Pollinator Academy

Genus: Anthidiellum

Female

Male

Genus: *Anthidiellum Cockerell 1904*

Clade: Anthophila

Family: Megachilidae

SubFamily: Megachilinae

Tribe: Anthidiini

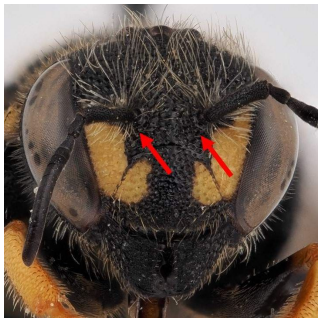
Number of species of this genus found in Europe: 3

Morphology & diagnosis

They are small sized bees (5mm). They are small robust black bees that as most of the Anthidini, present yellow markings across the body. They present a long tongue morphology. Their forewings bear two submarginal cells and the second recurrent vein is postfurcal. The lower part of the preoccipital carina is absent. The juxtantennal carinae or lamellae are absent. They present carina or lamella on the omaulus. The scutellum has a distinct shape, elongated with angular sides giving it an almost rectangular appearance. The axillae are mostly not pointed posteriorly. They do present arolium between the claws. The visible part of tergite 2 is at least 1.4 times longer than the visible part of tergite 3. The tergite 7 in males does not show a developed spine. Sternum 6 is without, or with weaker untoothed preapical carina.

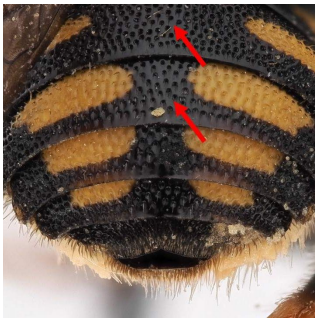
Summary of distinctive traits

- The juxtantennal carinae or lamellae are absent (a)
- They present carina or lamella on the omaulus (b)
- The visible part of tergite 2 is at least 1.4 times longer than the visible part of tergite 3 (c)
- 2nd recurrent vein reaching beyond submarginal cell 2 (d)
- Presence of arolium (e)
- Scutellum extended posteriorly with angled sides (f)
- Male tergite 7 without a spine (g)



(a) *Anthidiellum strigatum* Female

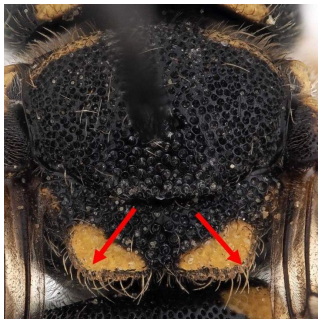
(b) *Anthidiellum strigatum* Female



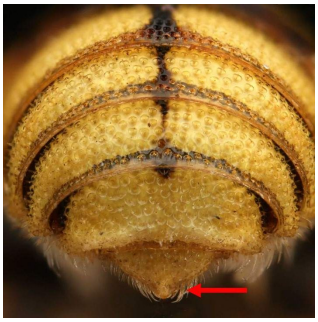
(c) *Anthidiellum strigatum* Female

(d) *Anthidiellum strigatum* Male

(e) *Anthidiellum strigatum* Male



(f) *Anthidiellum strigatum* Female



(g) *Anthidiellum strigatum* Female

General comments on identification to species level

According to Warncke, European species can be distinguished on the teeth and spines on sternites, as well as on the shape of the anterior border of the mesopleuron.

Morphologically similar genera, and how to distinguish them

- ***Anthidiellum - Afranthidium, Anthidium, Icteranthidium & Pseudoanthidium***
  Anthidiellum species do have an arolium between their claws.
  Afranthidium, Anthidium, Icteranthidium & Pseudoanthidium species don't have an arolium between their claws.

- ***Anthidiellum - Eoanthidium, Rhodanthidium & Trachusa***
  Anthidiellum species have a subrectangular, posteriorly extended scutellum and are much smaller.
  Eoanthidium, Rhodanthidium & Trachusa species have a rounded scutellum and are larger.

