

Records of Masarid wasps with descriptions of two new species of *Quartinia* Ed. André (Hymenoptera)

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I have recently had the opportunity to study various small consignments of *Masaridae*, mostly collected by Mr. K. M. Guichard and now in the British Museum, but also some collected by Dr. K. V. Krombein (U.S.Nat. Mus.), Mr. J. P. van Lith (Leiden Mus.) and Dr. George Salt (University of California, Berkeley and my collection). The specimens are here recorded and, where new, described.

In recent expeditions to the Canary Islands, Mr. K. M. Guichard collected specimens of *Quartinia* from the islands of Fuerteventura, Tenerife and Gran Canaria. Those from the first island belong to the species described by Blüthgen (1958) as *Q. canariensis* but the male was previously unknown; the specimens from Tenerife and Gran Canaria constitute new species. Mr. Guichard tells me the specimens were caught settling on the ground in the sunshine; none was seen on flowers.

The main key to the species of *Quartinia* is the one I published in 1962 and I shall relate the new species to that key. Three further species and one subspecies were added later (Richards, 1964).

Quartinia canariensis Blüthgen, 1958

♀. In the two original ♀♀ (Richards, 1962:143) the gaster was reddish in one and black in the other. In the present series the ground colour of the gaster varies from light to very dark reddish-brown. The pale spots on the tergites are connected with one another to a varying degree, sometimes being almost divided into five, sometimes almost forming a single band, somewhat widened in the middle.

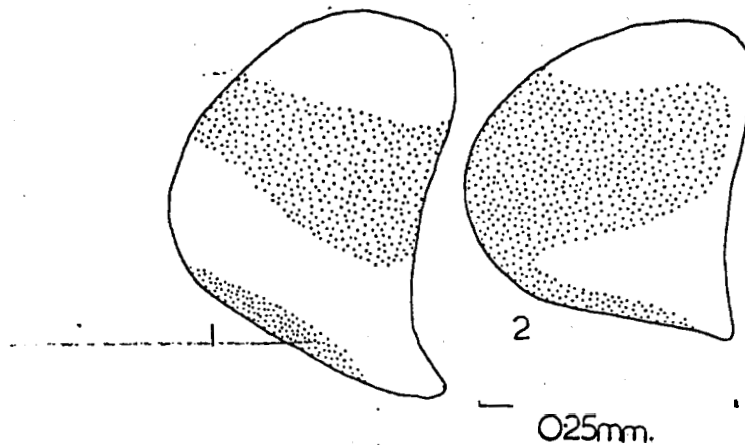
♂. Like one of the darker ♀ with the ground colour of the gaster nearly black; clypeus, labrum, mandibles except tip, and antennal segments 1-3 above, white. Otherwise like the ♀. Fore tibia unmodified; fore basitarsus curved but not hooked; gastral tergite 7 almost rounded at apex, very feebly emarginate; parameres wide and rounded at apex, inner side somewhat truncate. Hardly smaller than ♀. Canary Is., Fuerteventura, 9. v. 64; Puerto del Rosario, 30. iv. 64, ♂, 3♀, 6. v. 64, ♂, 3♀ (K. M. Guichard) (B.M.). The male of *Q. canariensis* runs down in the key (Richards, 1962:135) to couplet 49 but the mid basitarsus is not narrowed at the base and the fore tibia is also unmodified. The fore basitarsus is curved but not very strongly and not forming an apical hook. The species differs from all the others in this section in having no punctures on either the mesoscutum or gaster.

Quartinia tenerifina sp. nov.

Very close to *Q. canariensis* Blthgn. but differing as follows :

♀. Top of inner orbits with a white spot ; dorsal aspect of pronotum white with a roundish black spot on each side ; scutellum mainly white ; a white dot at the top of the mesopleuron ; whole dorsal aspect of propodeum white ; legs more extensively pale ; gaster frankly pale reddish, preapical white bands more continuous, widened in centre but not interrupted again on each side. Length about 2.7, length of fore wing 2.3 mm, hamuli 5-6.

Tegula (figs. 1 and 2) somewhat less strongly produced inwards, narrowed posteriorly ; fore wing with thickening at the junction of the M and Cu₁ ; M rather smaller ; propodeum projecting rather more below but the upper part of the posterior surface less distinctly margined.



FIGS. 1 and 2. (1) Left tegula of *Quartinia canariensis* Blthgn. ♀. (2) The same of *Q. tenerifina* sp. nov. ♀.

♂. Like the ♀ but the pale markings even more extensive, particularly the base of the antenna ; clypeus, labrum and mandibles except tip, white ; tergal bands widened in centre for a shorter distance (measured transversely). Structurally differing in the same way as ♀. Size about the same. Canary Is., Tenerife, Los Christianos, 17. iv. 64, ♂ holotype, 4♂, 5♀ paratypes (K. M. Guichard) (B.M.).

The species would run down in my key (Richards, 1963 : 128) to *Q. canariensis* Blthgn. but can be separated from it as indicated above.

Quartinia guichardi sp. nov.

