

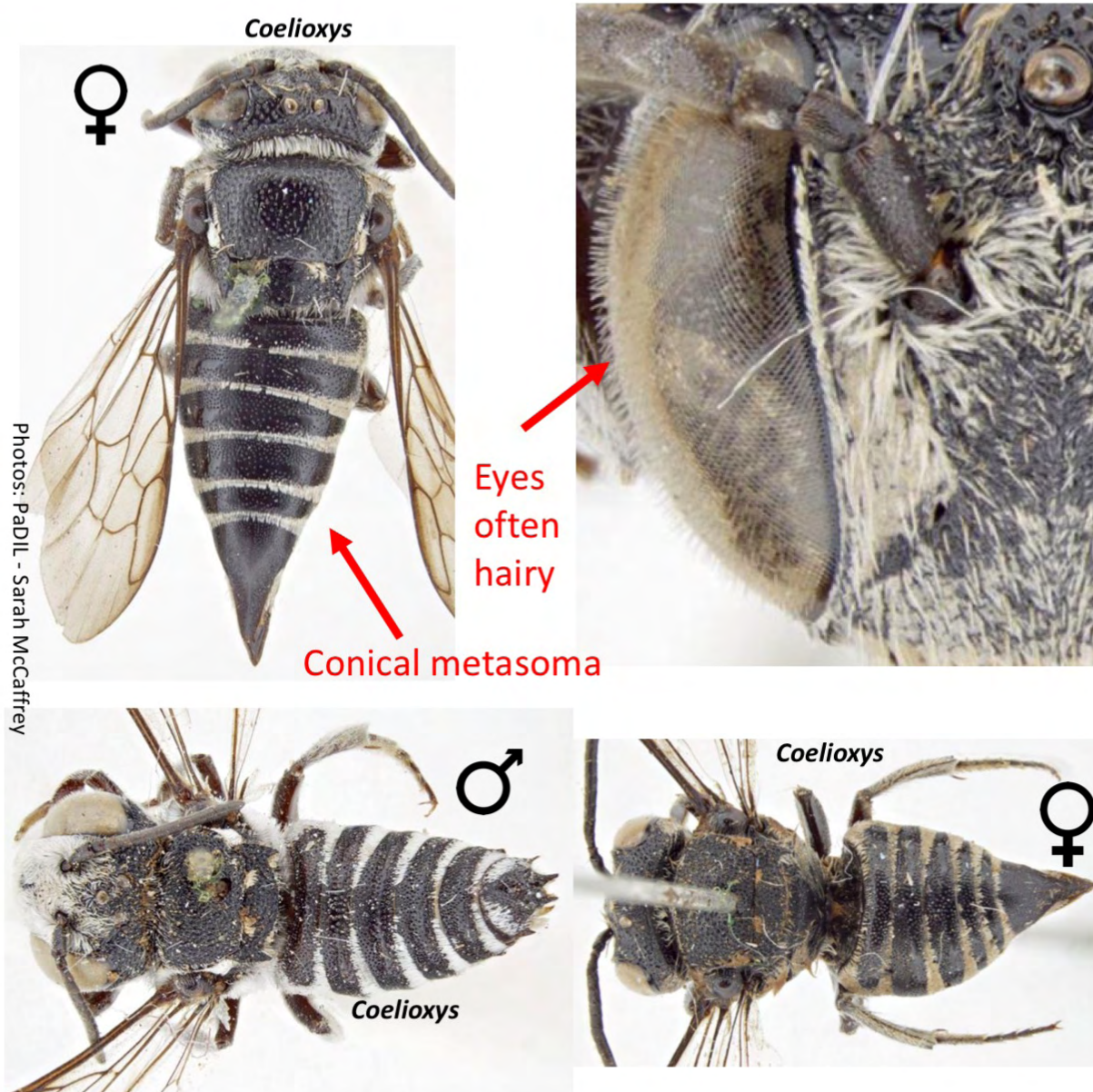
Family Megachilidae

The family Megachilidae is the second smallest of the Australian bee families, with approximately 169 described species. There are two subfamilies in Australia: the Megachilinae and Lithurginae. There are six genera, including one introduced.



Megachilidae – Couplet 1

- ❖ Metasoma conical, widest in first segment, tapering from near base to narrow, acutely pointed apex; eyes often hairy (T6 of males with two pairs of backwards facing spines) ... *Coelioxys*
- ❖ Metasoma not conical; eyes not hairy ... 2



<p><i>Coelioxys</i> 6 species Widespread Nest parasites of <i>Megachile</i> species</p>	<p>Rocha-Filho, L. C (2016) A revision of the cleptoparasitic bee genus <i>Coelioxys</i> (Hymenoptera: Megachilidae) from Australia. <i>European Journal of Entomology</i>, 113: 9–28.</p>
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Megachilidae – Couplet 2 (1)

- ❖ Matching the images below
- ❖ Not matching the images below

... *Anthidiellum*

... 3

Photos: PaDIL - Sarah McCaffrey



~5mm



Photo: Samantha Gray



Update: There is a newly introduced species to Australia, *Anthidium manicatum*, which looks similar to *Anthidiellum*. To date it has only been found in one area of regional Victoria. *Anthidium* has not yet been added to this key.



