

# Atlas of Male Morphology:

## Shield-Backed Trapdoor Spiders

### (*Idiosoma nigrum*-group)



Live male *Idiosoma sigillatum* (O. P.-Cambridge, 1870) from Perth, Western Australia (image by M. Rix)

This document is published as an Appendix 1 supplement to:

Rix MG, Huey JA, Cooper SJB, Austin AD, Harvey MS (2018) Conservation systematics of the shield-backed trapdoor spiders of the '*nigrum*-group' (Mygalomorphae: Idiopidae: *Idiosoma*): integrative taxonomy reveals a diverse and threatened fauna from south-western Australia. ZooKeys.

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(alphabetical, by species, type material and site [after *I. nigrum*]; holotypes\*\* and paratypes\* highlighted; sequenced specimens denoted by “DNA” superscripts)

## *Idiosoma nigrum* Main, 1952

- |             |                       |
|-------------|-----------------------|
| WAM T3301   | <i>I. nigrum</i> (♂)* |
| WAM T139511 | <i>I. nigrum</i> (♂)  |
| WAM T139514 | <i>I. nigrum</i> (♂)  |
| WAM T139510 | <i>I. nigrum</i> (♂)  |
| WAM T139515 | <i>I. nigrum</i> (♂)  |

## *Idiosoma arenaceum* sp. n. [MYG478]

- |                           |                           |
|---------------------------|---------------------------|
| WAM T139527               | <i>I. arenaceum</i> (♂)** |
| WAM T41787                | <i>I. arenaceum</i> (♂)*  |
| WAM T41364 <sup>DNA</sup> | <i>I. arenaceum</i> (♂)   |
| WAM T41788                | <i>I. arenaceum</i> (♂)   |
| AMS KS17388               | <i>I. arenaceum</i> (♂)   |
| WAM T27119                | <i>I. arenaceum</i> (♂)   |
| WAM T27123                | <i>I. arenaceum</i> (♂)   |

## *Idiosoma clypeatum* sp. n. [MYG018]

- |                            |                           |
|----------------------------|---------------------------|
| WAM T96452 <sup>DNA</sup>  | <i>I. clypeatum</i> (♂)** |
| WAM T96467                 | <i>I. clypeatum</i> (♂)*  |
| WAM T96463                 | <i>I. clypeatum</i> (♂)   |
| WAM T139501                | <i>I. clypeatum</i> (♂)   |
| WAM T98142                 | <i>I. clypeatum</i> (♂)   |
| WAM T136251                | <i>I. clypeatum</i> (♂)   |
| WAM T136252 <sup>DNA</sup> | <i>I. clypeatum</i> (♂)   |
| WAM T139505                | <i>I. clypeatum</i> (♂)   |
| WAM T139506                | <i>I. clypeatum</i> (♂)   |
| WAM T139503                | <i>I. clypeatum</i> (♂)   |

## *Idiosoma corrugatum* sp. n.

- |             |                            |
|-------------|----------------------------|
| SAM NN29858 | <i>I. corrugatum</i> (♂)** |
|-------------|----------------------------|

## *Idiosoma dandaragan* sp. n. [MYG477]

- |             |                            |
|-------------|----------------------------|
| WAM T139522 | <i>I. dandaragan</i> (♂)** |
| WAM T139521 | <i>I. dandaragan</i> (♂)*  |
| WAM T139523 | <i>I. dandaragan</i> (♂)*  |
| WAM T139524 | <i>I. dandaragan</i> (♂)*  |
| WAM T139525 | <i>I. dandaragan</i> (♂)*  |
| WAM T139526 | <i>I. dandaragan</i> (♂)*  |

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 WAM T139495 *I. formosum* (♂)  
 WAM T139516a *I. formosum* (♂)  
 WAM T139516b *I. formosum* (♂)

***Idiosoma gardneri* sp. n. [MYG476]**

- WAM T139528 *I. gardneri* (♂)\*\*

***Idiosoma gutharuka* sp. n. [MYG157]**

- WAM T38517 *I. gutharuka* (♂)\*\*

***Idiosoma incomptum* sp. n. [MYG130]**

- WAM T99997<sup>DNA</sup> *I. incomptum* (♂)\*\*  
 WAM T98469 *I. incomptum* (♂)  
 WAM T98474 *I. incomptum* (♂)  
 WAM T98472 *I. incomptum* (♂)  
 WAM T98473a *I. incomptum* (♂)  
 WAM T98473b *I. incomptum* (♂)  
 WAM T98470 *I. incomptum* (♂)  
 WAM T98471 *I. incomptum* (♂)  
 WAM T98475a *I. incomptum* (♂)  
 WAM T98475b *I. incomptum* (♂)

***Idiosoma intermedium* sp. n. [MYG475]**

- WAM T139520 *I. intermedium* (♂)\*\*  
 WAM T139494 *I. intermedium* (♂)  
 WAM T139517<sup>DNA</sup> *I. intermedium* (♂)  
 WAM T139519<sup>DNA</sup> *I. intermedium* (♂)

***Idiosoma jarrah* sp. n. [MYG156]**

- WAM T124143<sup>DNA</sup> *I. jarrah* (♂)\*\*  
 WAM T74623 *I. jarrah* (♂)  
 WAM T99952<sup>DNA</sup> *I. jarrah* (♂)  
 WAM T136943<sup>DNA</sup> *I. jarrah* (♂)  
 WAM T26822 *I. jarrah* (♂)  
 WAM T139475 *I. jarrah* (♂)  
 WAM T63354 *I. jarrah* (♂)  
 WAM T18582 *I. jarrah* (♂)  
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| WAM T139498 | <i>I. kopejtkaorum</i> (♂)*  |
| WAM T139499 | <i>I. kopejtkaorum</i> (♂)   |
| WAM T139497 | <i>I. kopejtkaorum</i> (♂)   |

***Idiosoma kwongan* sp. n. [MYG472]**

- |                            |                         |
|----------------------------|-------------------------|
| WAM T27142                 | <i>I. kwongan</i> (♂)** |
| WAM T27117 <sup>DNA</sup>  | <i>I. kwongan</i> (♂)   |
| WAM T27118                 | <i>I. kwongan</i> (♂)   |
| WAM T139468 <sup>DNA</sup> | <i>I. kwongan</i> (♂)   |

***Idiosoma mcclémentsorum* sp. n. [MYG474]**

- |             |                                |
|-------------|--------------------------------|
| WAM T139471 | <i>I. mcclémentsorum</i> (♂)** |
| WAM T139472 | <i>I. mcclémentsorum</i> (♂)*  |
| WAM T29779  | <i>I. mcclémentsorum</i> (♂)   |
| WAM T44388  | <i>I. mcclémentsorum</i> (♂)   |

***Idiosoma mcnamarai* sp. n. [MYG520]**

- |                            |                           |
|----------------------------|---------------------------|
| WAM T26107 <sup>DNA</sup>  | <i>I. mcnamarai</i> (♂)** |
| WAM T139518 <sup>DNA</sup> | <i>I. mcnamarai</i> (♂)   |
| WAM T44169                 | <i>I. mcnamarai</i> (♂)   |

***Idiosoma schoknechtorum* sp. n. [MYG518]**

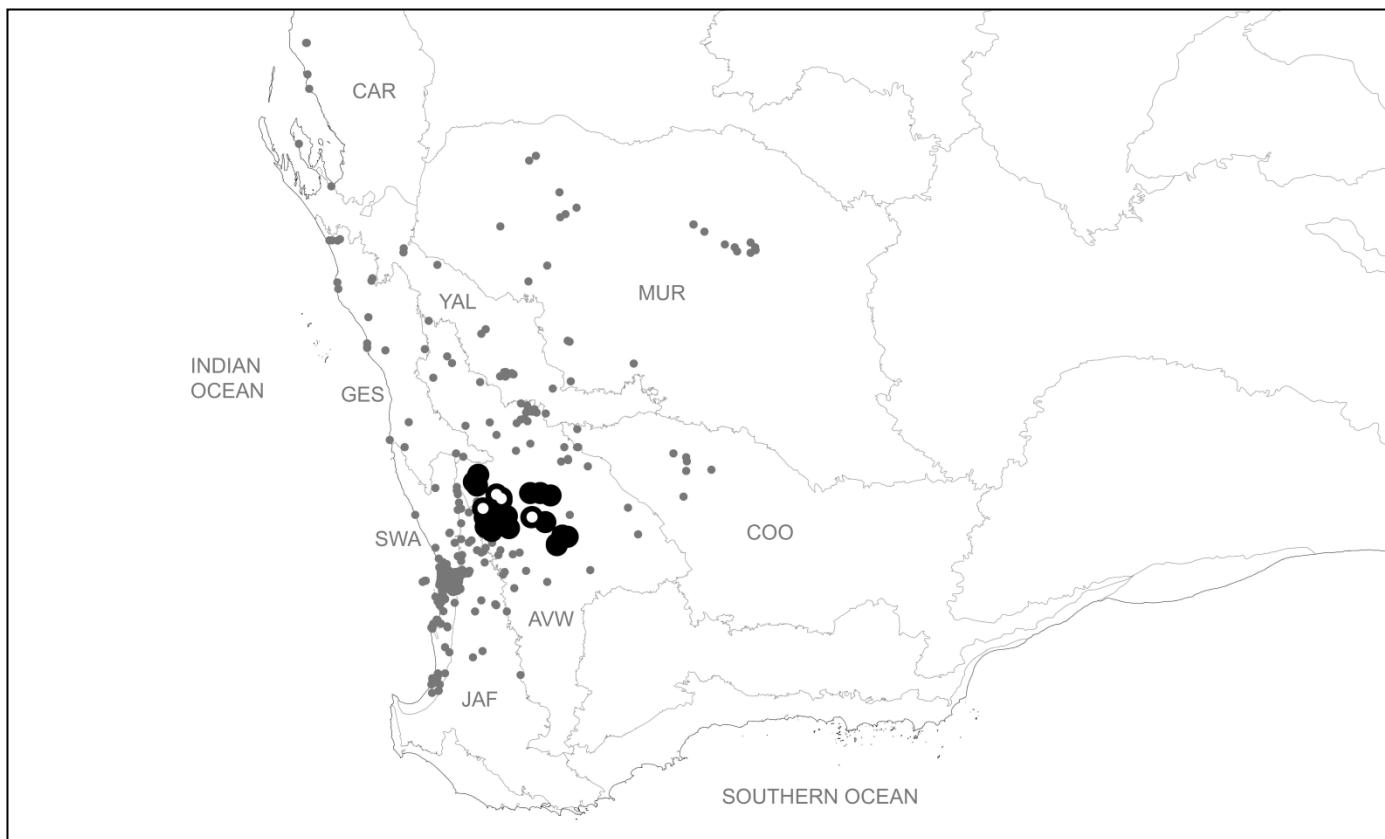
- |             |                               |
|-------------|-------------------------------|
| WAM T139512 | <i>I. schoknechtorum</i> (♂)* |
| WAM T27121  | <i>I. schoknechtorum</i> (♂)  |
| WAM T139513 | <i>I. schoknechtorum</i> (♂)  |

