

Notes on Palaearctic Eumenidae (Hymenoptera)

(part 2) ¹⁾

by

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12. *Symmorphus angustatus* (Zetterstedt, 1838). — When BLÜTHGEN in 1942 concluded that the type of *Odynerus angustatus* Zetterstedt is a male of the species described by ZETTERSTEDT on the same page of his "Insecta Lapponica", vol. 1, as *Odynerus alternans*, there was no necessity to give the name *angustatus* (described under no. 7) priority above the previously used name *alternans* (no. 8). But in doing this, BLÜTHGEN evidently acted as "first reviser" in the sense of Article 24 (a) (i) of the Code. His proposal to revoke this decision (BLÜTHGEN, 1961: 196) because it would lead to confusion and because page priority does not exist (!), is therefore not acceptable.

13. The name *Lionotus* Thomson. — BLÜTHGEN (1961: 234) considered *Lionotus* Thomson, 1870, published without reference to the preoccupied name *Leionotus* Saussure, 1853, to be an available name. BOHART (in MUESEBECK c.s., 1951: 887) listed *Lionotus* Thomson as an emendation of *Leionotus* Saussure and designated *Odynerus foraminatus* Saussure, 1853, as the type of *Leionotus*.

It should be noted, however, that *Lionotus* Thomson must anyhow be rejected because it is a junior homonym of *Lionotus* Agassiz, 1846.

14. The subgenus *Odontopterochilus* Kostylev. — This name was proposed by KOSTYLEV, 1940, *Bull. Soc. Nat. Moscou, Sect. Biol. (N.S.)* 49 (3-4): 148, for a subgenus of *Pterocheilus*, containing five species. The name is not available, since the author did not fix a type-species (art. 13 b of the International Code). It is herewith validated by the designation of *Pterocheilus heptneri* as its type species.

15. *Cyphodynerus* gen. nov. — Two palaearctic species of Eumenidae appear to belong to a group which is mainly distributed in the Ethiopian region. This group is still unnamed and is here recognized as a new genus. The receipt of specimens of three African species, kindly sent to me by Dr. GIORDANI SOIKA, has enabled me to present the following description.

Mandibles of ♀ long and narrow, beak-like, the teeth either broad and flat or almost entirely reduced; mandibles of ♂ variable, with more or less developed, irregularly placed, teeth on inner side. Palpi long and thin. Vertex of ♀ with indistinct post-ocellar fovea. Occipital carina well developed. Antennal hook of ♂ short.

Pronotum: anterior surface smooth in the middle, finely rugose laterally, without median impression(s), at most with some very superficial transverse

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wrinkles; humeral angles more or less projecting; transverse carina well developed on the sides (sometimes slightly projecting at lower end), on the dorsal surface either fairly distinct or more or less reduced in the middle; pronotal lobe not sharply defined. Mesoscutum with moderately distinct prescutal furrows; tegulae much enlarged and coarsely punctate (approximately as in *Brachyodynerus* Blüthgen), rounded on outer side, slightly emarginate on posterior part of inner side (here co-adapted to the more or less strongly developed parategula or mesoscutal hook), with angular inner posterior corner; scutellum anteriorly with deep transverse furrow, subdivided into a row of small cavities by a number (usually 10-12) of short keels, the furrow ending on each side in a more or less developed lamellar extension (small in *C. dimidiatus*, largest in *C. bisellatus*) which overhangs the deep lateral depression on each side of the disk of the scutellum; the latter varying from convex with median furrow to strongly raised and bituberculate; mesepisternum with strong epicnemial carina which becomes obsolete in front of the mid coxa. Metanotum (postscutellum) bituberculate.

