Nanda Country Bush Blitz

Hymenoptera (wasps only)

21–31 October

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Nomenclature and taxonomy used in this report is consistent with:

Australian Faunal Directory (AFD)

(except for some recent updates to Chalcidoidea which follow Burks et al. 2022: https://doi.org/10.3897/jhr.94.94263)

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List of contributors

List of contributors to this report.			
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Abstract

The Nanda Country Bush Blitz was highly successful for the Hymenoptera team, and will lead to a substantial increase in wasp biodiversity data available for land managers and researchers.

Before the expedition, there were only 231 records of wasps on the Atlas of Living Australia in the survey area, representing only 15 different families and 11 named species.

During the two-week expedition, hymenopterans were surveyed using a variety of methods including sweep netting, vehicle nets, Malaise traps, and light sheets.

There were 508 different putative species identified from 37 different families. Using either morphological or molecular methods, 44 taxa were able to be identified as a named species, only three of which were previously recorded on The Atlas of Living Australia in the survey area bounds. The remaining 465 species were identified to morphospecies or molecular operational taxonomic units at various taxonomic levels. A large proportion of these taxa likely represent undescribed species; however, this will take dedicated systematic studies to determine.

1. Introduction

The order Hymenoptera contains the ants, bees, wasps and sawflies. Despite being essential for ecosystem functioning as pollinators, parasitoids, and predators, many groups are vastly understudied in Australia. It is estimated that less than 30% of Australia's estimated 44,000 species of Hymenoptera are described.

The bees (clade Anthophila) collected on the Nanda Country Bush Blitz are covered in a separate report. Ants (family Formicidae) generally require quite different collecting methods than the rest of the Hymenoptera, and were not a target group of this survey. The remaining ~68 families of wasp and sawfly are covered in this report, with particular emphasis on the groups for which with report authors have expertise.

The Atlas of Living Australia currently lists 231 records of Hymenoptera (excluding bees and ants) within the bounding box shown in Figure 1. These records include members of 15 families, with only 11 different species-level identifications. Approximately half (n=130) of the records are from a preserved specimen in a collection, a few are a DNA barcode record (n=14) and 87 are human observations from iNaturalist and Questagame.

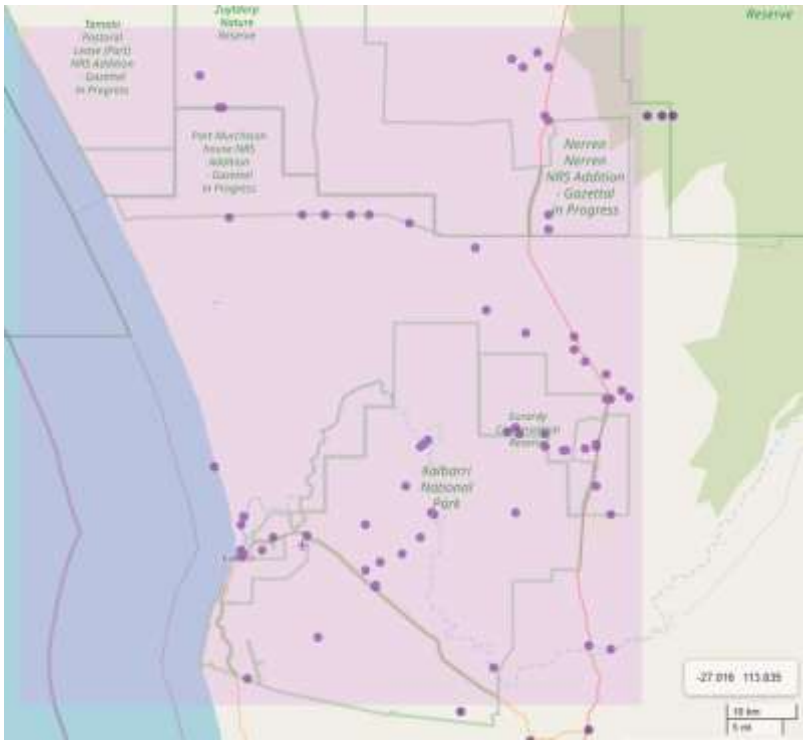


Fig 1. Current records (as of 24.2.2025) of Hymenoptera (excluding bees and ants) in and around the survey area on the Atlas of Living Australia.

2. Methods

2.1 Site selection

Sites were selected to try to cover a broad range of habitats and geographic spread, although sites with flowering plants were prioritised due to the likelihood of increasing the amount collected if sweep netting is done at floral resources vs non-flowering vegetation. The 67 different sites at which Hymenoptera were collected is shown in Figure 2 (note that 10 of these points actually represent vehicle net samples that range from 4 km to 35 km in sampled distances).

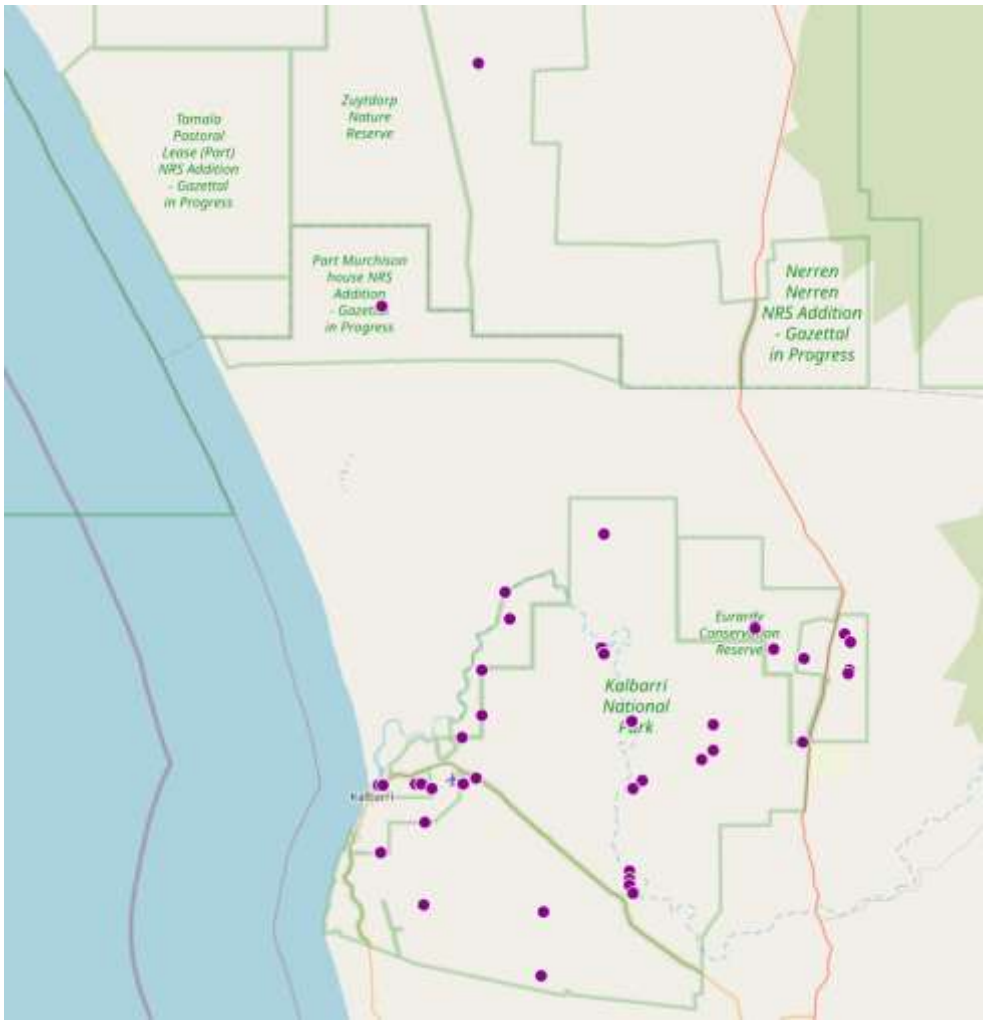


Fig. 2. Sites at which wasps (Hymenoptera excluding bees and ants) were collected from during the Bush Blitz survey.

2.2 Survey techniques

Various survey techniques were used to try to sample as much diversity as possible, and included:

- Contact sweep netting of vegetation, particularly flowering plants (Fig. 3).
- Active collection of wasps on the ground or trunk/branches of trees (Fig. 3).
- Active collecting at a Lepi-LED light in front of a white sheet or tent.
- Five standard Townes style Malaise traps (e.g. Fig. 4), and four 6 m Malaise traps.
- Vehicle nets mounted on top of cars travelling along tracks within the park.

Samples were collected into 70-100% ethanol and kept cold in a fridge or freezer for the duration of the expedition.



Fig. 3. Examples of ground collecting (stalking wasps hovering above the sand) and sweep netting on the expedition.