***Idiosoma sigillatum* (O. P.-Cambridge, 1870)**

- |                            |                          |
|----------------------------|--------------------------|
| WAM T139480                | <i>I. sigillatum</i> (♂) |
| WAM T132564 <sup>DNA</sup> | <i>I. sigillatum</i> (♂) |
| WAM T27984                 | <i>I. sigillatum</i> (♂) |
| WAM T18552                 | <i>I. sigillatum</i> (♂) |
| WAM T31152                 | <i>I. sigillatum</i> (♂) |
| WAM T27135                 | <i>I. sigillatum</i> (♂) |
| WAM T46829                 | <i>I. sigillatum</i> (♂) |
| WAM T41569                 | <i>I. sigillatum</i> (♂) |
| WAM T139486                | <i>I. sigillatum</i> (♂) |
| WAM T18575                 | <i>I. sigillatum</i> (♂) |

- |   |    |
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# *Idiosoma nigrum* Main, 1952



Collection records (open circles = DNA)



WAM T3301 male: Walk Walkin, via Koorda, WA [reference specimen]



WAM T139511 male: Durokoppin Nature Reserve, WA

## *Idiosoma nigrum* Main, 1952 (cont.)



**WAM T139514 male:** North Bungulla, WA

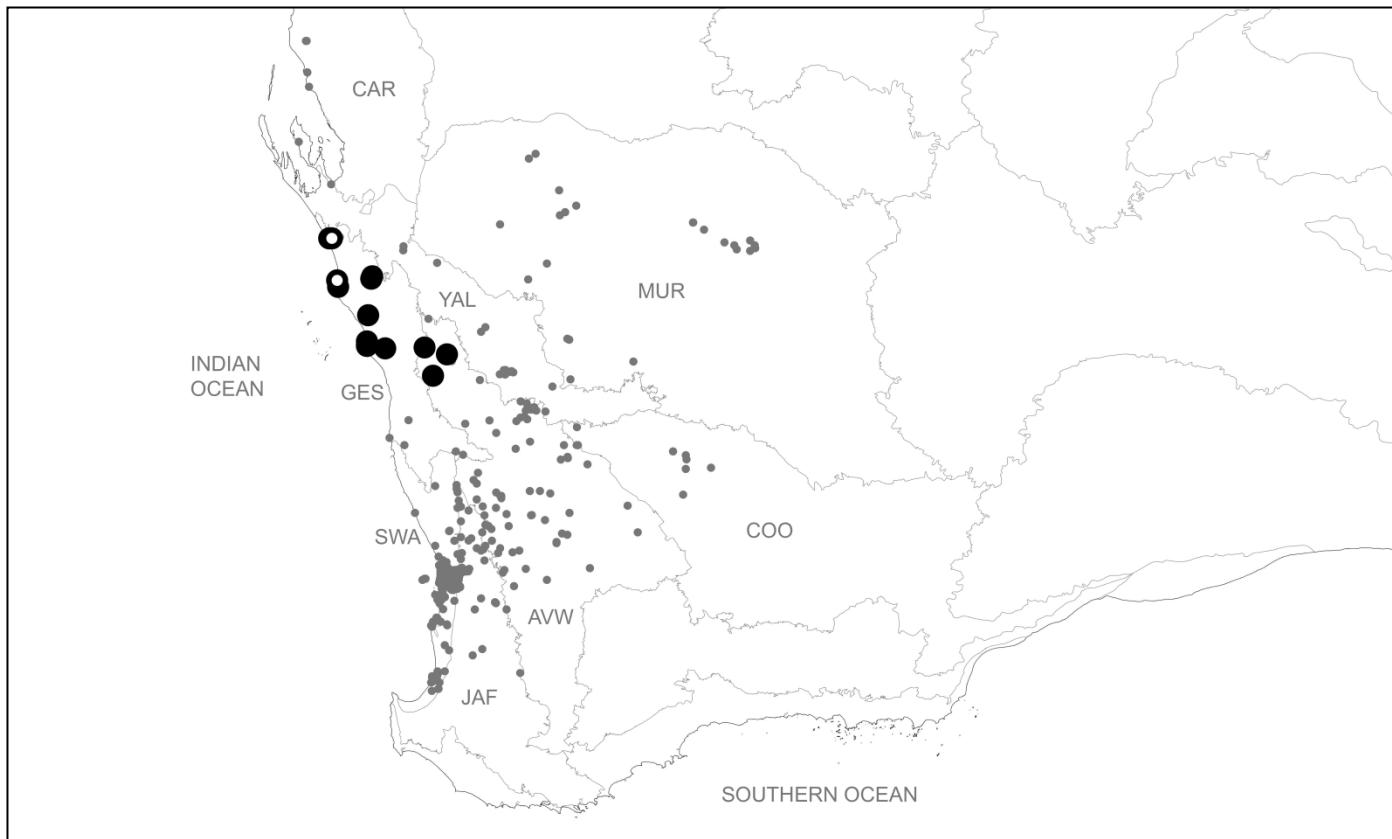


**WAM T139510 male:** Walk Walkin Nature Reserve, WA

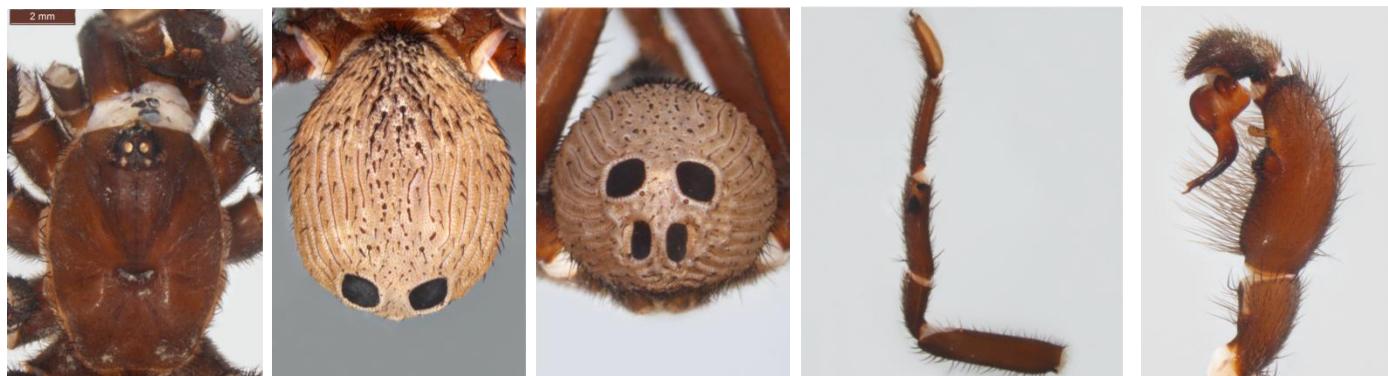


**WAM T139515 male:** Wroth Road Nature Reserve, WA

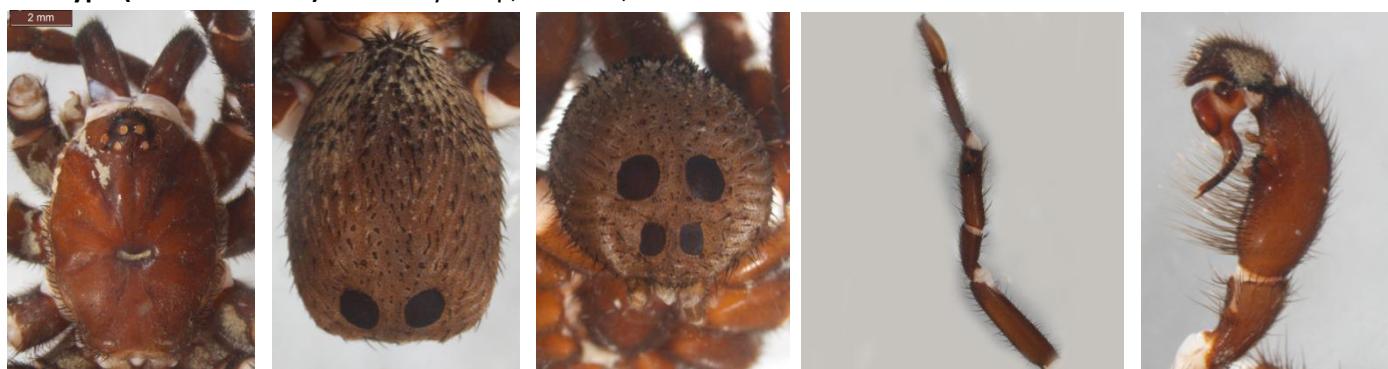
# *Idiosoma arenaceum* sp. n. [MYG478]



Collection records (open circles = DNA)