Photo: PaDIL - Sarah McCaffrey

Anthidiellum

1 species, *A. (Pycnanthidium) turneri*

Only known from Queensland

Megachilidae – Couplet 3 (2)

- ❖ Matching the images below
- ❖ Not matching the images below

... *Pseudoanthidium*

... 4

Note: These metasomal bands are integumental markings, not bands of hairs.



Female: Thin white transverse apical bands on metasomal segments

Photo: Tobias Smith



Male: Yellow transverse band in middle of each metasomal segment



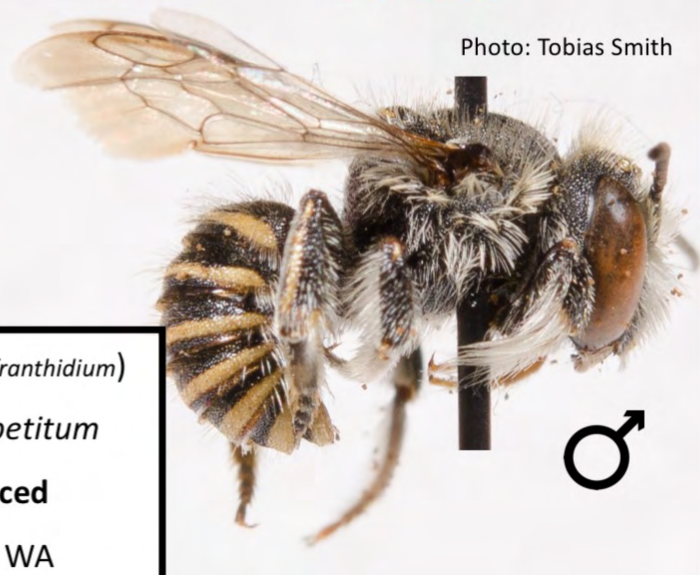
Photo: Tobias Smith



Male foreleg



Photo: Tobias Smith



Pseudoanthidium (previously called *Afranthidium*)

