THE GENUS CRYPTUS FABRICIUS, 1804 OF THE CANARY ISLANDS (HYMENOPTERA, ICHNEUMONIDAE)

by

G. VAN ROSSEM

ABSTRACT


Cryptus dianae Gravenhorst, 1829 solivagus subsp. nov. is described from Tenerife. A redecription of the holotype of Cryptus obscuripes Zetterstedt, 1838 is given and the species is acknowledged to be distinct. C. obscuripes impeditus subsp. nov. is described from Tenerife, Palma and Gomera. The lectotype of Cryptus nigritarsis Kriechbaumer, 1894 from Tenerife is redescribed. More specimens from Tenerife, only males, were found. Four new species are described, viz., Cryptus praefortis from Tenerife and Gomera. Cryptus ultramondanus from Lanzarote, Cryptus insularis from Fuerteventura and Cryptus furvus from Gran Canaria. Keys to the Cryptus males and females from the Canary Islands are given.

Key words. - Cryptus, Canary Islands; new species.

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INTRODUCTION

Two consignments of material from the Canary Islands, received from Dr G. Ortega (Museo Insular Ciencias Naturales, Tenerife) gave me the opportunity to study Canarian specimens of the genus Cryptus Fabricius, 1804. Dr Kl. Horstmann (Zoologisches Institut III, Würzburg) kindly offered me to insert specimens from his collection and one specimen from the Museo Insular at Tenerife. Dr Horstmann also acted in my interest by asking for the loan of the type material of Cryptus nigritarsis Kriechbaumer at the Transvaal Museum at Pretoria (RSA). Dr Max Fischer (Naturhistorisches Museum Wien) sent the type specimen of Cryptus verutus and Dr F. Koch (Museum für Naturkunde, Berlin, DDR) put the type specimen of C. verutus subsp. hierroensis at my disposal. Dr Roy Danielsson (Universitetets Zoologiska Institutionen, Lund, Sverige) granted me the permission to study the type of Cryptus obscuripes Zetterstedt and several other specimens of that species and of Cryptus dianae Gravenhorst as well.

With respect to the use of the name Cryptus the author refers to Van Rossem (1987). Townes (1970: 193) provides a description and a figure (fig. 165) of Itamoplex Förster, a junior synonym of Cryptus Fabricius.

In due time the collection Van Rossem will be placed in the Rijksmuseum van Natuurlijke Historie at Leiden.

KEY TO THE CRYPTUS MALES OF THE CANARY ISLANDS

The males of C. praefortis, C. furvus and C. verutus are unknown.


2. Face with conspicuous, long pilosity, the length of which is reaching the width of mandibular base ................................. 3

3. Front, middle femora and tibiae orange coloured. Hind femur fusceous, laterally ferruginoius. Tyloids on flagellar segments 13(14)-17(18)(19). Face and gena with long grey setae. Frons not concave .................................
Cryptus nigritarsis Kriechbaumer
- Front and middle femora fuscous, brownish at the extremity. Hind femur fuscous. Front and middle tibiae brownish. Tyloids on flagellar segments 12(13)–17(18). Face and gena with long setae

Cryptus ultramondanus spec. nov.
4. Basal area, first lateral area, areola and second lateral area polished. Mesoscutum polished, with fine punctation. Frons not concave. Tyloids on flagellar segments 15(16)–19

Cryptus insularis spec. nov.
- Basal area, first lateral area, areola and second lateral area with sculpture. Punctation of mesoscutum closer and coarse. Frons slightly concave (not in a specimen from Palma). Tyloids on flagellar segments 16(17)–19(20). Face and gena with grey pilosity, but in length not reaching the width of mandibular base

Cryptus obscuripes impeditus subsp. nov.

Key to the Cryptus females of the Canary Islands
The females of C. insularis and C. nigritarsis are unknown.