Fig. 4. Two of the Townes-style Malaise traps used on the Nanda Country Bush Blitz.

2.2.1 Methods used at standard survey sites

Both standard survey sites were visited by the survey authors or other expedition members with a team of people (either Nanda rangers, DBCA rangers, BHP staff or teachers). A Townes-style Malaise trap was placed at each site for as long as possible during the expedition. At each site, sweep-netting of vegetation and direct searching was conducted for at least half an hour.

2.3 Identifying the collections

Bulk samples were firstly sorted to order level, and then to superfamily or family level. Many specimens of the superfamilies Chalcidoidea, Platygastroidea and Ichneumonoidea (n=2280) underwent rapid-DNA barcoding of the COI gene using the pipeline developed in the SARFMEE labs at The University of Adelaide. Sequences were sorted into Molecular Operational Taxonomic Units (MOTUs) using the RESL algorithm on BOLD. Sequences were compared against references databases (Gebank or BOLD) using BLAST (Genbank) or the

BOLD identification portal. Identifications and MOTU delimitation was confirmed or supported using coarse morphology.

For all other superfamilies, specimens were identified as far as reasonably possible in the timeframe (e.g. subfamily, genus, or species level) using a variety of resources (listed below) and comparison to the collection at The South Australian Museum (SAMA).

The following resources were used to identify survey material (Azevedo *et. al.* 2018; Bohart, 1985; Bohart & Menke, 1976; Carpenter & Brown, 2021; Evans & Matthews, 1973; Gauld, 1984; Naumann, 1991; Jennings & Austin, 2002; Pasteels, 1957; Parslow, 2020).

3. Results and Discussion

Appendix 1 lists all Hymenoptera (excluding ants and bees) recorded during the Bush Blitz. Collections made during this Bush Blitz will result in at least 3000 specimens being added to public collections. Due to the timeframe of the survey report, the authors were unable to identify all individuals, and prioritised identifying species across the diversity of Hymenoptera, and groups in which they had expertise.

In total, **1678 individual specimens were identified to a putative species level**, either to a named species, or an operational taxonomic unit (either a morphospecies or molecular OTU). **There were 508 different putative species identified** amongst those 1678 individuals, in 37 different families, **44 which were able to be identified as a named species** using either morphology or a match of the COI barcode to BOLD or Genbank (subsequently confirmed by coarse morphological examination). These records are all available to be added to public databases. Only three of the taxa identified to species level were previously recorded on the Atlas of Living Australia within the survey area: *Bothriomutilla rugicollis*, *Radumeris tasmaniensis* and *Podalonia tydei.* The remaining 41 taxa represent new records for the survey area (according to ALA data).

Given that only 15 families and 11 species (231 records total) were listed on ALA in the survey area before the expedition, this represents a very large increase in the available biodiversity data, including a doubling of the number of hymenopteran families formally recorded.

3.1 Un-named or not formalised taxa

As most of Australia's wasp diversity is undescribed, and identifying all of the 37 different families to species level using traditional (often non-existent or outdated keys) is beyond the scope of this report, most of the species fall under the 'un-named or not formalised' definition. It is likely a few of these are named taxa, but will require significant time and expertise in the different groups to determine. The survey authors made an effort to sort as many specimens as possible to morphospecies or molecular OTU (MOTUs) to allow the collections to be as accessible for future research as possible.

Table 1. Putatively un-named or not formalised taxa

Taxon	Comment
Acanthostethus BBKB-1	Identified to genus and morphospecies
Agathidinae sp. BBKB-1	identified to subfamily and MOTU
Agathidinae sp. BBKB-2	identified to subfamily and MOTU
Agathidinae sp. BBKB-3	identified to subfamily and MOTU
Agathidinae sp. BBKB-4	identified to subfamily and MOTU
Agathidinae sp. BBKB-5	identified to subfamily and MOTU
Aleiodes sp. BBKB-1	identified to genus and MOTU

Allophatnus sp. BBKB-1	identified to genus and MOTU
Anacis sp. BBKB-1	identified to genus and MOTU
Anacis sp. BBKB-2	identified to genus and MOTU
Anoplius BBKB-1	Identified to genus and morphospecies
Argogorytes BBKB-1	Identified to genus and morphospecies
Austrogorytes BBKB-1	Identified to genus and morphospecies
Austrogorytes BBKB-2	Identified to genus and morphospecies
Bembecinus BBKB-1	Identified to genus and morphospecies
Bembecinus BBKB-2	Identified to genus and morphospecies
Bembix BBKB-1	Identified to genus and morphospecies
Bembix BBKB-2	Identified to genus and morphospecies
Brachistinae sp. BBKB-1	identified to subfamily and MOTU
Brachycyrtus sp. BBKB-1	identified to genus and MOTU
Brachymeria sp. BBKB-1	identified to genus and MOTU
Brachymeria sp. BBKB-2	identified to genus and MOTU
Brachymeria sp. BBKB-3	identified to genus and MOTU
Brachymeria sp. BBKB-4	identified to genus and MOTU
Brachymeria sp. BBKB-5	identified to genus and MOTU
Brachymeria sp. BBKB-6	identified to genus and MOTU
Braconidae sp. BBKB-1	identified to family and MOTU
Braconidae sp. BBKB-2	identified to family and MOTU
Braconidae sp. BBKB-3	identified to family and MOTU
Braconidae sp. BBKB-4	identified to family and MOTU
Braconidae sp. BBKB-5	identified to family and MOTU
Braconinae sp. BBKB-1	identified to subfamily and MOTU
Braconinae sp. BBKB-10	identified to subfamily and MOTU
Braconinae sp. BBKB-11	identified to subfamily and MOTU
Braconinae sp. BBKB-12	identified to subfamily and MOTU
Braconinae sp. BBKB-13	identified to subfamily and MOTU
Braconinae sp. BBKB-2	identified to subfamily and MOTU
Braconinae sp. BBKB-3	identified to subfamily and MOTU
Braconinae sp. BBKB-4	identified to subfamily and MOTU
Braconinae sp. BBKB-5	identified to subfamily and MOTU
Braconinae sp. BBKB-6	identified to subfamily and MOTU
Braconinae sp. BBKB-7	identified to subfamily and MOTU
Braconinae sp. BBKB-8	identified to subfamily and MOTU
Braconinae sp. BBKB-9	identified to subfamily and MOTU
Campopleginae sp. BBKB-1	identified to subfamily and MOTU
Cardiochilinae sp. BBKB-1	identified to subfamily and MOTU
Ceraphronidae sp. BBKB-1	identified to family and MOTU
Ceraphronidae sp. BBKB-2	identified to family and MOTU
Chalcididae sp. BBKB-1	identified to family and MOTU
Chalcididae sp. BBKB-10	identified to family and MOTU
Chalcididae sp. BBKB-2	identified to family and MOTU
Chalcididae sp. BBKB-3	identified to family and MOTU

Chalcididae sp. BBKB-4	identified to family and MOTU
Chalcididae sp. BBKB-5	identified to family and MOTU
Chalcididae sp. BBKB-6	identified to family and MOTU
Chalcididae sp. BBKB-7	identified to family and MOTU
Chalcididae sp. BBKB-8	identified to family and MOTU
Chalcididae sp. BBKB-9	identified to family and MOTU
Chalcidoidea sp. BBKB-1	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-10	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-11	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-12	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-13	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-14	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-15	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-16	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-17	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-18	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-19	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-2	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-20	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-21	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-22	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-23	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-24	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-25	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-26	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-3	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-4	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-5	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-6	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-7	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-8	identified to superfamily and MOTU
Chalcidoidea sp. BBKB-9	identified to superfamily and MOTU
Cheloninae sp. BBKB-1	identified to subfamily and MOTU
Cheloninae sp. BBKB-2	identified to subfamily and MOTU
Cheloninae sp. BBKB-3	identified to subfamily and MOTU
Cheloninae sp. BBKB-4	identified to subfamily and MOTU
Chrysolampidae sp. BBKB-1	identified to family and MOTU
Chrysolampidae sp. BBKB-2	identified to family and MOTU
Clitemnestra BBKB-1	Identified to genus and morphospecies
Coelocybidae sp. BBKB-1	identified to family and MOTU
Coelocybidae sp. BBKB-2	identified to family and MOTU
Colotrechninae sp. BBKB-1	identified to subfamily and MOTU
Colotrechninae sp. BBKB-2	identified to subfamily and MOTU
Colotrechninae sp. BBKB-3	identified to subfamily and MOTU
Colotrechninae sp. BBKB-4	identified to subfamily and MOTU

