853, Ét. Fam. Vesp. 2: 67, non Fabricius, 1775.

*Polistes humilis pseudoschach* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 21.

DISTRIBUTION: Australia: Queensland, New South Wales, A. C. T., Victoria, South Australia; introduced New Zealand – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

PE, “*sagittarius* group.”

***humilis synoecus* Saussure**

*Polistes synoecus* Saussure, 1853, Ét. Fam. Vesp. 2: 65.

*Polistes variabilis* var. *reginae* Meade-Waldo, 1911, Ann. Nat. Hist. (8)7: 101.

*Polistes humilis xanthorhoicus* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 21.

*Polistes humilis clarior* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 22.

*Polistes humilis xanthorhoicus* [!]; Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 46.

DISTRIBUTION: Australia: Northern Territory, Queensland, introduced Western Australia; Society Is.: Moorea, Tahiti – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

PE, “*sagittarius* group.”

***intermedius* Kojima, NEW NAME**

*Polistes medius* Kojima, 1988, in Kojima and Kojima, J. Aust. Entomol. Soc. 27: 74, non Palisot de Beauvois, 1818.

DISTRIBUTION: New Guinea.

PE, “*sagittarius* group.”

***japonicus* Saussure**

*Polistes japonicus* Saussure, 1858, Rev. Mag. Zool. (2) 10: 260.

*Polistes jokahamae* Radoszkowski, 1887, Horae Entomol. Soc. Ross. 21: 435.

*Polistes jocahamae* [!]; Dalla Torre, 1904, Genera Insect. 19: 70.

*Polistes yokohamae*; Matsumura, 1911, Thousand Insect. Japan, Suppl. 3: 105, unnecessary emendation.

*Polistes formosanus* Sonan, 1927, Trans. Nat. Hist. Soc. Formosa 17: 122.

*Polistes jokohamae* Yasumatsu, 1940, Trans. Sapporo Nat. Hist. Soc. 16: 96, unnecessary emendation.

*Polistes japonicus* var. *formosana* form *koshunensis* Sonan, 1938, Arbeit. Morphol. Taxon. Entomol. Berlin-Dahlem 5: 68. Unavailable under Art. 45(g)(ii)(1) of the

International Code of Zoological Nomenclature.

*Polistes yokohamae* [!]; Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33(242–243): 475.

*Polistes japonicus* [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 81.

*Polistes hengchunensis* Kuo, 1987, in Kuo and Yeh, J. Natl. Chiayi Inst. Agric. 16: 81.

*Polistes hengchun* [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 82.

*Polistes shekouensis* Kuo, 1987, in Kuo and Yeh, J. Natl. Chiayi Inst. Agric. 16: 82.

*Polistes japonicus* var. *fomosanus* [!]; Kuo and Yeh, 1987, J. Natl. Chiayi Inst. Agric. 16: 83.

DISTRIBUTION: China; Korea; Japan, including Ryukyu Is.; Taiwan – (Kim, 1980, Distr. Atlas Insect. Korea, Ser. 3, Hym. Dipt.; Lee, 1982, Econ. Insect. Fauna China Fasc. 30; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).

PE, “*sagittarius* group.”

***khasianus* Cameron**

*Polistes khasianus* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 413.

DISTRIBUTION: India: Haryana, Meghalaya – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

ST.

***laevigatissimus* Giordani Soika**

*Polistes laevigatissimus* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 25.

DISTRIBUTION: Australia: Western Australia.

ST.

***lateritius* Smith**

*Polistes lateritius* Smith, 1857, Cat. Hym. Br. Mus. 5, Vesp.: 103.

*Polistes colonicus* Smith, 1860, Proc. Linn. Soc. London, Zool. 5 Suppl.: 129.

*Polistes lateritus* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 30.

DISTRIBUTION: Indonesia: Moluccas: Ambon, Seram, Saparua – (Petersen, 1990, Entomol. Scand. 21).

ST.

***latinis* Das and Gupta**

*Polistes latinis* Das and Gupta, 1984, Orient. Insect. 17: 412, nomen nudum.

*Polistes latinis* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 79.

DISTRIBUTION: India: Andaman Is.  
PE, “*stigma* group.”

***lepcha*** Cameron

*Polistes khasianus* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 415, non Cameron, 1900: 413.

*Polistes lepcha* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 506. Replacement name for *khasianus* Cameron, 1900: 415, non Cameron, 1900: 413.

*Polistes klepcha* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 30.

DISTRIBUTION: India: Haryana, Meghalaya, Manipur – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

PE, “*sagittarius* group.”

***lycus*** Cameron

*Polistes lycus* Cameron, 1901, Proc. Zool. Soc. 1901: 242.

DISTRIBUTION: Bismarck Archipelago: New Britain, New Ireland – (Petersen, 1990, Entomol. Scand. 21).

ST.

***madecassus*** Saussure

*Polistes madecassus* Saussure, 1853, Ét. Fam. Vesp. 2: 51.

DISTRIBUTION: Madagascar.

PE, “*sagittarius* group.”

***madiburensis*** Schulthess

*Polistes madiburensis* Schulthess, 1921, Entomol. Mitt. 10: 124.

*Polistes maniburesis* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 31.

DISTRIBUTION: Tanzania; Zambia; Zimbabwe – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 149).

PE, “*sagittarius* group.”

***mandarinus*** Saussure

*Polistes mandarinus* Saussure, 1853, Ét. Fam. Vesp. 2: 58.

*Polistes puncticollis* Morawitz, 1892, Horae Entomol. Soc. Ross. 26: 150.

*Polistes nipponensis* Pérez, 1905, Bull. Mus. Hist. Nat. Paris 2: 82.

*Polistes megei* Pérez, 1905, Bull. Mus. Hist. Nat. Paris 2: 83.

*Polistes mandarinensis* [!]; Zimmermann, 1931, Z. Morphol. Ökol. Tiere 22: 230.

*Polistes mandarinus* [!]; Ma, 1936, Entomol. Phytopath. 4: 65.

*Polistes mandarinus* form *nigrihumerus* Uchida, 1936, Biogeographica, Tokyo 1 (2): 69.

*Polistes yamanakai* Sonan, 1937, Trans. Nat. Hist. Soc. Formosa 27(166): 169.

DISTRIBUTION: Russia: Siberia; China; Korea; Japan – (Liu, 1937, Peking Nat. Hist. Bull. 11(3); Kim, 1980, Distr. Atlas Insect. Korea, Ser. 3, Hym. Dipt.).

PE, “*sagittarius* group.”

***meadeanus*** (Schulthess)

*Parapolybia meadeana* Schulthess, 1913, Mitt. Schweiz. Entomol. Ges. 12: 161.

*Polybia andrei* Buysson, 1913, Bull. Soc. Entomol. France 1913: 296.

*Polybia shelfordi* Buysson, 1913, Bull. Soc. Entomol. France 1913: 297.

DISTRIBUTION: Malaysia; Indonesia: Borneo – (van der Vecht, 1966, Zool. Verh., Leiden 82).

ST.

***melanopterus*** Cameron

*Polistes melanopterus* Cameron, 1911, Nova Guinea, Zool. 9(2), Zool.: 187.

DISTRIBUTION: New Guinea.

ST.

***mertoni*** Buysson

*Polistes mertoni* Buysson, 1913 (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 227.

DISTRIBUTION: Indonesia: Aru.

ST.

***nigrifrons nigrifrons*** Smith

*Polistes nigrifrons* Smith, 1859, J. Proc. Linn. Soc., Zool. 3(11): 168.

DISTRIBUTION: Indonesia: Aru, Waigeo; New Guinea.

ST.

***nigrifrons obdurus*** Cheesman

*Polistes nigrifrons obdurus* Cheesman, 1951, Ann. Mag. Nat. Hist. (12)4: 989.

DISTRIBUTION: New Guinea.

ST.

***nigrifrons stotheri*** Meade-Waldo

*Polistes stotheri* Meade-Waldo, 1916 (1915), Br. Ornithol. Union Exped. Dutch New Guinea 1: 14.

DISTRIBUTION: New Guinea.

ST.

**nigritarsis** Cameron

*Polistes nigritarsis* Cameron, 1900, Ann. Mag. Nat. Hist. (7)6: 413.

DISTRIBUTION: India: West Bengal, Meghalaya – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

ST.

**occultus** Kojima

*Polistes occultus* Kojima, 1988, in Kojima and Kojima, J. Aust. Entomol. Soc. 27: 76.

DISTRIBUTION: New Guinea.

ST.

**philippinensis funebris** Bequaert

*Polistes sagittarius* var. (or subsp.) *funebris* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 269.

DISTRIBUTION: Philippines: Luzon.

PE, “*sagittarius* group.”

**philippinensis philippinensis** Saussure

*Polistes philippinensis* Saussure, 1853, Ét. Fam. Vesp. 2: 58.

*Polistes philippinensis* [!]; Meade-Waldo, 1911, Ann. Mag. Nat. Hist. (8)7: 102.

DISTRIBUTION: Philippines: Mindanao – (Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 265-273).

PE, “*sagittarius* group.”

**praenotatus** Kohl

*Polistes praenotatus* Kohl, 1908, Denkschr. Akad. Wiss., Wien 81: 311.

DISTRIBUTION: Solomon Is.

PE, “*sagittarius* group.”

**riekii** Richards

*Polistes riekkii* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 23.

DISTRIBUTION: Australia: Queensland.

ST.

**rufodorsalis** Yamane and Kusigemati

*Polistes rufodorsalis* Yamane and Kusigemati, 1985, Occas. Pap. Kagoshima Univ. Res. Center S. Pacif. 5: 77.

DISTRIBUTION: Solomon Is.: Guadalcanal.

PE, “*stigma* group.”

**sagittarius indonesicus** Bequaert

*Polistes sagittarius* var. (or subsp.) *indonesicus* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 267.

DISTRIBUTION: Philippines: Palawan; Indonesia: Sumatra, Java, Bali, Sulawesi.

PE, “*sagittarius* group.”

**sagittarius sagittarius** Saussure

*Polistes sagittarius* Saussure, 1853, Ét. Fam. Vesp. 2: 56.

*Polistes sagittarium* [!]; Das and Gupta, 1989, Orient. Insect. Monogr. 11: 67.

DISTRIBUTION: India: Himachal Pradesh, Delhi, Uttar Pradesh, Sikkim, West Bengal, Assam, Nagaland, Manipur, Tripura; Nepal; China; Hong Kong; Myanmar; Thailand; Malaysia; Singapore; Indonesia: Sumatra, Sulawesi – (Das and Gupta, 1989, Orient. Insect. Monogr. 11; Kojima and Yamane, 1990, in Sakagami et al., Nat. Hist. Soc. Wasps Bees in Eq. Sumatra).

PE, “*sagittarius* group.”

**santoshae** Das and Gupta

*Polistes virendrai* Das and Gupta, 1984, Orient. Insect. 17: 415, nomen nudum.

*Polistes santoshae* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 72.

DISTRIBUTION: India: Sikkim, Meghalaya; Nepal.

PE, “*adustus* group.”

**saussurei** Dalla Torre

*Polistes incertus* Saussure, 1890, in Granddier, Hist. Madagascar 20, Hym.: 145, non Cresson, 1865.

*Polistes saussurei* Dalla Torre, 1894, Cat. Hym. 9: 134. Replacement name for *incertus* Saussure, 1890, non Cresson, 1865.

DISTRIBUTION: Madagascar; Comoros – (Bequaert, 1918, Bull. Am. Mus. Nat. Hist. 39).

PE, “*sagittarius* group.”

**sgarambus** Giordani Soika

*Polistes sgarambus* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 24.

DISTRIBUTION: Australia: Northern Territory – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

PE, “*sagittarius* group.”

**shirakii** Sonan

*Polistes shirakii* Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33(242-243): 481.

*Polistes shiraki* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 36.

DISTRIBUTION: Taiwan.

PE, “*sagittarius* group.”

***sikorae*** Saussure

*Polistes sikorae* Saussure, 1900, Abh. Senckenberg. Naturforsch. Ges. 26: 233.

*Polistes sikorae* var. *obscura* Saussure, 1900, Abh. Senckenberg. Naturforsch. Ges. 26: 234, non Saussure, 1863.

DISTRIBUTION: Madagascar.

PE, "*sagittarius* group."

***similis*** Das and Gupta

*Polistes similis* Das and Gupta, 1984, Orient. Insect. 17: 413, nomen nudum.

*Polistes similis* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 72.

DISTRIBUTION: India: Meghalaya.

PE, "*adustus* group."

***simulatus halmaheirensis*** Petersen

*Polistes simulatus halmaheirensis* Petersen, 1990, Entomol. Scand. 21: 58.

DISTRIBUTION: Indonesia: Moluccas: Halmahera.

ST.

***simulatus morotaiensis*** Petersen

*Polistes simulatus morotaiensis* Petersen, 1990, Entomol. Scand. 21: 58.

DISTRIBUTION: Indonesia: Moluccas: Morotai.

ST.

***simulatus obiensis*** Petersen

*Polistes simulatus obiensis* Petersen, 1990, Entomol. Scand. 21: 57.

DISTRIBUTION: Indonesia: Moluccas: Obi.

ST.

***simulatus simulatus*** Smith

*Polistes simulatus* Smith, 1860, J. Proc. Linn. Soc., Zool. 5 Suppl.: 130.

DISTRIBUTION: Indonesia: Moluccas: Bacan, Kayoa – (Petersen, 1990, Entomol. Scand. 21).

ST.

***smithii neavei*** Schulthess

*Polistes smithii* var. *neavei* Schulthess, 1921, Entomol. Mitt. 10: 126.

DISTRIBUTION: Sierra Leone; Zaire; Tanzania, including Zanzibar; Mozambique; Zambia – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 149).

PE, "*sagittarius* group."

***smithii smithii*** Saussure

*Polistes smithii* Saussure, 1853, Ét. Fam. Vesp. 2: 60.

DISTRIBUTION: Senegal; Zaire; Tanzania, including Zanzibar; Zimbabwe; South Africa: Kwazulu-Natal – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 146; Richards and Richards, 1951, Trans. R. Entomol. Soc. London 102).

PE, "*sagittarius* group."

***snelleni*** Saussure

*Polistes snelleni* Saussure, 1862, Stettin. Entomol. Ztg. 23: 140.