1. Hind femur orange coloured...........2
- Hind femur black coloured............3

2. Ovipositor exceptionally long, 0.96–1.0 of the length of the front wing

Cryptus verutus Van Rossem
- Ovipositor of moderate length, 0.48–0.60 of the length of the front wing (see remark on page 253)

Cryptus dianae solivagus subsp. nov.
3. Ovipositor exceptionally long, 1.13 of the length of the front wing. Entire abdomen, with all tergites highly polished

Cryptus furvus spec. nov.
- Ovipositor shorter...................4

4. The apical transverse carina with strong apophyses. All abdominal tergites red in colour and highly polished. Ovipositor 0.44–0.47 of the length of the front wing

Cryptus praefortis spec. nov.
- The apical transverse carina without apophyses................5

5. Basitarsus of front leg 0.69 of the length of front tibia. Ovipositor 0.86–0.98 of the length of the front wing

Cryptus ultramondanus spec. nov.
- Basitarsus of front leg 0.58 of the length of front tibia. Ovipositor 0.53 of the length of the front wing (see remark on page 254)

Cryptus obscuripes impeditus subsp. nov.

Cryptus dianae dianae Gravenhorst
Cryptus dianae Gravenhorst, 1829: 545, Q
Cryptus dianae dianae; Ortega & Baez 1980: 44–47.

Cryptus dianae solivagus subsp. nov.

Holotype label of the present author.

Description of male holotype. - Front wing 5.91 mm long. Palpi brown. Mandible black. Inner orbit with ivory margin. Outer orbit with slight ivory margin. Face black, pilosity short. Tyloids on flagellar segments 14–19. Mesoscutum more widely

Table 1. Cryptus dianae dianae Gravenhorst

<table>
<thead>
<tr>
<th>locality</th>
<th>tyloids</th>
<th>colour inner orbits</th>
<th>colour outer orbits</th>
<th>colour femur 3</th>
<th>colour abdomen</th>
<th>colour mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>15-20</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>orange</td>
<td>postpetiolar and terg. 2, 3 and 4 orange; rest fuscous</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>Grollo 18.v.1960</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark Løjtt</td>
<td>15-20</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>orange</td>
<td>postpetiolar and terg. 2, 3, 4 orange; rest fuscous</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>Kirkeby vi.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy Funes</td>
<td>15-21</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>orange</td>
<td>postpetiolar and terg. 2, 3 and 4 orange; rest fuscous</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>20.vii.1968</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sverige Palsjö</td>
<td>15-19</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>orange</td>
<td>postpetiolar and terg. 2, 3 and 4 orange; rest fuscous</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>Skåne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
punctured than in continental specimens. All femora orange coloured. First abdominal segment black. Tergites two and three reddish, other tergites black (third tergite orange in continental specimens). Compare table 1 and 2.

Characteristics of the female. I did not see a female from the Canary Islands of this subspecies. Some important characters of the continental female follow here. Antenna with segments 4–7(8) marked white, or without marking. Postanellus slender 7.0–8.0 X as long as wide. Frons rather concave. Inner and outer orbits with ivory margin. All femora orange coloured. Abdominal segments 2–4 orange. Ovipositor in larger specimens 0.55–0.60 of the length of the front wing, 0.48–0.53 in small specimens.

Female. – Unknown.

Etymology. – “Solivagus” is the Latin for “standing solitary”.

Cryptus obscuripes Zetterstedt
_Cryptus obscuripes_ Zetterstedt, 1838: 370.
_Cryptus obscuripes_; Horstman 1968: 311.
_Cryptus dianae obscuripes_; Ortega & Baez 1980: 47–49.

In my paper of 1969 I included Zetterstedt’s species, _Cryptus obscuripes_ as a subspecies of _Cryptus dianae_ Gravenhorst. Reconsidering some more or less stable features, I think this point of view can not be maintained. It seems that _C. obscuripes_ represents a boreal – montane species. It occurs in Scandinavia and Finland and also it is known from mountainous localities in central Europe.

Description of male holotype. – Labels: an original label _C. obscuripes_ ♀, Talvig (Sverige, coll. Zetterstedt). Holotype label of Horstmann (1966). Front wing 7.33 mm long. Palpi, mandible, clypeus, inner orbits, face below antennae, frontal orbit next to antennal scrobes, upper inner orbit at OOL, outer orbit (narrow), yellow to ivory in colour. Face with grey pilosity. Frons, including scrobes, concave. Upper frons with wrinkled sculpture. Anten-
Table 3. Cryptus obscuripes Zetterstedt

<table>
<thead>
<tr>
<th>location</th>
<th>tyloids colour</th>
<th>inner colour</th>
<th>outer colour</th>
<th>femur 3 colour</th>
<th>abdomen colour</th>
<th>mandible colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holotype Sverige</td>
<td>15-20</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>fuscous</td>
<td>all tergites bright orange</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>Talvig r</td>
<td>15-19</td>
<td></td>
<td></td>
<td></td>
<td>tip somewhat fuscous</td>
<td></td>
</tr>
<tr>
<td>Netherlands Ede</td>
<td>15-20</td>
<td>broadly ivory</td>
<td>ivory marked</td>
<td>black</td>
<td>postpet. terg. 2, 3, 4, 5 orange</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>28.vii.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6 &amp; 7 somewhat fuscous</td>
<td></td>
</tr>
</tbody>
</table>

Eventually the best thing to do is to propose a subspecies for the Canary Islands specimens.