Holotype (WAM T139527) male: Zuytdorp, site ZU1, WA



Paratype (WAM T41787) male: Zuytdorp, site ZU1, WA

## *Idiosoma arenaceum* sp. n. [MYG478] (cont.)



WAM T41364 male<sup>DNA</sup>: Zuytdorp, site ZU3, WA



WAM T41788 male: Zuytdorp Nature Reserve, site ZU2, WA



AMS KS17388 male: Geraldton, WA



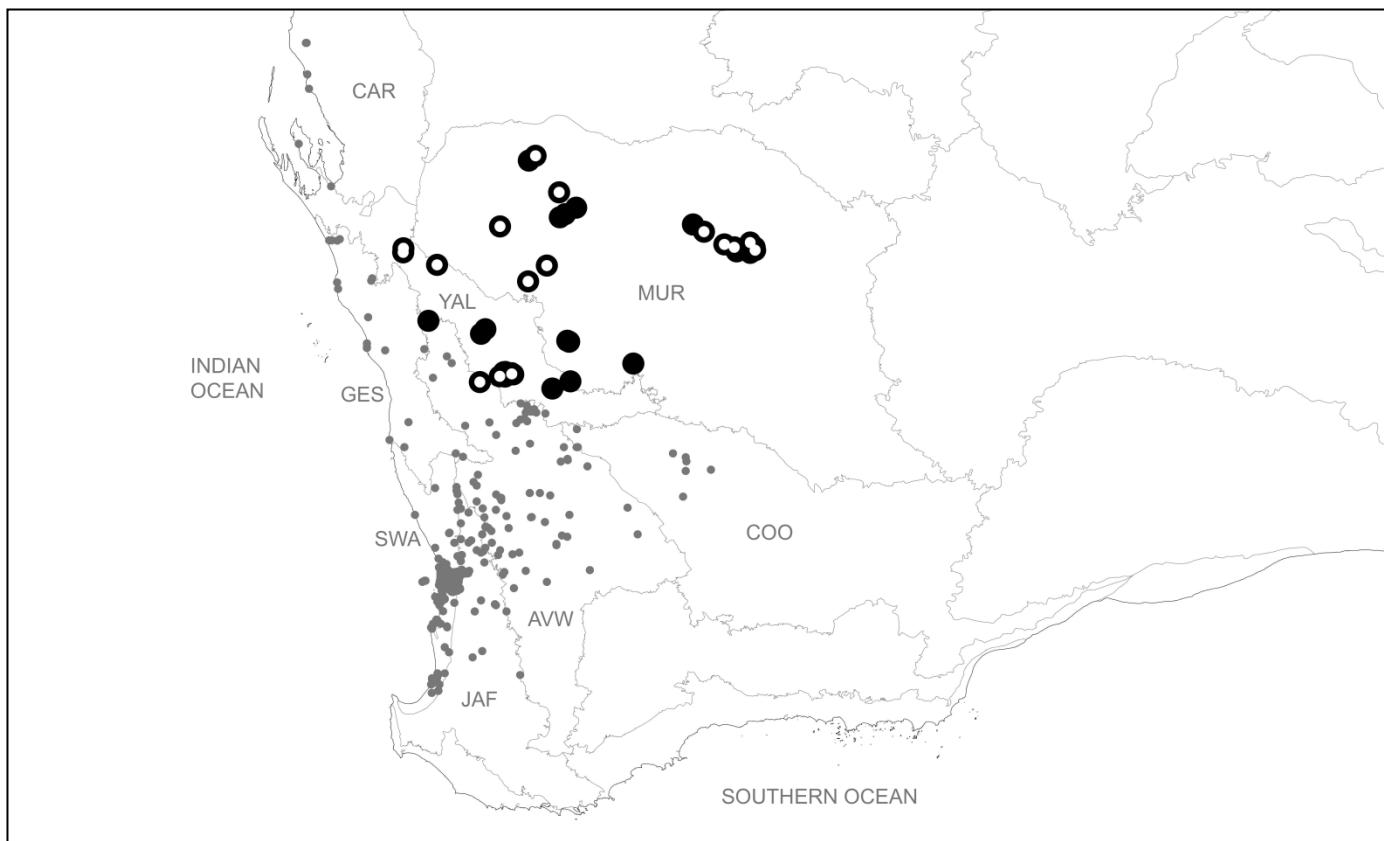
WAM T27119 male: Geraldton, Minnenoaka, WA

***Idiosoma arenaceum* sp. n. [MYG478] (cont.)**



**WAM T27123 male:** Northampton, WA

# *Idiosoma clypeatum* sp. n. [MYG018]



Collection records (open circles = DNA)



Holotype (WAM T96452) male<sup>DNA</sup>: Albion Downs, WA



Paratype (WAM T96467) male: Albion Downs, WA

## *Idiosoma clypeatum* sp. n. [MYG018] (cont.)



WAM T96463 male: Albion Downs, WA



WAM T139501 male: Browns Soak, 20 miles N. of Lake Barlee, WA



WAM T98142 male: Glen Station, off Kalli Road, WA



WAM T136251 male: Jack Hills, ca. 1 km SW. of Mount Hale, WA

## *Idiosoma clypeatum* sp. n. [MYG018] (cont.)



WAM T136252 male<sup>DNA</sup>: Jack Hills, ca. 1 km SW. of Mount Hale, WA



WAM T139505 male: Urawa Nature Reserve, north, site ML7, WA [NB. right leg I flipped horizontal]

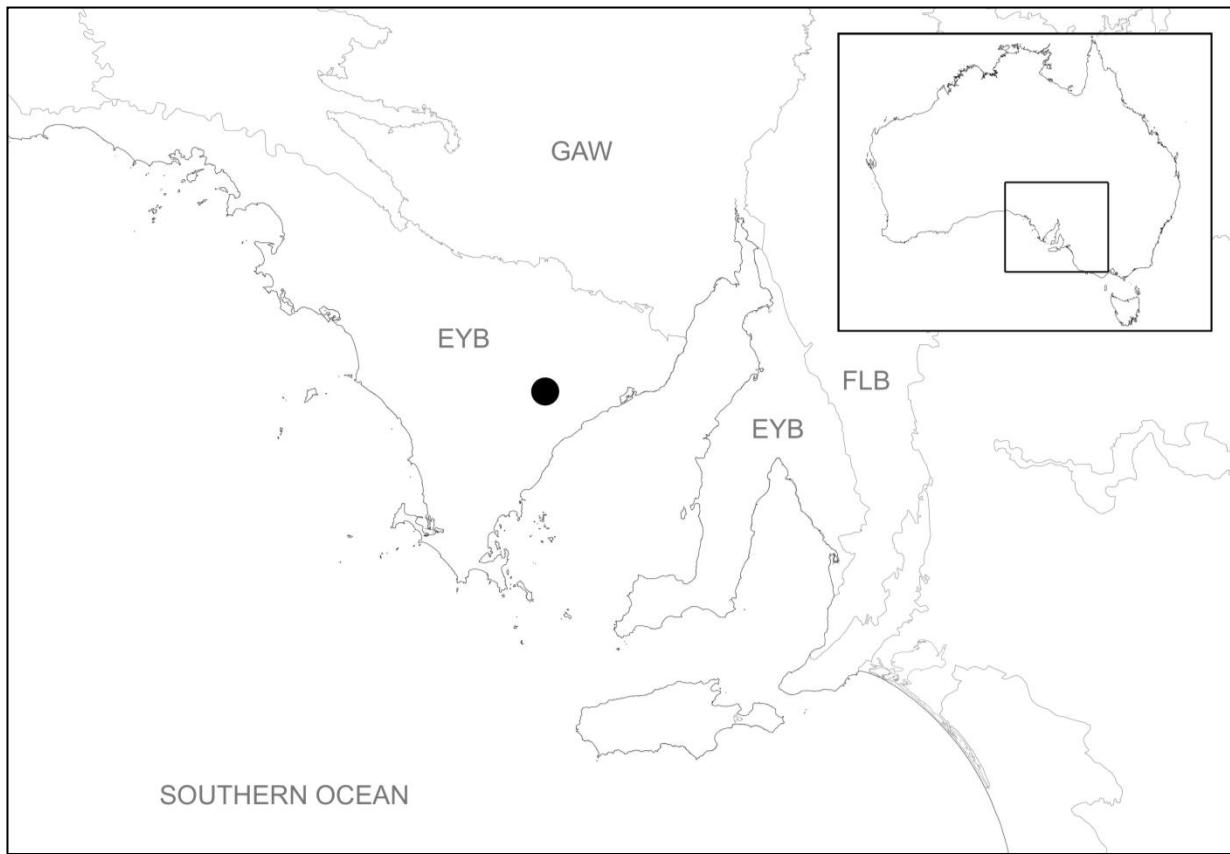


WAM T139506 male: Weld Range North, site WN8, WA



WAM T139503 male: Weld Range North, site WN11, WA

# *Idiosoma corrugatum* sp. n.

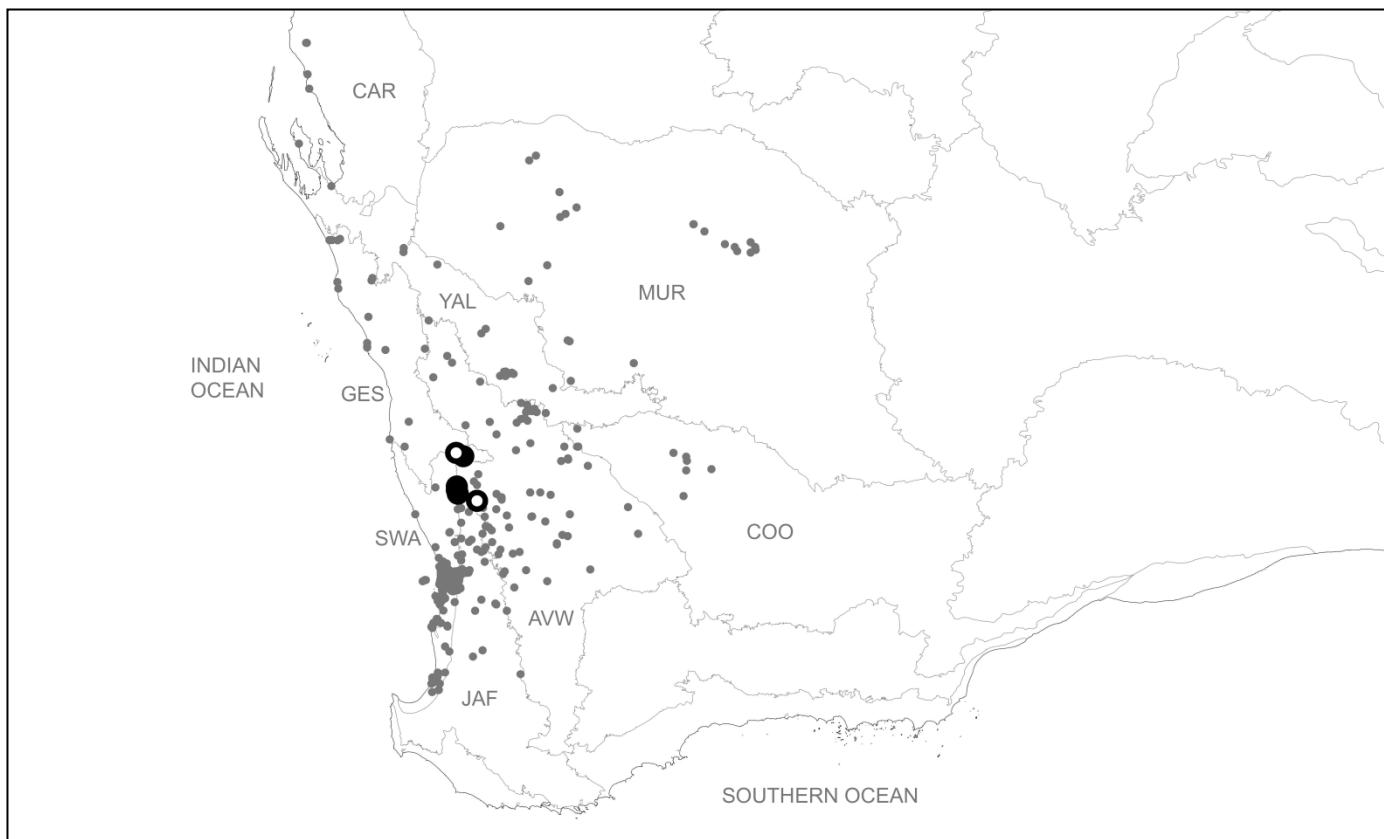


**Collection records (NB. not DNA sequenced)**



**Holotype (SAM NN29858) male:** SW. of Kimba, Eyre Peninsula, SA

# *Idiosoma dandaragan* sp. n. [MYG477]



Collection records (open circles = DNA)