DISTRIBUTION: China; Korea; Japan – (Kim, 1980, Distr. Atlas Insect. Korea, Ser. 3, Hym. Dipt.).

PE, "*sagittarius* group."

***stigma alagari*** Petersen

*Polistes stigma alagari* Petersen, 1987, Entomol. Scand. 18: 246.

DISTRIBUTION: Philippines: Tawitawi, Palawan.

PE, "*stigma* group."

***stigma bernardii*** Le Guillou

*Polistes bernardii* Le Guillou, 1841, Rev. Mag. Zool. 5: 325.

*Polistes bernardii richardsi* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 23.

*Polistes bernardii duplicinctus* Richards, 1978., Aust. J. Zool., Suppl. Ser., 61: 28.

*Polistes bernardii insulae* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 30.

DISTRIBUTION: New Guinea; Australia: Western Australia, Northern Territory, Queensland; Society Is.: Tahiti – (Cheesman, 1928, Ann. Mag. Nat. Hist. (10) 1; Richards, 1978, Aust. J. Zool., Suppl. Ser., 61; Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma* group."

***stigma dubius*** Saussure

*Polistes dubius* Saussure, 1867, in Reise der Novara-Expedition, Zool. Theil 2, Hym.: 20.

DISTRIBUTION: Philippines: Luzon, Calicoan Is. – (Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma* group."

***stigma galathea*** Petersen

*Polistes stigma galathea* Petersen, 1987, Entomol. Scand. 18: 239.

DISTRIBUTION: India: South Nicobar Is.

PE, "*stigma* group."

***stigma goestai*** Petersen

*Polistes stigma goestai* Petersen, 1987, Entomol. Scand. 18: 255.

DISTRIBUTION: Bismarck Archipelago: Mus-sau.

PE, "*stigma group*."

***stigma jani*** Petersen

*Polistes stigma jani* Petersen, 1987, Entomol. Scand. 18: 256.

DISTRIBUTION: Admiralty Is.: Manus.

PE, "*stigma group*."

***stigma maculipennis*** Saussure

*Polistes maculipennis* Saussure, 1853, Ét. Fam. Vesp. 2: 61.

*Polistes multipictus* Smith, 1860, Proc. Linn. Soc. London, Zool. 5 Suppl.: 130, non Haliday, 1836. NEW SYNONYMY.

*Polistes stigma* var. *thoracica* Buysson, 1913 (1911), Abh. Senckenberg. Naturforsch. Ges. 34: 228, non Fox, 1898. NEW SYNONYMY.

*Polistes comis* Cheesman, 1951, Ann. Mag. Nat. Hist. (12) 4: 991.

DISTRIBUTION: New Guinea; Indonesia: Aru, Moluccas: Ambon – (Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma group*."

***stigma madsii*** Petersen

*Polistes stigma madsii* Petersen, 1987, Entomol. Scand. 18: 254.

DISTRIBUTION: Bismarck Archipelago: Djaul.

PE, "*stigma group*."

***stigma manillensis*** Saussure

*Polistes manillensis* Saussure, 1853, Ét. Fam. Vesp. 2: 70.

*Polistes manillesis* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 31.

DISTRIBUTION: Philippines: Luzon, Leyte – (Kojima, 1984, Kontyû 52; Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma group*."

***stigma nebulosus*** Yamane and Kusigemati

*Polistes stigma nebulosus* Yamane and Kusigemati, 1985, Occas. Pap. Kagoshima Univ. Res. Center S. Pacif. 5: 77.

DISTRIBUTION: Solomon Is.: Guadalcanal; Fiji.

PE, "*stigma group*."

***stigma novarae*** Saussure

*Polistes novarae* Saussure, 1867, in Reise

der Novara-Expedition, Zool. Theil 2, Hym.: 19.

DISTRIBUTION: India: North Nicobar Is. – (Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma group*."

***stigma papuanus*** Schulz

*Polistes marginalis papuanus* Schulz, 1905, Berlin Entomol. Z. 49: 231.

DISTRIBUTION: Bismarck Archipelago: New Britain; Duke of York; New Ireland – (Petersen, 1987, Entomol. Scand. 18).

PE, "*stigma group*."

***stigma pouli*** Petersen

*Polistes stigma pouli* Petersen, 1987, Entomol. Scand. 18: 252.

DISTRIBUTION: Bismarck Archipelago: Lavongai.

PE, "*stigma group*."

***stigma sauiensis*** Petersen

*Polistes stigma sauiensis* Petersen, 1987, Entomol. Scand. 18: 240.

DISTRIBUTION: India: Car Nicobar Is.

PE, "*stigma group*."

***stigma stigma*** (Fabricius)

*Vespa stigma* Fabricius, 1793, Entomol. Syst. 2: 275.

DISTRIBUTION: Thailand; Malaysia; Singapore; Indonesia: Sumatra; Taiwan – (Dover, 1929, Bull. Raffles Mus. 2; Petersen, 1987, Entomol. Scand. 18; Kojima and Yamane, 1990, in Sakagami et al., Nat. Hist. Soc. Wasps Bees in Eq. Sumatra; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).

PE, "*stigma group*."

***stigma svendi*** Petersen

*Polistes stigma svendi* Petersen, 1987, Entomol. Scand. 18: 257.

DISTRIBUTION: Hermit Is.: Luf.

PE, "*stigma group*."

***stigma tamulus*** (Fabricius)

*Vespa tamula* Fabricius, 1798, Suppl. Entomol. Syst.: 263.

DISTRIBUTION: India: Himachal Pradesh, Delhi, Bihar, West Bengal, Maharashtra, Karnataka, Tamil Nadu; Sri Lanka – (Das and Gupta, 1989, Orient. Insect. Monogr. 11).

PE, "*stigma group*."



***stigma townsvillensis*** Giordani Soika

*Polistes townsvillensis* Giordani Soika, 1975, Boll. Soc. Entomol. Ital. 107: 22.

*Polistes townsvillensis austrinus* Richards, 1978, Aust. J. Zool., Suppl. Ser., 61: 37.

DISTRIBUTION: Australia: Queensland, New South Wales Victoria – (Petersen, 1987, Entomol. Scand. 18).

PE, “*stigma* group.”

***stigma tualensis*** Petersen

*Polistes stigma tualensis* Petersen, 1987, Entomol. Scand. 18: 243.

DISTRIBUTION: Indonesia: Kai Is.

PE, “*stigma* group.”

***strigosus atratus*** Das and Gupta

*Polistes strigosus atratus* Das and Gupta, 1984, Orient. Insect. 17: 415, nomen nudum.

*Polistes strigosus atratus* Das and Gupta, 1989, Orient. Insect. Monogr. 11: 81.

DISTRIBUTION: India: Delhi, Uttar Pradesh, Sikkim, Bihar, West Bengal, Assam, Manipur, Tripura.

PE, “*sagittarius* group.”

***strigosus mimus*** Bequaert

*Polistes strigosus* var. (or subsp.) *mimus* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 272.

*Polistes strigosus minus* [!]; Kojima and Yamane, 1984, Rep. Fac. Sci., Kagoshima Univ. (Earth Sci. Biol) 17: 119.

DISTRIBUTION: Nepal; Malaysia: Sabah; Philippines: Sibuyan, Luzon, Mindanao – (Yamane and Yamane, 1979, Insect. Matsum., N. S. 15; Kojima and Yamane, 1984, Rep. Fac. Sci., Kagoshima Univ. (Earth Sci. Biol) 17).

PE, “*sagittarius* group.”

***strigosus strigosus*** Bequaert

*Polistes strigosus* Bequaert, 1940, Trans. Am. Entomol. Soc. 66: 269.

*Polistes stigosus* [!]; Das and Gupta, 1984, Orient. Insect. 17: 415.

DISTRIBUTION: China; Taiwan – (Sonan, 1943, Trans. Nat. Hist. Soc. Formosa 33: 467–484).

PE, “*sagittarius* group.”

***takasagonus*** Sonan

*Polistes takasagonus* Sonan, 1943, Trans. Nat. Hist. Soc. Taiwan 33(242–243): 482.

DISTRIBUTION: Taiwan.

PE, “*sagittarius* group.”

***tristis*** Meade-Waldo

*Polistes tristis* Meade-Waldo, 1911, Ann. Nat. Hist. (8)7: 101.

DISTRIBUTION: Kenya.

PE, “*sagittarius* group.”

***tullgreni*** Schulz

*Polistes inornatus* Tullgren, 1904, Arkiv Zool. 1: 456, pl. 25 figs. 15a, b, non Ritsema, 1874.

*Polistes tullgreni* Schulz, 1906, Spolia Hym.: 229. Replacement name for *inornatus* Tullgren, 1904, non Ritsema, 1874.

DISTRIBUTION: Cameroon; Zaire – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 151).

PE, “*sagittarius* group.”

***utakwae*** Meade-Waldo

*Polistes utakwae* Meade-Waldo, 1916 (1915), Br. Ornithol. Union Exped. Dutch New Guinea 1: 13.

DISTRIBUTION: New Guinea.

PE, “*sagittarius* group.”

***variabilis*** (Fabricius)

*Vespa variabilis* Fabricius, 1781, Spec. Insect. 1: 466.

DISTRIBUTION: Australia: Queensland – (Richards, 1978, Aust. J. Zool., Suppl. Ser., 61).

PE, “*sagittarius* group.”

***watutus*** Kojima

*Polistes watutus* Kojima, 1988, in Kojima and Kojima, J. Aust. Entomol. Soc. 27: 72.

DISTRIBUTION: New Guinea.

PE, “*sagittarius* group.”

***williamsi*** Petersen

*Polistes williamsi* Petersen, 1990, Entomol. Scand. 21: 58.

DISTRIBUTION: Philippines: Palawan, Panay, Negros, Sibuyan, Mindanao, Samar, Luzon, Polillo.

ST.

***xantholeucus*** van der Vecht

*Polistes xantholeucus* van der Vecht, 1984, Nat. Hist. Rennell Is., Br. Solomon Is. 8: 171.

DISTRIBUTION: Solomon Is.: Rennell, San Cristobal.

ST.

SUBGENUS *POLISTES* LATREILLE

*Polistes* Latreille, 1802, Hist. Nat. Crust. Insect. 3: 363, genus (6 species).

Type species: *Vespa gallica* Linnaeus, 1767, by subsequent designation of Latreille, 1810, Consid. Gén. Crust. Arachn. Insect.: 438.

*Polistes* [!]; Palisot de Beauvois, 1818, Insect. Recueill. Afrique Amérique: pl. 8; Buysson, 1892, Ann. Soc. Entomol. France 61: 59; H. von Ihering, 1896, Zool. Anz. 19: 452.

*Eupolistes* Dalla Torre, 1904, Genera Insect. 19: 68, name for "Premiere division" of *Polistes* Latreille in Saussure, 1853, Ét. Fam. Vesp. 2: 45 (61 species).

Type species: *Vespa gallica* Linnaeus, 1767, by subsequent designation of Richards, 1973, Rev. Bras. Entomol. 17 (13): 86.

*Pseudopolistes* Weyrauch, 1937, Zool. Jahrb. (Abt. Syst. Ökol. Geogr. Tiere) 70: 266, 274, genus (3 species). Unavailable; no type species designated.

*Sulcopolistes* Blüthgen, 1938 (1937), Kownowia 16: 273, subgenus of *Polistes* Latreille.

Type species: *Polistes semenowi* Morawitz, 1889, by original designation.

*Polistula* Weyrauch, 1938, Arbeit. Physiol. Angewand. Entomol. 5(3): 273, genus (5 species). Unavailable; no type species designated.

*Polistula* Weyrauch, 1939, Arch. Naturgesch. (N. F.) 8(2): 148, genus.

Type species: *Polistes kohli* Dalla Torre, 1904 [= *Polistes biglumis* Linnaeus, 1758], by original designation.

*Pseudopolistes* Weyrauch, 1939, Arch. Naturgesch. (N. F.) 8(2): 195, validation by type selection of *Pseudopolistes* Weyrauch, 1937.

Type species: *Polistes sulcifer* Zimmermann, 1930, by original designation.

*Leptopolistes* Blüthgen, 1943, Arch. Naturgesch. (N. F.) 12(1): 99, 121, subgenus of *Polistes* Latreille.

Type species: *Polistes associus* Kohl, 1898, by original designation.

*africanus* Palisot de Beauvois

*Polistes africana* Palisot de Beauvois, 1818,

Insect. Recueill. Afrique Amérique, livr. 12: 207.

*Polistes africana* [!]; Palisot de Beauvois, 1818, Insect. Recueill. Afrique Amérique: pl. 8.

*Polistes plebejus* Gerstaecker, 1871, Arch. Naturgesch. 37: 351.

*Polistes inornatus* Ritsema, 1874, Tijdschr. Entomol. 17: 177, 203, pl. 11 fig. 8.

*Polistes spilophorus* Schletterer, 1891, Ann. Soc. Entomol. Belg. 35: 29.

*Polistes spilopectera* [!]; Kohl, 1894, Ann. Naturh. Hofmus., Wien 9: 343.

*Polistes sphiophorus* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 31.

DISTRIBUTION: Senegal; Liberia; Nigeria; Cameroon; São Tomé; Zaire; Kenya; Somalia; Tanzania, including Zanzibar; Comoros; South Africa: Kwazulu-Natal, Western Cape Prov. – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 142; Guiglia, 1940, Boll. Lab. Zool. Gen. Agrar. Fac. Agrar. Portici 31; Giordani Soika, 1961, South Afr. Anim. Life 8).

PO.

*albicinctus* Saussure

*Polistes albicinctus* Saussure, 1890, in Grandier, Hist. Madagascar 20, Hym.: 148.

*Polistes albocinctus* [!]; Saussure, 1900, Abh. Senckenberg. Naturforsch. Ges. 36: 234.

DISTRIBUTION: Madagascar – (Giordani Soika, 1991, Lavori Soc. Ven. Sci. Nat. 16).

PO.

*associus* Kohl

*Polistes associa* Kohl, 1898, Ann. Naturh. Hofmus., Wien 13: 89.

DISTRIBUTION: southern Europe; Turkey; Israel; Azerbaijan; India: Jammu and Kashmir; China – (Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion.; Das and Gupta, 1989, Orient. Insect. Monogr. 11).