**Cryptus obscuripes impeditus** subsp. nov.


Description of male holotype. – Front wing 6.88 mm long. Palpi pale brown. Mandible ivory, teeth fuscous. Clypeus convex, punctured, with a wide polished margin. Face closely punctured, with grey pilosity. Inner orbits with conspicuous yellow margin. Outer orbits with narrow yellow margin up to vertex. Malar space wide, with microsculpture. Gena polished, with minute punctation, implantations of grey pilosity. Tyloids on flagellar segments 17-20. Prothorax with coarse sculpture and robust epomia. Mesoscutum with rather fine punctation, notaulus strong. Postscutellum with yellow mark. Propodeum, with coarse sculpture, both transverse carinae present, the apical carina with small apophyses. Mesopentum with coarse punctation. All coxae black. Front and middle femora robust and brownish in colour. Front and middle tibiae brown and with a yellow streak. Hind femur, tibia and basitarsus brown, third and fourth tarsal segments paler. Entire gaster orange to reddish, claspers black.

There are two specimens from two islands, viz., Palma and Gomera. The position of the tyloids is slightly different from the holotype of Tenerife. The other characters are worth to accept.


No additional material found. I did not see the Canary Islands female. The characters given in the key are based on the continental female of Cryptus obscuripes.

Etymology. – "Impeditus" is the Latin for "difficult to approach", relating to the difficulty to place the specimens taxonomically.

The main characters of the male of C. obscuripes and the subspecies impeditus are shown on the tables 3 and 4.

**Cryptus nigritarsis** Kriechbaumer

**Cryptus nigritarsis** Kriechbaumer, 1894: 45-46.
**Cryptus nigritarsis; Ortega & Baez** 1980: 49-50.


Table 4. Cryptus obscures impeditus subsp. nov.

<table>
<thead>
<tr>
<th>locality</th>
<th>tyloids</th>
<th>colour inner orbits</th>
<th>colour outer orbits</th>
<th>colour femur 3</th>
<th>colour abdomen</th>
<th>colour mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenerife</td>
<td>17-20</td>
<td>ivory marked</td>
<td>upper orbit ivory</td>
<td>brown</td>
<td>entirely orange-red; clasper black</td>
<td>yellow; teeth fuscous</td>
</tr>
<tr>
<td>Lii.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palma</td>
<td>16-19</td>
<td>ivory marked</td>
<td>ivory marked</td>
<td>black</td>
<td>entirely orange claspers black</td>
<td>ivory; teeth fuscous</td>
</tr>
<tr>
<td>4 viii.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gomera</td>
<td>117-19</td>
<td>ivory marked</td>
<td>ivory marked</td>
<td>black</td>
<td>entirely orange claspers black</td>
<td>ivory spot on upper margin</td>
</tr>
<tr>
<td>16 viii.77</td>
<td>16-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The main characters of *C. nigritarsis* are shown on Table 5.

**Cryptus praefortis** spec. nov.

Material examined. - Holotype female: Tenerife, Ijuana, 11. vii. 1986, leg. G. Ortega / Museo Insular Cien-

Two female specimens from the islands of Tenerife and Gomera respectively, belong to an undescribed species of the genus *Cryptus* showing affinity with *C. spinosus* Gravenhorst and *C. subspinosus* Smits van Burgst. The difference with *C. spinosus* lies in the coriaceous sculpture of the tergites in *C. spinosus* while in *C. subspinosus* the ovipositor is longer, 0.50–0.60 of the length of the front wing and the second, third and fourth tergites show a close and fine alutaceous sculpture.