Colotrechninae sp. BBKB-5	identified to subfamily and MOTU
Colotrechninae sp. BBKB-6	identified to subfamily and MOTU
Colotrechninae sp. BBKB-7	identified to subfamily and MOTU
Cotesia nr radiantis' cf Fagan-Jeffries & Austin 2019	identified to genus and MOTU, match to published MOTU
Cotesia sp. BBKB-1	identified to genus and MOTU
Ctenostegus BBKB-1	Identified to genus and morphospecies
Ctenostegus BBKB-2	Identified to genus and morphospecies
Ctenostegus BBKB-3	Identified to genus and morphospecies
Dinotrema sp. BBKB-1	identified to genus and MOTU
Diolcogaster sp. BBKB-1	identified to genus and MOTU
Diolcogaster sp. BBKB-2	identified to genus and MOTU
Dolichogenidea sp. BBKB-1	identified to genus and MOTU
Dolichogenidea sp. BBKB-2	identified to genus and MOTU
Dolichogenidea sp. BBKB-3	identified to genus and MOTU
Dolichogenidea sp. BBKB-4	identified to genus and MOTU
Dryinus BBKB-1	Identified to genus and morphospecies
Encyrtidae sp. BBKB-1	identified to family and MOTU
Encyrtidae sp. BBKB-10	identified to family and MOTU
Encyrtidae sp. BBKB-11	identified to family and MOTU
Encyrtidae sp. BBKB-12	identified to family and MOTU
Encyrtidae sp. BBKB-13	identified to family and MOTU
Encyrtidae sp. BBKB-14	identified to family and MOTU
Encyrtidae sp. BBKB-15	identified to family and MOTU
Encyrtidae sp. BBKB-16	identified to family and MOTU
Encyrtidae sp. BBKB-2	identified to family and MOTU
Encyrtidae sp. BBKB-3	identified to family and MOTU
Encyrtidae sp. BBKB-4	identified to family and MOTU
Encyrtidae sp. BBKB-5	identified to family and MOTU
Encyrtidae sp. BBKB-6	identified to family and MOTU
Encyrtidae sp. BBKB-7	identified to family and MOTU
Encyrtidae sp. BBKB-8	identified to family and MOTU
Encyrtidae sp. BBKB-9	identified to family and MOTU
Enicospilus sp. BBKB-1	identified to genus and MOTU
Entedoninae sp. BBKB-1	identified to subfamily and MOTU
Entedoninae sp. BBKB-2	identified to subfamily and MOTU
Entedoninae sp. BBKB-5	identified to subfamily and MOTU
Entedoninae sp. BBKB-6	identified to subfamily and MOTU
Entedoninae sp. BBKB-7	identified to subfamily and MOTU
Entedoninae sp. BBKB-8	identified to subfamily and MOTU
Epyrinae BBKB-1	identified to subfamily and morphospecies
Epyrinae BBKB-2	identified to subfamily and morphospecies
Eucaphila sp. BBKB-1	identified to genus and MOTU
Eulophidae sp. BBKB-1	identified to family and MOTU
Eulophidae sp. BBKB-10	identified to family and MOTU

Eulophidae sp. BBKB-11	identified to family and MOTU
Eulophidae sp. BBKB-12	identified to family and MOTU
Eulophidae sp. BBKB-13	identified to family and MOTU
Eulophidae sp. BBKB-14	identified to family and MOTU
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Eulophinae sp. BBKB-11	identified to subfamily and MOTU
Eulophinae sp. BBKB-12	identified to subfamily and MOTU
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Eulophinae sp. BBKB-2	identified to subfamily and MOTU
Eulophinae sp. BBKB-3	identified to subfamily and MOTU
Eulophinae sp. BBKB-4	identified to subfamily and MOTU
Eulophinae sp. BBKB-6	identified to subfamily and MOTU
Eulophinae sp. BBKB-7	identified to subfamily and MOTU
Eulophinae sp. BBKB-8	identified to subfamily and MOTU
Eulophinae sp. BBKB-9	identified to subfamily and MOTU
Eumeninae BBKB-1	identified to subfamily and morphospecies
Eumeninae BBKB-2	identified to subfamily and morphospecies
Eumeninae BBKB-3	identified to subfamily and morphospecies
Eupelmidae sp. BBKB-1	identified to family and MOTU
Eupelmidae sp. BBKB-10	identified to family and MOTU
Eupelmidae sp. BBKB-11	identified to family and MOTU
Eupelmidae sp. BBKB-2	identified to family and MOTU
Eupelmidae sp. BBKB-3	identified to family and MOTU
Eupelmidae sp. BBKB-4	identified to family and MOTU
Eupelmidae sp. BBKB-5	identified to family and MOTU
Eupelmidae sp. BBKB-6	identified to family and MOTU
Eupelmidae sp. BBKB-7	identified to family and MOTU
Eupelmidae sp. BBKB-8	identified to family and MOTU
Eupelmidae sp. BBKB-9	identified to family and MOTU
Euphorinae sp. BBKB-1	identified to subfamily and MOTU
Eupsenella BBKB-1	Identified to genus and morphospecies

Euryischiinae sp. BBKB-1	identified to subfamily and MOTU
Euryischiinae sp. BBKB-2	identified to subfamily and MOTU
Euryischiinae sp. BBKB-3	identified to subfamily and MOTU
Eurytomidae sp. BBKB-1	identified to family and MOTU
Eurytomidae sp. BBKB-10	identified to family and MOTU
Eurytomidae sp. BBKB-11	identified to family and MOTU
Eurytomidae sp. BBKB-12	identified to family and MOTU
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Eurytomidae sp. BBKB-17	identified to family and MOTU
Eurytomidae sp. BBKB-18	identified to family and MOTU
Eurytomidae sp. BBKB-19	identified to family and MOTU
Eurytomidae sp. BBKB-2	identified to family and MOTU
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Eurytomidae sp. BBKB-24	identified to family and MOTU
Eurytomidae sp. BBKB-25	identified to family and MOTU
Eurytomidae sp. BBKB-26	identified to family and MOTU
Eurytomidae sp. BBKB-27	identified to family and MOTU
Eurytomidae sp. BBKB-28	identified to family and MOTU
Eurytomidae sp. BBKB-29	identified to family and MOTU
Eurytomidae sp. BBKB-3	identified to family and MOTU
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Eurytomidae sp. BBKB-31	identified to family and MOTU
Eurytomidae sp. BBKB-32	identified to family and MOTU
Eurytomidae sp. BBKB-33	identified to family and MOTU
Eurytomidae sp. BBKB-34	identified to family and MOTU
Eurytomidae sp. BBKB-35	identified to family and MOTU
Eurytomidae sp. BBKB-4	identified to family and MOTU
Eurytomidae sp. BBKB-5	identified to family and MOTU
Eurytomidae sp. BBKB-6	identified to family and MOTU
Eurytomidae sp. BBKB-7	identified to family and MOTU
Eurytomidae sp. BBKB-8	identified to family and MOTU
Eurytomidae sp. BBKB-9	identified to family and MOTU
Gasteruption BBKB-1	Identified to genus and morphospecies
Gasteruption BBKB-2	Identified to genus and morphospecies
Goniozus BBKB-1	Identified to genus and morphospecies
Gryon sp. M427_cf Murphy et al 2007_saxatile_group	identified to genus and MOTU, match to published MOTU
Gryon sp. M430 cf Murphy et al 2007	identified to genus and MOTU, match to published MOTU
Gryon sp. BBKB-1	identified to genus and MOTU