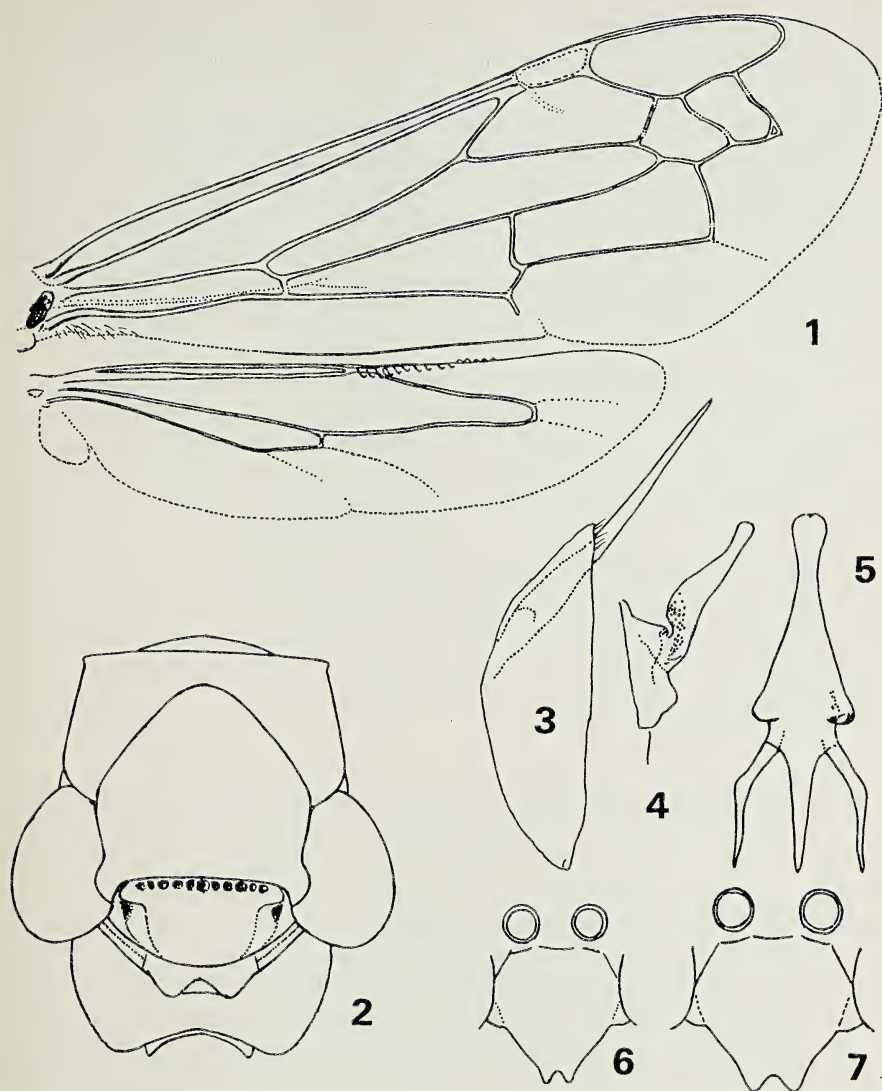
Wings: fig. 1; first submarginal crossvein more strongly curved inwards in some species; inner crossvein of second discoidal cell in all available species distinctly bent posteriorly.

Tarsal segments 1-4 of fore legs of ♀ with short spine at apex on outer side, sometimes (in *C. "spec. A"*) the basitarsus with two similar spines at outer side. Claws only slightly curved, inner tooth short or nearly absent (in *C. "spec. A"*), situated very close to the middle.

Propodeum steeply sloping, dorsal and posterior areas not separated, transition to lateral areas bluntly angular or marked by a crenate ridge (sometimes with projecting tooth posteriorly); posterior surface slightly depressed, in the middle with carina which runs into a more or less distinct narrow groove anteriorly; upper lamella (see PARKER, 1966: 175) strongly developed, but laterally not or only slightly extending beyond the apex of the lower lamella (= valvula); upper and lower lamella meet on each side in a blunt or nearly right angle, the transition being either gradual (as in *C. "spec. A"*) or marked by a more or less developed carina.

First gastral segment approximately as in *Antepipona* Saussure (= *Odontodynerus* Blüthgen), but the tergite shallowly depressed in the middle posteriorly and in front of the posterior margin; narrow basal part of the sternite not separated from the wider posterior part by a carina (in *C. "spec. A"* the posterior area bordered anteriorly by a weak ridge). Second tergite with one median and two lateral convex areas, separated by two shallow impressions (sometimes almost absent) which converge towards the posterior margin; in addition there is a transverse impression in front of the raised and thickened or duplicated apical margin; transverse furrow at base of second sternite with about 14 to 20 short carinae, the area behind the furrow with more or less distinct median groove on basal half.