♀. Black ; mandibles reddish ; antennae whitish beneath segments 1-11 and also partly above, especially on intermediate segments ; clypeus often with an indefinite or (1 spec.) two well-defined spots at dorsal margin, yellowish ; spots at inner dorsal corner of each eye, anterior margin of pronotum (with posterior semicircular emargination on each side) and posterior inner corner, spot at top of pleuron, anterior and posterior part of brownish tegula, spot on disk of hind margin of mesoseutum, scutellum, except two more or less fused black spots and its lamellate margin, dorsal spots and tip of angles of propodeum, narrow bands on gastral tergites 1-5 (those on 2-5 biemarginate in

front), most of tergite 6, legs except coxae, most of femora and spot behind tibia, yellow or whitish-yellow. Last segment of tarsi somewhat darkened. Wings hyaline, venation brown except base of costa which is yellowish. Length 3.0-4.0 mm, length fore wing about 2.5 mm, hamuli 3-4.

In my key to the genus (1962 : 128) it runs to couplet 42 but it has much more extensive pale marks than in *Q. nubiana* Rich., is more clearly punctured and the propodeal angles though projecting are not lamellate; the colour is darker than that of *Q. tripolitana* Rich. and the gastral tergites are distinctly though very closely punctured. Agrees with the description of *Q. dilecta* André (Richards, 1962 : 136) except mandibles more shining; pronotum with fore margin a little sharp, surface rather more distinctly punctured. Mesoscutum finely reticulate but clearly a little shining with more distinct punctures; mesopleuron more shining and somewhat more strongly punctured; propodeum with angles rather more prominent. Gaster a little shining, tergite 2 very closely and finely punctured, basal part not separated off by a fine keel, posterior tergites finely reticulate not punctured.

♂. Coloured like ♀, but mandibles, labrum except small dark spot, clypeus and more of antennae, white. Bands of gastral tergites with a prominent spot at centre and nearly interrupted on each side of it, bands on tergites 1-6, 7 with a pale spot, gaster rather browner, especially beneath. Distal half of femora pale, especially beneath. Size as in a small female.

In the key (1962 : 128) it runs down to couplet 45 but it differs from *Q. medusa* Rich. in having the mid basitarsus simple, the clypeus entirely white, the tegula less produced, and all parts ~~less coarsely~~ punctured. It differs from all species of the group of *Q. dilecta* André (to which it seems nearest allied) in having a simple fore tibia and basitarsus and in not having a fine keel near base of gastral tergite 2. It is more distinctly punctured than any of the species except *Q. parvula* Dusmet. Structure generally very like the female and differing much as the sexes do in *Q. dilecta*; gastral tergite 7 truncate at apex but scarcely emarginate; parameres very slightly hooked at apex; sternite 7+8 subquadrate, centre a little depressed with indications (in some lights) of a V-shaped pit. Canary Is. Gran Canaria. Maspalomas. 17. vi. 66, holotype ♂, 6 paratypes ♀, 28. vi. 66, 1 paratype ♀ (*K. M. Guichard*) (B.M.).

Dr. K. V. Krombein (U.S. Nat. Mus.) recently collected eight specimens of *Quartinia* in the United Arab Republic and the Sudan and has kindly allowed me to examine them.

Quartinia thebaica R. du Buyss. Karga Oasis, El Karga, 7. v. 65, 2♀.

Q. tuareg G. Soika. Karga Oasis, E. Karga, 7. v. 65, 2♀.

These specimens like the male previously recorded from Luxor, are considerably darker than the Saharan specimens.

Q. tripolitana Rich. 50 miles E.N.E. of Cairo, El Qassasin, 10. iii. 65, 2♀. These resemble the specimens from Tripolitania and Cyrenaica but there are somewhat fewer punctures on the duller mesoscutum and the gaster is rather darker. They are much more like these specimens than they are like subsp. *sinaitica* Richards, 1964 from Sinai in which the mesoscutum is more shining and more punctured and the ground colour of the gaster is black.

Quartinia nubiana Rich. or species very near. Sudan: Gebel Oweinat, Wadi Ain el Brins, 9-12. iv. 67, ♂ ♀ (*K. V. Krombein*).

The female has the mesoscutum somewhat less strongly punctured than in the original material, the pale bands on the gaster are developed only on tergites 1-2, and are narrower and less widened at the sides and centre. The male (previously undescribed) resembles the female but has a large discal area on the clypeus white; much of gastral tergite 7 and indications of pale spots at the centre of the apical margin of tergites 3-5. It lacks the fore and mid leg on the right side; as far as can be seen the fore tibia is narrowed behind on rather less than its distal half (hardly emarginate) and the fore basitarsus is simple. The fine keel at the base of gastral tergite 2 is distinct. The pronotum is black with two small white central spots. The gaster is fundamentally black and the tegula is white with a fairly large central testaceous spot.

In the key (1962 : 128) it runs best to *Q. tripolitana* Rich. (couplet 51) but the fore tibia is less emarginate and the basitarsus is simple. The mesoscutal punctures are also stronger and more numerous, though considerably weaker than in *Q. parvula* (Duf.).