Homolobinae sp. BBKB-1	identified to subfamily and MOTU
Homolobinae sp. BBKB-2	identified to subfamily and MOTU
Ichneumonidae sp. BBKB-1	identified to family and MOTU
Ichneumonidae sp. BBKB-2	identified to family and MOTU
Ichneumonidae sp. BBKB-3	identified to family and MOTU
Iconella sp. BBKB-1	identified to genus and MOTU
Labium sp. BBKB-1	identified to genus and MOTU
Labium sp. BBKB-2	identified to genus and MOTU
Larrisson BBKB-1	Identified to genus and morphospecies
Megastigmidae sp. BBKB-1	identified to family and MOTU
Megastigmidae sp. BBKB-2	identified to family and MOTU
Megastigmidae sp. BBKB-3	identified to family and MOTU
Megastigmidae sp. BBKB-4	identified to family and MOTU
Megastigmidae sp. BBKB-5	identified to family and MOTU
Megastigmus sp. BBKB-1	identified to genus and MOTU
Mesochorus sp. BBKB-1	identified to genus and MOTU
Mesochorus sp. BBKB-2	identified to genus and MOTU
Microchelonus sp. BBKB-1	identified to genus and MOTU
Microctonus sp. BBKB-1	identified to genus and MOTU
Microctonus sp. BBKB-2	identified to genus and MOTU
Microctonus sp. BBKB-3	identified to genus and MOTU
Microgastrinae sp. BBKB-1	identified to subfamily and MOTU
Microgastrinae sp. BBKB-2	identified to subfamily and MOTU
Microgastrinae sp. BBKB-3	identified to subfamily and MOTU
Microplitis sp. BBKB-1	identified to genus and MOTU
Microplitis sp. BBKB-2	identified to genus and MOTU
Mutilidae BBKB-1	identified to family and morphospecies
Mutilidae BBKB-2	identified to family and morphospecies
Mutilidae BBKB-3	identified to family and morphospecies
Mutilidae BBKB-4	identified to family and morphospecies
Mutilidae BBKB-5	identified to family and morphospecies
Mutilidae BBKB-6	identified to family and morphospecies
Mutilidae BBKB-7	identified to family and morphospecies
Mymaridae sp. BBKB-1	identified to family and MOTU
Mymaridae sp. BBKB-10	identified to family and MOTU
Mymaridae sp. BBKB-11	identified to family and MOTU
Mymaridae sp. BBKB-12	identified to family and MOTU
Mymaridae sp. BBKB-2	identified to family and MOTU
Mymaridae sp. BBKB-3	identified to family and MOTU
Mymaridae sp. BBKB-4	identified to family and MOTU
Mymaridae sp. BBKB-5	identified to family and MOTU
Mymaridae sp. BBKB-6	identified to family and MOTU
Mymaridae sp. BBKB-7	identified to family and MOTU
Mymaridae sp. BBKB-8	identified to family and MOTU
Mymaridae sp. BBKB-9	identified to family and MOTU

Netelia sp. BBKB-1	identified to genus and MOTU
Netelia sp. BBKB-2	identified to genus and MOTU
Netelia sp. BBKB-3	identified to genus and MOTU
Netelia sp. BBKB-4	identified to genus and MOTU
Opiinae sp. BBKB-1	identified to subfamily and MOTU
Opiinae sp. BBKB-2	identified to subfamily and MOTU
Opius sp. BBKB-1	identified to genus and MOTU
Opius sp. BBKB-2	identified to genus and MOTU
Opius sp. BBKB-3	identified to genus and MOTU
Orgilinae sp. BBKB-1	identified to subfamily and MOTU
Orthocentrinae sp. BBKB-2	identified to subfamily and MOTU
Orthocentrus sp. BBKB-1	identified to genus and MOTU
Oxyserphus BBKB-1	Identified to genus and morphospecies
Paraphylax BBKB-1	identified to genus and MOTU
Paraphylax sp. BBKB-1	identified to genus and MOTU
Paraphylax sp. BBKB-2	identified to genus and MOTU
Paraphylax sp. BBKB-3	identified to genus and MOTU
Perilampidae sp. BBKB-1	identified to family and MOTU
Perilampidae sp. BBKB-2	identified to family and MOTU
Perilampidae sp. BBKB-3	identified to family and MOTU
Perilampidae sp. BBKB-4	identified to family and MOTU
Perilampidae sp. BBKB-5	identified to family and MOTU
Perilampidae sp. BBKB-6	identified to family and MOTU
Phanerotoma sp. BBKB-1	identified to genus and MOTU
Phanerotoma sp. BBKB-2	identified to genus and MOTU
Phanerotoma sp. BBKB-3	identified to genus and MOTU
Phanerotoma sp. BBKB-4	identified to genus and MOTU
Platygastridae sp. BBKB-10	identified to family and MOTU
Platygastridae sp. BBKB-1	identified to family and MOTU
Platygastridae sp. BBKB-2	identified to family and MOTU
Platygastridae sp. BBKB-3	identified to family and MOTU
Platygastridae sp. BBKB-4	identified to family and MOTU
Platygastridae sp. BBKB-6	identified to family and MOTU
Platygastridae sp. BBKB-7	identified to family and MOTU
Platygastridae sp. BBKB-8	identified to family and MOTU
Platygastridae sp. BBKB-9	identified to family and MOTU
Platygastroidea sp. BBKB-1	identified to superfamily and MOTU
Platygastroidea sp. BBKB-2	identified to superfamily and MOTU
Platygastroidea sp. BBKB-3	identified to superfamily and MOTU
Podagritus BBKB-1	Identified to genus and morphospecies
Podagritus BBKB-2	Identified to genus and morphospecies
Pristaulacus BBKB-1	Identified to genus and morphospecies
Pseudofoenus BBKB-1	Identified to genus and morphospecies
Pseudofoenus BBKB-2	Identified to genus and morphospecies
Psyllaephagus sp. BBKB-1	identified to genus and MOTU

Psyllaephagus sp. BBKB-2	identified to genus and MOTU
Psyllaephagus sp. BBKB-3	identified to genus and MOTU
Pteromalidae sp. BBKB-1	identified to family and MOTU
Pteromalidae sp. BBKB-10	identified to family and MOTU
Pteromalidae sp. BBKB-11	identified to family and MOTU
Pteromalidae sp. BBKB-2	identified to family and MOTU
Pteromalidae sp. BBKB-3	identified to family and MOTU
Pteromalidae sp. BBKB-4	identified to family and MOTU
Pteromalidae sp. BBKB-5	identified to family and MOTU
Pteromalidae sp. BBKB-6	identified to family and MOTU
Pteromalidae sp. BBKB-7	identified to family and MOTU
Pteromalidae sp. BBKB-8	identified to family and MOTU
Pteromalidae sp. BBKB-9	identified to family and MOTU
Pteromalidae? sp. BBKB-1	identified to family and MOTU
Scelionidae sp. BBKB-1	identified to family and MOTU
Scelionidae sp. BBKB-10	identified to family and MOTU
Scelionidae sp. BBKB-11	identified to family and MOTU
Scelionidae sp. BBKB-12	identified to family and MOTU
Scelionidae sp. BBKB-13	identified to family and MOTU
Scelionidae sp. BBKB-14	identified to family and MOTU
Scelionidae sp. BBKB-15	identified to family and MOTU
Scelionidae sp. BBKB-16	identified to family and MOTU
Scelionidae sp. BBKB-17	identified to family and MOTU
Scelionidae sp. BBKB-18	identified to family and MOTU
Scelionidae sp. BBKB-19	identified to family and MOTU
Scelionidae sp. BBKB-2	identified to family and MOTU
Scelionidae sp. BBKB-3	identified to family and MOTU
Scelionidae sp. BBKB-4	identified to family and MOTU
Scelionidae sp. BBKB-5	identified to family and MOTU
Scelionidae sp. BBKB-6	identified to family and MOTU
Scelionidae sp. BBKB-7	identified to family and MOTU
Scelionidae sp. BBKB-8	identified to family and MOTU
Scelionidae sp. BBKB-9	identified to family and MOTU
Scelioninae sp. BBKB-1	identified to subfamily and MOTU
Scolia BBKB-1	Identified to genus and morphospecies
Sericophorus BBKB-1	Identified to genus and morphospecies
Sericophorus BBKB-2	Identified to genus and morphospecies
Spex BBKB-1	Identified to genus and morphospecies
Spex BBKB-2	Identified to genus and morphospecies
Spex BBKB-3	Identified to genus and morphospecies
Spilomena BBKB-1	Identified to genus and morphospecies
Synopeas sp. BBKB-1	identified to genus and MOTU
Systasidae sp. BBKB-1	identified to family and MOTU
Systasidae sp. BBKB-2	identified to family and MOTU
Systasidae sp. BBKB-3	identified to family and MOTU

Systasidae sp. BBKB-4	identified to family and MOTU
Systasidae sp. BBKB-5	identified to family and MOTU
Systasidae sp. BBKB-6	identified to family and MOTU
Systasidae sp. BBKB-7	identified to family and MOTU
Systasidae sp. BBKB-8	identified to family and MOTU
Systasidae sp. BBKB-9	identified to family and MOTU
Szepligetiella BBKB-1	Identified to genus and morphospecies
Szepligetiella BBKB-2	Identified to genus and morphospecies
Tachytes BBKB-1	Identified to genus and morphospecies
Tachytes BBKB-2	Identified to genus and morphospecies
Tachytes BBKB-3	Identified to genus and morphospecies
Tanaostigmatidae sp. BBKB-1	identified to family and MOTU
Tanaostigmodes BBKB-1	identified to genus and MOTU
Telengaiinae sp. BBKB-1	identified to subfamily and MOTU
Telenomus sp. M432 cf Murphy et al 2007	Identified to genus and MOTU
Telenominae sp. BBKB-1	identified to subfamily and MOTU
Telenominae sp. BBKB-2	identified to subfamily and MOTU
Telenominae sp. BBKB-3	identified to subfamily and MOTU
Telenominae sp. BBKB-4	identified to subfamily and MOTU
Telenominae sp. BBKB-5	identified to subfamily and MOTU
Telenominae sp. BBKB-6	identified to subfamily and MOTU
Telostegus BBKB-1	Identified to genus and morphospecies
Temelucha sp. BBKB-1	identified to genus and MOTU
Tetrastichinae sp. BBKB-1	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-10	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-11	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-12	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-13	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-14	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-15	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-16	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-17	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-18	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-19	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-2	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-20	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-21	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-22	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-23	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-24	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-25	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-26	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-27	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-3	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-4	identified to subfamily and MOTU