Type species: *Odynerus dimidiatus* Spinola, 1838; other species belonging to this genus are *Odynerus sculpturatus* Dover, 1925, described from Karachi, *O. bisellatus* Schulthess, 1914, from S. Mozambique, and a new species (here in-



Figs. 1-6: *Cyphodynerus sculpturatus* (Dover), Karachi. — 1, wings of ♂. — 2, dorsal view of thoracic complex of ♂. — 3-5, genitalia of ♂, paramere, volsella, and aedeagus, resp. — 6, clypeus of ♀.

Fig. 7: *Cyphodynerus dimidiatus* (Spinola), Egypt, clypeus of ♀.

dicated as "spec. A") from Basutoland, to be described by Dr. A. GIORDANI SOIKA.

BLÜTHGEN (1938, *Dt. ent. Z.* 1938: 450) has already ascertained that *Rhynchium dimidiatum* (Spinola) Saussure, 1855 (Ét. Fam. Vesp. 3: 182) and *Odynerus canaliculatus* Saussure, 1855 (l. c.: 260), described from Arabia, are identical with *Odynerus dimidiatus* Spinola, originally described from Egypt.

An illustrated description of *C. dimidiatus*, based on specimens of both sexes from Egypt, has been published by GIORDANI SOIKA in 1935 (*Bull. Soc. ent. Egypte* 19: 196-199) under the name *Odynerus (Rhynchium) canaliculatus* Sauss.

Odynerus canaliculatus nigroflammeus Kostylev, 1937 (*Arch. Mus. zool. Univ. Moscou* 3: 221) from Mekran, prov. Kerman, Eastern Iran, is evidently a synonym of *C. sculpturatus* (Dover). Apart from some striking differences in colour pattern the eastern form is very similar to *C. dimidiatus*, and at first I was inclined to regard it as no more than subspecifically different. A closer study, however, revealed some distinct structural differences, so that a specific status appears to be well justified. The two species may be distinguished as follows:

1. Clypeus about as long as wide between the eyes; the anterior portion relatively wider and more shallowly emarginate at apex (fig. 7). Pronotal carina obsolete in the middle, the coarsely and densely punctate dorsal surface here not sharply separated from the smooth anterior surface. Pubescence of head and thorax moderately long. Coxae and gastral segments 3-6 (3-7 in ♂) black. — Arabia; Egypt. *dimidiatus* (Spinola)

— Clypeus longer than its width between the eyes, more strongly narrowed anteriorly and here more deeply emarginate (fig. 6). Pronotal carina distinct throughout. Pubescence of head and thorax very short. Legs and gaster brownish yellow, second tergite often with brownish mark of variable size. Yellowish parts of head and thorax much more extensive than in *dimidiatus*. — Eastern Iran; Karachi, W. Pakistan *sculpturatus* (Dover)