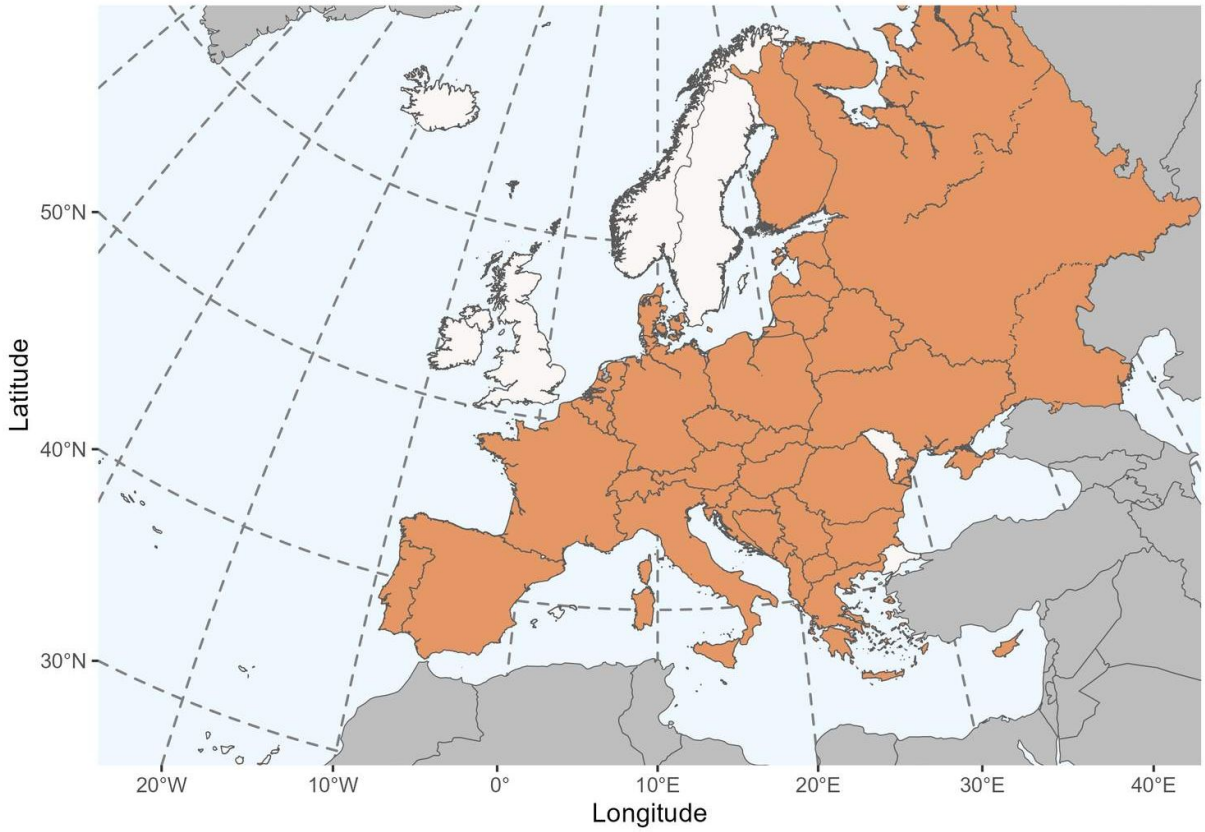
- ***Anthidiellum - Stelis***

  Anthidiellum species have rounded axillae, males have one apical tooth (sometimes bifid) on their anterior and median tibiae and females have a ventral scopa.

  Stelis species may have pointed axillae, males have two widely separated apical teeth on their anterior and median tibiae and females have no ventral scopa

Geographical distribution and global diversity

This genus is cosmopolite (Michener 2007). In total, 7 subgenera and 44 species have been recognized for this genus. From those species, three occur in Europe.



Presence in Europe

Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, North Macedonia, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Switzerland, Ukraine.

Biology

Seasonal life cycle

They are univoltine species flying in spring and summer.

Reproduction

Details about their reproduction are not known.

Nesting

They are solitary species and make their nest aboveground. The nest cells are lined with resin, giving their common name.

Parasites

They are parasitized by species of the genus *Stelis.*

Floral preferences

A. breviusculum is mostly generalist, *A. strigatum* visit preferentially *Lotus corniculatus* and other members of the Fabaceae family (Müller 1996), and *A. troodicum* is specialist of Lamiaceae.

Type species: Trachusa strigata Panzer, 1805, by original designation.

Synonyms: *n/a*

Etymology: the origin of this name means ‘small Anthidium’

Common names:

FR : l'anthidie naine

NL : de klein harsbijen (= small resin bees)

EN : resin bee

List of species found in Europe:

1. *Anthidiellum breviusculum* (Pérez, 1890)
2. *Anthidiellum strigatum* (Panzer, 1805)
3. *Anthidiellum troodicum* Mavromoustakis, 1949

References

Michener, D.C. 2007. The Bees of the World. The Johns Hopkins University Press, Baltimore.

Müller, A. 1996. Host plant specialization in western palearctic Anthidiini bees. Ecological Monographs 66(2): 235-257.

Attributions

This factsheet was created by ORBIT and is one of the outputs from a network of European Initiatives dedicated to pollinators, such as the EU Pollinator Monitoring Scheme (EUPoMS), the Preparatory Action for EU Pollinator Monitoring Scheme and Indicators (SPRING project), the Horizon 2020 Europe research projects (POSHBEE, SAFEGUARD), and European National action plans for pollinators.

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