Tetrastichinae sp. BBKB-5	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-6	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-7	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-8	identified to subfamily and MOTU
Tetrastichinae sp. BBKB-9	identified to subfamily and MOTU
Thynnidae BBKB-1	identified to family and morphospecies
Thynnidae BBKB-10	identified to family and morphospecies
Thynnidae BBKB-11	identified to family and morphospecies
Thynnidae BBKB-12	identified to family and morphospecies
Thynnidae BBKB-13	identified to family and morphospecies
Thynnidae BBKB-14	identified to family and morphospecies
Thynnidae BBKB-15	identified to family and morphospecies
Thynnidae BBKB-16	identified to family and morphospecies
Thynnidae BBKB-17	identified to family and morphospecies
Thynnidae BBKB-18	identified to family and morphospecies
Thynnidae BBKB-19	identified to family and morphospecies
Thynnidae BBKB-2	identified to family and morphospecies
Thynnidae BBKB-20	identified to family and morphospecies
Thynnidae BBKB-21	identified to family and morphospecies
Thynnidae BBKB-22	identified to family and morphospecies
Thynnidae BBKB-23	identified to family and morphospecies
Thynnidae BBKB-3	identified to family and morphospecies
Thynnidae BBKB-4	identified to family and morphospecies
Thynnidae BBKB-5	identified to family and morphospecies
Thynnidae BBKB-6	identified to family and morphospecies
Thynnidae BBKB-7	identified to family and morphospecies
Thynnidae BBKB-8	identified to family and morphospecies
Thynnidae BBKB-9	identified to family and morphospecies
Toryminae sp. BBKB-1	identified to subfamily and MOTU
Toryminae sp. BBKB-2	identified to subfamily and MOTU
Toryminae sp. BBKB-3	identified to subfamily and MOTU
Toryminae sp. BBKB-4	identified to subfamily and MOTU
Toryminae sp. BBKB-5	identified to subfamily and MOTU
Toryminae sp. BBKB-6	identified to subfamily and MOTU
Toryminae sp. BBKB-7	identified to subfamily and MOTU
Torymoides sp. BBKB-1	identified to genus and MOTU
Trichogramma sp. BBKB-1	identified to genus and MOTU
Trichogrammatidae sp. BBKB-1	identified to family and MOTU
Trichogrammatidae sp. BBKB-10	identified to family and MOTU
Trichogrammatidae sp. BBKB-11	identified to family and MOTU
Trichogrammatidae sp. BBKB-12	identified to family and MOTU
Trichogrammatidae sp. BBKB-13	identified to family and MOTU
Trichogrammatidae sp. BBKB-14	identified to family and MOTU
Trichogrammatidae sp. BBKB-15	identified to family and MOTU
Trichogrammatidae sp. BBKB-2	identified to family and MOTU

Trichogrammatidae sp. BBKB-3	identified to family and MOTU
Trichogrammatidae sp. BBKB-4	identified to family and MOTU
Trichogrammatidae sp. BBKB-5	identified to family and MOTU
Trichogrammatidae sp. BBKB-6	identified to family and MOTU
Trichogrammatidae sp. BBKB-7	identified to family and MOTU
Trichogrammatidae sp. BBKB-8	identified to family and MOTU
Trichogrammatidae sp. BBKB-9	identified to family and MOTU
Turneromyia BBKB-1	Identified to genus and morphospecies
Vipiellus sp. BBKB-1	identified to genus and MOTU
Zagrammosoma nr. latilineatum	identified to genus and MOTU, very close match to described species

3.2 Species new to science

In this report, 'species new to science' means species that were not recognised by Western science before this Bush Blitz.

As mentioned above, it is highly likely many of the informal species in section 3.1 are new species, but this will require significant work and expertise in different taxa to determine definitely. The list below are species that the report contributors have expertise in and are reasonably sure represent undescribed species not collected before. However, several other specimens will feed immediately into active systematics projects that the report authors are involved in, including those of *Szepligetiella*, *Paraphylax*, Tanaostigmatidae, Microgastrinae, and Rogadinae. Confirmation of new species in those groups is therefore likely to occur within the next 12 months.

Table 2. Species new to science

Species	**Comment**
Gasteruption BBKB-sp1	Putative new species, only known from specimens collected on 2021 Bush Blitz Yalata/ Fowlers Bay
Gasteruption BBKB-2	Putative new species, represented by single male specimen
Pristaulacus BBKB-sp.1	Distinctive male specimen, different to all described Australian species
Tanaostigmodes BBKB-1	Extremely rare in collections, only one species known from WA with a lost holotype and vague description.

3.3 Introduced species

There were no introduced species of Hymenoptera (excluding bees, which are not reported here) identified in the material collected. Notably, there were no specimens of the invasive European wasp (*Vespula germanica*) collected during the survey.

3.4 Threatened species

None of the Hymenoptera species collected during the survey were listed as critically endangered, endangered, vulnerable or conservation dependent under the Australian Environment Protection and Biodiversity Conservation Act 1999. It should be noted that this is more to do with so few invertebrates being listed as threatened, rather than none of the species actually being of conservation concern.

3.5 Range extensions

Detailed information on Hymenoptera distributions is generally only available for well-studied groups. For the range extensions below, unless otherwise noted, we use only the data on the Atlas of Living Australia. We acknowledge there may be additional specimens in collections that are not digitised and available on the ALA.

Of the wasp specimens identified to species level, nearly all of them represent range extensions or infill in distribution (Table 5), due to the limited records for the survey area. Many of the specimens identified to genus, subfamily or family level also represent significant range extensions compared to the data on ALA, but it would be impractical to list them all here.

Table 5. Range extensions or significant infill in distribution records for species

Species	Location sighted/observed	Distance from nearest known record (km)	Comments
Diadegma semiclausum	Kalbarri NP	~480 km	Nearest record on ALA is near Perth
Diplazon laetatorius	Eurardy station; Kalbarri NP	~295 km	Records on ALA in Carnarvon and near Guilderton
Ichneumon promissorius	Kalbarri NP	~480 km	Nearest record on ALA is near Perth
Echthromorpha intricatoria	Kalbarri NP	~460 km	Nearest record on ALA is near Perth
Lissopimpla excelsa	Kalbarri NP, multiple sites	~100 km	Records on ALA near Geraldton and Denham
Aphidius colemani	Eurardy Station and Kalbarri NP, multiple sites	~500 km	Nearest record on ALA is near Perth. Used in biological control of common aphid pests.
Habrobracon hebetor	Kalbarri rd. -27.6989123, 114.1766402		No records on ALA (listed on ALA as *Bracon hebetor*, may be issue with record sync). Used commercially as a parasitoid for moths. ID needs confirmation.
Myiocnema comperei	Kalbarri NP	~3000 km	Only records on ALA are in Melbourne, Brisbane, and north QLD.
Aphidius ervi	SSS2	~3100 km	No records on ALA in WA – NSW, QLD, TAS. Known and commercially used parasitoid of aphid pests in Australia.
Apanteles brockhedgesi	Kalbarri NP, multiple sites	~570 km	Most southern record in WA, other record in WA further

			north (From Slater-Baker et al. 2025)
Apanteles ippeus	Eurardy station; Kalbarri NP, multiple sites	~570 km	Most southern record in WA, other records for WA further north (From Slater-Baker et al. 2025)
Apanteles magicus	Kalbarri NP	~480 km	Records in WA near Perth and further north (From Slater-Baker et al. 2025)
Apanteles oenone	Kalbarri NP	~570 km	Most southern record in WA, two other records for WA further north (From Slater-Baker et al. 2025)
Apanteles rufiterra	Kalbarri NP	~270 km	Records in WA both north and south of Kalbarri (From Slater-Baker et al. 2025)
Dolichogenidea bonbonensis	Kalbarri NP	~500 km	Other record in WA is further north (from Fagan-Jeffries et al. 2019)
Glytpanateles kingae	Eurady station, Kalbarri NP, multiple sites	~500 km	Other record in WA is further north (from Fagan-Jeffries et al. 2022)
Glytpanateles kittelae	Kalbarri NP, multiple sites	~2,200 km	First record for WA (from Fagan-Jeffries et al. 2022)
Gasteruption raphidioides	Kalbarri NP, Four ways access track	~540 km	Broadly distributed species, other records from WA are south closer to Perth
Gasteruption zebra	Kalbarri NP, multiple sites	~2,300 km	Recorded from SA, ACT and NSW
Szepligetiella perfida	Kalbarri NP, Hawks head road	~1700 km	The species was described from material collected in Tasmania (Westwood, 1851), it has been recorded in SA and likely has a broader distribution across Australia.