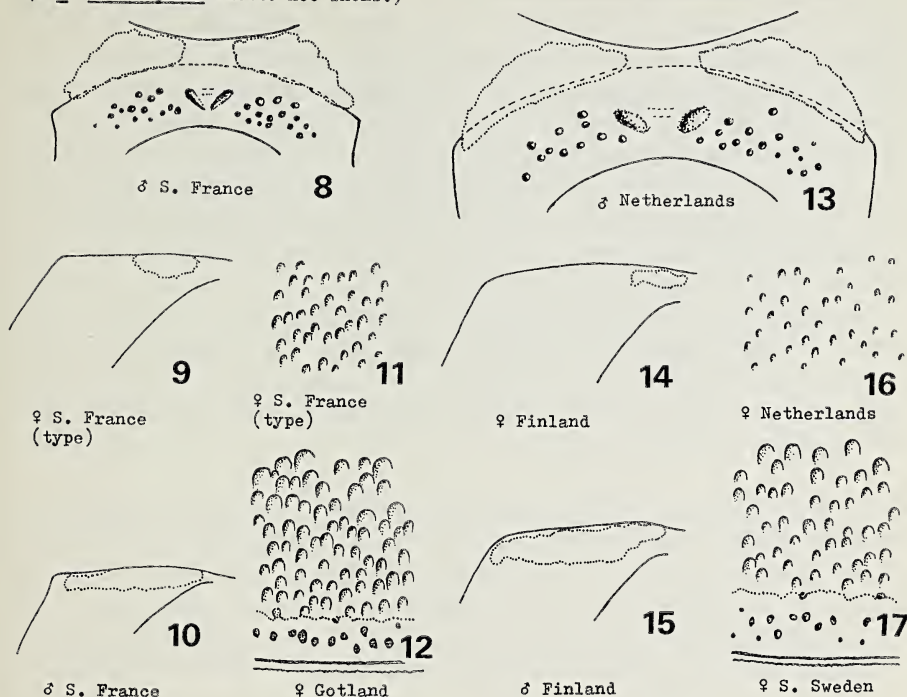
16. The identity of *Stenodynerus dentisquama* (Thomson). — Shortly after Dr. J. GUSENLEITNER (1970) had described the female of *Stenodynerus caroli* (Blüthgen) from a series collected in the island of Terschelling, Netherlands, it struck me that BLÜTHGEN (1961: 118) states to have seen a male of *caroli* from Sweden, but refers to THOMSON for information concerning the distribution of *dentisquama* in that country. Since BLÜTHGEN apparently had not seen the type of the latter species, which was described from "Skåne; Norrland", Sweden, it seemed desirable to establish the identity of THOMSON's species with certainty.

Upon my request, the only typical specimen found to be present in THOMSON's collection was kindly sent to me for study by Prof. Carl H. LINDROTH. This specimen, a rather small female with only the right hand side of the pronotum marked with a small whitish mark, bears a label "Eslv 4/6", which most probably indicates that it has been collected at Eslöv in Scania or Skåne, South Sweden. Since this is in agreement with the fact that THOMSON (1874) described the specimen(s) of *dentisquama*, recorded in 1870 from Norrland, as a new species (*picticrus*), I have designated this female as the lectotype. There is no doubt that this specimen is identical with *S. caroli*, a conclusion which was confirmed by Dr. GUSENLEITNER, who subsequently also examined this specimen. The latter name thus becomes a synonym of *dentisquama*.

Further study of Swedish material of *S. "dentisquama"* in the collections of the museums at Lund and Stockholm revealed the interesting fact that all specimens

Stenodynerus bluethgeni sp. n.
(= *S. dentisquama* auctt. nec Thoms.)

Stenodynerus dentisquama (Thomson)



Figs. 8 and 13, front face of pronotum; 9 and 14, left humeral angle of pronotum of ♀, seen from above and behind; 10 and 15, do. of ♂; 11 and 16, puncturation of second gastral tergite of ♀ in the middle, close to the anterior border; 12 and 17, do. near and on posterior margin.

from the mainland (8 ♀ 3 ♂ from eight localities south of 58° N) are conspecific with the lectotype, whereas 4 ♀ 2 ♂ collected at different times in the islands of Gotland and Öland belong to *S. dentisquama* auctt. nec Thomson.

True *S. dentisquama* also occurs in Finland (1 ♀ 1 ♂ Uleaborg or Oulu, 65° N, 1 ♀ Yläne, 60°54' N; Mus. Lund), and has been recorded from N. W. Poland (Slupsk or Stolp) and East Germany (near Jena) by BLÜTHGEN (1961). Furthermore it is now known from the following localities in the Netherlands: Terschelling; 1 ♂ Hoorn, 20 July 1951, J. VAN DER VECHT, 8 ♀ 9 ♂ near Dodemanskisten and at Swart dune, July 1967, C. VAN HEIJNINGEN and PH. PRONK (Mus. Leiden; 1 ♀ 1 ♂ coll. GUSENLEITNER, 1 ♀ 1 ♂ coll. GIORDANI SOIKA); 1 ♀ dunes near Wassenaar ("Meyendel"), 29 June 1962, on *Rubus*, J. VAN DER VECHT (Mus. Leiden), 1 ♂ do., 29 May 1966 (coll. H. SANDERS, reported in *Natuurh. Maandblad* 56: 37, 1967); 2 ♂ Hellendoorn, 5 June 1922, on *Frangula alnus*, M. A. LIEFTINCK (Mus. Leiden); 1 ♀ Ermelo, 6 July 1936, coll. J. LINDEMANS (Mus. Rotterdam).