PO.

*atrimandibularis* Zimmermann

*Polistes atrimandibularis* Zimmermann, 1930, Mitt. Zool. Mus. Berlin 15: 611.

*Polistes atrimandibularis albidus* Blüthgen, 1957, Rev. Fac. Sci. Univ. Istanbul, Ser. B, 22(3): 164.

DISTRIBUTION: central and southern Europe; Turkey; Iran; Armenia; Egypt – (Guiglia,

- 1972, Guêpes Soc. Europe Occident. Septentrion.; Yildirim and Özbek, 1993, Türk. Entomol. Derg. 17).
- SU.
- badius*** Gerstaecker  
*Polistes badia* Gerstaecker, 1871, Arch. Naturgesch. 37: 351.
- DISTRIBUTION: Senegal; Guinea-Bissau; Gambia; Togo; Gabon; Zaire; Tanzania, including Zanzibar, Wanga; Kenya; Somalia; Ethiopia; Sudan; Yemen – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 143; Guiglia, 1939, Mem. Soc. Entomol. Ital. 18; Guiglia, 1940, Boll. Lab. Zool. Gen. Agrar. Fac. Agrar. Portici 31; Giordani Soika, 1952, Riv. Biol. Colon. 11; Giordani Soika, 1957, Br. Mus. (Nat. Hist.) Exp. South-West Arabia 1937-8, 1(31)).
- PO.
- biglumis*** (Linnaeus)  
*Vespa biglumis* Linnaeus, 1758, Syst. Nat.: 573.  
*Vespa rupestris* Linnaeus, 1758, Syst. Nat.: 573.  
*Vespa bimaculata* Geoffroy, 1785, in Fourcroy, Entomol. Paris 2: 433.  
*Polistes Geoffroyi* Lepeletier and Serville, 1825, Encyc. Méthod. 10: 173.  
*Polistes dubia* Kohl, 1898, Ann. Naturh. Hofmus., Wien 13: 90, non Saussure, 1867.  
*Polistes Kohli* Dalla Torre, 1904, Genera Insect. 19: 70. Replacement name for *Polistes dubia* Kohl, 1898, non Saussure, 1867.  
*V. bimacula* [!] “Fourcroy”; Dalla Torre, 1904, Genera Insect. 19: 72.  
*Polistes bimaculatus* var. *Arduinoides* Guiglia, 1948, Mem. Soc. Entomol. Ital. 27, Fasc. Suppl.: 14 (key), 22.  
“*Polistes pamirensis* Soika” Zirngiebl, 1955, Mitt. München. Entomol. Ges. 44/45: 381.  
*Polistes pamirensis* var. *soikai* Zirngiebl, 1955, Mitt. München. Entomol. Ges. 44/45: 383.  
*Polistes pamirensis* var. *interruptus* Zirngiebl, 1955, Mitt. München. Entomol. Ges. 44/45: 383.  
*Polistes bimaculatus* var. *nigrinotum* Zirngiebl, 1955, Mitt. München. Entomol. Ges. 44/45: 385.  
*Polistes biglumis alpium* Blüthgen, 1957, Rev. Fac. Sci. Univ. Istanbul, Ser. B, 22 (3): 163.
- Polistes geoffroyi* [!]; Das and Gupta, 1984, Orient. Insect. 17: 404.
- DISTRIBUTION: Europe; northern Africa; Turkey; Iran; Mongolia – (Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion.; Giordani Soika, 1976, Acta Zool. Acad. Sci. Hung. 22; Guiglia, 1979, Boll. Mus. Civ. Stor. Nat. Venezia 30; Day, 1979, Biol. J. Linn. Soc. 12).
- PO.
- bischoffi*** Weyrauch  
*Polistes Bischoffi* Weyrauch, 1937, Zool. Jahrb. (Abt. Syst. Ökol. Geogr. Tiere) 70: 274.
- DISTRIBUTION: central and southern Europe; Malta; Turkey – (Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion).
- PO.
- chinensis antennalis*** Pérez  
*Polistes biglumis* var. *antennalis* Pérez, 1905, Bull. Mus. Hist. Nat. Paris 2: 81.  
*Polistes inseptulus* Giordani Soika, 1976, Ann. Hist.-Nat. Mus. Natl. Hung. 68: 288.
- DISTRIBUTION: Mongolia; Korea; Japan – (Giordani Soika, 1976, Acta Zool. Acad. Sci. Hung. 22; Kim, 1980, Distr. Atlas Insect. Korea, Ser. 3, Hym. Dipt.; Lee, 1982, Econ. Insect. Fauna China, Fasc. 30).
- PO.
- chinensis chinensis*** (Fabricius)  
*Vespa chinensis* Fabricius, 1793, Entomol. Syst. 2: 261.  
*Polistes caspicus* Yoshikawa, 1962, J. Biol., Osaka City Univ. 13: 21, nomen nudum.
- DISTRIBUTION: Russia: Siberia; China; Hong Kong; Taiwan; Japan: Okinawa; introduced New Zealand – (Liu, 1937, Peking Nat. Hist. Bull. 11(3); Clapperton et al., 1989, New Zealand J. Zool. 16; Starr, 1992, Bull. Natl. Mus. Nat. Sci. 3).
- PO.
- dominulus*** (Christ)  
*Vespa dominula* Christ, 1791, Naturgesch. Insect.: 229.  
*Polistes italica* Herrich-Schäffer, 1840, Nomencl. Entomol. 2: 196, nomen nudum.  
*Polistes pectoralis* “Meg.” Herrich-Schäffer, 1841, Fauna Insect. German. 179: 39, 179.6.

- Polistes gallica* var. *Lefebvrei* Guérin, 1844, Icon. Règne Anim. 3: 447.
- Polistes Bucharensis* Erichson, 1849, Mem. Acad. Sci. St. Petersburg (6)6: 307.
- Polistes Lefebvrii* [!]; Saussure, 1853, Ét. Fam. Vesp. 2: 49.
- Polistes maculatus* Rudow, 1889, Soc. Entomol. 3: 171.
- Polistes Merceti* Dusmet, 1903, Mem. Soc. Espan. 2(3): 146 (key), 149.
- Polistes gallicus* var. *rufescens* Buysson, 1912, Ann. Hist. Nat. Délégation Perse II. Entomol. 1: 79.
- Polistes gallica* var. *ornata* Weyrauch, 1938, Arbeit. Physiol. Angewand. Entomol. Berlin-Dahlem 5: 278, non Lepeletier, 1836.
- Polistes gallica* var. *pacifica* Weyrauch, 1939, Arch. Naturgesch. (N. F.) 8: 155, non Fabricius, 1804.
- Polistes gallicus pseudopacificus* Giordani Soika, 1970, Ann. Hist.-Nat. Mus. Natl. Hung., Zool. 62: 326. Replacement name for *pacificus* Weyrauch, 1939, non Fabricius, 1804.
- Polistes gallicus muchei* Gusenleitner, 1976, Nachrichtenbl. Bayer. Entomol. 25(6): 118.
- Vespa dominuta* [!]; Das and Gupta, 1984, Orient. Insect. 17: 404.
- DISTRIBUTION: central and southern Europe; Turkey; northern Africa; Israel; Syria; Afghanistan; Russia; Iran; Uzbekistan; Turkmenistan; Pakistan; India: Jammu and Kashmir; Mongolia; China; introduced Australia: Western Australia; Chile; U.S.A.: Massachusetts, now spread westward to Ohio – (Liu, 1937, Peking Nat. Hist. Bull. 11(3): 313; Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion.; Day, 1979, Biol. J. Linn. Soc. 12; Hathaway, 1981, Psyche 88; Das and Gupta, 1984, Orient. Insect. 17; Cardale, 1985, in Walton, Zool. Cat. Australia 2; Yildirim and Özbek, 1993, Türk. Entomol. Derg. 17).
- PO.
- gallicus** (Linnaeus)  
*Vespa gallica* Linnaeus, 1767, Syst. Nat. Ed. 12, 1(2): 949.
- Polistes pictior* Radoszkowski, 1872, Horae Entomol. Soc. Ross. 8(4): v, nomen nudum.
- Polistes foederata* Kohl, 1898, Ann. Naturh. Hofmus., Wien 13: 90.
- Polistes gallicus* var. *mongolicus* Buysson, 1911, Bull. Mus. Natl. Hist. Nat. 76: 218.
- Polistes foederata* var. *obscuricornis* Mader, 1936, Entomol. Z. 50(23): 263.
- Polistula omissa* Weyrauch, 1938, Arbeit. Physiol. Angewand. Entomol. Berlin-Dahlem 5: 277.
- Polistes omissus* var. *ordubadensis* Zirngiebl, 1955, Mitt. München Entomol. Ges. 44/45: 381.
- Polistes gallicus* var. *monogolicus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 28.
- Polistes omissus kaszabi* Giordani Soika, 1970, Ann. Hist.-Nat. Mus. Natl. Hung., Zool. 62: 327.
- Polistes foederatus albellus* Giordani Soika, 1976, Acta Zool. Acad. Sci. Hung. 22: 272.
- DISTRIBUTION: southern Europe; Ukraine; Russia; Armenia; Azerbaijan; Turkmenistan; Mongolia; China; Iran; Afghanistan; Turkey; Israel; northern Africa; Ethiopia – (Zimmermann, 1930, Mitt. Zool. Mus. Berlin 15; Liu, 1937, Peking Nat. Hist. Bull. 11(3): 313; Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion.; Gusenleitner, 1985, Nachrichtenbl. Bayer. Entomol. 34(4); Gusenleitner, 1991, Linzer Biol. Beitr. 23(2)).
- PO.
- indicus** Stolfa  
*Polistes indicus* Stolfa, 1934, Bol. Soc. Veneziana Stor. Nat. 1: 47.
- DISTRIBUTION: Afghanistan; Iran; Pakistan; United Arab Emirates; Oman – (Gusenleitner, 1972 (1971–72), Acta Mus. Morav. 56/57; Richards, 1985, Fauna Saudi Arabia 6).
- PO.
- iranus** Guiglia  
*Polistes iranus* Guiglia, 1976, Ann. Mus. Civ. Stor. Nat. Genova 81: 198, nomen nudum.
- Polistes iranus* Guiglia, 1977 (1976), Boll. Mus. Civ. Stor. Nat. Venezia 28: 99.
- DISTRIBUTION: Iran.
- PO.

***loveridgei*** Bequaert

*Polistes loveridgei* Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 135.

DISTRIBUTION: Tanzania; Ethiopia – (Giordani Soika, 1952, Riv. Biol. Colon. 11).

PO.

***macrocephalus*** Bequaert

*Polistes macrocephalus* Bequaert, 1918, Bull. Am. Mus. Nat. Hist. 39: 261.

DISTRIBUTION: Zaire.

PO.

***marginalis baidoensis*** Giordani Soika

*Polistes marginalis* var. *baidoensis* Giordani Soika, 1944, Atti Inst. Ven. Sci. Lett. Arti, Part II Cl. Sci. Mat. Nat. 103: 177.

DISTRIBUTION: Ethiopia; Somalia.

PO.

***marginalis lindensis*** Giordani Soika

*Polistes marginalis lindensis* Giordani Soika, 1981, Boll. Soc. Entomol. Ital. 113: 174.

DISTRIBUTION: Tanzania.

PO.

***marginalis marginalis*** (Fabricius)

*Vespa marginalis* Fabricius, 1775, Syst. Entomol.: 367.

*Polistes marginalis arabicus* Giordani Soika, 1957, Br. Mus. (Nat. Hist.) Exp. South-West Arabia 1937–8, 1(31): 482.

DISTRIBUTION: Saudi Arabia; Yemen; Somalia; Ethiopia; Tanzania; South Africa: Northern Transvaal, Orange Free State, Kwazulu-Natal, Western and Eastern Cape Prov.; Lesotho – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 142; Giordani Soika, 1952, Riv. Biol. Colon. 11; Giordani Soika, 1961, South Afr. Anim. Life 8; Das and Gupta, 1984, Orient. Insect. 17; Richards, 1985, Fauna Saudi Arabia 6).

PO.

***marginalis meruensis*** Giordani Soika

*Polistes marginalis meruensis* Giordani Soika, 1981, Boll. Soc. Entomol. Ital. 113: 173.

DISTRIBUTION: Kenya.

PO.

***mysteriosus*** Bequaert

*Polistes mysteriosus* Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 143.

DISTRIBUTION: Zaire.

PO.

***nimphus*** (Christ)

*Vespa nimpha* Christ, 1791, Naturgesch. Insect.: 232.

*Vespa diadema* Latreille, 1802, Ann. Mus. Hist. Nat. 1: 292, non Christ, 1791.

*Polistes opinabilis* Kohl, 1898, Ann. Naturh. Hofmus., Wien 13: 90.

*Polistes nimpha* [!]; Weyrauch, 1939, Arch. Naturgesch. (N. F.) 8: 145.

*Polistes nimpha* var. *Moltonii* Guiglia, 1944, Atti Soc. Ital. Sci. Nat. 83: 166.

*Polistes nimpha* var. *molotnii* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 33.

*Polistes nimpha irakensis* Gusenleitner, 1976, Nachrichtenbl. Bayer. Entomol. 25 (6): 119.

DISTRIBUTION: central and southern Europe; Madeiras; northern Africa; Israel; Turkey; Iraq; Azerbaijan; Iran; Pakistan; India: Jammu and Kashmir, Himachal Pradesh; Mongolia; China – (Zimmermann, 1930, Mitt. Zool. Mus. Berlin 15; Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion.; Das and Gupta, 1989, Orient. Insect. 11.; Yildirim and Özbek, 1993, Türk. Entomol. Derg. 17).

PO.

***ornatus*** Lepeletier

*Polistes ornata* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 531.

DISTRIBUTION: Liberia; Zaire; Kenya – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 143).

PO.

***riparius*** Yamane and Yamane

*Polistes riparius* Yamane and Yamane, 1987, Kontyû 55: 215.

DISTRIBUTION: Japan.

PO.

***semenowi*** Morawitz

*Polistes semenowi* Morawitz, 1889, Horae Entomol. Soc. Ross. 23: 552.

*Polistes semenowii* [!]; Dalla Torre, 1894, Cat. Hym. 9: 134.