3.6 Genetic information

Of the 2280 specimens which underwent COI barcoding, 1794 produced a usable COI barcode (79% sequencing success rate). All available sequences of Ichneumonoidea were included in the dataset used for this report, but there were ~200 barcodes of Platygastroidea and Chalcidoidea that were not included due to time constraints. However, these are still available for future research. This process allowed a much clearer identification of OTUs than morphology would have provided within the timeframe, and also assisted in identifying and delimiting groups in which the report authors are not specialists. We believe the addition of the large number of DNA barcodes in this report allowed for the substantially higher number of families and OTUs to be recorded compared to previous expeditions on which wasps were surveyed. These barcode data will be made public if permission is granted from the Nanda Traditional Owners and land managers, which will also allow the tracking of OTUs across different Bush Blitz surveys if a similar process is followed in future. This is extremely useful given that most of Australia's hymenopterans are undescribed, there is limited taxonomic expertise, and different researchers attend different Bush Blitz surveys. We believe the

addition of the large number of DNA barcodes in this report allowed for the substantially higher number of families and OTUs to be recorded compared to previous expeditions on which wasps were surveyed.

4. Information on species lists

The hymenopteran fauna of Australia is extremely diverse, and highly understudied. The Australian faunal directory lists 74 families and over 12,000 described species (only a third of the estimated species-level diversity). The high diversity and lack of suitable identification resources for many groups makes identifying specimens beyond family or generic level time-consuming and often impossible. Therefore, the main focus of this report was on groups in which the survey participants had expertise and where suitable resources were available. It should also be noted that there is a portion of material that is not included in this report at all and is still in bulk vials sorted to either order or family level, that will be deposited in WAM. However, effort was made to try and include a large spectrum of diversity in the species list.

5. Information for land managers

The sampled habitat across Kalbarri National Park was found to be of high quality and, based on collections, supported diverse communities of Hymenoptera. Sites sampled across the Eurardy Nature Reserve were also found to be of high quality, even in areas with historic evidence of previous grazing. It is recommended continued efforts are maintained to manage pest plant and animal species, and to limit land clearing. This will support the high diversity of Hymenoptera across the parks and reserves.

6. Other significant findings

In terms of the number and diversity of hymenopterans collected on the Nanda Country Bush Blitz, the survey was one of the most successful that either of the report authors have attended. This is likely due to:

a) Having a two-person team allowed for more in-depth sampling at sites.
b) The “Bee team” (Remko Leijs and Katja Hogendoorn) running vehicle nets provided many specimens not collected with other methods.
c) The large number of Malaise traps, including the 6 m traps run by Keith Bayless, provided a diversity of material.
d) The collaboration with other survey members, particularly Keith Bayless (Diptera), Nik Tatarnic (Hemiptera), Katja Hogendoorn and Remko Leijs (bees) allowed all entomology participants to collect specimens for other teams at different sites, expanding the diversity of material available to everyone.

The ideal weather (warm, not too windy, allowing high insect activity) and presence of many flowering plants from recent rain, also likely contributed to the high number of different species recorded during the survey.

7. Conclusions

Kalbarri National Park, Eurardy station and surrounding reserves contain a highly diverse hymenopteran fauna. This report touches on just a small subset of the species that are most likely present in the area, and has substantially increased the publicly available biodiversity data for the region.

Acknowledgements

We would like to thank the Nanda Aboriginal Corporation, Nanda Traditional Owners, Nanda Rangers, Department of Biodiversity, Conservation and Attractions (DBCA) rangers, BHP staff, and the Eurardy Nature reserve (Bush Heritage) managers for facilitating access to sites and assisting with collections and knowledge on Country. We are grateful to the other Bush Blitz participants, Earthwatch staff, and the amazing Bush Blitz expedition leaders (Helen and Kate) who assisted with collections, morale, safety and logistics in the field.

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Appendices

Appendix 1. List of Hymenoptera (excluding bees and ants) recorded during the Nanda Country Bush Blitz

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-1	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-2	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-3	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-4	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-5	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-6	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-7	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-8	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-9	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-10	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-11	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-12	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-13	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-14	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-15	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-16	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-17	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-18	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-19	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-20	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-21	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-22	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-23	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-24	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-25	na	unknown	no	no	no
[Superfamily] Chalcidoidea	Chalcidoidea sp. BBKB-26	na	unknown	no	no	no
[Superfamily] Platygastroidea	Platygastroidea sp. BBKB-1	na	unknown	no	no	no
[Superfamily] Platygastroidea	Platygastroidea sp. BBKB-2	na	unknown	no	no	no
[Superfamily] Platygastroidea	Platygastroidea sp. BBKB-3	na	unknown	no	no	no
Aulacidae	*Aulacus aquilus*	na	no	no	no	no
Aulacidae	*Pristaulacus* BBKB-1	na	yes	no	no	no
Bethylidae	Epyrinae BBKB-1	na	unknown	no	no	no
Bethylidae	Epyrinae BBKB-2	na	unknown	no	no	no
Bethylidae	*Eupsenella* BBKB-1	na	unknown	no	no	no
Bethylidae	*Goniozus* BBKB-1	na	unknown	no	no	no
Braconidae	Agathidinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Agathidinae sp. BBKB-2	na	unknown	no	no	no
Braconidae	Agathidinae sp. BBKB-3	na	unknown	no	no	no
Braconidae	Agathidinae sp. BBKB-4	na	unknown	no	no	no
Braconidae	Agathidinae sp. BBKB-5	na	unknown	no	no	no
Braconidae	*Aleiodes* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Apanteles brockhedgesi*	na	no	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Braconidae	*Apanteles ippeus*	na	no	no	no	no
Braconidae	*Apanteles magicus*	na	no	no	no	no
Braconidae	*Apanteles oenone*	na	no	no	no	no
Braconidae	*Apanteles rufiterra*	na	no	no	no	no
Braconidae	*Aphidius colemani*	na	no	no	no	no
Braconidae	*Aphidius ervi*	na	no	no	no	no
Braconidae	Brachistinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Braconidae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Braconidae sp. BBKB-2	na	unknown	no	no	no
Braconidae	Braconidae sp. BBKB-3	na	unknown	no	no	no
Braconidae	Braconidae sp. BBKB-4	na	unknown	no	no	no
Braconidae	Braconidae sp. BBKB-5	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-2	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-3	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-5	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-6	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-7	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-8	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-9	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-10	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Braconidae	Braconinae sp. BBKB-11	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-12	na	unknown	no	no	no
Braconidae	Braconinae sp. BBKB-13	na	unknown	no	no	no
Braconidae	Cardiochilinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Cheloninae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Cheloninae sp. BBKB-2	na	unknown	no	no	no
Braconidae	Cheloninae sp. BBKB-3	na	unknown	no	no	no
Braconidae	Cheloninae sp. BBKB-4	na	unknown	no	no	no
Braconidae	*Cotesia icipe*	na	no	no	no	no
Braconidae	*Cotesia* nr *radiantis* cf Fagan-Jeffries & Austin 2019	na	no - known MOTU	no	no	no
Braconidae	*Cotesia ruficrus*	na	no	no	no	no
Braconidae	*Cotesia* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Dinotrema* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Diolcogaster* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Diolcogaster* sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Dolichogenidea bonbonensis*	na	no	no	no	no
Braconidae	*Dolichogenidea* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Dolichogenidea* sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Dolichogenidea* sp. BBKB-3	na	unknown	no	no	no
Braconidae	*Dolichogenidea* sp. BBKB-4	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Braconidae	*Eunesaulax terebratus*	na	unknown	no	no	no
Braconidae	Euphorinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Glyptapanteles kingae*	na	no	no	no	no
Braconidae	*Glyptapanteles kittelae*	na	no	no	no	no
Braconidae	*Habrobracon hebetor*	na	no	no	no	no
Braconidae	Homolobinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Homolobinae sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Iconella* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Microchelonus* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Microctonus* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Microctonus* sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Microctonus* sp. BBKB-3	na	unknown	no	no	no
Braconidae	Microgastrinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Microgastrinae sp. BBKB-2	na	unknown	no	no	no
Braconidae	Microgastrinae sp. BBKB-3	na	unknown	no	no	no
Braconidae	*Microplitis demolitor*	na	no	no	no	no
Braconidae	*Microplitis* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Microplitis* sp. BBKB-2	na	unknown	no	no	no
Braconidae	Opiinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	Opiinae sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Opius* sp. BBKB-1	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Braconidae	*Opius* sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Opius* sp. BBKB-3	na	unknown	no	no	no
Braconidae	Orgilinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Phanerotoma* sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Phanerotoma* sp. BBKB-2	na	unknown	no	no	no
Braconidae	*Phanerotoma* sp. BBKB-3	na	unknown	no	no	no
Braconidae	*Phanerotoma* sp. BBKB-4	na	unknown	no	no	no
Braconidae	Telengaiinae sp. BBKB-1	na	unknown	no	no	no
Braconidae	*Vipiellus* sp. BBKB-1	na	unknown	no	no	no
Ceraphronidae	Ceraphronidae sp. BBKB-1	na	unknown	no	no	no
Ceraphronidae	Ceraphronidae sp. BBKB-2	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-1	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-2	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-3	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-4	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-5	na	unknown	no	no	no
Chalcididae	*Brachymeria* sp. BBKB-6	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-1	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-2	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-3	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-4	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Chalcididae	Chalcididae sp. BBKB-5	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-6	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-7	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-8	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-9	na	unknown	no	no	no
Chalcididae	Chalcididae sp. BBKB-10	na	unknown	no	no	no
Chrysididae	*Chrysis saginata*	na	no	no	no	no
Chrysolampidae	Chrysolampidae sp. BBKB-1	na	unknown	no	no	no
Chrysolampidae	Chrysolampidae sp. BBKB-2	na	unknown	no	no	no
Coelocybidae	Coelocybidae sp. BBKB-1	na	unknown	no	no	no
Coelocybidae	Coelocybidae sp. BBKB-2	na	unknown	no	no	no
Crabronidae	*Acanthostethus* BBKB-1	na	unknown	no	no	no
Crabronidae	*Argogorytes* BBKB-1	na	unknown	no	no	no
Crabronidae	*Austrogorytes* BBKB-1	na	unknown	no	no	no
Crabronidae	*Austrogorytes* BBKB-2	na	unknown	no	no	no
Crabronidae	*Bembecinus* BBKB-1	na	unknown	no	no	no
Crabronidae	*Bembecinus* BBKB-2	na	unknown	no	no	no
Crabronidae	*Bembix atrifrons*	na	no	no	no	no
Crabronidae	*Bembix* BBKB-1	na	unknown	no	no	no
Crabronidae	*Bembix* BBKB-2	na	unknown	no	no	no
Crabronidae	*Clitemnestra* BBKB-1	na	unknown	no	no	no