Stenodynerus dentisquama auctt., nec Thomson, is now without a valid name. I propose to call it *Stenodynerus bluethgeni* sp. n., in recognition of the late

P. BLÜTHGEN's merits as a renovator of the taxonomy of the palaearctic Eumenidae. For the characters of this species, more particularly for those in which it differs from *S. dentisquama* (= *caroli*), I may refer to BLÜTHGEN, 1961, and to GUSENLEITNER's note on the female of *S. caroli* (1970). The differences in the humeral angles of the pronotum and in the puncturation of the second gastral tergite, mentioned by GUSENLEITNER, are shown in the accompanying figures, which also demonstrate a striking difference in the position and the shape of the impressions on the front face of the pronotum. As the holotype of *S. bluethgeni* I have chosen a female from Bourdeaux, Drôme (about 30 km east of Montélimar), collected by me on 22 Aug. 1966 on *Eryngium campestre* L. (Mus. Leiden).

This species is widely distributed in Europe, but does not occur in Great Britain. In the Netherlands it is rather rare and apparently restricted to the centre and the South-eastern part of the country. I have only seen 1 ♂ from Putten, July 1935, and 1 ♂ from Ermelo, 20 May 1936, both in coll. LINDEMANS (Mus. Rotterdam).

17. The status of *Eumenes wagaе* Radoszkowski. — *Eumenes wagaе* Radoszkowski (1876, *Hor. Soc. ent. Ross.* 12: 142, ♀ ♂ — "Egypte" or "au Caucase"?) was described in a report on two collections of Hymenoptera, one made by Dr. DZIEDZICKI in Egypt, and one by Mr. RAFFRAY in Abyssinia. The author writes "Je cite seulement l'endroit de la récolte de M. Raffray". No locality is given for *E. wagaе*, but its description is followed by a comparison with *E. baeri* Rad. and an additional description of that species. In my opinion the last sentence of this chapter "Cette espèce paraît être très répandue au Caucase" refers to *E. baeri*, but DALLA TORRE (1894) gave Caucasus as the type locality of *E. wagaе*. This is evidently incorrect and appears to explain why the species has hitherto remained unrecognized. The description applies in all details to the Egyptian race of *Delta campaniforme*, *D. campaniforme gracile* Saussure, 1852. *E. wagaе* is therefore to be placed in the synonymy of this subspecies.

18. The identity of *Eumenes histrio* (Villers). — The original description of the unrecognized species *Vespa histrio* Villers, 1789: 282, pl. 8 f. 20, is as follows: "41. V.[espa] (l'arlequine) nigra, thorace abdomineque punctis & maculis luteis flavisve variegatis. t. f. 20. — *Hab. in Europa. In Gallia Australiori. Desc. Caput* nigrum, clypeo fulvo, macula nigra in medio. *Antennae* nigrae. Thorax niger, antice scapulis fulvis. Punctum callosum fulvum ante alas. In regione scutelli maculae quatuor fulvae. Duae primae horizontales, duae laterales & inferiores. Abdominis petiolus niger, quatuor punctis fulvis fere in parallelogrammum dispositis; margo flavus. *Magnum* segmentum abdominis nigrum, duabus maculis fulvis, quae maculae cum fulvedine basis segmenti lateraliter unitae sunt, ita ut nigredo divisa sit in duas partes inter se connexas spatio nigro; caetera segmenta fere flava. *Faemina*.