*Pseudopolistes semenovi* [!]; Weyrauch, 1937, Zool. Jahrb. (Abt. Syst. Ökol. Geogr. Tiere) 70: 265.

DISTRIBUTION: southern Europe; northern Africa; Turkey; Iran; Turkmenistan – (Guig-

lia, 1972, Guêpes Soc. Europe Occident. Septentrion).

SU.

**sulcifer** Zimmermann

*Polistes sulcifer* Zimmermann, 1930, Mitt. Zool. Mus. Berlin 15: 610.

*Polistes sulcifera* [!]; Guiglia and Capra, 1933 (1932), Mem. Soc. Entomol. Ital. 11: 166.

*Pseudopolistes sulcifer* var. *similator* Zirn-giebl, 1955, Mitt. München. Entomol. Ges. 44/45: 384.

DISTRIBUTION: southern and central Europe; Madeiras; northern Africa; Egypt; Israel; Turkey; Iran – (Guiglia, 1972, Guêpes Soc. Europe Occident. Septentrion).

SU.

**tenellus lahejensis** Giordani Soika

*Polistes tenellus lahejensis* Giordani Soika, 1981, Boll. Soc. Entomol. Ital. 113: 175.

DISTRIBUTION: Yemen.

PO.

**tenellus minutissimus** Giordani Soika

*Polistes tenellus minutissimus* Giordani Soika, 1981, Boll. Soc. Entomol. Ital. 113: 174.

DISTRIBUTION: Ethiopia.

PO.

**tenellus tenellus** Buysson

*Polistes tenellus* Buysson, 1905, Bull. Soc. Entomol. France 1905: 256.

DISTRIBUTION: Liberia; Nigeria; Cameroon; Equatorial Guinea; Congo; Zaire – (Bequaert, 1938, Rev. Zool. Bot. Afr. 31: 150).

PO.

SUBGENUS *APHANILOPTERUS* MEUNIER

*Aphanilopterus* Meunier, 1888, Nat. Sicil. 7: 302, genus.

Type species: *Aphanilopterus vagabundus* Meunier, 1888 [= *Vespa lanio* Fabricius, 1775], by monotypy.

*Polistoides* Dalla Torre, 1904, Genera Insect. 19: 68, name for division II of genus *Polistes* Latreille in Saussure, 1854, Ét. Fam. Vesp. 2: 100. Non *Polistoides* Loew, 1873 (Diptera).

Type species: *Polistes subsericeus* Saussure, 1854, by monotypy.

*Onerarius* Richards, 1973, Rev. Bras. Ento-

mol. 17: 91, 94, 101, subgenus of *Polistes* Latreille.

Type species: *Vespa carnifex* Fabricius, 1775, by original designation.

*Fuscopolistes* Richards, 1973, Rev. Bras. Entomol. 17: 91, 95, 100, subgenus of *Polistes* Latreille.

Type species: *Vespa fuscata* Fabricius, 1793, by original designation.

*Polistarchus* Richards, 1973, Rev. Bras. Entomol. 17: 94, 95, 101, subgenus of *Polistes* Latreille.

Type species: *Vespa canadensis* Linnaeus, 1758, by original designation.

*Palisotius* Richards, 1973, Rev. Bras. Entomol. 17: 95, 96, 100, subgenus of *Polistes* Latreille.

Type species: *Polistes major* Palisot de Beauvois, 1818, by original designation.

*Epicnemius* Richards, 1973, Rev. Bras. Entomol. 17: 96, 102, subgenus of *Polistes* Latreille.

Type species: *Polistes bicolor* Lepeletier, 1836, by original designation.

**actaeon** Haliday

*Polistes actaeon* Haliday, 1836, Trans. Linn. Soc. London 17: 323.

*Polistes acteon* [!]; Saussure, 1854, Ét. Fam. Vesp. 2: 98.

*Polistes limai* von Ihering, 1903, Ann. Soc. Entomol. France 72: 145.

DISTRIBUTION: Brazil; Paraguay; Argentina: Misiones – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**adelphus** Richards

*Polistes adelphus* Richards, 1978, Soc. Wasps. Am.: 501.

DISTRIBUTION: Colombia; Ecuador.

A, group 2.

**angulinus** Richards

*Polistes erythrogaster* var. *angulinus* Richards, 1951, in Richards and Richards, Trans. R. Entomol. Soc. London 102: 92.

DISTRIBUTION: Guyana.

E, group 3.

**annularis** (Linnaeus)

*Vespa annularis* Linnaeus, 1763, Amoenitat. Acad. 6: 413.

*Vespa cincta* Drury, 1773, *Illus. Nat. Hist.* 2: index to vol. 1.

*Vespa virginiensis* [!]; Dalla Torre, 1894, *Cat. Hym.* 9: 122.

*Vespa annulata* [!]; Dalla Torre, 1894, *Cat. Hym.* 9: 123.

*Polistes annuralis* [!]; Yamane, 1969, *J. Fac. Sci., Hokkaido Univ., Ser. VI, Zool.* 17: 79.

DISTRIBUTION: U.S.A.: Massachusetts to Florida, west to South Dakota, south to Texas – (Richards, 1978, *Soc. Wasps. Am.*).

A, group 1.

***apachus* Saussure**

*Polistes apachus* Saussure, 1857, *Ann. Soc. Entomol. France* (3)5: 314.

*Polistes texanus* Cresson, 1872, *Trans. Am. Entomol. Soc.* 4: 246.

DISTRIBUTION: U.S.A.: Kansas to Colorado, south to Texas, occasionally Iowa, California, Florida; Mexico: Baja California, Nuevo León, San Luis Potosí, Coahuila, Sonora, Durango – (Richards, 1978, *Soc. Wasps. Am.*; Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*).

F

***apicalis* Saussure**

*Polistes apicalis* Saussure, 1858, *Rev. Mag. Zool.* (2)10: 260.

DISTRIBUTION: Mexico: Veracruz, Chiapas; Belize; Guatemala; Honduras; Costa Rica; French Guiana – (Richards, 1978, *Soc. Wasps. Am.*; West-Eberhard et al., 1995, *in* Hanson and Gauld, *Hym. Costa Rica*).

A, group 3.

***arizonensis* Snelling**

*Polistes exclamans arizonensis* Snelling, 1954, *J. Kans. Entomol. Soc.* 27: 152.

DISTRIBUTION: U.S.A.: Arizona, California; Mexico: Sonora – (Krombein et al., 1958, *Hym. Am. N. of Mexico Suppl.*).

A, group 5.

***aterrimus* Saussure**

*Polistes aterrimus* Saussure, 1853, *Ét. Fam. Vesp.* 2: 73.

DISTRIBUTION: Costa Rica; Colombia; Ecuador; Peru; Venezuela; Bolivia – (Richards, 1978, *Soc. Wasps. Am.*; West-Eberhard et al., 1995, *in* Hanson and Gauld, *Hym. Costa Rica*).

A, group 1.

***atrox* Richards**

*Polistes atrox* Richards, 1978, *Soc. Wasps. Am.*: 542.

DISTRIBUTION: Brazil: Pará.

E, group 3.

***aurifer* Saussure**

*Polistes aurifer* Saussure, 1853, *Ét. Fam. Vesp.* 2: 78.

*Polistes anaheimensis* Provancher, 1888, *Addit. Corr. Faune Entomol. Can., Hym.*: 423.

*Polistes fuscatus* var. *utahensis* Hayward, 1933, *Proc. Utah Acad. Sci.* 10: 142.

*Polistes fuscatus vtriatius* [!]; Hayward, 1933, *Proc. Utah Acad. Sci.* 10: 142.

*Polistes fuscatus* var. *centralis* Hayward, 1933, *Proc. Utah Acad. Sci.* 10: 143.

*Polistes fuscatus* var. (or subsp.) *connectens* Bequaert, 1940, *J. New York Entomol. Soc.* 48: 21.

*Polistes fuscatus* var. (or subsp.) *montanus* Bequaert, 1940, *J. New York Entomol. Soc.* 48: 26.

DISTRIBUTION: Canada: Alberta, British Columbia; U. S. A.: Montana to Washington, south to California, Arizona, New Mexico, Texas; Mexico: Baja California, Sonora, Chihuahua, Coahuila; introduced U.S.A.: Hawaii, Society Is.: Bora Bora, Raiatea, Tahiti – (Richards, 1978, *Soc. Wasps. Am.*; MacLean et al., 1978, *Great Lakes Entomol.* 11; Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*).

F

***bahamensis* Bequaert and Salt**

*Polistes bahamensis* Bequaert and Salt, 1931, *Ann. Entomol. Soc. Am.* 24: 793.

*Polistes bahamensis* var. *bilineolatus* Bequaert and Salt, 1931, *Ann. Entomol. Soc. Am.* 24: 796.

*Polistes bahamensis* var. *picturatus* Bequaert and Salt, 1931, *Ann. Entomol. Soc. Am.* 24: 797.

*Polistes exclamans* var. (or subsp.) *louisianus* Bequaert, 1940, *J. New York Entomol. Soc.* 48: 14.

DISTRIBUTION: U.S.A.: Florida to Louisiana; Bahamas – (Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*; Snelling, 1983, *Pan-Pacif. Entomol.* 59).

A, group 5.

**bellicosus** Cresson

*Polistes bellicosus* Cresson, 1872, Trans. Am. Entomol. Soc. 4: 247.

DISTRIBUTION: North Carolina to Florida, west to Texas – (Richards, 1978, Soc. Wasps. Am.).

F

**bequaertellus** Snelling

*Polistes bequaertellus* Snelling, 1983, Pan-Pacif. Entomol. 59: 269.

DISTRIBUTION: El Salvador.

A, group 5.

**bequaertianus** Willink

*Polistes bequaertiana* Willink, 1954, Acta Zool. Lilloana 14: 255.

DISTRIBUTION: Argentina: Misiones.

E, group 3.

**bicolor** Lepeletier

*Polistes bicolor* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 521.

*Polistes deuteroleucus* Ducke, 1906, Rev. Entomol., Caen 25: 10.

*Polistes bicolor* var. *unicolor* Ducke, 1908, Deutsch. Entomol. Z. 6: 700, non Lepeletier, 1836.

*Polistes sosia* Bequaert, 1937, Arch. Inst. Biol. Veg. 3: 190.

*Polistes duckei* Bequaert, 1937, Arch. Inst. Biol. Veg. 3: 192. Replacement name for *bicolor* var. *unicolor* Ducke, 1908, non Lepeletier, 1836.

DISTRIBUTION: Costa Rica; Panama; Colombia; Ecuador; Peru; Venezuela; Suriname; French Guiana; Brazil: Amapá, Pará, Amazonas, Acre, Mato Grosso, Minas Gerais – (Richards, 1978, Soc. Wasps Am.; West-Eberhard et al., 1995, in Hansson and Gauld, Hym. Costa Rica).

E, group 1.

**biguttatus** Haliday

*Polistes biguttatus* Haliday, 1836, Trans. Linn. Soc. London 17: 323.

? *Polistes bipustulatus* [!]; Smith, 1875, Entomol. Mon. Mag. 12: 156.

*Polistes bipustulstus* [!]; Yoshikawa, 1962, J. Biol., Osaka City Univ. 13: 22.

DISTRIBUTION: Brazil: Rio de Janeiro to Rio Grande do Sul – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

**billardieri biglumoides** Ducke

*Polistes biglumoides* Ducke, 1904, Bol. Mus. Goeldi, Pará 4: 369.

DISTRIBUTION: Colombia; Peru; Venezuela; Brazil: Amapá, Pernambuco, to São Paulo, Matto Grosso; Bolivia – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**billardieri billardieri** Fabricius

*Polistes billardieri* Fabricius, 1804, Syst. Piez.: 274.

*Polistes ruficornis* var. *demeraraensis* Bequaert, 1937, Arch. Inst. Biol. Veg. 3: 181.

DISTRIBUTION: Colombia; Guyana; Suriname; Brazil: Roraima, Amazonas, Mato Grosso – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**billardieri ruficornis** Saussure

*Polistes ruficornis* Saussure, 1853, Ét. Fam. Vesp. 2: 85.

DISTRIBUTION: Brazil: Goiás, Minas Gerais, São Paulo, Mato Grosso, Paraná, Rio Grande do Sul; Paraguay; Uruguay; Argentina: Misiones to Salta; Bolivia – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**binotatus** Saussure

*Polistes binotatus* Saussure, 1853, Ét. Fam. Vesp. 2: 87.

DISTRIBUTION: Brazil: Rio de Janeiro – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

**boharti** Snelling

*Polistes boharti* Snelling, 1983, Pan-Pacif. Entomol. 59: 272.

DISTRIBUTION: Mexico: Sinaloa, Nayarit, Guerrero, Colima, Oaxaca, Veracruz.

E, group 3.

**brevifissus** Richards

*Polistes brevifissus* Richards, 1978, Soc. Wasps Am.: 481.

DISTRIBUTION: Brazil: Amapá, Roraima, Pará, Mato Grosso, Bahia to Rio Grande do Sul; Argentina: Buenos Aires.

A, group 1.

**buyssoni** Brèthes

*Polistes cavapyta* var. *thoracica* Buysson, 1906, Entomol. Medd. 3: 19, non Fox, 1898.