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Crabronidae	*Clitemnestra guttatula*	na	no	no	no	no
Crabronidae	*Larrisson* BBKB-1	na	unknown	no	no	no
Crabronidae	*Pison aterrimum*	na	no	no	no	no
Crabronidae	*Podagritus* BBKB-1	na	unknown	no	no	no
Crabronidae	*Podagritus* BBKB-2	na	unknown	no	no	no
Crabronidae	*Sericophorus* BBKB-1	na	unknown	no	no	no
Crabronidae	*Sericophorus* BBKB-2	na	unknown	no	no	no
Crabronidae	*Sphodrotes rubra*	na	no	no	no	no
Crabronidae	*Spilomena* BBKB-1	na	unknown	no	no	no
Crabronidae	*Tachytes* BBKB-1	na	unknown	no	no	no
Crabronidae	*Tachytes* BBKB-2	na	unknown	no	no	no
Crabronidae	*Tachytes* BBKB-3	na	unknown	no	no	no
Dryinidae	*Dryinus* BBKB-1	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-1	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-2	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-3	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-4	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-5	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-6	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-7	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-8	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Encyrtidae	Encyrtidae sp. BBKB-9	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-10	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-11	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-12	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-13	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-14	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-15	na	unknown	no	no	no
Encyrtidae	Encyrtidae sp. BBKB-16	na	unknown	no	no	no
Encyrtidae	*Psyllaephagus* sp. BBKB-1	na	unknown	no	no	no
Encyrtidae	*Psyllaephagus* sp. BBKB-2	na	unknown	no	no	no
Encyrtidae	*Psyllaephagus* sp. BBKB-3	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-1	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-2	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-5	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-6	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-7	na	unknown	no	no	no
Eulophidae	Entedoninae sp. BBKB-8	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-1	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-2	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-3	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-4	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Eulophidae	Eulophidae sp. BBKB-5	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-6	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-7	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-8	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-9	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-10	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-11	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-12	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-13	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-14	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-15	na	unknown	no	no	no
Eulophidae	Eulophidae sp. BBKB-16	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-1	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-2	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-3	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-4	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-6	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-7	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-8	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-9	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-10	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Eulophidae	Eulophinae sp. BBKB-11	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-12	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-13	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-14	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-15	na	unknown	no	no	no
Eulophidae	Eulophinae sp. BBKB-16	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-1	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-2	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-3	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-4	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-5	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-6	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-7	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-8	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-9	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-10	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-11	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-12	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-13	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-14	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-15	na	unknown	no	no	no