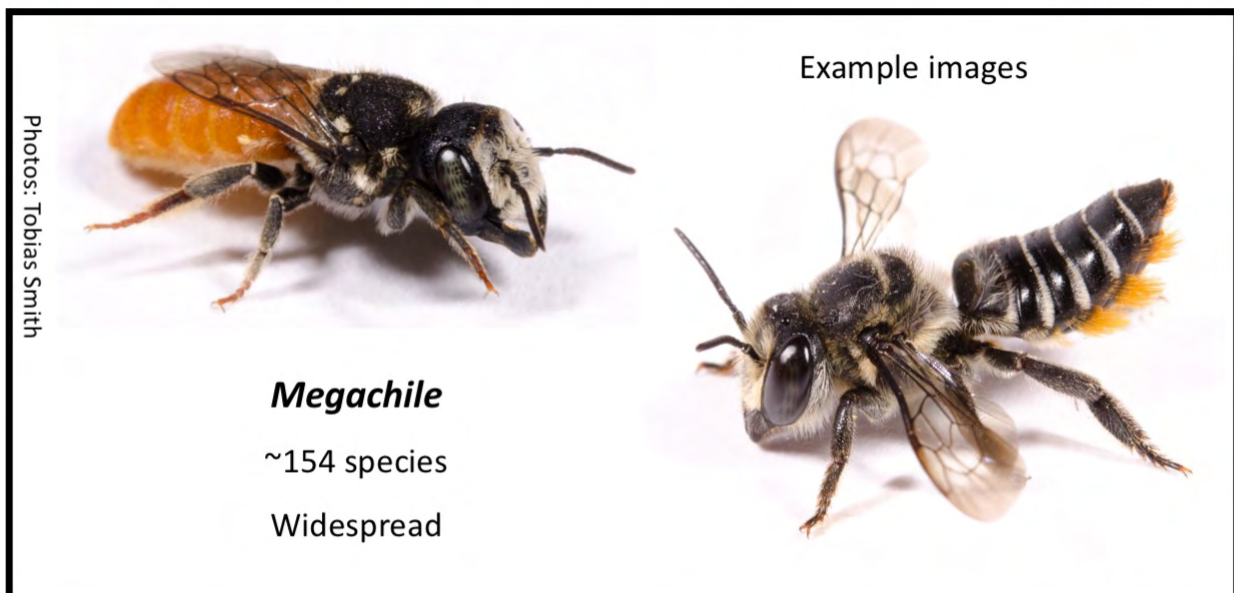
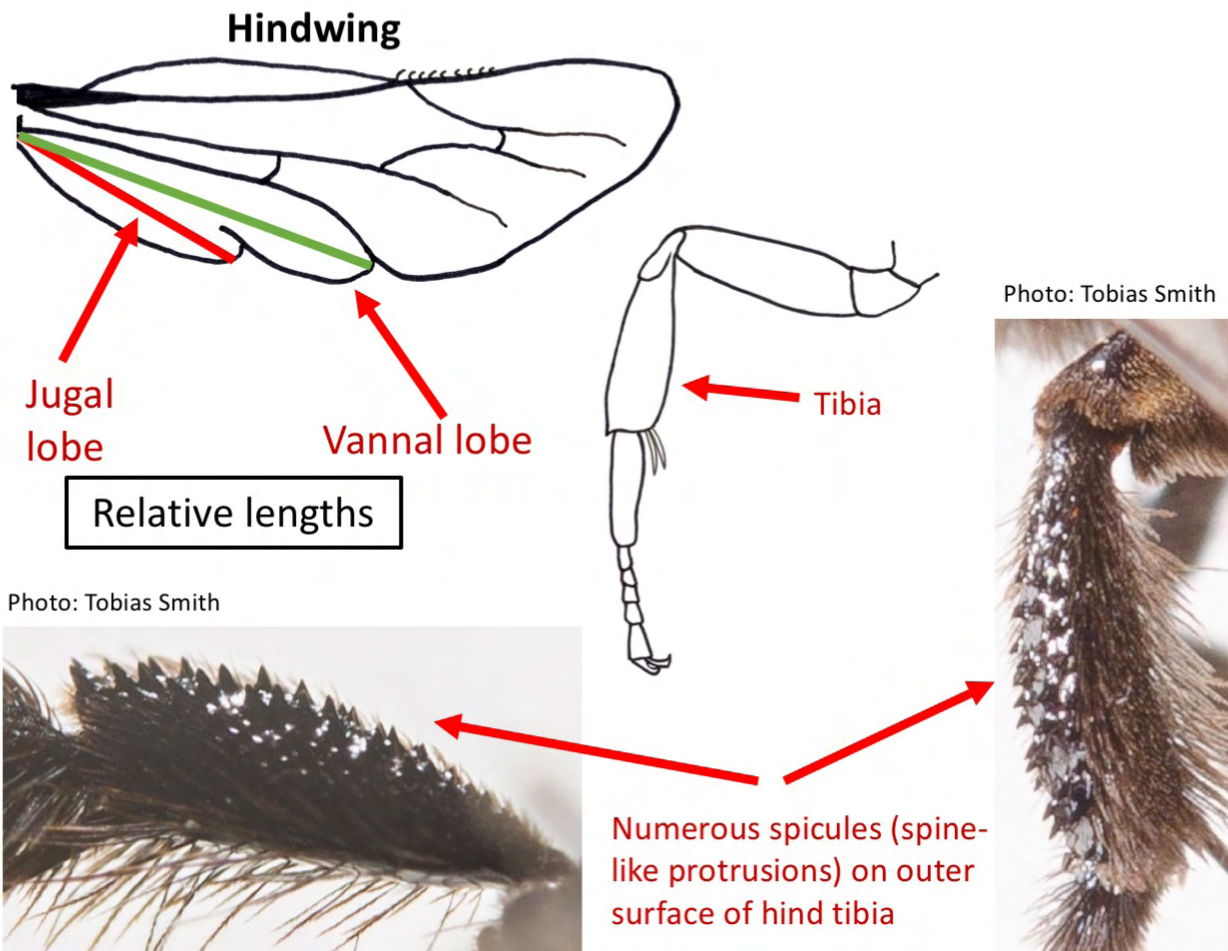
1 species, *P. (Immanthidium) repetitum*

African carder bee - **Introduced**

Widespread east coast & SW WA

Megachilidae – Couplet 4 (3)