*Polistes cavapyta* var. *buyssoni* Brèthes,



- 1909, An. Mus. Nac. Hist. Nat. Buenos Aires (3)17: 456. Replacement name for *cavapyta* var. *thoracica* Buysson, 1906, non Fox, 1898.
- DISTRIBUTION: Bolivia; Argentina: Jujuy to Rio Negro; introduced Chile – (Willink, 1952, Acta Zool. Lilloana 10; Pérez-D'Angello, 1970, Not. Mens. Mus. Nac. Hist. Nat. 15(169); Willink and Chiappa, 1993, Acta Entomol. Chil. 18).
- A, group 1.
- canadensis borientalis*** Richards  
*Polistes canadensis borientalis* Richards, 1978, Soc. Wasps Am.: 494.
- DISTRIBUTION: Brazil: Rio Grande do Norte, Paraíba, Pernambuco, Bahia.
- A, group 1.
- canadensis canadensis*** (Linnaeus)  
*Vespa canadensis* Linnaeus, 1758, Syst. Nat.: 574.
- “*Vespa crabro marribous* Linn.” Christ, 1791, Naturgesch. Insect.: 217.
- ? *Polistes urceolata* “Klug” Erichson, 1848, in Schomburgk, Reisen Br.-Guiana III: 590.
- ? *Polistes urceolicus* [!]; Dalla Torre, 1904, Genera Insect. 19: 71.
- Polistes unicolor* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 520.
- Polistes panamensis* Holmgren, 1868, K. enska Fregat. Eugenies Resa Omkring Jordan, Zool. 1, Insect., Hym.: 439.
- Polistes canadensis* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 26.
- Polistes canadiensis* [!]; Maes, 1988, Rev. Nicarag. Entomol. 5: 39.
- DISTRIBUTION: U.S.A.: Arizona; Mexico: Sonora, Tamaulipas, Nayarit to Oaxaca; Guatemala; El Salvador; Honduras; Costa Rica; Panama; Colombia; Peru; Venezuela; Guyana; Suriname; French Guiana; Brazil: Amazonas to Pará, Bahia and Mato Grosso south to São Paulo; Bolivia; Paraguay; Argentina: Corrientes, Misiones, Tucumán – (Bequaert, 1944, Bull. Mus. Comp. Zool. 94; Richards, 1978, Soc. Wasps Am.).
- A, group 1.
- candidoi*** von Ihering  
*Polistes candidoi* von Ihering, 1903, Ann. Soc. Entomol. France 72: 144.
- DISTRIBUTION: Bolivia.  
 E, group 3.
- carnifex boliviensis*** Bequaert  
*Polistes carnifex* var. *boliviensis* Bequaert, 1936, Rev. Entomol., Rio de Janeiro 6: 381.
- DISTRIBUTION: Colombia; Peru; Bolivia – (Richards, 1978, Soc. Wasps Am.).
- O.
- carnifex carnifex*** (Fabricius)  
*Vespa carnifex* Fabricius, 1775, Syst. Entomol.: 365.
- ? *Polistes variegata* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 523.
- Polistes onerata* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 524.
- Polistes valida* Say, 1837, Boston J. Nat. Hist. 1: 389.
- Polistes transverso-strigata* Spinola, 1851, preprint of Mem. R. Accad. Sci. Torino (2) 13: 62.
- Polistes transversosignatus* [!]; Saussure, 1853, Ét. Fam. Vesp. 2: 90.
- Polistes transversesignata* [!]; Schulz, 1906, Spolia Hym.: 226.
- Polistes transversignatus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 23.
- DISTRIBUTION: U.S.A.: Arizona, Texas; Mexico; Belize; Guatemala; Honduras; Nicaragua; Costa Rica; Panama; Colombia; Ecuador; Peru; Brazil: Pernambuco to Amazonas, south to Rio Grande do Sul; Guyana; Suriname; Paraguay; Argentina: Misiones; introduced U.S.A.: Hawaii – (Richards, 1978, Soc. Wasps Am.; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico; Nishida, 1992, Hawaiian Terr. Arth. Checklist; West-Eberhard et al., 1995, in Hanson and Gauld, Hym. Costa Rica).
- O.
- carnifex rufipennis*** Latreille  
*Polistes rufipennis* Latreille, 1817, in Humboldt and Bonpland, Voyage, Zool. 2, Insect. 2: 97.
- Polistes chlorostoma* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 521.
- Polistes transverso-strigata* var. *ochreata* “KL.” Spinola, 1851, Mem. R. Accad. Sci. Torino (2)13: 63.
- DISTRIBUTION: Honduras; Colombia; Trini-

dad; Tobago; Suriname; French Guiana – (Bequaert, 1944, Bull. Mus. Comp. Zool. 94; Richards, 1978, Soc. Wasps Am.).

O.

**carolina** (Linnaeus)

*Vespa carolina* Linnaeus, 1767, Syst. Nat., Ed. 12, 1(2): 948.

*Vespa nigripennis* DeGeer, 1773, Mem. Hist. Insect. 3: 582, pl. 29 fig. 10.

*Polistes rubiginosa* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 524.

*Polistes ruginosus* [!]; Gowdey, 1926, Entomol. Bull., Dept. Agric. Jamaica 4: 95.

*Polistes rubigenosus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 35.

DISTRIBUTION: U.S.A.: New York to Florida, west to Kansas and Texas; introduced Bermuda – (Richards, 1978, Soc. Wasps Am.; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

F.

**cavapyta** Saussure

*Polistes cavapyta* Saussure, 1853, Ét. Fam. Vesp. 2: 87.

DISTRIBUTION: Brazil: Rio Grande do Sul; Paraguay; Uruguay; Argentina: Misiones to Jujuy, south to Buenos Aires – (Willink, 1952, Acta Zool. Lilloana 10; Willink and Chiappa, 1993, Acta Entomol. Chil. 18).

A, group 1.

**cavapytiformis** Richards

*Polistes cavapytiformis* Richards, 1978, Soc. Wasps Am.: 481.

DISTRIBUTION: Brazil: Paraná to Rio Grande do Sul.

A, group 1.

**cinerascens** Saussure

*Polistes cinerascens* Saussure, 1854, Ét. Fam. Vesp. 2: 99.

*Polistes orbitalis* Kirby, 1888, Ann. Mag. Nat. Hist. (6)2: 143.

DISTRIBUTION: Ecuador; Brazil: Bahia to Mato Grosso and Santa Catarina; Bolivia; Paraguay; Uruguay; Argentina: Misiones and Jujuy to Buenos Aires – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**claripennis** Ducke

*Polistes claripennis* Ducke, 1904, Bol. Mus. Goeldi, Pará 4: 370.

*Polistes synoecoides* Ducke, 1907, Bol. Mus. Goeldi, Pará 5: 196.

DISTRIBUTION: Brazil: Pará, Amazonas; Peru – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

**comanchus comanchus** Saussure

*Polistes comanchus* Saussure, 1857, Ann. Soc. Entomol. France (3)5: 314.

*Polistes commanchus* [!]; Richards, 1978, Soc. Wasps Am.: 485.

DISTRIBUTION: U.S.A.: Texas, New Mexico; Mexico: Coahuila, Durango – (Richards, 1978, Soc. Wasps Am.; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

A, group 1.

**comanchus navajoe** Cresson

*Polistes navajoe* Cresson, 1868, Trans. Am. Entomol. Soc. 1: 383.

*Polistes novajoe* [!]; Dalla Torre, 1894, Cat. Hym. 9: 132.

*Polistes novajae* [!]; Dalla Torre, 1894, Cat. Hym. 9: 177.

DISTRIBUTION: U.S.A.: Texas to Arizona, California; Mexico: Sonora, Chihuahua, Durango, Sinaloa – (Richards, 1978, Soc. Wasps Am.: 485; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

A, group 1.

**consobrinus** Saussure

*Polistes consobrinus* Saussure, 1858, Rev. Mag. Zool. (2)10: 259.

DISTRIBUTION: Brazil: Paraná, Rio Grande do Sul; Paraguay; Uruguay; Argentina: Buenos Aires, Corrientes, Entre Rios, Santa Fé – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

**crinitus americanus** (Fabricius)

*Vespa americana* Fabricius, 1775, Syst. Entomol.: 370.

*Polistes madoci* Kirby, 1884, Ann. Mag. Nat. Hist. (5)13: 411.

*Polistes madocii* [!]; Yoshikawa, 1962, J. Biol., Osaka Univ. 13: 30.

DISTRIBUTION: Puerto Rico; Mona Is.; St. Thomas – (Richards, 1978, Soc. Wasps Am.).

A, group 5.

***crinitus crinitus*** (Felton)

*Vespa crinita* Felton, 1765 (1764), Philos. Trans. R. Soc. London 54: 54.

*Vespa tricolor* Fabricius, 1775, Syst. Entomol.: 369, non Pallas, 1771.

*Polistes media* Palisot de Beauvois, 1818, Insect. Recueill. Afrique Amérique, livr. 12: 207.

DISTRIBUTION: Jamaica; Dominican Republic; Montserrat – (Schulz, 1906, Spolia Hym.; Richards, 1978, Soc. Wasps Am.).

A, group 5.

***crinitus multicolor*** (Olivier)

*Vespa multicolor* Olivier, 1792, Encyc. Méthod. 6: 691.

? *Vespa dominicensis* Vallot, 1802, Concord. Syst.: 168.

*Polistes crinitus* var. *insulicola* Bequaert and Salt, 1931, Ann. Entomol. Soc. Am. 24: 793.

DISTRIBUTION: Guadeloupe; St. Croix; St. Barthélemy; St. Kitts; Anguilla; Nevis; Montserrat; Antigua; Dominica – (Sausure, 1854, Ét. Fam. Vesp. 2; Richards, 1978, Soc. Wasps Am.).

A, group 5.

***cubensis*** Lepeletier

*Polistes cubensis* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 526.

DISTRIBUTION: Cuba; introduced Venezuela – (Richards, 1978, Soc. Wasps Am.).

A, group 5.

***davillae*** Richards

*Polistes davillae* Richards, 1978, Soc. Wasps Am.: 540.

DISTRIBUTION: Brazil: Amazonas, Mato Grosso.

E, group 3.

***deceptor*** Schulz

*Polistes deceptor* Schulz, 1905, Hym.-Studien: 119.

*Polistes rhodostoma* Ducke, 1905, Rev. Entomol., Caen 24: 23.

DISTRIBUTION: Panama; Ecuador; Peru; Guyana; Suriname; Brazil: Amazonas, Pará, São Paulo; Bolivia; Paraguay; Argentina: Misiones – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***dominicus*** (Vallot)

*Vespa dominica* Vallot, 1802, Concord. Syst.: 168.

*Polistes cincta* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 522, non Drury, 1773.

*Polistes cinctus barbadosis* Richards, 1978, Soc. Wasps Am.: 479.

DISTRIBUTION: St. Kitts; Montserrat; Martinique; Barbados; Santa Lucia; St. Vincent; Mustique Is.; Carriacou Is.; Trinidad – (Snelling, 1983, Pan-Pacif. Entomol. 59).

A, group 1.

***dorsalis californicus*** Bohart

*Polistes hunteri californicus* Bohart, 1949, Pan-Pacif. Entomol. 25: 101.

DISTRIBUTION: U.S.A.: California, Arizona; Mexico: Baja California, Chihuahua, Sonora, Sinaloa – (Richards, 1978, Soc. Wasps. Am.).

F

***dorsalis clarionensis*** Bohart

*Polistes hunteri clarionensis* Bohart, 1949, Pan-Pacif. Entomol. 25: 102.

DISTRIBUTION: Mexico: Revilla Gigedo group and Clarion Is.

F

***dorsalis dorsalis*** (Fabricius)

*Vespa dorsalis* Fabricius, 1775, Syst. Entomol.: 367.

*Polistes fuscatus* (var. or subsp.) *hunteri* Bequaert, 1940, J. New York Entomol. Soc. 48: 23.

DISTRIBUTION: U.S.A.: Virginia to Florida, west to Arizona; Mexico: San Luis Potosí, Sonora, Nayarit, D. F., Morelos, Guerrero; Jamaica – (van der Vecht, 1970, Proc. K. Ned. Akad. Wet (ser. C) 73; Richards, 1978, Soc. Wasps. Am.).

F

***dorsalis maritimus*** Bequaert

*Polistes fuscatus* var (or subsp.) *maritimus* Bequaert, 1940, J. New York Entomol. Soc. 48: 25.

DISTRIBUTION: Bahamas: Andros Is.

F

***dorsalis neotropicus*** Bequaert

*Polistes fuscatus* var (or subsp.) *neotropicus* Bequaert, 1940, J. New York Entomol. Soc. 48: 28.

DISTRIBUTION: U.S.A.: Colorado, New Mex-

ico, Texas; Mexico: Veracruz, Oaxaca; Guatemala; Honduras; Costa Rica – (Bohart, 1949, Pan-Pacif. Entomol. 25; van der Vecht, 1970, Proc. K. Ned. Akad. Wet (ser. C) 73; Richards, 1978, Soc. Wasps Am.).

F

***eburneus*** Bequaert

*Polistes canadensis* var. (or subsp.) *eburneus* Bequaert, 1943, Bol. Entomol. Venezolana 2: 118.

DISTRIBUTION: Paraguay.

A, group 2.

***erythrocephalus*** Latreille

*Polistes erythrocephala* Latreille, 1813, in Humboldt and Bonpland, Voyage, Zool. 2, Insect. 2: 96.

DISTRIBUTION: Nicaragua; Costa Rica; Panama; Colombia; Ecuador; Peru; Bolivia; Brazil: Pará to Acre, south to Paraná – (Richards, 1978, Soc. Wasps Am.).

A, group 1.

***exclamans*** Viereck

*Polistes exclamans* Viereck, 1906, Trans. Am. Entomol. Soc. 32: 201.

*Polistes exclamans durangoensis* Snelling, 1955, Am. Mus. Novitates 1701: 7.

*Polistes instabilis coahuilae* Richards, 1978, Soc. Wasps Am.: 510.

DISTRIBUTION: U.S.A.: New Jersey to Florida, west to Nebraska, Colorado, Texas; Mexico: Chihuahua to Jalisco, Hidalgo; introduced U.S.A.: Hawaii – (Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico; Snelling, 1983, Pan-Pacif. Entomol. 59; Nishida, 1992, Hawaiian Terr. Arth. Checklist).

A, group 5.

***ferreri*** Saussure

*Polistes ferreri* Saussure, 1853, Ét. Fam. Vesp. 2: 77.

DISTRIBUTION: Brazil: Bahia to Rio Grande do Sul, Mato Grosso; Bolivia; Uruguay; Argentina: Buenos Aires, Tucumán – (Richards, 1978, Soc. Wasps Am.).

A, group 1.

***flavus*** Cresson

*Polistes flavus* Cresson, 1868, Trans. Am. Entomol. Soc. 1: 383.

DISTRIBUTION: U.S.A.: California (southern),

Nevada to Colorado, Arizona to Texas (western); Mexico: Sonora, Chihuahua, Coahuila – (Richards, 1978, Soc. Wasps Am.; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

F

***franciscanus*** Richards

*Polistes franciscanus* Richards, 1978, Soc. Wasps Am.: 521.

DISTRIBUTION: Guatemala.

A, group 5.