**Description of female holotype.** - Front wing 6.35 mm long. Palpi, mandible and entire head black, except for minute yellow margins of inner and outer orbits. Clypeus convex, with a flattened front margin. Face coriaceous, medially with a circular protuberance. Lower frons rather strongly concave, transversely wrinkled. Antenna black, postanellus 5.6× as long as apically wide. Malar space wide. Pronotum coarsely wrinkled, epomia strong. Mesoscutum polished, widely punctured, notaulus strong and long, transversely wrinkled along the sides of the median lobe. Scutellum polished, with fine punctures. Propodeum with coarse sculpture, both transverse carinae present, the apical carina with strong apophyses, reminding of *C. subspinosus* and *C. spinosus*. Mesopleurum strongly sculptured. All coxae black and all other parts of legs fuscous. The abdomen shows a main character of the species, namely all tergites highly polished and red in colour. Ovipositor 0.44 of the length of the front wing.

The paratype closely resembles the holotype. The ovipositor measures 0.47 of the length of the front wing.
Table 5. *Cryptus nigritarsis* Kriechbaumer

<table>
<thead>
<tr>
<th>locality</th>
<th>tyloids</th>
<th>colour inner orbits</th>
<th>colour outer orbits</th>
<th>colour femur 3</th>
<th>colour abdomen</th>
<th>colour mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>lectotype Tenerife Santa Cruz</td>
<td>14-18 yellow line</td>
<td>tempor. orbit yellow</td>
<td>fuscous; lateral. reddish</td>
<td>petirole black</td>
<td>tergites orange</td>
<td>base with yellow spot</td>
</tr>
<tr>
<td>paratype Tenerife Santa Cruz</td>
<td>14-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenerife P. del Hid. 2.v.1977</td>
<td>14-18 yellow line</td>
<td>tempor. orbit yellow</td>
<td>fuscous; tip somewhat ferruginous</td>
<td>first tergite black; other tergites reddish</td>
<td></td>
<td>black</td>
</tr>
<tr>
<td>Tenerife P. del Hid. 2.v.1977</td>
<td>14-17 yellow line</td>
<td>tempor. orbit yellow</td>
<td>fuscous</td>
<td>first tergite black; terg. 2 &amp; 3 red, tip black</td>
<td></td>
<td>black</td>
</tr>
<tr>
<td>Tenerife las Cañadas</td>
<td>14-17 yellow spot at black anten. base</td>
<td></td>
<td></td>
<td>fuscous</td>
<td>first tergite black, terg. 2 &amp; 3 red, others ferruginous</td>
<td></td>
</tr>
</tbody>
</table>

Etymology. — "Praefortis" is Latin for "very brave".

*Cryptus ultramondanus* spec. nov.


Description of the male paratype from Yaiza. — The male agrees with the female. Not all characters are recapitulated. Front wing 7.11 mm long. The entire head, including the mandible, with long grey setae. Right antenna missing beyond second flagellar segment. Tyloids on flagellar segments 12–17. Anterior transverse carina absent. The apical carina with weakly developed apophyses. Margin of postpetirole and all tergites orange in colour. Male claspers black. Left hind leg lacking behind trochanter.

Remark. — The male shows suspect resemblance with the male of *C. nigritarsis*. The most important difference lies in the colour of the front and middle femora and tibiae, but it should be admitted, in specimens from different islands. A definite decision about conformity of the two species can only be taken after the female of *C. nigritarsis* turns up.

Etymology. — "Ultramondanus" is Latin for "on the other side of the world".

The main characters of the male are shown on tabel 6.

*Cryptus insularis* spec. nov.

Material examined. — Holotype male: Isl. Can., Fuertev (= Fuerteventura), Vallebrin, 7.iii.1984, leg. G. Ortega /
Table 6. Cryptus ultramondanus spec. nov.

<table>
<thead>
<tr>
<th>locality</th>
<th>tyloids</th>
<th>colour inner orbits</th>
<th>colour outer orbits</th>
<th>colour femur 3</th>
<th>colour abdomen</th>
<th>colour mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanzarote Yaiza 19 ii 79</td>
<td>12-17</td>
<td>yellow spot at ant. scrobes</td>
<td>yellow margin temp. orbit</td>
<td>black</td>
<td>first tergite fuscous; other tergites red</td>
<td>black</td>
</tr>
</tbody>
</table>

