

Nanda Country Bush Blitz

Flora

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Nomenclature and taxonomy used in this report is consistent with:

The Australian Plant Name Index (APNI)

The Australian Plant Census (APC)

Florabase

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Table 1. List of contributors to this report (* principal authors).			
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Abstract

The Nanda Country (Kalbarri) Bush Blitz was held from 21 to 31 October 2024 in the Geraldton sandplains region of Western Australia. Seventeen (17) areas were selected within Kalbarri National Park, Eurardy Reserve, and the Nanda Reserves (proposed National Parks). Habitats included sandy plain, sandstone gorge, freshwater seep, dune-swale system, ironstone, and recently burnt communities. During the eight days of survey, 533 botanical voucher collections and thirteen observations were gathered, together comprising 326 unique vascular plant taxa from 61 families. Many conservation-listed taxa (29) were recorded, along with twelve introduced taxa. A large number of records (73) were new records for the areas surveyed, filled a collection geographical gap for the region, or were range extensions. Eight DBCA conservation officers and park rangers, Nanda Traditional Owners, one Earthwatch staff member and four BHP staff members were introduced to flora collecting best practice. As part of the outreach component of the Bush Blitz, the team participated in a successful community day held in Kalbarri.

1. Introduction

The Nanda Country (Kalbarri) Bush Blitz expedition was held in the Geraldton Sandplains region of Western Australia on Nanda Country, from 21-31 October, towards the end of the annual flowering season.
The specific land units that the expedition included were:

- Kalbarri National Park, managed by Department of Biodiversity, Conservation and Attractions – Parks and Wildlife;
- Nanda Reserves, managed by Department of Biodiversity, Conservation and Attractions - Parks and Wildlife; and
- Eurardy Reserve, managed by Bush Heritage Australia.

While Kalbarri National Park and Eurardy Reserve have been reasonably well surveyed for flora (13,000 vouchered specimens of 1,900 taxa), the more northern Nanda Reserves have not been well collected (approx. 1,000 vouchered specimens comprising around 400 taxa (AVH, 2024)), with 80% of collections being made during the typical flowering season of August to (early) October. The Nanda Country Bush Blitz region experienced a significantly wetter than average and later winter rainfall season, and an unexpected high rainfall event the week prior to the expedition in October (BOM, 2025) resulting in an extended flowering period, and an expectation of finding taxa not usually recorded from the area.

2. Methods

2.1 Site selection

Sites were selected based on low collection density of areas (as documented by vouchered collections in Australian herbaria (AVH 2024)), availability/accessibility to fresh water, accessibility by car or helicopter, permission to enter and collect in an area, and recommendations by Traditional Owners and land managers, and Bush Blitz teams visiting locations during the expedition (Table 2, Figure 1). Areas were also selected by traversing regions by car or helicopter and selecting areas for voucher collection based on changes in vegetation type.