Holotype (WAM T139522) male: S. of Moora on Mogumber Road, WA



WAM T139521 male: S. of Moora on Mogumber Road, WA

## *Idiosoma dandaragan* sp. n. [MYG477] (cont.)



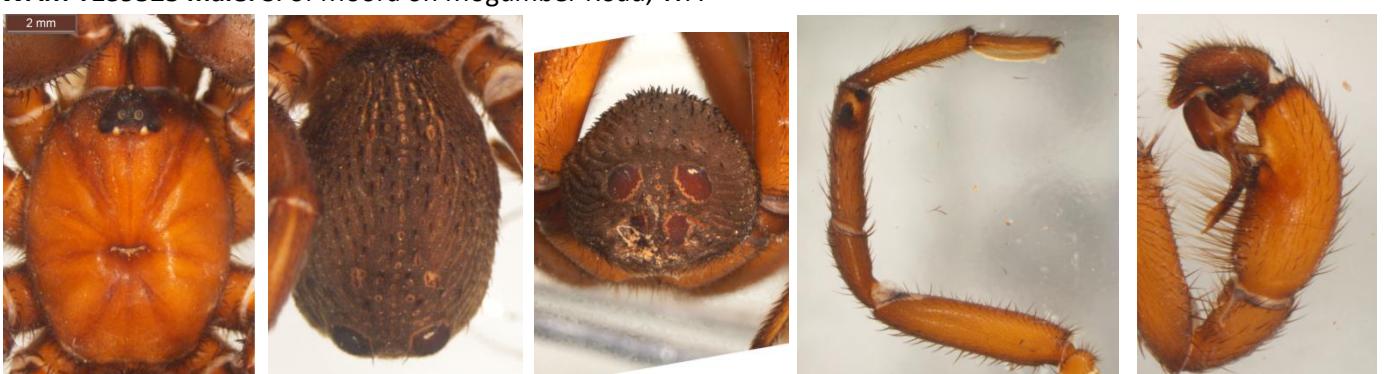
**WAM T139523 male:** S. of Moora on Mogumber Road, WA



**WAM T139524 male:** S. of Moora on Mogumber Road, WA

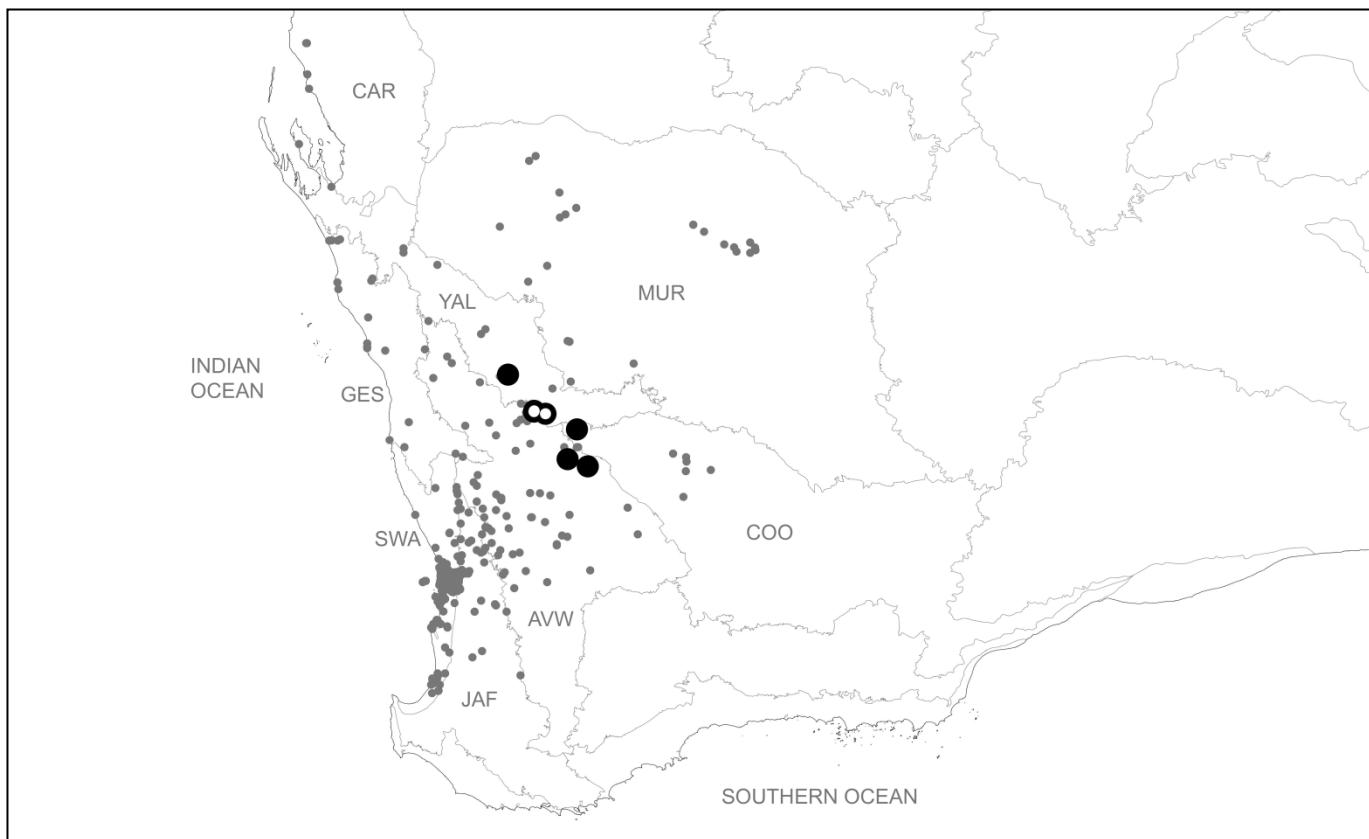


**WAM T139525 male:** S. of Moora on Mogumber Road, WA



**WAM T139526 male:** S. of Moora on Mogumber Road, WA

## *Idiosoma formosum* sp. n. [MYG262]



Collection records (open circles = DNA)



Holotype (WAM T139470) male<sup>DNA</sup>: Mt Gibson, WA



WAM T139495 male: Dajoing Rock, WA

*Idiosoma formosum* sp. n. [MYG262] (cont.)