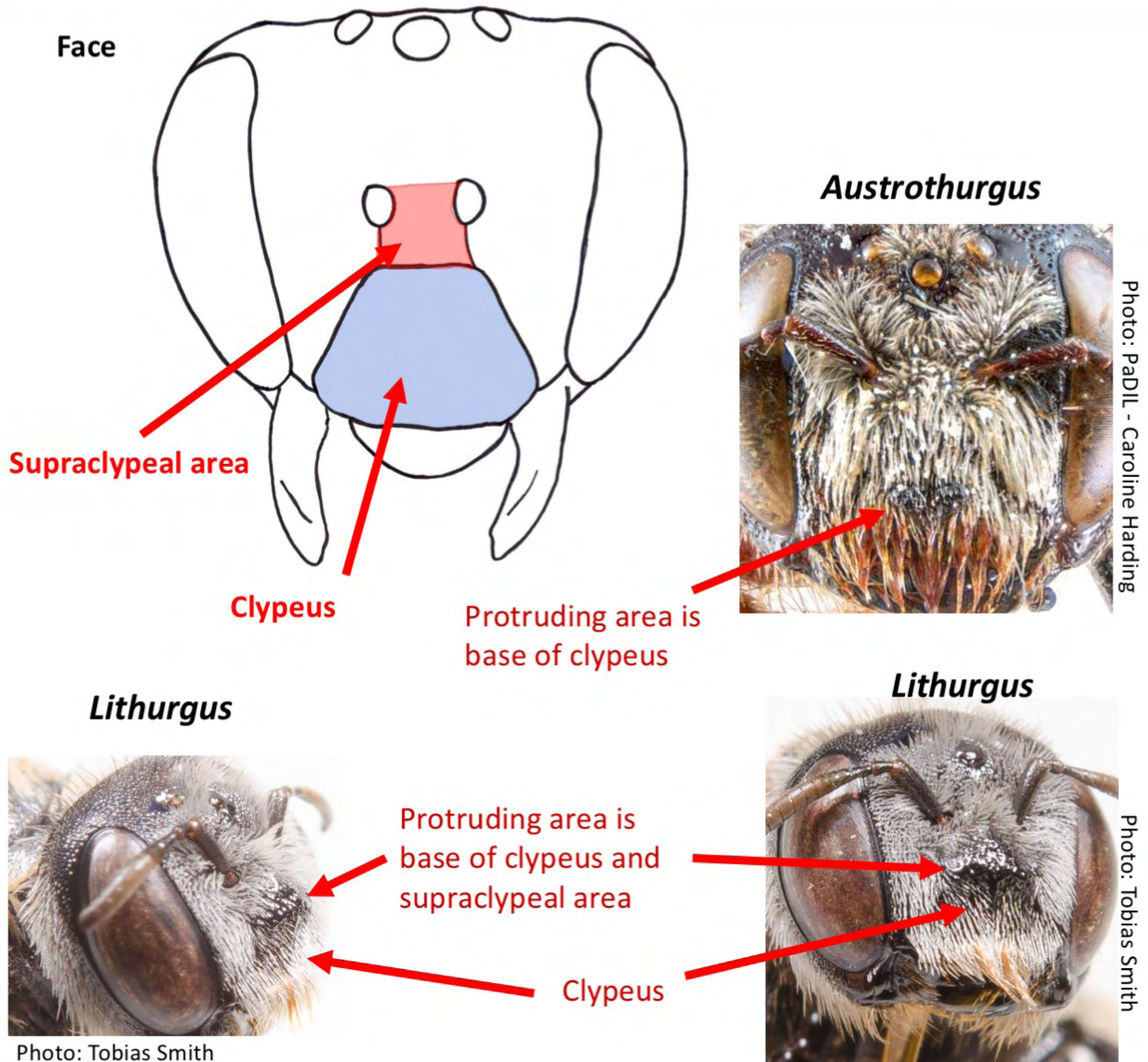
- ❖ Outer surface of hind tibia of female with numerous large, bare spicules; jugal lobe of hindwing about three-fourths as long as vannal lobe ... **5**
- ❖ Outer surface of hind tibia of female without large, bare spicules; jugal lobe of hindwing less than half as long as vannal lobe ... ***Megachile***





Line drawing by Tobias Smith (wing based on diagram by E.R.S. Hodges in Michener, McGinley & Danforth, 1994)

Megachilidae – Couplet 5 (4)

- ❖ Facial prominence involving base (top part) of clypeus and part of supraclypeal area ... **Lithurgus**
- ❖ Facial prominence mostly involving base of clypeus ... **Austrothurgus**



 <p>Photo: PADIL - Caroline Harding</p>	<p>Lithurgus 3 species Widespread</p>	<p>Austrothurgus 3 species Northern half of continent</p>	 <p>Photo: PADIL - Caroline Harding</p>
<p>Gonzalez, V. H., Engel, M.S., & Griswold, T. L. (2013) The lithurgine bees of Australia (Hymenoptera: Megachilidae), with a note on <i>Megachile rotundipennis</i>. <i>Journal of Melittology</i>, 11: 119.</p>			

Line drawing by Tobias Smith