Table 2. Site descriptions for the Nanda Bush Blitz

Date	Location	Description	Survey type
21 October 2024	Standard Survey Site 1, Kalbarri National Park, Middle Track	Flat to rolling plain. White sandy soil. Open Myrtaceous shrubland.	Standard Survey methods
22 October 2024	Standard Survey Site 2, Kalbarri National Park, Centre Track Kalbarri National Park, western end of Little Z Track	Flat to rolling plain; elevated. Yellow-brown sand. Open shrubland. Gorge to low rolling plain. Herbland to open Eucalyptus woodland.	Standard Survey methods Hand collection
23 October 2024	Kalbarri National Park, Junga Track	Ironstone. Open Myrtaceous shrubland.	Hand collection
24 October 2024	Eurardy Reserve, eastern block	Flat plain to rolling dune systems. Open Myrtaceous and Proteaceous shrubland/woodland.	Hand collection
25 October 2024	Eurardy Reserve, western block	Plains adjacent to creek bed. Myrtaceous heath to open Myrtaceous and Proteaceous shrubland/woodland.	Hand collection
27 October 2024	Kalbarri National Park, Emu, Airstrip and Banksia Tracks Kalbarri National Park, Bettie Track	Sandy plain. Myrtaceous heath; Eucalyptus and Acacia stands. Plain with low open shrubland to fire regeneration with herbland.	Hand collection
28 October 2024	Nanda Reserve (FL9), Cooloomia Station Kalbarri National Park “Eurardy Station” (FL5), west of Eurardy Reserve Kalbarri National Park, Emu and Junga Tracks	Dune system. Open Acacia, Grevillea and Eucalyptus shrubland. Ephemeral Creek line. Allocasuarina and Myrtaceae mixed shrubland. Flat plain to wet depression. Herbland to Myrtaceous heath.	Hand collection
29 October 2024	Nanda Reserve (FL8), near Zuytdorp Nature Reserve Kalbarri National Park, Goat and Junga Tracks and north of tourist road to Nature’s Window	Dune-swale system. Open Myrtaceous shrubland. Flat plain. York Gum and Melaleuca woodland and adjacent shrubland.	Hand collection
30 October 2024	Kalbarri National Park, Eagle Gorge, Red Bluff Beach gully and Red Bluff Lookout	Freshwater seep to rocky beach cliffs. Salt tolerant herbs and low shrubs.	Hand collection

Table 2. Site descriptions for the Nanda Bush Blitz			
Date	**Location**	**Description**	**Survey type**
	Kalbarri National Park, Meanarra Hill	Limestone. Degraded shrubland.	
31 October 2024	Kalbarri National Park, Loop–Z Bend Road junction and slope to gorge Kalbarri National Park, Hawks Head Road	Flat plain to slope. Fire regeneration; Myrtaceous shrubland Plain, white sand. Open Myrtaceous shrubland.	Hand collection



Figure 1. Map of the Bush Blitz survey region indicating areas surveyed by car, on foot, and by helicopter (pale blue). Standard survey sites (SSS) and helicopter landing locations (FL) are indicated.

2.2 Survey techniques

All flowering or fruiting taxa at each site were collected as a voucher specimen using standard herbarium collecting techniques (see https://herbarium.dbca.wa.gov.au/How to collect herbarium specimens.pdf) and lodged in the Western Australian Herbarium (PERTH). Duplicate specimens, where available, will be lodged at the Australian National Herbarium (CANB). Along with a research-grade herbarium specimen, collection metadata and images of each collection and habitat were captured, and tissue for molecular analysis was gathered where possible (see Section 3.6). Observations have been uploaded to iNaturalist or iNaturalist AU.

2.2.1 Methods used at standard survey sites

A 20 m x 20 m quadrat was established at each standard survey site in a representative area not impacted by other survey activities and away from roadsides. Single representatives of all taxa within the plot were collected as vouchers or observations (as described in Section 2.2).

2.3 Identifying the collections

Many identifications were supported by or based on comparisons with existing specimens in the research collection at the Western Australian Herbarium (PERTH) and guided by species distribution data available through The Australasian Virtual Herbarium (https://avh.chah.org.au).

Taxonomic experts who assisted with the identification of specimens have been listed in Table 1.

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3. Results and Discussion

During the ten days of survey, 326 unique vascular plant taxa in 61 families were collected (Appendix 1), and 533 botanical voucher collections, and 13 observations were gathered (Appendix 2). These have been incorporated into the collections of the Western Australian Herbarium, with duplicates being distributed to CANB, AD, BM, K, MO, NSW, and NY (Thiers, 2025). Collections records are available via Florabase and The Australasian Virtual Herbarium. Images of specimens lodged within the Western Australian Herbarium are available online, following the URL https://herbarium.dbca.wa.gov.au/[PERTH number] (e.g. https://herbarium.dbca.wa.gov.au/PERTH 09737588.jpg), with the PERTH number being given in Appendix 2.

3.1 Un-named or not formalised taxa

Eleven (11) collections were made of un-named or currently undescribed and unpublished taxa (Table 3). These taxa have been collected previously and are recognized as unique entities but require further taxonomic research and publication.