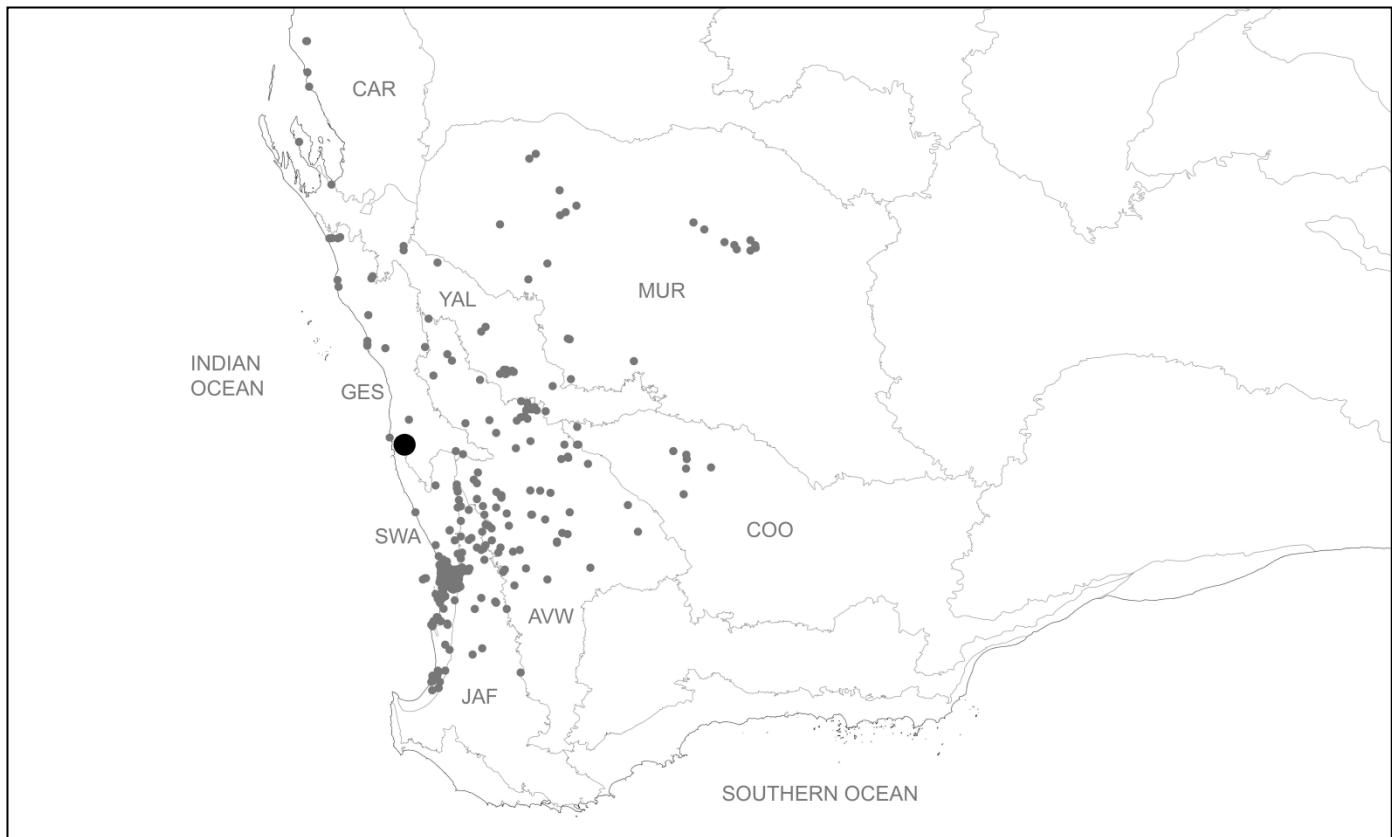


WAM T139516a male: Mungarri Nature Reserve (North), WA



WAM T139516b male: Mungarri Nature Reserve (North), WA

# *Idiosoma gardneri* sp. n. [MYG476]

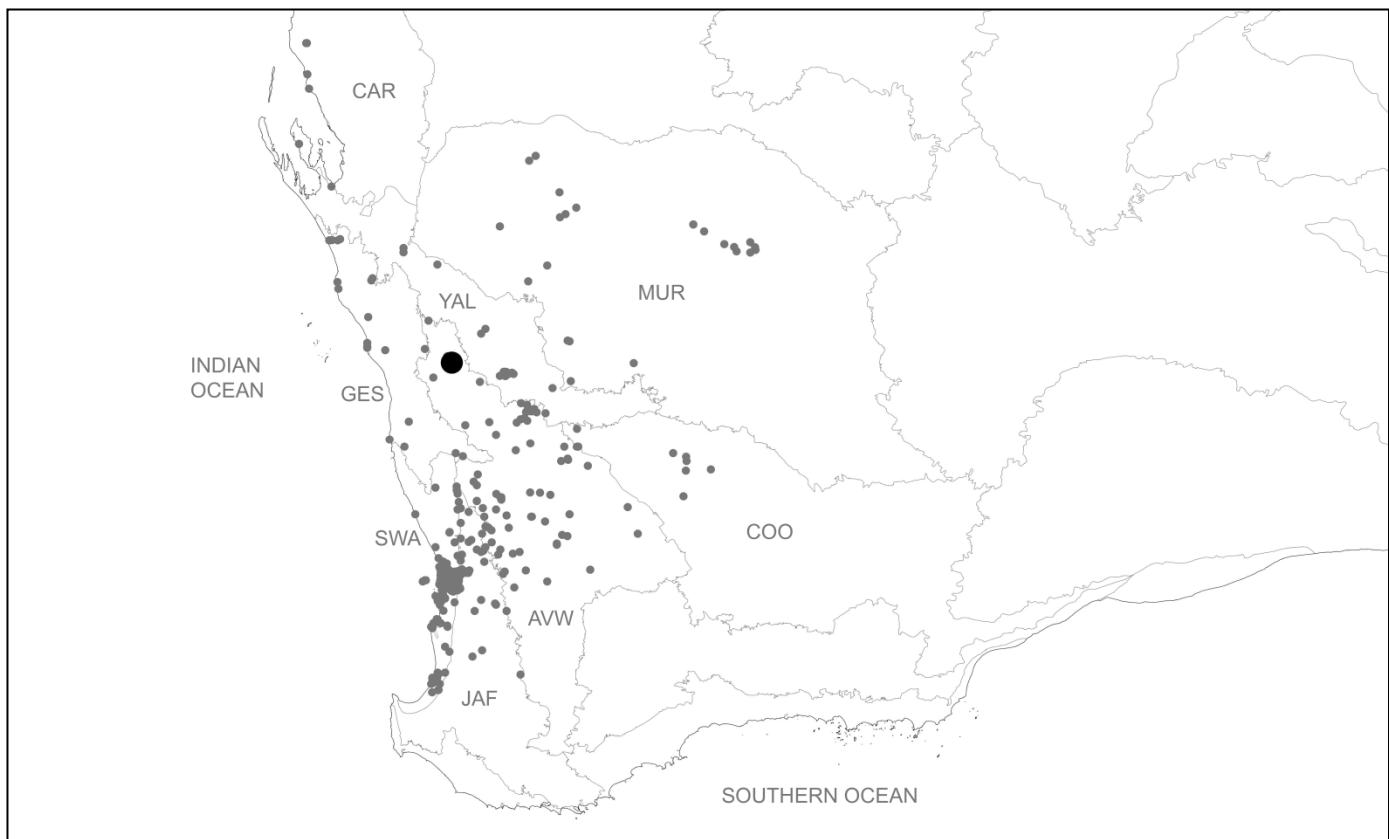


Collection records (NB. not DNA sequenced)



Holotype (WAM T139528) male: Lesueur National Park, WA

## *Idiosoma gutharuka* sp. n. [MYG157]

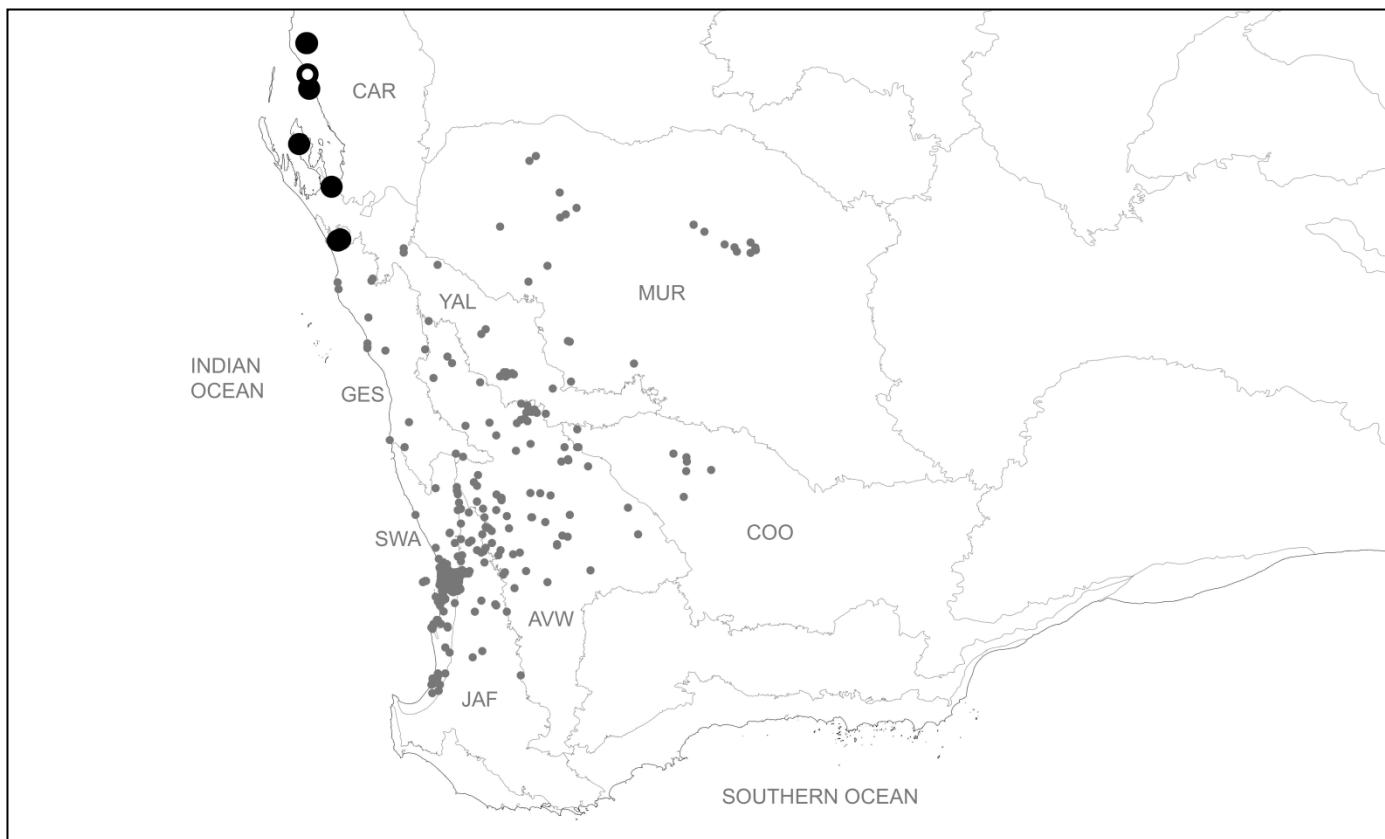


Collection records (NB. not DNA sequenced)



Holotype (WAM T38517) male: Gutha, WA

# *Idiosoma incomptum* sp. n. [MYG130]



Collection records (open circles = DNA)