Description of male holotype. – Front wing 5.06 mm long. Palpi and mandible fuscous. The entire head black, only a minute marking of ivory on inner orbit next to antennal socket and on temporal orbit. Face with close small punctures, implantations of grey pilosity. Antennal scrobes polished and somewhat concave. Upper frons not concave (compare C. obscuripes), with weak sculpture around anterior ocellus. OOL region, vertex and gena polished. Tyloids on flagellar segments 15-19. Lower 0.6 part of prothorax with wrinkled sculpture. Epomia present. There is a vague light spot opposite the notaulus. Mesoscutum polished with inconsiderable punctuation. Scutellum polished. Basal area and first lateral area, areola and second lateral area polished (compare C. obscuripes). Both transverse carinae present. Petiolar area wrinkled. Mesopleuron with widely placed small punctures. All coxae, including middle femur and entire hind leg black. Front femur somewhat brownish. Front and middle tibia brownish, with an ivory streak. Entire abdomen reddish, except for fuscous seventh tergite and claspers.

The paratype agrees with the holotype. Tyloids on flagellar segments 16-19. Orbits not marked. Fifth, sixth and seventh tergites fuscous.

Etymology. – "Insularis" is Latin for "belonging to the island".

The main characters of the male are shown on table 7.

Cryptus furvus spec. nov.

Material examined. – Holotype female: Gran Canaria, Caldera Tejecta, Las Palmas, La Roche, 2.iv.1983 / Museo Ins. Cienc. Nat. HY 1483 / Holotype label of the present author.

Only one specimen of this species is available. Within the genus Cryptus it takes an exceptional position with its long ovipositor, 1.13 of the length of the front wing.

Description of female holotype. – Front wing 7.33 mm long. Head including the mandibles black, except for slight yellow marking on inner orbit next to antennal socket. There is also a spot on the outer orbit. Face with close punctuation and coriaceous sculpture. Antennal scrobes polished, somewhat concave. Frons with coarse wrinkled sculpture. Gena with widely placed fine punctures, implantations of grey pilosity. Antenna long and slender, sixth, seventh and eighth flagellar segments marked white. Pronotum with coarse sculpture, the epomia robust. Lateral lobes of mesoscutum polished, with weak punctures. The median lobe proximally more closely punctured. The notaulus strong, with close transverse striation across. Propodeum with coarsely wrinkled sculpture. The basal transverse carina obsolete, the apical transverse carina present with weak apophyses. Mesopleuron coarsely sculptured. Legs, including all coxae, fuscous. The front tibia slightly swollen. The entire gaster black, with all tergites highly polished, hairs almost obsolete. The highly polished tergites offer a principal character. The very long ovipositor, 1.13 of the length of the front wing is another main character.

Etymology. – "Furvus" is the Latin for "dressed in black", relating to the entire black colour of the specimen.

Cryptus verutus Van Rossem


Description of female. – Front wing 7.5 mm long. Head black with ivory lining of inner and outer orbits. Postanellus 6.0-7.4 X as long as apically lining of inner and outer orbits. Postanellus 6.0-7.4 X as long as apically wide. Frons rugosely wrinkled. Thorax roughly sculptured. Propodeum...
Table 7. Cryptus insularis spec. nov.

<table>
<thead>
<tr>
<th>locality</th>
<th>tyloids</th>
<th>colour inner orbits</th>
<th>colour outer orbits</th>
<th>colour femur 3</th>
<th>colour abdomen</th>
<th>colour mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>holotype</td>
<td>15-19</td>
<td>marked yellow</td>
<td>minute yel. spot</td>
<td>black</td>
<td>tergite 1-6 orange-red</td>
<td>base light coloured</td>
</tr>
<tr>
<td>Fuerteventura 1984</td>
<td>next ant. scrob</td>
<td>temp. orb.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>paratype</td>
<td>16-19</td>
<td>minute yellow</td>
<td>black</td>
<td>black</td>
<td>tergites 1-4 red; other terg. fuscous</td>
<td>vague light spot at base</td>
</tr>
<tr>
<td>Fuerteventura 1984</td>
<td>spot vertex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

with anterior transverse carina obsolete. Posterior transverse carina present with weak apophyses. All femora orange. Abdomen with petiole fuscous, all other tergites orange coloured. Ovipositor long, 0.96-1.0 of the length of the front wing.

Male unknown to me.

References


Rossem, G. van, 1969. A revision of the genus Cryptus Fabricius s.str. in the western Palearctic region, with keys to genera of Cryptina and species of Cryptus. - Tijdschrift voor Entomologie 112: 299-274.


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