***fuscatus*** (Fabricius)

? *Vespa tibialis* Olivier, 1792, Encyc. Méthod. Insect. 6: 690, non Gmelin, 1790.

*Vespa fuscata* Fabricius, 1793, Entomol. Syst. 2: 260.

*Vespa nestor* Fabricius, 1798, Suppl. Entomol. Syst.: 262.

*Polistes pallipes* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 530.

*Polistes exilis* Saussure, 1853, Ét. Fam. Vesp. 2: 85.

*Polistes variatus* Cresson, 1872, Trans. Am. Entomol. Soc. 4: 247.

*Polistes fortunatus* Kirby, 1884, Ann. Mag. Nat. Hist. (5)13: 410.

*Polistes pallidipes* Dalla Torre, 1894, Cat. Hym. 9: 133, unnecessary emendation.

*Polistes fuscatus* var. (or subsp.) *laurentianus* Bequaert, 1942, Can. Entomol. 74: 159.

*Polistes varistus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 27.

DISTRIBUTION: Canada; U.S.A.: Maine south to Florida, west to Nebraska, south to Texas; Bermuda; Jamaica; Barbados; introduced Cape Verde Is.; Ascension Is. – (Richards, 1978, Soc. Wasps Am.; MacLean et al., 1978, Great Lakes Entomol. 11; Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

Note: *Vespa tibialis* Olivier was described from Georgia, and has remained unrecognized; the description may correspond to a dark specimen of *fuscatus*.

F

***geminatus geminatus*** Fox

*Polistes geminatus* Fox, 1898, Proc. Acad. Nat. Sci. Philadelphia 1898: 448.

*Polistes gaminatus* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 28.

DISTRIBUTION: French Guiana; Brazil: Pará,

Minas Gerais, Goiás, Mato Grosso, São Paulo – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***geminatus guyanensis*** Cameron

*Polistes guyanensis* Cameron, 1912, *Timehri* 2: 221.

DISTRIBUTION: Guyana.

E, group 3.

***goeldii*** Ducke

*Polistes goeldii* Ducke, 1904, *Bol. Mus. Goeldi*, Pará 4: 368.

DISTRIBUTION: El Salvador; Costa Rica; Colombia; Ecuador; Peru; Brazil: Pará, Amazonas, Mato Grosso – (Richards, 1978, Soc. Wasps Am.; West-Eberhard et al., 1995, *in* Hanson and Gauld, *Hym. Costa Rica*).

A, group 6.

***huacapistana*** Richards

*Polistes huacapistana* Richards, 1978, Soc. Wasps Am.: 496.

DISTRIBUTION: Peru.

A, group 1.

***incertus*** Cresson

*Polistes incertus* Cresson, 1865, *Proc. Entomol. Soc. Philadelphia* 4: 166.

DISTRIBUTION: Cuba, Is. de la Juventud; Haiti; Dominican Republic; Tortuga Is. – (Richards, 1978, Soc. Wasps Am.).

A, group 5.

***infuscatus anduzei*** Bequaert

*Polistes canadensis* var. (or subsp.) *anduzei* Bequaert, 1943, *Bol. Entomol. Venezolana* 2: 114.

DISTRIBUTION: Venezuela; Peru – (Richards, 1978, Soc. Wasps Am.).

A, group 1.

***infuscatus ecuadorius*** Richards

*Polistes infuscatus ecuadorius* Richards, 1978, Soc. Wasps Am.: 484.

DISTRIBUTION: Ecuador; Colombia.

A, group 1.

***infuscatus infuscatus*** Lepeletier

*Polistes infuscata* Lepeletier, 1836, *Hist. Nat. Insect. Hym.* 1: 520.

*Polistes canadensis amazonicus* Schulz, 1905, *Hym.-Studien*: 113.

DISTRIBUTION: Costa Rica; Panama; Colom-

bia; Venezuela; Guyana; Suriname; French Guiana; Ecuador; Peru; Brazil: Pará – (Schulz, 1905, *Hym.-Studien*; Bequaert, 1944, *Bull. Mus. Comp. Zool.* 94; Richards, 1978, Soc. Wasps Am.; West-Eberhard et al., 1995, *in* Hanson and Gauld, *Hym. Costa Rica*).

A, group 1.

***infuscatus mariae*** Richards

*Polistes infuscatus mariae* Richards, 1978, Soc. Wasps Am.: 484.

DISTRIBUTION: Colombia.

A, group 1.

***infuscatus metensis*** Richards

*Polistes infuscatus metensis* Richards, 1978, Soc. Wasps Am.: 484.

DISTRIBUTION: Colombia.

A, group 1.

***instabilis*** Saussure

*Polistes instabilis* Saussure, 1853, *Ét. Fam. Vesp.* 2: 91, pl. X fig. 2, pl. XI fig. 1.

*Polistes instbailis* [!]; Yoshikawa, 1962, *J. Biol.*, Osaka Univ. 13: 24.

DISTRIBUTION: Mexico: Sonora and Tamaulipas to Yucatán; Belize; Guatemala; Honduras; Nicaragua; Costa Rica; ? introduced U.S.A.: southern Texas – (Snelling, 1974, *Proc. Entomol. Soc. Washington* 76; Richards, 1978, Soc. Wasps Am.).

A, group 3.

***kaibabensis*** Hayward

*Polistes canadensis* var. *kaibabensis* Hayward, 1932, *Proc. Utah Acad. Sci.* 9: 89.

DISTRIBUTION: U.S.A.: Arizona (Grand Canyon), southern Utah – (Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*).

A, group 1.

***lanio lanio*** (Fabricius)

*Vespa lanio* Fabricius, 1775, *Syst. Entomol.* 365.

*Aphanilopterus vagabundus* Meunier, 1888, *Nat. Sicil.* 7: 302.

*Polistes canadensis trinitatis* Giordani Soika, 1965, *Boll. Entomol. Soc. Ital.* 95: 27, non Bequaert, 1937.

*Polistes lanio soikai* Richards, 1978, Soc. Wasps Am.: 490, non Zirngiebl, 1955. Replacement name for *canadensis trinitatis*

- Giordani Soika, 1965, non Bequaert, 1937.  
NEW STATUS.
- Polistes* “*efoveatus* Richards” Almeida and Castro, 1991, *Acta Biol. Par.*, Curitiba 20: 50, nomen nudum.
- DISTRIBUTION: Colombia; Peru; Trinidad; Guyana; Brazil: Amapá to Acre, Pará to Rio Grande do Sul; Bolivia; Paraguay; Argentina: Corrientes, Misiones – (Richards, 1978, *Soc. Wasps Am.*).
- Note: Because the name *soikai* is preoccupied in *Polistes*, I am treating Richards’ name as a synonym of nominotypical *lanio*.
- A, group 1.
- lanio satanulus*** Bequaert  
*Polistes canadensis* var. (or subsp.) *satanulus* Bequaert, 1940, *Entomol. News* 51: 82.  
DISTRIBUTION: Brazil: Santa Catarina.  
A, group 1.
- lanio weberi*** Bequaert  
*Polistes canadensis* var. (or subsp.) *weberi* Bequaert, 1940, *J. New York Entomol. Soc.* 48: 12.  
DISTRIBUTION: Venezuela.  
A, group 1.
- lineonotus*** Bohart  
*Polistes exclamans lineonotus* Bohart, 1949, *Pan-Pacif. Entomol.* 25: 98.  
DISTRIBUTION: Mexico: Baja California – (Snelling, 1983, *Pan-Pacif. Entomol.* 59).  
A, group 5.
- major bonaccensis*** Bequaert  
*Polistes major* var. *bonaccensis* Bequaert, 1937, *Arch. Inst. Biol. Veg.* 3: 174.  
DISTRIBUTION: Honduras: Bonacca Is.  
PA.
- major castaneicolor*** Bequaert  
*Polistes major* var. *castaneicolor* Bequaert, 1936, *Entomol. News* 47: 12.  
DISTRIBUTION: U.S.A.: southern Arizona, New Mexico; Mexico: Baja California, Sonora, Chihuahua, Jalisco – (Richards, 1978, *Soc. Wasps Am.*; Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*).  
PA.
- major colombianus*** Bequaert  
*Polistes major* var. (or subsp.) *colombianus* Bequaert, 1940, *Entomol. News* 51: 80.  
DISTRIBUTION: Colombia.  
PA.
- major major*** Palisot de Beauvois  
*Polistes major* Palisot de Beauvois, 1818, *Insect. Recueill. Afrique Amérique*, livr. 12: 206.
- Polistes maior* [!]; Schulz, 1906, *Spolia Hym.*: 227.
- Polistes major* var. (or subsp.) *bakeri* Bequaert, 1940, *J. New York Entomol. Soc.* 48: 15.
- DISTRIBUTION: U.S.A.: southern Arizona, New Mexico, Texas, Florida; Cuba; Bahamas; Navassa Is.; Dominican Republic; Jamaica; Mexico; Guatemala, El Salvador; Honduras; Nicaragua; Costa Rica; Venezuela; Trinidad; Brazil: Pará, Amazonas, Espírito Santo, São Paulo, Mato Grosso; ? introduced Puerto Rico – (Richards, 1978, *Soc. Wasps Am.*; Krombein, 1979, *in* Krombein et al., *Cat. Hym. Am. N. of Mexico*; West-Eberhard et al., 1995, *in* Hanson and Gauld, *Hym. Costa Rica*).  
PA.
- major weyrauchi*** Bequaert  
*Polistes major* var. (or subsp.) *weyrauchi* Bequaert, 1940, *Entomol. News* 51: 79.  
DISTRIBUTION: Panama; Colombia; Venezuela; Peru – (Richards, 1978, *Soc. Wasps Am.*).  
PA.
- maranonensis*** Willink  
*Polistes versicolor* var. *flavescens* Weyrauch, 1943, *Bol. Mus. Hist. Nat. “Javier Prado”* 7: 71, nomen nudum.  
*Polistes maranonensis* Willink, 1964, *Acta Zool. Lilloana* 20: 16.  
DISTRIBUTION: Peru – (Richards, 1978, *Soc. Wasps Am.*).  
A, group 2.
- melanosoma*** Saussure  
*Polistes melanosoma* Saussure, 1853, *Ét. Fam. Vesp.* 2: 76.  
DISTRIBUTION: Guyana; Brazil: Espírito Santo to Rio Grande do Sul; Paraguay; Argentina: Misiones – (Bequaert, 1937, *Arch. Inst. Biol. Veg.* 3; Bequaert, 1944, *Bull. Mus. Comp. Zool.* 94; Richards, 1978, *Soc. Wasps Am.*).  
E, group 3.

***melanotus* Richards**

*Polistes melanotus* Richards, 1978, Soc. Wasps Am.: 487.

DISTRIBUTION: Colombia.

A, group 1.

***metricus* Say**

*Polistes metrica* Say, 1831, Am. Entomol.: 15.

DISTRIBUTION: U.S.A.: New York to Florida, west to Nebraska, south to Texas – (Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

F

***mexicanus* Bequaert**

*Polistes canadensis* var. (or subsp.) *mexicanus* Bequaert, 1940, J. New York Entomol. Soc. 48: 10.

*Polistes canadensis* var. (or subsp.) *wheeleri* Bequaert, 1940, J. New York Entomol. Soc. 48: 12.

DISTRIBUTION: Mexico: Sonora, Veracruz, Puebla, D. F., Morelos, Guerrero, Oaxaca – (Snelling, 1974, Proc. Entomol. Soc. Washington 76; Richards, 1978, Soc. Wasps Am.).

A, group 1.

***minor* Palisot de Beauvois**

*Polistes minor* Palisot de Beauvois, 1818, Insect. Recueill. Afrique Amérique, livr. 12: 207.

*Polistes hertwigi* Schulz, 1903, Sitzungsber. Math.-Phys. Kl. Bayer. Akad. Wiss. 33: 486.

DISTRIBUTION: Dominican Republic; Haiti; Puerto Rico; Tortuga Is. – (Richards, 1978, Soc. Wasps Am.).

A, group 5.

***moraballi* Richards**

*Polistes erythrogaster* var. *moraballi* Richards, 1951, in Richards and Richards, Trans. R. Entomol. Soc. London 102: 92.

DISTRIBUTION: Guyana.

E, group 3.

***myersi curassavicus* Richards**

*Polistes myersi curassavicus* Richards, 1978, Soc. Wasps Am.: 507.

DISTRIBUTION: Netherlands Antilles: Curaçao; Aruba; Bonaire.

A, group 2.

***myersi myersi* Bequaert**

*Polistes versicolor* var. *myersi* Bequaert, 1934, Rev. Entomol., Rio de Janeiro 4: 151.

DISTRIBUTION: Costa Rica; Panama; Colombia; Venezuela – (Richards, 1978, Soc. Wasps Am.; West-Eberhard et al., 1995, in Hanson and Gauld, Hym. Costa Rica).

A, group 2.

***niger* Brèthes**

*Polistes niger* Brèthes, 1903, An. Mus. Nac. Hist. Nat. Buenos Aires (3)9: 20.

DISTRIBUTION: Brazil: São Paulo, Minas Gerais, Mato Grosso – (Bequaert, 1937, Arch. Inst. Biol. Veg. 3; Richards, 1978, Soc. Wasps Am.: 551).

E, group 3.

***ninabamba* Richards**

*Polistes ninabamba* Richards, 1978, Soc. Wasps Am.: 500.

DISTRIBUTION: Peru.

A, group 2.

***notatipes* Richards**

*Polistes notatipes* Richards, 1978, Soc. Wasps Am.: 488.

DISTRIBUTION: Brazil: São Paulo, Rio Grande do Sul.

A, group 1.

***obscurus* Saussure**

*Polistes obscurus* Saussure, 1863, Mém. Soc. Phys. Hist. Nat. Genève 17: 236.

*Polistes obscurus* var. *simulans* Bertoni, 1918, An. Cient. Parag. (2)3: 228.

DISTRIBUTION: Brazil; Paraguay; Argentina: Misiones – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***occipitalis* Ducke**

*Polistes occipitalis* Ducke, 1904, Bol. Mus. Goeldi, Pará 4: 371.

DISTRIBUTION: Panama; Colombia; Peru; Guyana; Suriname; French Guiana; Brazil: Amapá, Amazonas, Pará, Espírito Santo, Rio de Janeiro, São Paulo; Bolivia – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***oculatus* Smith**

*Polistes oculatus* Smith, 1857, Cat. Hym. Br. Mus. 5, Vesp.: 111.