Holotype (WAM T99997) male<sup>DNA</sup>: Carnarvon, WA



WAM T98469 male: Boolathana Station, WA

## *Idiosoma incomptum* sp. n. [MYG130] (cont.)



WAM T98474 male: Boolathana Station, WA



WAM T98472 male: Bush Bay, WA



WAM T98473a male: Francois Peron National Park, WA



WAM T98473b male: Francois Peron National Park, WA

## *Idiosoma incomptum* sp. n. [MYG130] (cont.)



WAM T98470 male: Nanga Station, WA



WAM T98471 male: Zuytdorp, WA

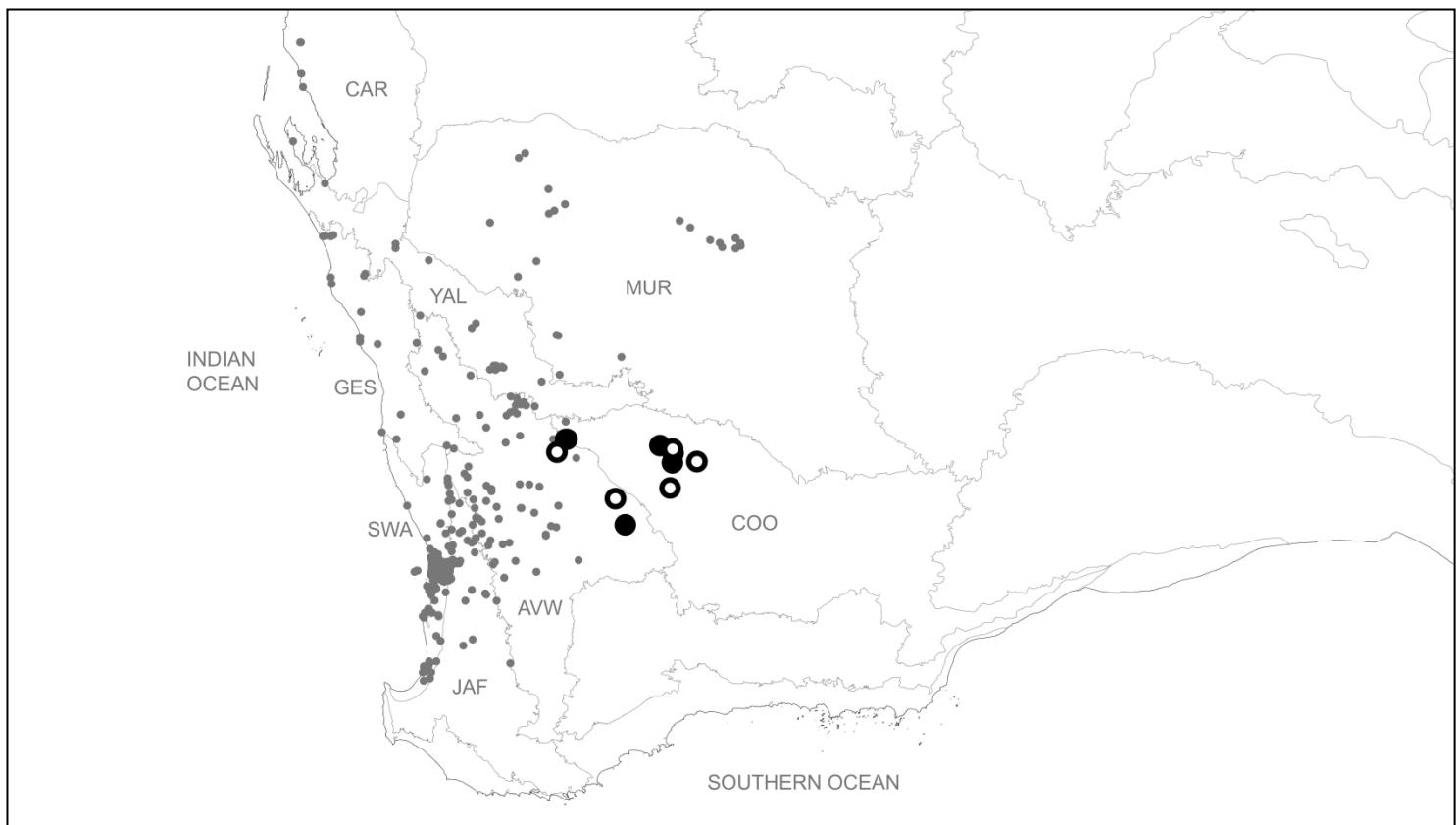


WAM T98475a male: Zuytdorp, WA



WAM T98475b male: Zuytdorp, WA

# *Idiosoma intermedium* sp. n. [MYG475]



Collection records (open circles = DNA)



Holotype (WAM T139520) male: Bodallin, WA



WAM T139494 male: Billiburning Rock, WA

## *Idiosoma intermedium* sp. n. [MYG475] (cont.)

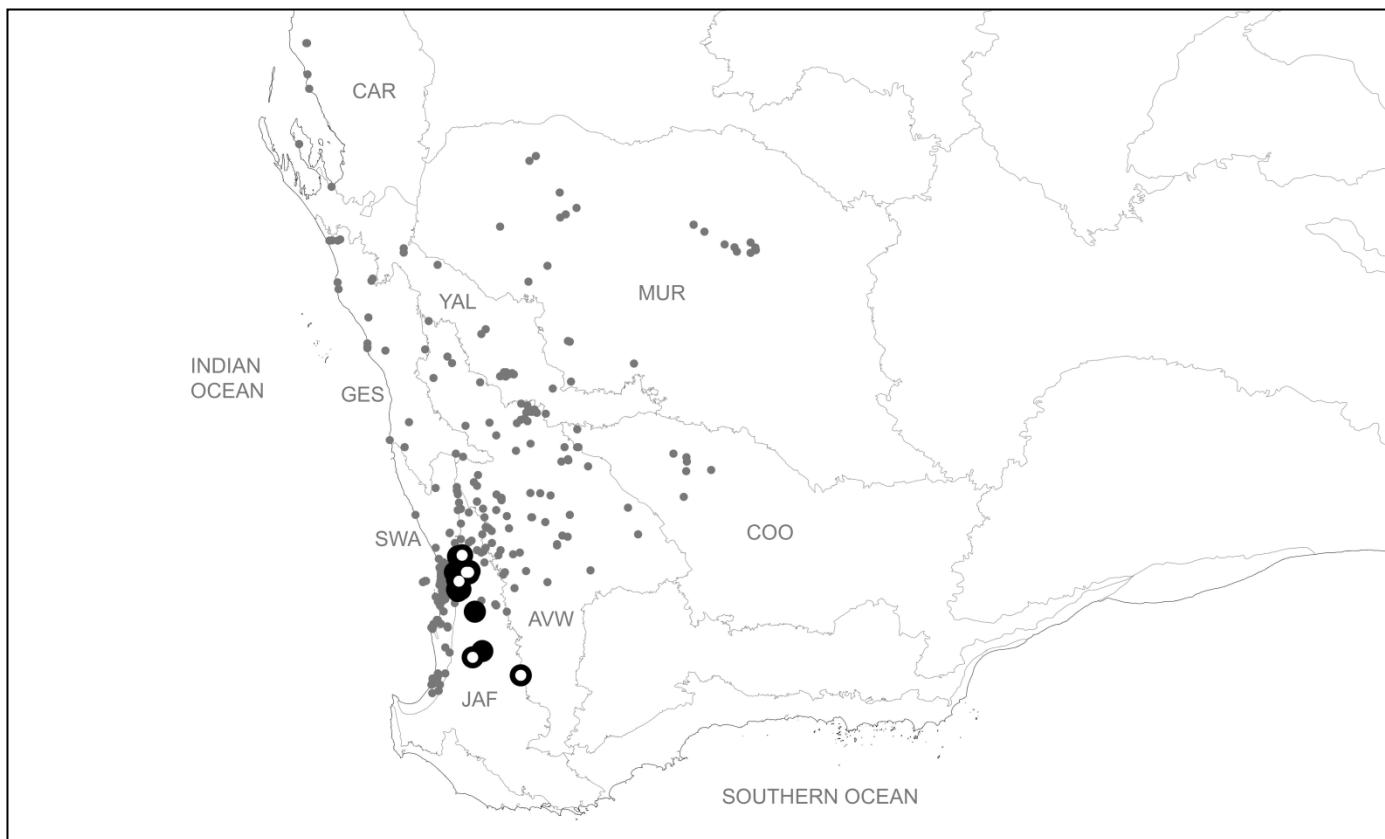


WAM T139517 male<sup>DNA</sup>: Mungarri Nature Reserve (South), WA



WAM T139519 male<sup>DNA</sup>: Warrachuppin North Road, WA

# *Idiosoma jarrah* sp. n. [MYG156]



Collection records (open circles = DNA)



Holotype (WAM T124143) male<sup>DNA</sup>: Lesmurdie, WA



WAM T74623 male: SW. of Boddington, WA

## *Idiosoma jarrah* sp. n. [MYG156] (cont.)



WAM T99952 male<sup>DNA</sup>: SW. of Boddington, WA



WAM T136943 male<sup>DNA</sup>: Bullsbrook, Smith Road, WA



WAM T26822 male: Darlington, WA



WAM T139475 male: Gooseberry Hill, WA

## *Idiosoma jarrah* sp. n. [MYG156] (cont.)



WAM T63354 male: Mount Helena, WA



WAM T18582 male: Mundaring Weir Road, Kalamunda, WA

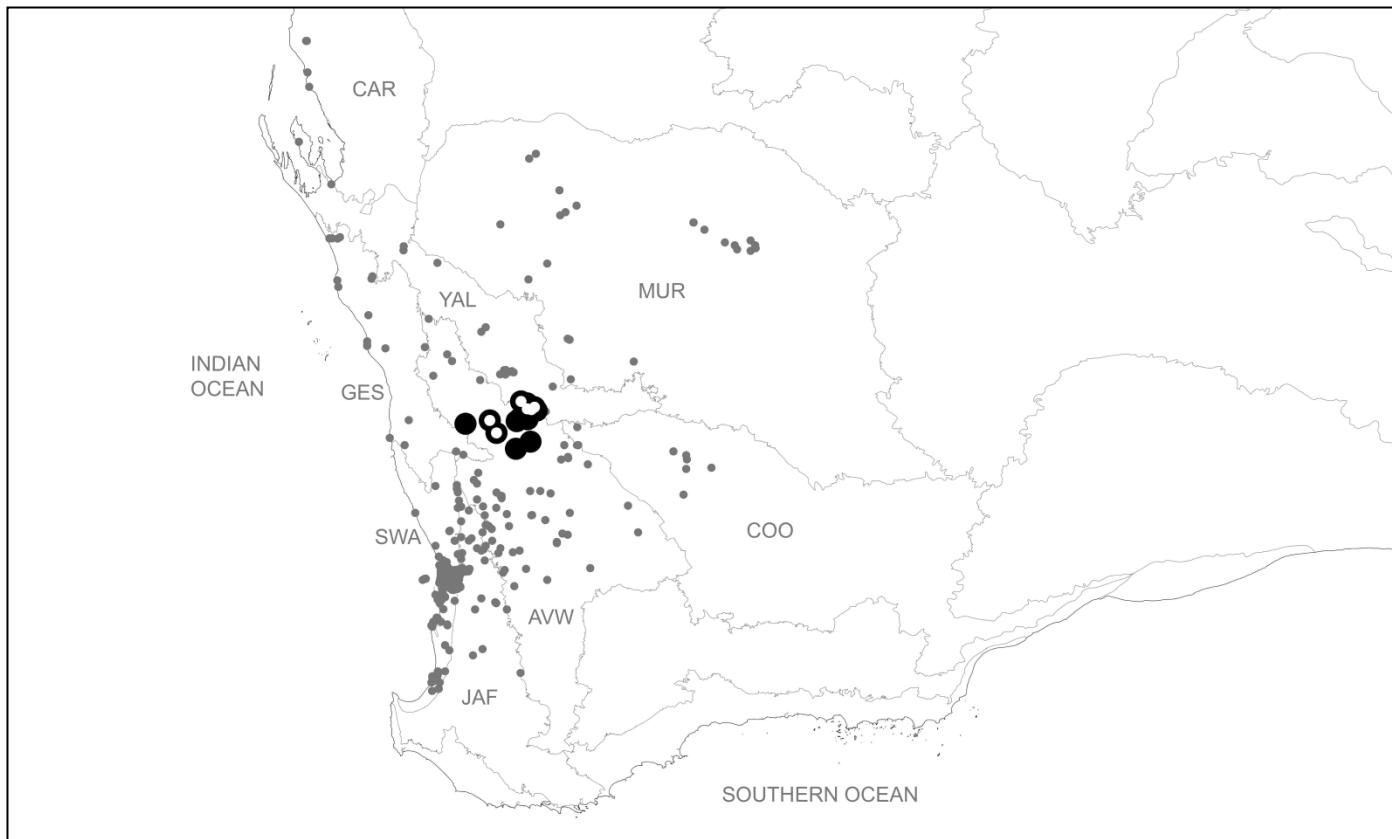


WAM T139474 male: Roleystone, WA



WAM T30019 male: Talbot Road Reserve, site TR3, WA

# *Idiosoma kopejkaorum* sp. n. [MYG521]



Collection records (open circles = DNA)