Table 3. Putatively un-named or not formalised taxa

Taxon	Comment
Acanthocarpus sp. Cooloomia (S.D. Hopper 3301)	Northern range extension, nearest records 18 km south-west and 20 km ENE.
Baeckea sp. East Nabawa (M.E. Trudgen MET 21623)	Placeholder taxon (true *Baeckea* does not occur in Western Australia).
Baeckea sp. aff *muricata*	A known new species which does not yet have a phrase name.
Chamelaucium sp. Coolcalalaya (A.H. Burbidge 4233)	Distinctive species of conservation significance (P1) not yet formally described.
Gunniopsis sp. Lake Koorkoordine (R.J.Chinnock 10605)	Proposed new phrase name, to be described. Second only collection in Kalbarri National Park; nearest collection in Mullewa.
Halgania cyanea var. Allambi Stn (B.W. Strong 676)	Phrase name, does not yet have a published name.
Malleostemon cf. *hursthousei*	Not matched to known taxon; northern range extension if not new species.
Patersonia drummondii subsp. Northern (R.D. Royce UWA 777)	
Scholtzia sp.	Within the *Scholtzia obovata* complex.
Stylidium sp. nov	A known new species which is currently in the process of being formally described.
Tricoryne sp. Mullewa (G.J. Keighery 12080)	

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.

Two putative new flora species (Figure 2) were identified during this expedition but require further study (Table 4).

Table 4. Species new to science	
Species	**Comment**
Calytrix sp.	Not matched to any known taxon.
Thysanotus sp.	Twiner, climbing, putative new species.



Figure 2. Two putative new species found during the Nanda Bush Blitz. A) *Calytrix* sp. (Image: S.A. James, DBCA); B) *Thysanotus* sp. (Image: R. Gugiatti, DBCA)

3.3 Introduced species

In general, sites surveyed had minimal introduced species with the exception of heavily human-impacted and disturbed areas (e.g. roadsides). Twelve (12) introduced species were recorded (Table 5). Areas heavily impacted by previous agricultural activities, feral animal activity, or human activities had the greatest abundance of non-native taxa.

Table 5. Introduced species recorded			
Introduced species	**Location sighted/observed**	**Indication of abundance**	**Comments**
Cenchrus setaceus	Kalbarri National Park, Red Bluff Beach gully	Common	Recorded from coastal areas near Perth and Geraldton; second record from Kalbarri
Centaurea melitensis	Kalbarri National Park, terminus of Little Z Track | Red Bluff Beach gully | Meanarra Hill	Infrequent | Three seen | Dominant	Widespread weed
Centaurium tenuiflorum	Kalbarri National Park, Red Bluff Beach gully	Infrequent	Common weed species
Cuscuta planiflora	Eurardy Reserve, eastern block	Uncommon	Naturalised weed
Ehrharta longiflora	Kalbarri National Park, wet depression along Emu Track	A few seen	Widespread weed
Lysimachia loeflingii (part of the taxon listed	Kalbarri National Park, wet depression along	Locally common	Widespread weed

in Florabase as *L. arvensis*)	Emu Track & Red Bluff Beach gully | terminus of Little Z Track		
Pentameris airoides	Eurardy Reserve, western block	Common	
Polypogon monspeliensis	Kalbarri National Park, Red Bluff Beach gully	Two seen	Widespread weed
Reichardia tingitana	Nanda Reserve, FL8 | Kalbarri National Park, Red Bluff Beach gully	Single individuals	Widespread weed
Rumex versicarius	Kalbarri National Park, Red Bluff Beach gully	Locally common. Observed approx. 10 plants flowering at time of sample collection.	
Solanum nigrum	Kalbarri National Park, Red Bluff Beach gully	Two seen	Widespread weed
Wahlenbergia capensis	Kalbarri National Park | Eurardy Reserve, western block (all habitats)	Occasional	Widespread weed

3.4 Threatened species

Twenty-nine (29) Western Australian Conservation-Listed taxa were reported during the Nanda Country (Kalbarri) Bush Blitz (Table 6).