DISTRIBUTION: Mexico: Guadalajara, More-

los, Oaxaca, Veracruz; Guatemala; Honduras; Costa Rica – (Richards, 1978, Soc. Wasps Am.; West-Eberhard et al., 1995, in Hanson and Gauld, Hym. Costa Rica).

A, group 4.

***pacificus*** Fabricius

*Polistes pacifica* Fabricius, 1804, Syst. Piez.: 274.

*Polistes liliaciosus* Saussure, 1854, Ét. Fam. Vesp. 2: 97.

*Polistes liliaceusculus* Saussure, 1854, Ét. Fam. Vesp. 2: 98.

*Polistes pacificus flavopictus* Ducke, 1918, Rev. Mus. Paulista 10: 360.

*Polistes modestus* Smith, 1862, Trans. Entomol. Soc. London (3)1: 38.

*Polistes pacificus* var. *trinitatis* Bequaert, 1937, Arch. Inst. Biol. Veg. 3: 197.

*Polistes pacificus* var. *flavopicus* [!]; Richards, 1978, Soc. Wasps Am.: 549.

DISTRIBUTION: U.S.A.: southern Texas; Mexico: Veracruz, Colima, Guerrero, Morelos, Yucatán; Guatemala; Honduras; Nicaragua; Costa Rica; Panama; Colombia; Ecuador; Peru; Venezuela; Trinidad; Guyana; Suriname; French Guiana; Brazil: Amapá to Amazonas, Bahia to São Paulo; Paraguay; Bolivia – (Richards, 1978, Soc. Wasps Am.; Snelling, 1983, Pan-Pacif. Entomol. 59).

E, group 3.

***palmarum*** Bequaert

*Polistes major* var. *palmarum* Bequaert, 1936, Entomol. News 47: 11.

*Polistes major slevini* Bohart, 1949, Pan-Pacif. Entomol. 25: 103.

DISTRIBUTION: U.S.A.: southern California; Mexico: Baja California – (Snelling, 1983, Pan-Pacif. Entomol. 59).

PA.

***paraguayensis*** Bertoni

*Polistes paraguayensis* Bertoni, 1921, Rev. Soc. Cient. Paraguay 1: 12.

DISTRIBUTION: Brazil: Mato Grosso; Bolivia; Paraguay; Argentina: Misiones – (Richards, 1978, Soc. Wasps Am.).

PA.

***penai*** Richards

*Polistes penai* Richards, 1978, Soc. Wasps Am.: 494.

DISTRIBUTION: Bolivia.

A, group 1.

***perplexus*** Cresson

*Polistes perplexus* Cresson, 1872, Trans. Am. Entomol. Soc. 4: 245.

*Polistes generosus* Cresson, 1872, Trans. Am. Entomol. Soc. 4: 246.

DISTRIBUTION: U.S.A.: Maryland to Georgia, west to Kansas, south to Texas – (Krombein, 1979, in Krombein et al., Cat. Hym. Am. N. of Mexico).

F.

***peruvianus*** Bequaert

*Polistes versicolor* var. *peruvianus* Bequaert, 1934, Rev. Entomol., Rio de Janeiro 4: 152.

DISTRIBUTION: Peru – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

***poeyi haitiensis*** Bequaert and Salt

*Polistes poeyi* var. *haitiensis* Bequaert and Salt, 1931, Ann. Entomol. Soc. Am. 24: 792.

*Polistes poeyi* var. *haitensis* [!]; Yoshikawa, 1962, J. Biol. Osaka City Univ. 13: 35.

DISTRIBUTION: Haiti; Dominican Republic.

F.

***poeyi poeyi*** Lepeletier

*Polistes poeyi* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 532.

DISTRIBUTION: Cuba, Is. de la Juventud – (Richards, 1978, Soc. Wasps. Am.).

F.

***pseudocolatus*** Snelling

*Polistes instabilis pseudocolatus* Snelling, 1955, Am. Mus. Novitates 1701: 8.

DISTRIBUTION: Mexico: Chihuahua.

A, group 3.

***ridleyi*** Kirby

*Polistes ridleyi* Kirby, 1890, J. Linn. Soc. (Zool.) 20: 541.

DISTRIBUTION: Brazil: Fernando Noronha.

A, group 5.

***rossi*** Bohart

*Polistes rossi* Bohart, 1949, Pan-Pacif. Entomol. 25: 99.

DISTRIBUTION: Mexico: Baja California.

F.



***rufidens* Saussure**

*Polistes rufidens* Saussure, 1853, Ét. Fam. Vesp. 2: 77.

DISTRIBUTION: Colombia; Venezuela – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

***rufiventris* Ducke**

*Polistes rufiventris* Ducke, 1904, Bol. Mus. Goeldi, Pará 4: 371.

*Polistes erythrogaster* Ducke, 1905, Rev. Entomol., Caen 24: 23.

DISTRIBUTION: Colombia; Guyana; Ecuador; Peru; Brazil: Pará, Amazonas, Rondônia – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***satan* Bequaert**

*Polistes canadensis* var. (or subsp.) *satan* Bequaert, 1940, J. New York Entomol. Soc. 28: 11.

? *Polistes melanarius* Zikán, 1951, Dusenía 2: 230.

DISTRIBUTION: Brazil: Goiás, D. F., Rio de Janeiro, São Paulo, Minas Gerais – (Richards, 1978, Soc. Wasps Am.).

A, group 1.

***simillimus* Zikán**

*Polistes simillimus* Zikán, 1951, Dusenía 2: 232.

DISTRIBUTION: Brazil: Bahia to Rio Grande do Sul; Bolivia; Paraguay; Argentina: Jujuy to Misiones, south to Buenos Aires – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

***stabilinus* Richards**

*Polistes stabilinus* Richards, 1978, Soc. Wasps Am.: 510.

DISTRIBUTION: Mexico: Sonora, Jalisco, Veracruz, Tabasco, Yucatán; Belize; Honduras.

A, group 3.

***subsericeus* Saussure**

*Polistes subsericeus* Saussure, 1854, Ét. Fam. Vesp. 2: 100.

DISTRIBUTION: Colombia; Venezuela; Guyana; Suriname; Brazil: Amapá, Amazonas, Pará to Mato Grosso, São Paulo; Paraguay; Bolivia – (Richards, 1978, Soc. Wasps Am.).

E, group 3.

***testaceicolor* Bequaert**

*Vespa analis* Fabricius, 1798, Suppl. Entomol. Syst.: 261, non Fabricius, 1775.

*Polistes testaceicolor* Bequaert, 1937, Arch. Inst. Biol. Veg. 3: 179. Replacement name for *analis* Fabricius, 1798, non Fabricius, 1775.

DISTRIBUTION: Costa Rica; Colombia; Venezuela; Guyana; Suriname; French Guiana; Ecuador; Peru; Brazil: Amapá to Acre, Mato Grosso; Bolivia – (Bequaert, 1949, Bol. Mus. Venez. 7; Richards, 1978, Soc. Wasps Am.).

E, group 3.

***thoracicus* Fox**

*Polistes thoracicus* Fox, 1898, Proc. Acad. Nat. Sci. Philadelphia 1898: 447.

DISTRIBUTION: Brazil: Goiás, Mato Grosso; Paraguay – (Richards, 1978, Soc. Wasps Am.).

E, group 2.

***torresae* Silveira, NEW NAME**

*Polistes occultus* Silveira, 1994, Stud. Neotrop. Fauna Env. 29(4): 189, non Kojima, 1988.

DISTRIBUTION: Brazil: Pará, Rondônia.

E, group 3.

***veracrucis* Richards**

*Polistes veracrucis* Richards, 1978, Soc. Wasps Am.: 508.

DISTRIBUTION: Mexico: Nuevo León, Veracruz, Hidalgo.

A, group 2.

***versicolor flavoguttatus* Bequaert**

*Polistes versicolor* var. *flavoguttatus* Bequaert, 1934, Rev. Entomol., Rio de Janeiro 4: 155.

DISTRIBUTION: Ecuador; Peru; Bolivia – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

***versicolor kaieteurensis* Bequaert**

*Polistes versicolor* var. *kaieteurensis* Bequaert, 1934, Rev. Entomol., Rio de Janeiro 4: 156.

DISTRIBUTION: Guyana; Brazil: Roraima – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

***versicolor versicolor* (Olivier)**

*Vespa versicolor* Olivier, 1792, Encyc. Méthod. 6: 692.

*Vespa myops* Fabricius, 1798, Suppl. Entomol. Syst.: 261.

*Polistes opalinus* Saussure, 1853, Ét. Fam. Vesp. 2: 89.

*Polistes versicolor* var. *vulgaris* Bequaert, 1934, Rev. Entomol., Rio de Janeiro 4: 150.

DISTRIBUTION: Costa Rica; Panama; Colombia; Ecuador; Peru; Venezuela; Trinidad; Grenada; Guyana; Suriname; French Guiana; Brazil: Amapá to Acre, Pará to Rio Grande do Sul, Mato Grosso; Bolivia; Paraguay; Argentina: Jujuy to Misiones, south to Buenos Aires – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

*weyrauchorum* Willink

*Polistes weyrauchorum* Willink, 1964, Acta Zool. Lilloana: 12.

DISTRIBUTION: Ecuador; Peru; Chile – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

*xanthogaster willei* Bequaert

*Polistes versicolor* var. (or subsp.) *willei* Bequaert, 1940, Entomol. News 51: 81.

DISTRIBUTION: Peru – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

*xanthogaster xanthogaster* Bequaert

*Polistes versicolor* var. (or subsp.) *xanthogaster* Bequaert, 1940, Entomol. News 51: 81.

DISTRIBUTION: Bolivia; Argentina: Córdoba – (Richards, 1978, Soc. Wasps Am.).

A, group 2.

#### FOSSIL SPECIES

*attavinus* (Heer)

*Vespa attavina* Heer, 1850, Neue Denkschr. Allg. Schweiz. Ges. Gesammt. Naturwiss. 11: 101, pl. VII fig. 8.

*Vespa atavina* [!]; Dalla Torre, 1894, Cat. Hym. 9: 137.

? *Polistes* “*primativa* Heer” Piton, 1940, Thesis Fac. Sci., Univ. Clermont: 227, non nudum.

Miocene of Austria – (Bequaert, 1930, Bull. Brooklyn Entomol. Soc. 25: 69).

*industrius* Theobald

*Polistes industrius* Theobald, 1937, Bull.

Soc. Sci. Nancy 2: 399, pl. VIII fig. 10, pl. XXVIII fig. 9.

Oligocene of France.

*kirbyanus* Cockerell

*Polistes kirbyanus* Cockerell, 1914, Proc. Acad. Nat. Sci. Philadelphia 66: 638.

Miocene of Colorado.

*signatus* Statz

*Polistes signata* Statz, 1936, Decheniana 93: 282, pl. XI fig. 33.

Oligocene of Germany.

*vergnei* Piton

*Polistes vergnei* Piton, 1940, Thesis Fac. Sci., Univ. Clermont: 226, fig. 93.

Eocene of France.

#### UNRECOGNIZED TAXA

*concinnus* (Fabricius)

*Vespa concinna* Fabricius, 1775, Syst. Entomol.: 367.

DISTRIBUTION: Australia – (Schulz, 1906, Spolia Hym.: 231).

*fuscus* Fabricius

*Polistes fusca* Fabricius, 1804, Syst. Piez.: 274.

DISTRIBUTION: Australia.

*luctuosus* (Smith)

*Polybia luctuosa* Smith, 1858, J. Proc. Linn. Soc. Zool. 2: 114.

DISTRIBUTION: Borneo – (van der Vecht, 1966, Zool. Verh., Leiden 82).

*rubidus* Lepeletier

*Polistes rubida* Lepeletier, 1836, Hist. Nat. Insect. Hym. 1: 523.

DISTRIBUTION: South Africa.

*spinolae* Saussure

*Polistes spinolae* Saussure, 1853, Ét. Fam. Vesp. 2: 80.

DISTRIBUTION: Brazil.

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Torres, who collected the specimens from Rondônia and Carajas described as *occultus* Silveira. Those names should be attributed to the respective author, and I am grateful that these authors permitted me to include the names in this checklist.