Holotype (WAM T144621) male: Snake Gully Nature Reserve, WA



Paratype (WAM T139498) male: Snake Gully Nature Reserve, WA

***Idiosoma kopejkaorum* sp. n. [MYG521] (cont.)**

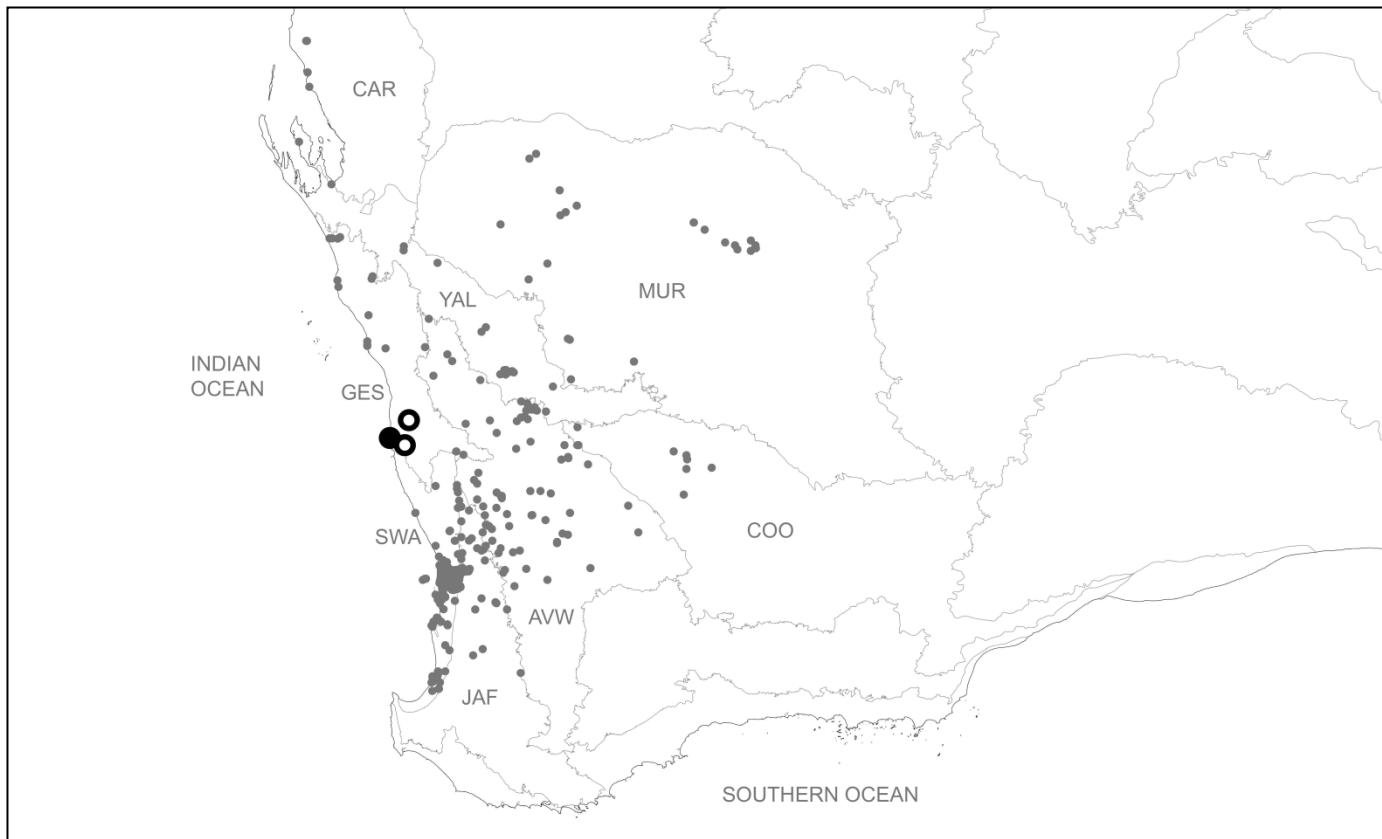


**WAM T139499 male:** Snake Gully Nature Reserve, WA



**WAM T139497 male:** Lake Goorly (North-west), WA

## *Idiosoma kwongan* sp. n. [MYG472]



Collection records (open circles = DNA)



Holotype (WAM T27142) male: E. of Greenhead, WA



WAM T27117 male<sup>DNA</sup>: Eneabba, AMC Minesite, WA

## *Idiosoma kwongan* sp. n. [MYG472] (cont.)

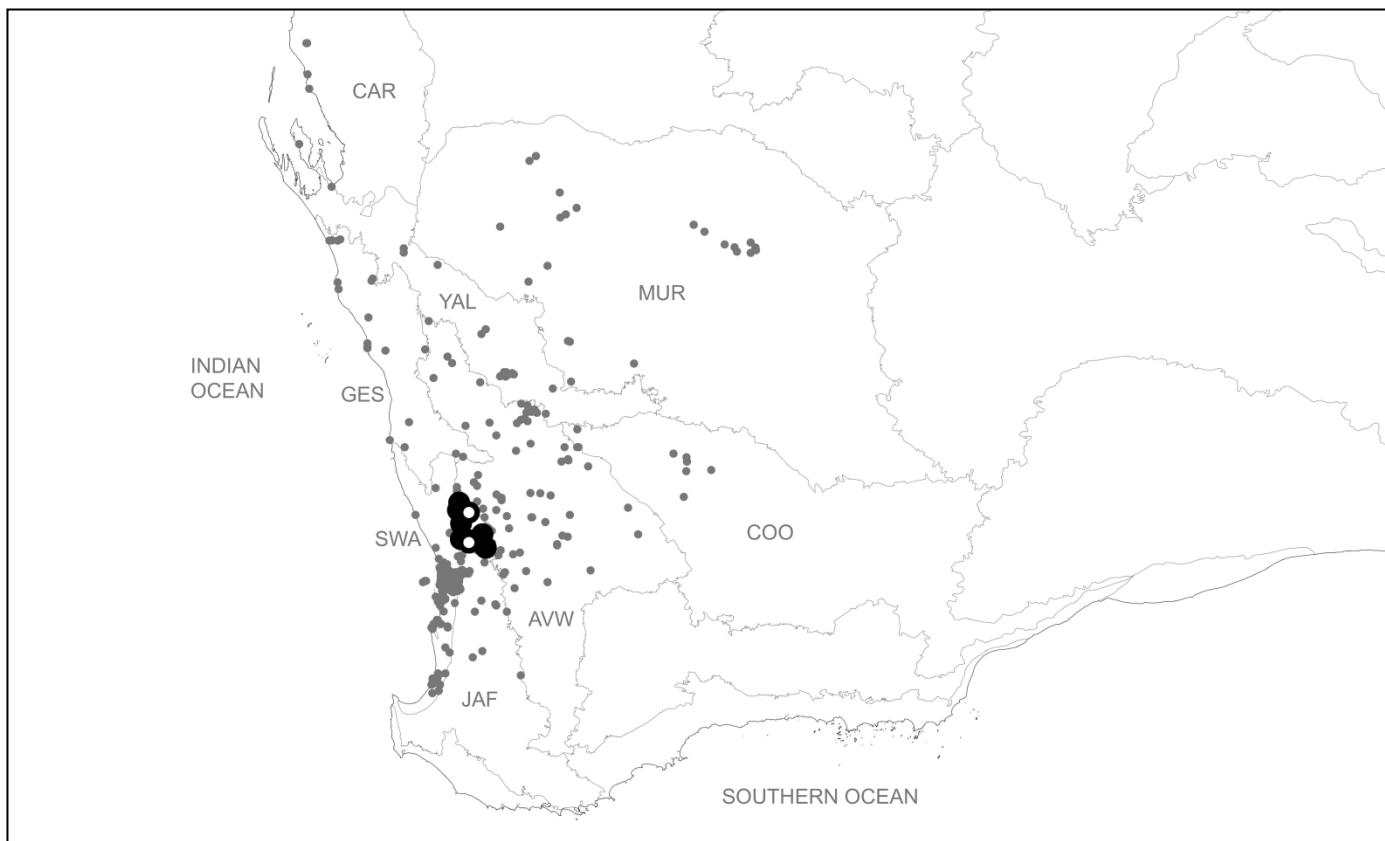


WAM T27118 male: Eneabba, AMC Minesite, WA



WAM T139468 male<sup>DNA</sup>: Lesueur National Park, WA

# *Idiosoma mcclementsorum* sp. n. [MYG474]



Collection records (open circles = DNA)



Holotype (WAM T139471) male: Julimar State Forest, WA



Paratype (WAM T139472) male: Julimar State Forest, WA

*Idiosoma mcclementsorum* sp. n. [MYG474] (cont.)