Table 6. Threatened species

Species	Listing status and level (EBPC, State/Territory)	Location sighted/observed	Indication of abundance
Acacia plautella	P3 (WA)	Standard Survey Site 2: Kalbarri National Park	Infrequent
Acacia stereophylla var. *cylindrata*	P2 (WA)	Kalbarri National Park, FL5	Common
Anthotroche myoporoides	P3 (WA)	Kalbarri National Park, FL5 | Eurardy Reserve, eastern block	One seen | Locally common
Calytrix formosa	P3 (WA)	Eurardy Reserve, western block | Standard Survey Site 2: Kalbarri National Park	One seen | Locally common
Calytrix harvestiana	P2 (WA)	Eurardy Reserve, western block | Nanda Reserve, FL8	Locally common
Calytrix paucicostata	P2 (WA)	Standard Survey Site 1: Kalbarri National Park	Locally common

Table 6. Threatened species			
Species	**Listing status and level (EBPC, State/Territory)**	**Location sighted/observed**	**Indication of abundance**
Chamelaucium marchantii	P3 (WA)	Kalbarri National Park, Red Bluff Beach	A few seen
Chamelaucium sp. Coolcalalaya (A.H. Burbidge 4233)	P1 (WA)	Eurardy Reserve, western block | Nanda Reserve, FL8	A few seen
Eremophila microtheca	P4 (WA)	Kalbarri National Park, north of tourist road to Nature's Window	One seen
Grevillea rogersoniana	P3 (WA)	Nanda Reserve, FL9	Locally common
Grevillea stenomera	P2 (WA)	Kalbarri National Park (near boundary with the town)	One seen
Lepidobolus aff. *eurardyensis*	P1 (WA)	Eurardy Reserve, western block	Two seen, but unable to definitively confirm identification.
Liparophyllum congestiflorum	P4 (WA)	Kalbarri National Park, wet depression along Emu Track & Red Bluff Beach gully	Locally common
Macarthuria intricata	P3 (WA)	Nanda Reserve, FL9	One seen
Microcorys tenuifolia	P3 (WA)	Kalbarri National Park, north of Z Bend Road	Occasional
Micromyrtus greeniana	P1 (WA)	Eurardy Reserve, western block	Four seen
Mirbelia corallina	P3 (WA)	Kalbarri National Park, Junga Track	Infrequent, 1 plant seen
Persoonia brachystylis	P2 (WA)	Kalbarri National Park, Z Bend Road & Emu Track	Four + seen
Pileanthus bellus	P3 (WA)	Kalbarri National Park, Centre Track | Eurardy Reserve, western block	Locally common
Scaevola chrysopogon	P2 (WA)	Eurardy Reserve, eastern block	Occasional
Scholtzia corrugata	P2 (WA)	Nanda Reserve, FL9	Locally common
Scholtzia peltigera	P1 (WA)	Eurardy Reserve, western block	One seen
Thysanotus kalbarriensis	P2 (WA)	Kalbarri National Park, Z Bend Road	One observed within fire scar
Triodia bromoides	P4 (WA)	Eurardy Reserve, western block | Nanda Reserve, FL8 | Kalbarri National Park, Little Z Track & FL5	Common

Table 6. Threatened species			
Species	**Listing status and level (EBPC, State/Territory)**	**Location sighted/observed**	**Indication of abundance**
Triodia dielsii	P3 (WA)	Kalbarri National Park, Bettie Track	Infrequent, 1 plant observed
Verticordia capillaris	P4 (WA)	Eurardy Reserve, eastern block | Kalbarri National Park, Centre Track	Occasional
Verticordia cooloomia	P3 (WA)	Nanda Reserve, FL8	Locally common (although confined to hill crest)
Verticordia dicroma var. *dicroma*	P3 (WA)	Over Road Track, Eurardy Reserve, eastern block	Infrequent
Verticordia polytricha	P4 (WA)	Kalbarri National Park, FL5 | Nanda Reserve, FL8	Common