The original material was recorded from the 'Nubian desert' and more specimens are required to deal satisfactorily with these forms.

Celonites mayeli Richards was recorded (Richards, 1962 : 33) from *Teucrium aureum* Schreb. in the south of France. Mr. M. Cooper allowed me to examine eight females which he collected in the Camargue and Bouches-du-Rhône (S. France) 3-18. vii. 65. Five females were on the flowers of *Teucrium polium* L. (Labiatae) and one on those of *Dorycnium* sp. (Leguminosae), the last in a spot where *Teucrium* was absent. Dr. F. Schremmer (1959) has recently given an interesting account of the method by which *Celonites abbreviatus* (Vill.) collects pollen. The short dense hairs of the frons are the collecting agent and the pollen is brushed off the head by the modified front tarsi. It is then swallowed and taken back to the nest to be regurgitated, together with the nectar. Dr. Schremmer caught the wasp on *Salvia officinalis* L. at Roving (Jugoslavia) and on *Echium* near Bolzano. These short frontal hairs are specially developed in the ♀ of the group of *C. abbreviatus*.

Mr. J. P. van Lith sent me three specimens of *Celonites*, now in the Leiden Museum, which he collected in Greece. These specimens were :

C. rugiceps Bischoff. Kastoria, 700 m, 23-25. vi. 63. ♀ with wings almost black; *C. abbreviatus* (Vill.). Athene, Hymettus, 23. vi. 66, ♂ on *Thymus*; *C.* sp. near *foveolatus* Kostylev. Athene, Voet Hymettus, 14. vi. 65, ♀. This single specimen appears to belong to an undescribed species but more material of both sexes is required to determine its status.

Further specimens of *Celonites* have recently been collected by Mr. K. M. Guichard.

Celonites yemenensis yemensis G. Soika. S. Arabia : Lodar, 800 m, 18. v. 67 (K. M. Guichard).

Celonites jousseaumei asrensis G. Soika. Aden : Musaybir, 600 m, 14. iii. 67, 2 ♂, 9 ♀ (K. M. Guichard).

Celonites sp. near *abbreviatus* (Vill.). Turkey : Artrin, 20 km Yusufeli-Tortum Rd., 700 m, 8. vi. 62 (Guichard & Harvey). This specimen is very like *C. abbreviatus* but it is rather dark, with the pale marks which are all whitish somewhat reduced. The gastral bands are narrow but quite continuous. The posterior margins of tergites 2-5 appear crenulate though the crenulations

are filled in by a transparent lamella. This may be the same as *C. abbreviatus tauricus* Kostylev, 1935, from the Crimea, though Kostylev mentions no colour difference. *C. abbreviatus* has been recorded from France and Portugal to Greece and Cyprus and from the Caucasus (Kostylev) but more material including males would have to be studied to decide on the status of the Turkish specimen.

The expeditions to Turkey of Messrs Guichard and Harvey produced a long series of *Ceramius* belonging to two species of which previous records have not been numerous. Some of the earlier specimens had already been determined by Dr. Giordani Soika.

Ceramius caucasicus André.

Turkey: Ankara, Elma Dagi, c. 1000 m, 19. vi. 62, 5 ♂, 3 ♀, 28. vi. 62, 8 ♂, 5 ♀, Idris Dagi, c. 1300 m, 30. vi. 62, ♀, Dikmen, 914 m, 5. vii. 59, 6 ♂: Amanus Mts., Serta vul Gececi, 1494 m, 21. vi. 60, ♀: Yozgat, Yozgat-Sivas Rd., 914 m, 1. vii. 60, ♂: Hasan Oglan, 914 m, 8. vii. 59, 2 ♂, 1 ♀: Ayas Dagi (Ankara-Baypazari Rd.), 1158 m, 30. vi. 59, ♀: Sivas Serefiye area, 1524 m, 4. vii. 60, ♂ ♀: Kayseri, Sultan Lani, 1200 m, 13. vi. 62, ♂: Erzerum, Kopdagi Gececi, 1524 m, 22. vii. 60, 6 ♂, 1 ♀.

Ceramius bureschi Atanassov subsp. *lycaonius* Bischoff.

Turkey: Ankara, Ravli, 1000 m, 30. vi. 62, ♂: Kutahya, Acem Dag, 1300 m, 28. vii. 62, ♂.

Finally, Dr. George Salt sent a long series of *Pseudomasaris* which were obtained on the flowers of *Phacelia* in S. California. *Pseudomasaris basirufus* Rohw. Riverside Co., Cottonwood Springs, 23. iii. 66, on *Phacelia crenulata* Torr., ♀. *Pseudomasaris maculifrons* (Fox), Riverside Co., 6 miles from Cottonwood Springs, 23. iii. 66, 34 ♂, 10 ♀ on flowers *Phacelia crenulata* (G. Salt): Imperial Co. Palo Verde, 19. iii. 66, 1 ♂ on flowers *Phacelia crenulata* (J. W. MacSwain): Arizona, Yuma Co., 2-3 miles S. of Quartzite, 21. iii. 66, 1 ♂ on flower of *Phacelia crenulata* (G. Salt).

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