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INDEX OF *POLISTES*

- |                           |                              |                            |
|---------------------------|------------------------------|----------------------------|
| <i>actaeon</i> , 22       | <i>apicalis</i> , 23         | <i>bambusae</i> , 10       |
| <i>acteon</i> , 22        | <i>aquilinus</i> , 9         | <i>barbadensis</i> , 27    |
| <i>adelphus</i> , 22      | <i>arabicus</i> , 21         | <i>batjanensis</i> , 8     |
| <i>adustus</i> , 9        | <i>arduinoides</i> , 19      | <i>bellicosus</i> , 24     |
| <i>adustus</i> , 9        | <i>arizonensis</i> , 23      | <i>bequaertellus</i> , 24  |
| <i>aficana</i> , 18       | <i>arthuri</i> , 4           | <i>bequaerti</i> , 10      |
| <i>africanus</i> , 18     | <i>arvidi</i> , 10           | <i>bequaertianus</i> , 24  |
| <i>alagari</i> , 15       | <i>assamensis</i> , 9        | <i>bernardii</i> , 15      |
| <i>albellus</i> , 20      | <i>associus</i> , 18         | <i>bicolor</i> , 24        |
| <i>albicinctus</i> , 18   | <i>asterope</i> , 10         | <i>biglumis</i> , 19       |
| <i>albidus</i> , 18       | <i>atavina</i> , 34          | <i>biglumoides</i> , 24    |
| <i>albocalcaratus</i> , 9 | <i>ater</i> , 6              | <i>biguttatus</i> , 24     |
| <i>albocinctus</i> , 18   | <i>aterrimus</i> , 23        | <i>biguttatus</i> , 23     |
| <i>alpium</i> , 19        | <i>atratus</i> , 17          | <i>billardieri</i> , 24    |
| <i>amazonicus</i> , 29    | <i>atrimandibularis</i> , 18 | <i>bimacula</i> , 19       |
| <i>americanus</i> , 26    | <i>atrox</i> , 23            | <i>bimaculata</i> , 19     |
| <i>anaheimensis</i> , 23  | <i>attavinus</i> , 34        | <i>binotatus</i> , 24      |
| <i>analisis</i> , 33      | <i>aurifer</i> , 23          | <i>bipustulatus</i> , 24   |
| <i>andrei</i> , 13        | <i>austrinus</i> , 17        | <i>bipustulatus</i> , 24   |
| <i>anduzei</i> , 29       |                              | <i>bischoffi</i> , 19      |
| <i>angulinus</i> , 22     | <i>bader</i> , 4             | <i>bituberculatus</i> , 10 |
| <i>annularis</i> , 22     | <i>badius</i> , 19           | <i>boharti</i> , 24        |
| <i>annulata</i> , 23      | <i>bahamensis</i> , 23       | <i>boliviensis</i> , 25    |
| <i>annuralis</i> , 23     | <i>baidoensis</i> , 21       | <i>bonaccensis</i> , 30    |
| <i>antennalis</i> , 19    | <i>bakeri</i> , 30           | <i>borientalis</i> , 25    |
| <i>apachus</i> , 23       | <i>balder</i> , 4            |                            |

- brandti*, 7  
*brevifissus*, 24  
*bucharensis*, 20  
*buruensis*, 10  
*buyssoni*, 24  
  
*californicus*, 27  
*callimorphus*, 10  
*canadensis*, 25  
*canadensiss*, 25  
*canadiensis*, 25  
*candidoi*, 25  
*capnodes*, 10  
*carletoni*, 6  
*carnifex*, 25  
*carolina*, 26  
*caspicus*, 19  
*castaneicolor*, 30  
*cavapyta*, 26  
*cavapytiformis*, 26  
*centralis*, 23  
*centrocontinentalis*, 11  
*chinensis*, 19  
*chlorostoma*, 25  
*cincta*, 23, 27  
*cinerascens*, 26  
*clarionensis*, 27  
*clarior*, 12  
*claripennis*, 26  
*clavicornis*, 10  
*coahuilae*, 28  
*colombianus*, 30  
*colonicus*, 12  
*comanchus*, 26  
*comis*, 16  
*commanchus*, 26  
*concinus*, 34  
*confusus*, 5  
*connectens*, 23  
*consobrinus*, 26  
*contrarius*, 10  
*crinitus*, 27  
*cubensis*, 27  
*curassavicus*, 31  
  
*davillae*, 27  
*dawnae*, 10  
*deceptor*, 27  
*defectivus*, 10  
*delhiensis*, 11  
*demeraraensis*, 24  
*deuteroleucus*, 24  
*diabolicus*, 4  
*diadema*, 21  
*diakonovi*, 11  
*dominicensis*, 27  
*dominicus*, 27  
*dominulus*, 19  
*dominuta*, 20  
  
*dorsalis*, 27  
*dubia*, 19  
*dubius*, 15  
*duckei*, 24  
*duplicinctus*, 15  
*durangoensis*, 28  
  
*ebsohinus*, 11  
*eburneus*, 28  
*ecuadorius*, 29  
*efoveatus*, 30  
*elegans*, 11  
*ellenbergi*, 11  
*engeli*, 6  
*ephippium*, 11  
*erromangensis*, 5  
*erythrinus*, 4  
*erythrocephalus*, 28  
*erythrocerus*, 11  
*erythrogaster*, 33  
*exclamans*, 28  
*exilis*, 28  
*extraneus*, 11  
  
*facilis*, 5  
*fastidiosus*, 11  
*ferreri*, 28  
*flavescens*, 30  
*flavipennis*, 5  
*flavobilineatus*, 11  
*flavoguttatus*, 33  
*flavopictus*, 32  
*flavopicus*, 32  
*flavus*, 28  
*foederata*, 20  
*fomosanus*, 12  
*fordi*, 5  
*formosanus*, 12  
*fortunatus*, 28  
*franciscanus*, 28  
*funebri*, 14  
*fuscatus*, 28  
*fuscus*, 34  
  
*galathea*, 15  
*gallicus*, 20  
*gaminatus*, 28  
*ganonganus*, 7  
*geminatus*, 28  
*generosus*, 32  
*geoffroyi*, 19  
*geoffroyi*, 19  
*gigas*, 5  
*goeldii*, 29  
*goestai*, 16  
*grahami*, 6  
*gressitti*, 6  
*guyanensis*, 29  
*gyrostoma*, 5  
  
*hainanensis*, 6  
*haitensis*, 32  
*haitiensis*, 32  
*halmaheirensis*, 15  
*haugi*, 11  
*hebraea*, 5  
*hebreus*, 6  
*hebridensis*, 5  
*helvenacus*, 6  
*hengchun*, 12  
*hengchunensis*, 12  
*hertwigi*, 31  
*hoplites*, 8  
*hoplites*, 8  
*huacapistana*, 29  
*huisunensis*, 11  
*humboldti*, 10  
*humilis*, 11  
*hunteri*, 27  
  
*incertus*, 14, 29  
*incomptus*, 10  
*indicus*, 20  
*indonesicus*, 14  
*industrius*, 34  
*infuscatus*, 29  
*ingrami*, 6  
*inornatus*, 17, 18  
*insepultus*, 19  
*instabilis*, 29  
*instbailis*, 29  
*insulae*, 15  
*insulicola*, 27  
*intermedius*, 12  
*interruptus*, 19  
*irakensis*, 21  
*iranus*, 20  
*italica*, 19  
*iwatai*, 7  
  
*jadwigae*, 5  
*jani*, 16  
*japoniaus*, 12  
*japonicus*, 5, 12  
*javanicus*, 8  
*jocahamae*, 12  
*jokahamae*, 12  
*jokohamae*, 12  
  
*kaibabensis*, 29  
*kaieteurensis*, 33  
*kaszabi*, 20  
*hasianus*, 12, 13  
*kirbyanus*, 34  
*klepcha*, 13  
*kohli*, 19  
*koreanus*, 7  
*koshunensis*, 12  
*krombeini*, 7

- laevigatissimus*, 12  
*lahejensis*, 22  
*lanio*, 29  
*lateritius*, 12  
*latinis*, 12  
*laurentianus*, 28  
*lefebvrei*, 20  
*lefebvreii*, 20  
*legnotus*, 5  
*leopoldi*, 8  
*lepcha*, 13  
*liliaceusculus*, 32  
*liliaciosus*, 32  
*limai*, 22  
*lindensis*, 21  
*lineonotus*, 30  
*louisianus*, 23  
*loveridgei*, 21  
*luctuosus*, 34  
*lycus*, 13  
  
*macaensis*, 5  
*macrocephalus*, 21  
*maculatus*, 20  
*maculipennis*, 16  
*madecassus*, 13  
*madiburensis*, 13  
*madoci*, 26  
*madocii*, 26  
*madsii*, 16  
*maior*, 30  
*major*, 30  
*malaitensis*, 6  
*malayanus*, 8  
*malekulensis*, 5  
*mandariniensis*, 13  
*mandarinius*, 13  
*mandarinus*, 13  
*maniburesis*, 13  
*manillensis*, 16  
*manni*, 8  
*manusensis*, 9  
*maranonensis*, 30  
*marginalis*, 21  
*mariae*, 29  
*maritimus*, 27  
*marribous*, 25  
*meadeanus*, 13  
*media*, 27  
*medius*, 12  
*megei*, 13  
*melanarius*, 33  
*melanopterus*, 13  
*melanosoma*, 30  
*melanotus*, 31  
*merceti*, 20  
*mertoni*, 13  
*meruensis*, 21  
  
*metensis*, 29  
*metricus*, 31  
*mexicanus*, 31  
*mimus*, 17  
*minor*, 8, 31  
*minus*, 17  
*minutissimus*, 22  
*modestus*, 32  
*molotnii*, 21  
*moltonii*, 21  
*mongolicus*, 20  
*monogolicus*, 20  
*montanus*, 23  
*moraballi*, 31  
*morotaiensis*, 15  
*mucheii*, 20  
*multicolor*, 27  
*multipectus*, 16  
*myersi*, 31  
*myops*, 34  
*mysteriosus*, 21  
  
*narupi*, 10  
*navajoe*, 26  
*neavei*, 15  
*nebulosus*, 16  
*neotropicus*, 27  
*nestor*, 28  
*niger*, 31  
*nigrifrons*, 13  
*nigrihumerus*, 13  
*nigrinotum*, 19  
*nigripennis*, 26  
*nigritarsis*, 14  
*nigrosericans*, 8  
*nigrosericans*, 8  
*nimphus*, 21  
*ninabamba*, 31  
*nipponensis*, 13  
*notatipes*, 31  
*novae-pomerania*, 4  
*novae-pomeraniae*, 4  
*novae-pomeraniaeae*, 4  
*novajae*, 26  
*novajoe*, 26  
*novarae*, 16  
*novopomeraniae*, 4  
*nympha*, 21  
  
*obdurus*, 13  
*obiensis*, 15  
*obscura*, 15  
*obscuricornis*, 20  
*obscurus*, 31  
*occipitalis*, 31  
*occultus*, 14, 33  
*ochreata*, 25  
*oculatus*, 31  
*okinawaensis*, 5  
  
*okinawensis*, 5  
*olivaceous*, 6  
*olivaceus*, 5  
*omissa*, 20  
*onerata*, 25  
*opalinus*, 34  
*opinabilis*, 21  
*orbitalis*, 26  
*ordubadensis*, 20  
*orientalis*, 5  
*ornata*, 20  
*ornatus*, 21  
  
*pacifica*, 20  
*pacificus*, 32  
*pallidipes*, 28  
*pallipes*, 28  
*palmarum*, 32  
*pamirensis*, 19  
*panamensis*, 25  
*papuanus*, 16  
*paraguayensis*, 32  
*pectoralis*, 20  
*penai*, 32  
*penthicus*, 6  
*perflavus*, 6  
*perkinsi*, 5  
*perkinsii*, 5  
*perplexus*, 32  
*peruvianus*, 32  
*philippinensis*, 14  
*phillipinensis*, 14  
*picteti*, 9  
*pictior*, 20  
*picturatus*, 23  
*plebejus*, 18  
*poeyi*, 32  
*pouli*, 16  
*praenotatus*, 14  
*primativa*, 34  
*pseudoculatus*, 32  
*pseudopacificus*, 20  
*pseudoschach*, 12  
*puncticollis*, 13  
  
*quadrifasciatus*, 10  
*quatei*, 7  
  
*reginae*, 12  
*religiosus*, 8  
*rhodostoma*, 27  
*richardsi*, 15  
*ridleyi*, 32  
*riekii*, 14  
*riparius*, 21  
*robinsoni*, 7  
*rossi*, 32  
*rothneyi*, 7  
*rubidus*, 34

- rubigenosus*, 26  
*rubiginosa*, 26  
*rufescens*, 20  
*ruficornis*, 24  
*rufidens*, 33  
*rufipennis*, 25  
*rufiventris*, 33  
*rufodorsalis*, 14  
*rufolineatus*, 7  
*rugifrons*, 8  
*ruginosus*, 26  
*rupestris*, 19
- sagittarius*, 14  
*santoshae*, 14  
*satan*, 33  
*satanulus*, 30  
*sauiensis*, 16  
*saussurei*, 14  
*schach*, 7  
*semenovi*, 21  
*semenowi*, 21  
*semenowii*, 21  
*semiflavus*, 7  
*sgarambus*, 14  
*shekouensis*, 12  
*shelfordi*, 13  
*shiraki*, 14  
*shirakii*, 14  
*sibuyanensis*, 8  
*signatus*, 34  
*sikkimensis*, 7  
*sikorae*, 15  
*similator*, 22  
*similis*, 15  
*simillimus*, 33  
*simulans*, 31  
*simulatus*, 15  
*slevini*, 32  
*smithii*, 15  
*snelleni*, 15  
*soikai*, 19, 29  
*sordidus*, 9  
*sosia*, 24  
*speciosus*, 9
- spilophorus*, 18  
*spiloptera*, 18  
*spinolae*, 34  
*spliophorus*, 18  
*stabilinus*, 33  
*stenopus*, 8  
*stigma*, 16  
*stigosus*, 17  
*stotherti*, 13  
*strigosus*, 17  
*subsericeus*, 33  
*sulcatus*, 8  
*sulcifer*, 22  
*sulcifera*, 22  
*svendi*, 16  
*synoecoides*, 26  
*synoecus*, 12
- tahitensis*, 5  
*takasagonus*, 17  
*tamulus*, 16  
*tasmaniensis*, 11  
*tenebricosus*, 8  
*tenellus*, 22  
*tepidus*, 9  
*testaceicolor*, 33  
*texanus*, 23  
*theodori*, 9  
*thoracica*, 16, 24  
*thoracicus*, 33  
*tibetanus*, 7  
*tibialis*, 28  
*torresae*, 33  
*townsvillensis*, 17  
*transversesignata*, 25  
*transversignatus*, 25  
*transverso-strigata*, 25  
*transversosignatus*, 25  
*tricolor*, 11, 27  
*trinitatis*, 29, 32  
*tristis*, 17  
*tualensis*, 17  
*tullgreni*, 17
- undata*, 5  
*unicolor*, 24, 25
- urceolata*, 25  
*urceolicus*, 25  
*utahensis*, 23  
*utakwae*, 17
- vagabundus*, 29  
*valida*, 25  
*variabilis*, 17  
*variatus*, 28  
*varicornis*, 8  
*variegata*, 25  
*varistus*, 28  
*vechti*, 4, 7  
*veracruzis*, 33  
*vergnei*, 34  
*versicolor*, 33  
*vilensis*, 5  
*virendrai*, 14  
*virginiensis*, 23  
*vtriatus*, 23  
*vulgaris*, 34
- waldoi*, 10  
*watti*, 9  
*wattii*, 9  
*watutus*, 17  
*weberi*, 30  
*weyrauchi*, 30  
*weyrauchorum*, 34  
*wheeleri*, 31  
*willei*, 34  
*williamsi*, 17
- xanthogaster*, 34  
*xantholeucus*, 17  
*xanthorhoicus*, 12  
*xanthorhoicus*, 12
- yaeyamae*, 7  
*yamanakai*, 13  
*yayeyamae*, 7  
*yayeyamensis*, 7  
*yokahamae*, 12  
*yokohamae*, 12

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