3.5 Range extensions

Most specimens, while not new records for the areas surveyed, filled a geographical gap in collections for the region. Significant collections gap infills of more than 10 km, range extensions, and new records for the National Park or Reserves are indicated in Table 7 (see also Appendix 2). Fifteen (15) range extensions were documented (Table 7). Thirty-seven (37) records have been noted as new records for the National Park or Reserves, and 23 specimens are significant voucher collection gap infills (greater than 20 km). A further 13 specimens fill a collection gap of up to 20 km.

Table 7. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Approximate Distance from nearest known record**	**Comments**
Acacia stereophylla var. *cylindrata*	Kalbarri National Park, FL5	13 km	Small northern range extension
Acacia tetragonophylla	Nanda Reserve, FL9		New record for northern part of Reserve
Actinobile condensatum	Nanda Reserve, FL9		New record for northern part of Reserve
Bonamia rosea	Eurardy Reserve, eastern block		New record for Reserve
Calandrinia baccata	Kalbarri National Park, Little Z Track		New record for NP
Calocephalus francisii	Nanda Reserve, FL9		New record for northern part of Reserve
Calothamnus chrysanthereus	Nanda Reserve, FL8		New record for northern part of Reserve

Table 7. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Approximate Distance from nearest known record**	**Comments**
Calothamnus quadrifidus subsp. *obtusus*	Nanda Reserve, FL8 | Kalbarri National Park, Bettie Track	>10 km	New record for northern part of Reserve | Significant gap fill
Calytrix harvestiana	Nanda Reserve, FL8	>10 km	New record for northern part of Reserve; northern range extension
Cassytha pomiformis	Nanda Reserve, FL8 | Kalbarri National Park, Emu Track	>10 km	New record for northern part of Reserve | Gap fill in NP
Cheilanthes sieberi subsp. *sieberi*	Kalbarri National Park, Little Z Track	>10 km	Significant gap fill
Conospermum stoechadis subsp. *stoechadis*	Kalbarri National Park, Junga Track	>10 km	New record for southern part of NP & gap fill
Disphyma crassifolium subsp. *clavellatum*	Kalbarri National Park, Red Bluff Beach gully	80 km	New record for NP; northern range extension
Drosera omissa	Nanda Reserve, FL8	60 km	Northern range extension; new record for Reserve
Elatine macrocalyx	Kalbarri National Park, Emu Track	>300 km	Significant northern and western range extension; new record for NP and IBRA region (Figure 3)
Eucalyptus eudesmioides	Nanda Reserve, FL9	10 km	New record for northern part of Reserve; significant gap fill
Gnephosis tenuissima	Kalbarri National Park, Little Z Track | Nanda Reserve, FL8	>10 km	Significant gap fill
Gonocarpus confertifolius var. *confertifolius*	Eurardy Reserve, eastern block | Nanda Reserve, FL8	30 km	New record for Reserves; northern range extension
Goodenia occidentalis	Eurardy Reserve, eastern block		New record for Eurardy
Goodenia trichophylla	Kalbarri National Park, Goat Track	Approx. 70 km	New record for NP; northern range extension
Grevillea rogersoniana	Nanda Reserve, FL9	>10 km	New record for northern part of Reserve; significant gap fill
Hakea stenophylla subsp. *notialis*	Nanda Reserve, FL9	25 km	New record for northern part of Reserve; significant gap fill

