

## ***Trypoxylon figulus* group – notes on identification**

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Richards (1980) and Lomholdt (1984) considered the Genus *Trypoxylon* to comprise three species in the UK and Fennoscandia (*clavicerum*, *attenuatum* and *figulus*) although Richards noted that three “varieties” of *figulus* had been proposed by de Beaumont (1945). These were named *major*, *media* and *minor*. Lomholdt cites a reference to having reared both *major* and *minor* from the same nest and concluded that the names therefore had no taxonomic validity. However, it is now generally held that these three forms are distinct species: *major* is now referred to as *figulus* sens. str., with the other two species being *T. medium* and *T. minus* (although referred to as *T. minor* in recent Target Species Atlas articles). The purpose of this article is to help those contributing to the Atlas project to accurately determine these three species from old material that may currently all reside under the name *figulus* sens. lat.

Three sources of information have been consulted to compile the table of characters below: Richards (1980), Bitsch et al. (2001) and Dollfuss (1991). Within the table, these references are indicated by R, B and D, respectively so that the inquisitive mind can trace the comments back to the original text. In many respects, Dollfuss follows Bitsch et al. (for which he was a co-author) in which case I have only indicated differences or additional information. I should stress that the French and German translations are mine so if anyone has a more fine-tuned translation of the two foreign texts I would be delighted to receive them. It should be noted that neither of the two more recent foreign texts use the characters suggested in Richards (taken from Beaumont?), which tends to suggest that they may not be good discriminants. It will be seen that the characters suggested by Richards are rather comparative, although they might be easier to observe than small, possibly hairy pits on the underside of the hind coxa!

### **Females**

#### *T. major*

- R: Length 9.0 – 12.0 mm. Clypeus projecting moderately below. Pleural punctures distinct, well separated. Striae of propodeal dorsum longitudinal.
- B: Anterior border of clypeus sinuous on each side, with a median rectangular projection. Ventral face of coxa 3 with a large oblong dimple, with hairs not forming a canal-like structure.
- D: Hairs on the centre of the mesopleuron in most examples longer than the diameter of the anterior ocellus (rarely shorter).

#### *T. medium*

- R: Length 6.5 – 10.0 mm. Clypeus strongly projecting. Pleural punctures close, not very distinct. Propodeal striae more oblique.
- B: Anterior border of clypeus evenly concave on either side of a central trapezoidal projection. Ventral face of coxa 3 with a small, almost circular dimple with hairs forming a sort of canal.
- D: Hairs on the centre of the mesopleuron shorter than the diameter of the anterior ocellus.

#### *T. minus*

- R: Length 6.0 – 9.0 mm. Clypeus feebly projecting. Pleural punctures indistinct, not close. Propodeal striae more irregular.
- B: Ventral surface of mesothorax anteriorly with a small hooked projection. Anterior border of clypeus almost straight between the eyes and the central lobe (this lobe is illustrated with a very slight emargination). Ventral face of coxa 3 with a circular dimple.
- D: Ventral mesothoracic projection present “in more than 95% of examples”. Hairs on the centre of the mesopleuron shorter than the diameter of the anterior ocellus.

### **Males**

#### *T. major*

- R: Length 7.5 – 10.0 mm. Pleural punctures distinct, well separated. Striae of propodeal dorsum longitudinal.

- B: Gonostylus without a basal latero-ventral triangular lobe. Antennal segment 13 greater than or equal to segments 10-12 together.
- D: Maximum length of last antennal segment generally 2.2 to 3.6 times the basal diameter. Length of preceding segment 0.5 to 0.8 times its breadth. Hairs on the centre of the mesopleuron in most examples longer than the diameter of the anterior ocellus (rarely shorter).

*T. medium*

- R: Length 6.0 – 8.5 mm. Pleural punctures close, not very distinct. Propodeal striae more oblique.
- B: Gonostylus with a basal latero-ventral triangular lobe. Antennal segment 13 shorter than segments 11-12 together.
- D: Maximum length of last antennal segment generally 2 to 2.2 times the basal diameter (occasionally 2.4 times). Length of preceding segment 0.75 to 0.9 times its breadth.

*T. minus*

- R: Length 5.0 – 7.5 mm. Pleural punctures indistinct, not close. Propodeal striae more irregular.
- B: Ventral surface of mesothorax anteriorly with a small hooked projection. Antennal segment 13 greater than or equal to segments 10-12 together.
- D: Maximum length of last antennal segment generally 2.2 to 3.6 times the basal diameter. Length of preceding segment 0.5 to 0.8 times its breadth. Ventral mesothoracic projection present “in more than 95% of examples”. Hairs on the centre of the mesopleuron shorter than the diameter of the anterior ocellus.

## References

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