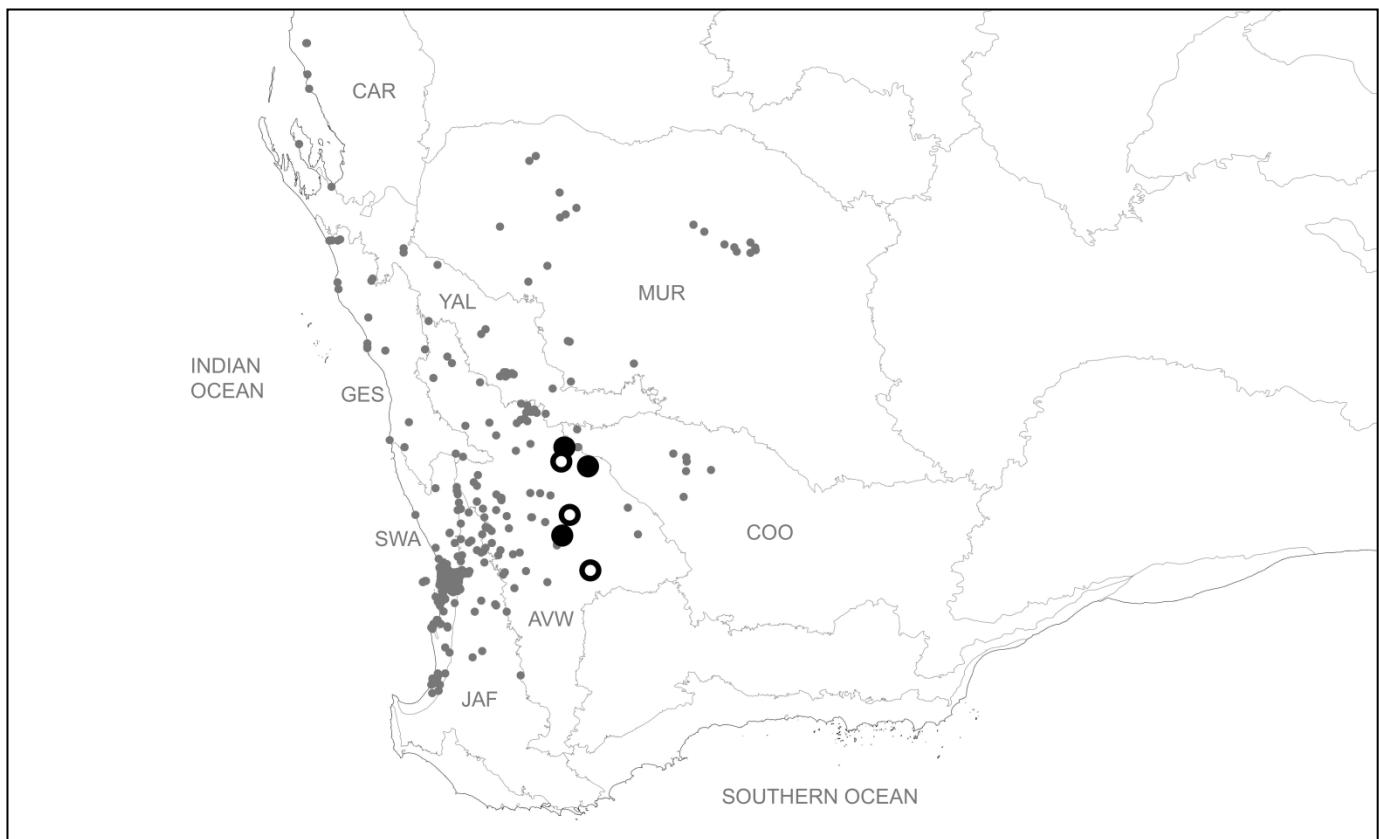


WAM T29779 male: Toodyay, Bindoon Road, WA



WAM T44388 male: Toodyay, WA

# *Idiosoma mcnamarai* sp. n. [MYG520]



Collection records (open circles = DNA)



Holotype (WAM T26107) male<sup>DNA</sup>: Trayning, WA



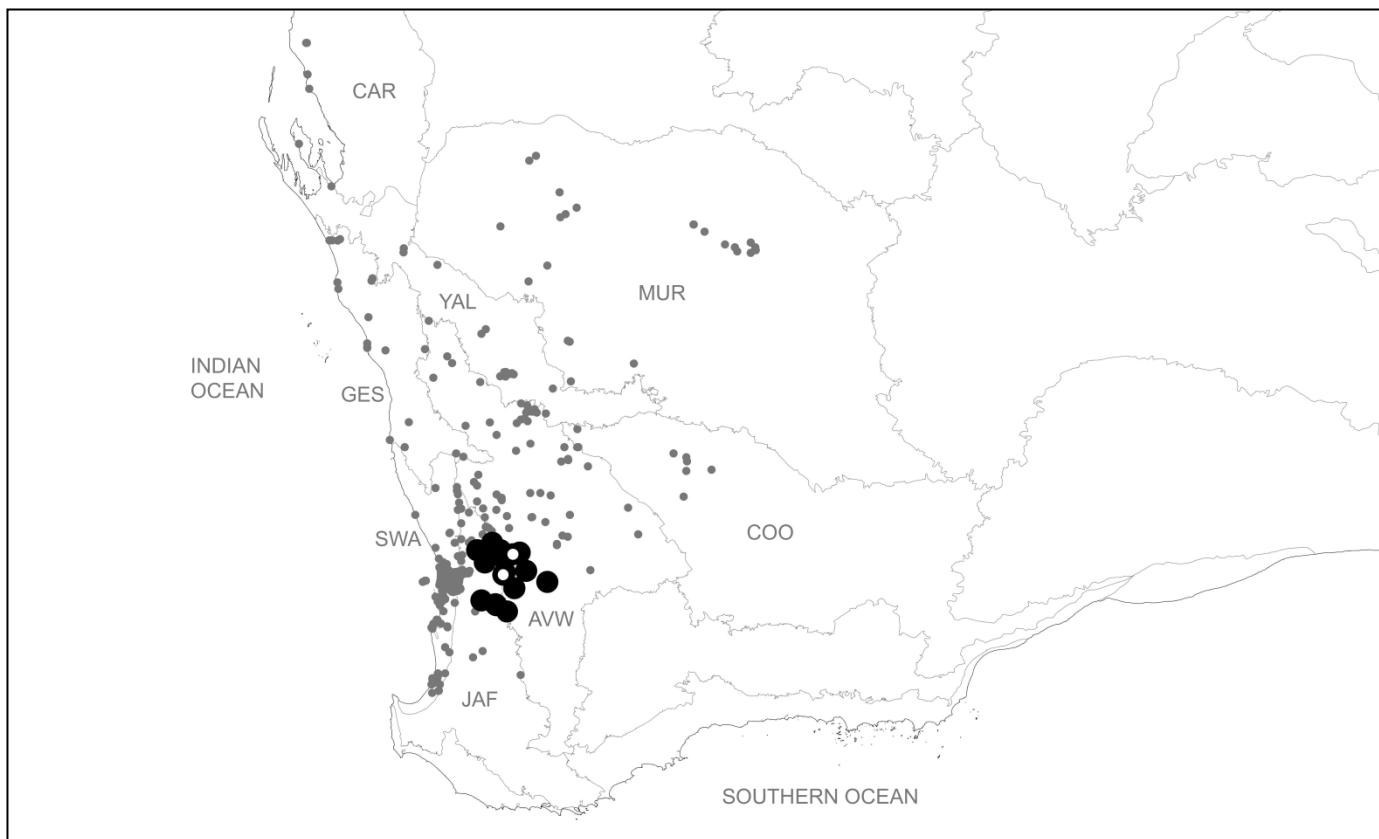
WAM T139518 male<sup>DNA</sup>: Bruce Rock-Doodlakine Road, WA

*Idiosoma mcnamarai* sp. n. [MYG520] (cont.)



WAM T44169 male: East Yorkrakine Nature Reserve, WA

# *Idiosoma schoknechtorum* sp. n. [MYG518]



Collection records (open circles = DNA)



WAM T139512 male: Beverley, WA



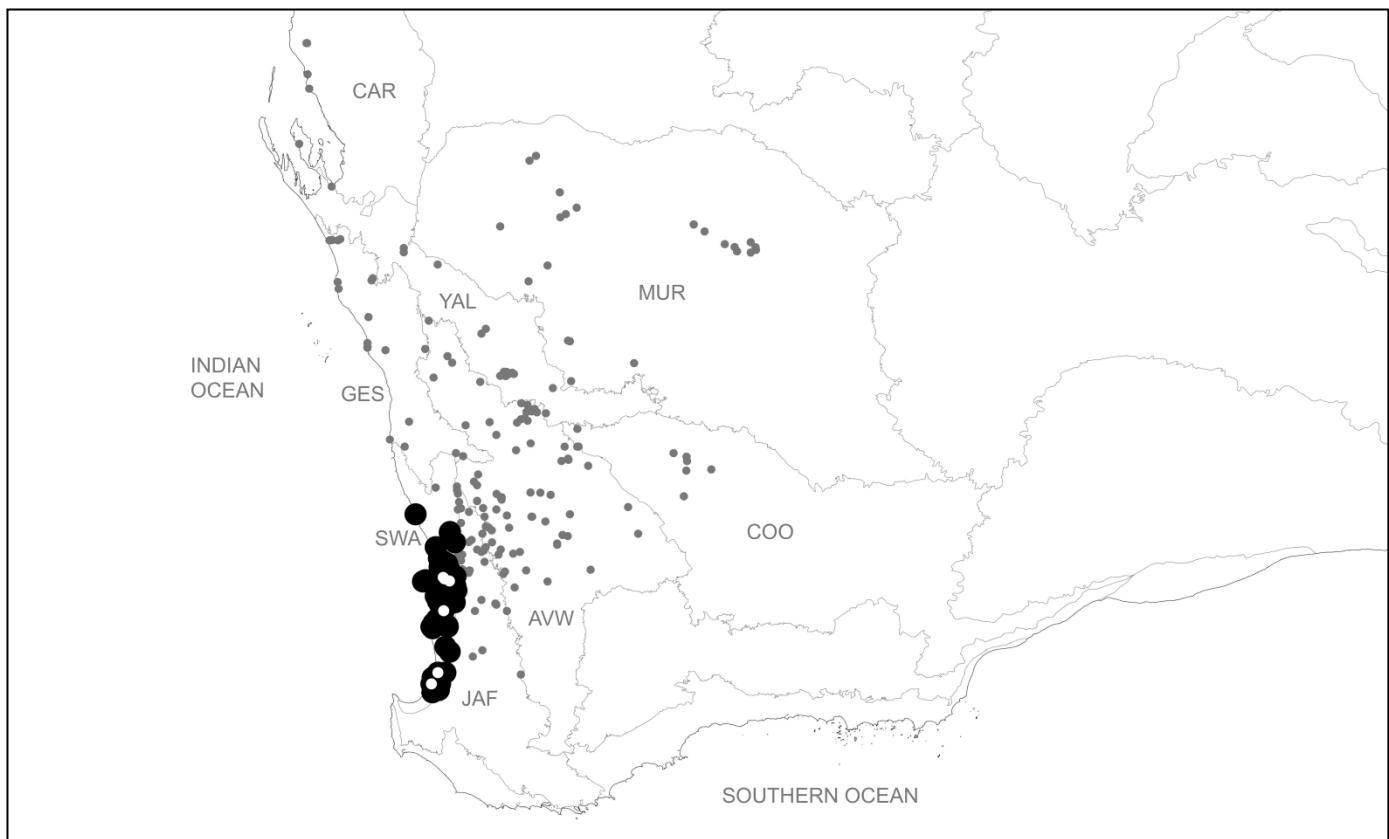
WAM T27121 male: Meckering, WA

*Idiosoma schoknechtorum* sp. n. [MYG518] (cont.)



WAM T139513 male: Westdale, WA

# *Idiosoma sigillatum* (O.P.-Cambridge, 1870)



Collection records (open circles = DNA)



WAM T139480 male: Duncraig, Perth, WA [reference specimen]



WAM T132564 male<sup>DNA</sup>: Crawley, Perth, WA

## *Idiosoma sigillatum* (O.P.-Cambridge, 1870) (cont.)



WAM T27984 male: Dardanup, WA



WAM T18552 male: Garden Island [sic "Naval Base"], WA



WAM T31152 male: Gelorup, WA



WAM T27135 male: Kings Park, Perth, WA [NB. right palp flipped horizontal]

## *Idiosoma sigillatum* (O.P.-Cambridge, 1870) (cont.)



WAM T46829 male: Mandurah, WA



WAM T41569 male: Mundijong, WA



WAM T139486 male: Rottnest Island, WA



WAM T18575 male: Yanchep Park, WA