Table 7. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Approximate Distance from nearest known record**	**Comments**
Halgania argyrophylla	Kalbarri National Park, Centre Track	>10 km	Significant gap fill, eastern part of NP
Isotoma hypocrateriformis	Nanda Reserve, FL8	40 km	New record for northern part of Reserve; significant gap fill
Lachnostachys eriobotrya	Eurardy Reserve, eastern block		New record for eastern part of Reserve
Leptomeria preissiana	Eurardy Reserve, eastern block		New record for eastern part of Reserve
Levenhookia leptantha	Nanda Reserve, FL8	100 km	New record for northern part of Reserve; significant northern range extension
Levenhookia octomaculata	Eurardy Reserve, western block		New record for Reserve
Levenhookia stipitata	Nanda Reserve, FL8	50 km	New record for northern part of Reserve; significant north-west range extension
Lobelia cleistogamoides	Kalbarri National Park, FL5 | Eurardy Reserve, eastern block	>190 km	Significant gap fill; new record for NP and Reserve
Lobelia heterophylla subsp. *heterophylla*	Nanda Reserve, FL8	50 km	New record for northern part of Reserve; significant gap fill
Macarthuria intricata	Nanda Reserve, FL9	>10 km	New record for northern part of Reserve; significant gap fill
Melaleuca calothamnoides	Nanda Reserve, FL8	5 km	New record for northern part of Reserve; northern range extension
Melaleuca filifolia	Nanda Reserve, FL8	16 km	New record for northern part of Reserve; north-west range extension
Melaleuca megacephala	Kalbarri National Park, Junga Track	20 km	Significant gap fill for southern portion of NP
Myoporum caprarioides	Kalbarri National Park, Meanarra Hill		New record for NP
Persoonia acicularis	Kalbarri National Park, Junga Track	20 km	Significant gap fill for southern portion of NP
Persoonia biglandulosa	Nanda Reserve, FL9	40-60 km	New record for northern part of Reserve; northern and western range extension

Table 7. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Approximate Distance from nearest known record**	**Comments**
Persoonia brachystylis	Kalbarri National Park, Emu Track	>10 km	Significant gap fill for NP
Persoonia stricta	Eurardy Reserve, eastern block		New record for eastern part of Reserve
Petropile semifurcata	Kalbarri National Park, Junga Track	>10 km	Gap fill for southern portion of NP
Podolepis aristata subsp. *aristata*	Kalbarri National Park, Little Z Track | Eurardy Reserve, western block	10 km	Significant gap fill for NP | New record for western part of Reserve
Poranthera drummondii	Kalbarri National Park, Bettie Track		New record for NP
Pterochaeta paniculata	Kalbarri National Park, Bettie Track		New record for NP
Ptilotus divaricatus	Nanda Reserve, FL9	20 km	New record for northern part of Reserve; significant gap fill
Ptilotus obovatus	Nanda Reserve, FL9		New record for northern part of Reserve
Ptilotus polystachyus	Nanda Reserve, FL9	35 km	Significant gap fill; new record for northern part of Reserve
Quoya oldfieldii	Eurardy Reserve, eastern block		New record for eastern part of Reserve
Reichardia tingitana	Nanda Reserve, FL8	55 km	New record for northern part of Reserve; significant gap fill
Salsola australis	Nanda Reserve, FL9	30 km	New record for northern part of Reserve; significant gap fill
Scholtzia obovata	Kalbarri National Park, Junga Track	>10 km	Significant gap fill for southern part of NP
Siloxerus humifusus	Kalbarri National Park	99 km	Northern range extension
Solanum orbiculatum subsp. *orbiculatum*	Nanda Reserve, FL9		New record for northern part of Reserve
Sphaerolobium gracile	Kalbarri National Park, FL5 | Nanda Reserve, FL8	20 km	Small northern range extension
Stackhousia dielsii	Kalbarri National Park, Junga Track	>10 km	Significant gap fill, southern portion of NP
Stenanthemum complicatum	Eurardy Reserve, eastern block		New record for eastern part of Reserve