Maris thoracis macula horizontalis anterior in duas divisa est. In petiolo duo puncta flava vel fulva. Caetera similia. In utroque sexu *alae* fusco-flavescentes."

In DALLA TORRE's catalogue this species is treated as a synonym of *Eumenes*

pomiformis (Fabricius), 1781, but in my opinion the original description suggests that this is incorrect.

19. The identity of *Eumenes fulva* Eversmann, 1854. — The type series, the "var. β " not included, has proved to contain female specimens of two species, *Katamenes dimidiatus* and *K. sichelii*. BLÜTHGEN (1962, *Dt. ent. Z., N. F.*, 9: 250) designated a specimen of the latter species as the lectotype, writing: "Damit ist die Art *fulva* Ev. als ssp. von *sichelii* fixiert."

GIORDANI SOIKA (1966, *Boll. Mus. civ. Stor. nat. Venezia* 17: 90—91) did not accept this designation, because some of the syntypes, belonging to *Katamenes dimidiatus*, proved to agree better with the original description than the lectotype. It is evident from his discussion, however, that he also regards the lectotype as belonging to the type series (the specimen bears a label "*fulva*" in EVERSMAAN's handwriting) in the sense of article 72 (b) of the Code of Nomenclature. Consequently BLÜTHGEN's designation has been made in accordance with article 74 (a) (i) of the Code and must be regarded as valid.

20. What is "*Eumenes marginata* v. d. Höven" [!]? — DALLA TORRE (1894: 29) listed this name in the synonymy of *Eumenes pomiformis* Fabricius, and LIU (1936: 99) included this reference in his catalogue of Chinese Vespidae. BLÜTHGEN (1961: 209) remarked about this and other unidentified *Eumenes* species: "Ob typisches Material dieser Arten noch vorhanden ist, ist mir nicht bekannt geworden; ohne solches ist der Versuch ihrer Enträtselung ein aussichtsloses Beginnen".

Fortunately, by consultation of VAN DER HOEVEN's paper (1826: 441) the problem of his mysterious *Eumenes marginata* could easily be solved. It proved to result from DALLA TORRE's incorrect reference to "*Eumenes emarginata* (= *Vespa emarginata* Fabr. = *V. quadrata* Panzer)", one of the insects mentioned by VAN DER HOEVEN in a list of insects collected in the environs of Rotterdam.

VAN DER HOEVEN gave the following description of the specimen(s) before him: "nigra, thorace maculato, abdomine fasciis quinque flavis, prima antice emarginata". Evidently this was based on a species of *Ancistrocerus*. It may be noted that *Vespa emarginata* Fabr. 1793 is an invalid homonym of *Vespa emarginata* Linné, 1758, and probably a synonym of *Ancistrocerus gazella* (Panzer, 1798).

21. Some species erroneously regarded as Eumenidae. — The following species were placed in the synonymy of *Eumenes pomiformis* (Fabr.) by DALLA TORRE (1894: 29).

1. *Vespa globulosa* Geoffroy, in FOURCROY, 1785, *Entom. Paris*. 2: 434 (= *Vespa* no. 8, Geoffroy, 1762, *Hist. Abr. Ins.* 2: 376). — In my opinion the description was evidently based on a Sphecoid wasp, probably a species of *Cerceris* or *Mellinus*.

2. *Vespa infundibuliformis* Geoffroy, in FOURCROY, 1785, *Entom. Paris*. 2: 434 (= *Vespa* no. 7, Geoffroy, 1762, *Hist. Abr. Ins.* 2: 375). — The description and the reference to LINNÉ, *Fauna Suecica*, no. 996 [*Mellinus arvensis* (L.)]

suggest that this is a Sphecoid, either LINNÉ's species or a synonym of *Cerceris rybyensis* (L.).

3. *Vespa lunulata* Villers, 1789, *Caroli Linnaei Entomologia* 3: 285 — "in Europa. Circa Nemausum" (= near Nîmes, S. France) (type lost). — This is undoubtedly a male Scoliid wasp ("*anus tridentatus*"), perhaps *Trielis* (*Heterelis*) *quinquecincta* (Fabricius).

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