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Eulophidae	Tetrastichinae sp. BBKB-16	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-17	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-18	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-19	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-20	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-21	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-22	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-23	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-24	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-25	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-26	na	unknown	no	no	no
Eulophidae	Tetrastichinae sp. BBKB-27	na	unknown	no	no	no
Eulophidae	*Zagrammosoma* nr. *latilineatum*	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-1	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-2	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-3	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-4	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-5	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-6	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-7	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-8	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Eupelmidae	Eupelmidae sp. BBKB-9	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-10	na	unknown	no	no	no
Eupelmidae	Eupelmidae sp. BBKB-11	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-1	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-2	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-3	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-4	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-5	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-6	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-7	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-8	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-9	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-10	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-11	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-12	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-13	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-14	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-15	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-16	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-17	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-18	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Eurytomidae	Eurytomidae sp. BBKB-19	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-20	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-21	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-22	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-23	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-24	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-25	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-26	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-27	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-28	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-29	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-30	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-31	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-32	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-33	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-34	na	unknown	no	no	no
Eurytomidae	Eurytomidae sp. BBKB-35	na	unknown	no	no	no
Evaniidae	*Szepligetiella* BBKB-1	na	unknown	no	no	no
Evaniidae	*Szepligetiella* BBKB-2	na	unknown	no	no	no
Evaniidae	*Szepligetiella braunsiana*	na	no	no	no	no
Evaniidae	*Szepligetiella perfida*	na	no	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Gasteruptiidae	*Gasteruption* BBKB-1	na	no	no	no	no
Gasteruptiidae	*Gasteruption* BBKB-2	na	yes	no	no	no
Gasteruptiidae	*Gasteruption raphidioides*	na	no	no	no	no
Gasteruptiidae	*Gasteruption zebra*	na	no	no	no	no
Gasteruptiidae	*Pseudofoenus* BBKB-1	na	unknown	no	no	no
Gasteruptiidae	*Pseudofoenus* BBKB-2	na	unknown	no	no	no
Gasteruptiidae	*Pseudofoenus coorowensis*	na	no	no	no	no
Gasteruptiidae	*Pseudofoenus grossitarsis*	na	no	no	no	no
Gasteruptiidae	*Pseudofoenus macronyx*	na	no	no	no	no
Gasteruptiidae	*Pseudofoenus taylori*	na	no	no	no	no
Gasteruptiidae	*Pseudofoenus whiani*	na	no	no	no	no
Ichneumonidae	*Allophatnus* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Anacis* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Anacis* sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Brachycyrtus* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	Campopleginae sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Diadegma semiclausum*	Diamondback Moth Parasitoid Wasp	no	no	no	no
Ichneumonidae	*Diplazon laetatorius*	Common Hover Fly Parasitoid Wasp	no	no	no	no
Ichneumonidae	*Echthromorpha intricatoria*	Cream-spotted Ichneumon	no	no	no	no
Ichneumonidae	*Enicospilus* sp. BBKB-1	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Ichneumonidae	*Eucaphila* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Ichneumon promissorius*	Armyworm Parasitoid Wasp	no	no	no	no
Ichneumonidae	Ichneumonidae sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	Ichneumonidae sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	Ichneumonidae sp. BBKB-3	na	unknown	no	no	no
Ichneumonidae	*Labium* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Labium* sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Lissopimpla excelsa*	Orchid Dupe Wasp	no	no	no	no
Ichneumonidae	*Mesochorus* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Mesochorus* sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Netelia* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Netelia* sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Netelia* sp. BBKB-3	na	unknown	no	no	no
Ichneumonidae	*Netelia* sp. BBKB-4	na	unknown	no	no	no
Ichneumonidae	Orthocentrinae sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Orthocentrus* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Paraphylax* BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Paraphylax* sp. BBKB-1	na	unknown	no	no	no
Ichneumonidae	*Paraphylax* sp. BBKB-2	na	unknown	no	no	no
Ichneumonidae	*Paraphylax* sp. BBKB-3	na	unknown	no	no	no
Ichneumonidae	*Temelucha* sp. BBKB-1	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Megastigmidae	Megastigmidae sp. BBKB-1	na	unknown	no	no	no
Megastigmidae	Megastigmidae sp. BBKB-2	na	unknown	no	no	no
Megastigmidae	Megastigmidae sp. BBKB-3	na	unknown	no	no	no
Megastigmidae	Megastigmidae sp. BBKB-4	na	unknown	no	no	no
Megastigmidae	Megastigmidae sp. BBKB-5	na	unknown	no	no	no
Megastigmidae	*Megastigmus* sp. BBKB-1	na	unknown	no	no	no
Mutillidae	*Bothriomutilla rugicollis*	na	no	no	no	no
Mutillidae	Mutillidae BBKB-1	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-2	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-3	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-4	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-5	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-6	na	unknown	no	no	no
Mutillidae	Mutillidae BBKB-7	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-1	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-2	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-3	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-4	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-5	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-6	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-7	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Mymaridae	Mymaridae sp. BBKB-8	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-9	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-10	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-11	na	unknown	no	no	no
Mymaridae	Mymaridae sp. BBKB-12	na	unknown	no	no	no
Pergidae	*Perga brullei*	na				
Perilampidae	Perilampidae sp. BBKB-1	na	unknown	no	no	no
Perilampidae	Perilampidae sp. BBKB-2	na	unknown	no	no	no
Perilampidae	Perilampidae sp. BBKB-3	na	unknown	no	no	no
Perilampidae	Perilampidae sp. BBKB-4	na	unknown	no	no	no
Perilampidae	Perilampidae sp. BBKB-5	na	unknown	no	no	no
Perilampidae	Perilampidae sp. BBKB-6	na	unknown	no	no	no
Pirenidae	Euryischiinae sp. BBKB-1	na	unknown	no	no	no
Pirenidae	Euryischiinae sp. BBKB-2	na	unknown	no	no	no
Pirenidae	Euryischiinae sp. BBKB-3	na	unknown	no	no	no
Pirenidae	*Myiocnema comperei*	na	no	no	no	no
Platygastridae	Platygastridae sp. BBKB-1	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-2	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-3	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-4	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-6	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Platygastridae	Platygastridae sp. BBKB-7	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-8	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-9	na	unknown	no	no	no
Platygastridae	Platygastridae sp. BBKB-10	na	unknown	no	no	no
Platygastridae	*Synopeas* sp. BBKB-1	na	unknown	no	no	no
Pompilidae	*Anoplius* BBKB-1	na	unknown	no	no	no
Pompilidae	*Ctenostegus* BBKB-1	na	unknown	no	no	no
Pompilidae	*Ctenostegus* BBKB-2	na	unknown	no	no	no
Pompilidae	*Ctenostegus* BBKB-3	na	unknown	no	no	no
Pompilidae	*Heterodontonyx distictus*	na	no	no	no	no
Pompilidae	*Telostegus* BBKB-1	na	unknown	no	no	no
Pompilidae	*Turneromyia* BBKB-1	na	unknown	no	no	no
Proctotrupidae	*Oxyserphus* BBKB-1	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-1	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-2	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-3	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-4	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-5	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-6	na	unknown	no	no	no
Pteromalidae	Colotrechninae sp. BBKB-7	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-1	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Pteromalidae	Pteromalidae sp. BBKB-2	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-3	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-4	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-5	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-6	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-7	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-8	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-9	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-10	na	unknown	no	no	no
Pteromalidae	Pteromalidae sp. BBKB-11	na	unknown	no	no	no
Pteromalidae?	Pteromalidae? sp. BBKB-1	na	unknown	no	no	no
Scelionidae	*Gryon* sp. BBKB-1	na	unknown	no	no	no
Scelionidae	*Gryon* sp. M427_cf Murphy et al 2007_saxatile_group	na	no - known MOTU	no	no	no
Scelionidae	*Gryon* sp. M430 cf Murphy et al 2007	na	no - known MOTU	no	no	no
Scelionidae	Scelionidae sp. BBKB-1	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-2	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-3	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-4	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-5	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Scelionidae	Scelionidae sp. BBKB-6	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-7	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-8	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-9	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-10	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-11	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-12	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-13	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-14	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-15	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-16	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-17	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-18	na	unknown	no	no	no
Scelionidae	Scelionidae sp. BBKB-19	na	unknown	no	no	no
Scelionidae	Scelioninae sp. BBKB-1	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-1	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-2	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-3	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-4	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-5	na	unknown	no	no	no
Scelionidae	Telenominae sp. BBKB-6	na	unknown	no	no	no

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Scelionidae	*Telenomus* sp. M432 cf Murphy et al 2007	na	no - known MOTU	no	no	no
Sclerogibbidae	*Sclerogibba embiopterae*	na	no	no	no	no
Scoliidae	*Scolia* BBKB-1	na	no	no	no	no
Scollidae	*Radumeris tasmaniensis*	Yellow-flower Wasp	no	no	no	no
Sphecidae	*Ammophila ardens*	na	no	no	no	no
Sphecidae	*Podalonia tydei*	Tyde's Sand Wasp	no	no	no	no
Sphecidae	*Prionyx globosus*	na	no	no	no	no
Sphecidae	*Sphex* BBKB-1	na	no	no	no	no
Sphecidae	*Sphex* BBKB-2	na	no	no	no	no
Sphecidae	*Sphex* BBKB-3	na	no	no	no	no
Systasidae	Systasidae sp. BBKB-1	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-2	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-3	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-4	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-5	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-6	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-7	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-8	na	unknown	no	no	no
Systasidae	Systasidae sp. BBKB-9	na	unknown	no	no	no
Tanaostigmatidae	Tanaostigmatidae sp. BBKB-1	na	unknown	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Tanaostigmatidae	*Tanaostigmodes* BBKB-1	na	yes	no	no	no
Thynnidae	Thynnidae BBKB-1	na	no	no	no	no
Thynnidae	Thynnidae BBKB-2	na	no	no	no	no
Thynnidae	Thynnidae BBKB-3	na	no	no	no	no
Thynnidae	Thynnidae BBKB-4	na	no	no	no	no
Thynnidae	Thynnidae BBKB-5	na	no	no	no	no
Thynnidae	Thynnidae BBKB-6	na	no	no	no	no
Thynnidae	Thynnidae BBKB-7	na	no	no	no	no
Thynnidae	Thynnidae BBKB-8	na	no	no	no	no
Thynnidae	Thynnidae BBKB-9	na	no	no	no	no
Thynnidae	Thynnidae BBKB-10	na	no	no	no	no
Thynnidae	Thynnidae BBKB-11	na	no	no	no	no
Thynnidae	Thynnidae BBKB-12	na	no	no	no	no
Thynnidae	Thynnidae BBKB-13	na	no	no	no	no
Thynnidae	Thynnidae BBKB-14	na	no	no	no	no
Thynnidae	Thynnidae BBKB-15	na	no	no	no	no
Thynnidae	Thynnidae BBKB-16	na	no	no	no	no
Thynnidae	Thynnidae BBKB-17	na	no	no	no	no
Thynnidae	Thynnidae BBKB-18	na	no	no	no	no
Thynnidae	Thynnidae BBKB-19	na	no	no	no	no
Thynnidae	Thynnidae BBKB-20	na	no	no	no	no

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Thynnidae	Thynnidae BBKB-21	na	no	no	no	no
Thynnidae	Thynnidae BBKB-22	na	no	no	no	no
Thynnidae	Thynnidae BBKB-23	na	no	no	no	no
Torymidae	Toryminae sp. BBKB-1	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-2	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-3	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-4	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-5	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-6	na	unknown	no	no	no
Torymidae	Toryminae sp. BBKB-7	na	unknown	no	no	no
Torymidae	*Torymoides* sp. BBKB-1	na	unknown	no	no	no
Trichogrammatidae	*Trichogramma* sp. BBKB-1	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-1	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-2	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-3	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-4	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-5	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-6	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-7	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-8	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-9	na	unknown	no	no	no

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Trichogrammatidae	Trichogrammatidae sp. BBKB-10	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-11	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-12	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-13	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-14	na	unknown	no	no	no
Trichogrammatidae	Trichogrammatidae sp. BBKB-15	na	unknown	no	no	no
Vespidae	*Abispa ephippium*	Australian Hornet	no	no	no	no
Vespidae	Eumeninae BBKB-1	na	no	no	no	no
Vespidae	Eumeninae BBKB-2	na	no	no	no	no
Vespidae	Eumeninae BBKB-3	na	no	no	no	no

na Not available