Table 7. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Approximate Distance from nearest known record**	**Comments**
Stylidium burbidgeanum	Kalbarri National Park, Junga Track		Only one other population of this species recorded from NP
Stylidium calcaratum	Kalbarri National Park, FL5	>115 km	Possible significant gap infill, but taxonomy problematic
Stylidium despectum	Kalbarri National Park, FL5	Approx.110 km	Northern range extension
Trachymene coerulea subsp. *leucopetala*	Eurardy Reserve, western block	Approx. 19 km	New record for Eurardy; northern range extension
Trichodesma zeylanicum var. *zeylanicum*	Nanda Reserve, FL9		New record for Nanda Reserve
Verticordia spicata	Eurardy Reserve, eastern block		New record for eastern part of Reserve.
Verticordia monadelpha	Eurardy Reserve, western block		New record for Eurardy
Waitzia acuminata var. *acuminata*	Eurardy Reserve, eastern block		New record for eastern part of Reserve.
Waitzia acuminata var. *albicans*	Nanda Reserve, FL8	>10 km	New record for northern part of Reserve; significant gap fill north part of range.
Xylomelum angustifolium	Nanda Reserve, FL8	>10 km	New record for northern part of Reserve; significant gap fill for north part of range



Figure 3. *Elatine macrocalyx* (SAJ3217), a significant range extension north and west (>300 km) and new record for Kalbarri National Park and the IBRA region. (Image: S.A. James, DBCA)

3.6 Genetic information

Samples of leaf tissues were taken from all viable vouchered collections, as indicated in Appendix 2. Fresh tissue (30–100 mg) was placed in an acid-free tea bag within excess silica gel for dehydration. Tissues have been lodged with the Western Australian Herbarium and stored at -20C, linked to voucher specimens, and available for analysis upon request.

No other genetic analysis has been undertaken.

4. Information on species lists

A complete flora species list, consisting of the 326 vascular plant taxa, comprising 61 families, recorded during the Nanda Country Bush Blitz is provided in Appendix 1. Due to the timing of rainfall in the region and the survey, many taxa had just completed flowering; others had an extended or delayed flowering due to the late season rainfall. The timing of the expedition resulted in no collections of fungi.

5. Information for land managers

Many areas within the survey sites were noted to be reacting to recent drought in the same way as fire, with abundant seed release and seedling germination. Seedling density was significant in all areas due to the recent rainfall, and reaction to stress events, such as fire and rainfall. Consideration is recommended for modifying fire regimes in these areas to avoid the loss of potential multi-year cohorts, particularly after this recent drought period.

Several areas, notably Meanarra Hill, were severely impacted by weed species, due to the impact of feral animals (e.g. goats, observed at the site). Maltese Cockspur (*Centaurea melitensis* L.) in particular, was found to be widespread in areas of Kalbarri National Park. It reproduces by seed, with the spines on the flower head allowing for easy and rapid transportation by feral animals, birds and humans. Removal methods such as hand-pulling

(with appropriate PPE) could reduce and possibly eliminate the infestation, particularly with small infestations, ensuring as much of the taproot as possible is removed and before flowering. Bag and dispose carefully of the pulled plants as the flowerheads can be self-fertilizing and can produce viable seed. Chemical applications, prior to flowering, may be more feasible in large infestations, such as Meanarra Hill.

Ruby Dock (*Rumex vesicarius* L.) is an environmental weed invading large areas of arid Australia through wind dispersal of the seed (Anthony & Dixon 2006). Due to location of the weed population, there is potential for further environmental impact to occur to other areas of the National Park. This weed species was located at an easily accessible site along the coast, enabling regular management and monitoring to occur. Low impact management practices that include hand weeding could be implemented while population numbers are low. It is recommended that regular monitoring events be conducted to ensure plants do not re-establish from the seed bank. As a disturbance opportunist, with rapid spread, timely identification of infestations and control of the weed in surrounding residential areas, using chemical and manual removal and practicing good phytosanitary practices would be recommended.

Given the large number of new records and significant gap fills within the Nanda Reserve areas, it is highly recommended that further targeted surveys be undertaken, particularly during times where unusual rainfall events have taken place, and post fire management events.

6. Other significant findings

Notable in the Nanda Country Bush Blitz survey area was the diversity of *Verticordia* species, of which 11 species (14 taxa) were documented, and four taxa being conservation listed (Figure 4).



Figure 4. A montage of the 11 *Verticordia* species documented during the Nanda Country Bush Blitz. From left to right, top to bottom: *V. etheliana*, *V. capillaris* (P4), *V. spicata*, *V. lepidophylla*, *V. oculata, V. monodelpha, V. dichroma var. dicroma, V. polytricha V. dichroma, V. cooloomia* (P3), *V. chrysantha*, *V. densiflora.* (Images: DBCA)

7. Conclusions

The Nanda Country (Kalbarri) Bush Blitz expedition has significantly added to botanical collections from the region and resulted in multiple range extensions, as well as new records for conservation listed taxa and weeds. The majority of collections have provided valuable records to fill gaps within the already existing ranges of taxa.

As part of the outreach component of the Bush Blitz, the authors, along with other scientific participants, provided members of the public with some botanical experiences (microscopes, collecting tools, etc.) as part of a successful community day held at the Kalbarri Community Centre. Four BHP staff along with DBCA Parks and Wildlife staff contributed to the location, processing, and best practices of botanical specimen collecting in the field (Table 1).

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Appendices

Appendix 1. List of Flora 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
Aizoaceae	*Disphyma crassifolium* subsp. *clavellatum*	na	No	No	No	No
Aizoaceae	*Gunniopsis* sp. Lake Koorkoordine (R.J.Chinnock 10605)	na	No	No	No	No
Aizoaceae	*Tetragonia implexicoma*	Bower Spinach	No	No	No	No
Amaranthaceae	*Ptilotus divaricatus*	Climbing Mulla Mulla	No	No	No	No
Amaranthaceae	*Ptilotus gaudichaudii*	na	No	No	No	No
Amaranthaceae	*Ptilotus manglesii*	Pom Poms	No	No	No	No
Amaranthaceae	*Ptilotus obovatus*	Cotton Bush	No	No	No	No
Amaranthaceae	*Ptilotus polystachyus*	Prince of Wales Feather	No	No	No	No
Amaranthaceae	*Ptilotus stirlingii* subsp. *stirlingii*	Stirling's Mulla Mulla	No	No	No	No
Aphanopetalaceae	*Aphanopetalum clematideum*	na	No	No	No	No
Apiaceae	*Daucus glochidiatus*	Australian Carrot	No	No	No	No
Apocynaceae	*Alyxia buxifolia*	Dysentery Bush	No	No	No	No
Apocynaceae	*Cynanchum viminale* subsp. *australe*	Caustic Bush	No	No	No	No
Araliaceae	*Trachymene coerulea* subsp. *leucopetala*	Blue Lace Flower	No	No	No	No
Araliaceae	*Trachymene ornata*	Spongefruit	No	No	No	No
Araliaceae	*Trachymene pilosa*	Native Parsnip	No	No	No	No
Asparagaceae	*Acanthocarpus* sp. Cooloomia (S.D. Hopper 3301)	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
Asparagaceae	*Lomandra hastilis*	na	No	No	No	No
Asparagaceae	*Thysanotus arenarius*	Sand-dune Fringed Lily	No	No	No	No
Asparagaceae	*Thysanotus kalbarriensis*	Kalbarri Fringe Lily	No	No	**Yes - P2 (WA)**	No
Asparagaceae	*Thysanotus* sp.	na	**Yes**	No	No	No
Asparagaceae	*Thysanotus sparteus*	Leafless Fringed Lily	No	No	No	No
Asteraceae	*Actinobile condensatum*	na	No	No	No	No
Asteraceae	*Angianthus tomentosus*	Camel-grass	No	No	No	No
Asteraceae	*Brachyscome billabongensis*	na	No	No	No	No
Asteraceae	*Brachyscome iberidifolia*	Swan River Daisy	No	No	No	No
Asteraceae	*Calocephalus francisii*	Fine-leaf Beauty-heads	No	No	No	No
Asteraceae	*Centaurea melitensis*	Maltese Cockspur	No	No	No	**Yes**
Asteraceae	*Cephalipterum drummondii*	Pompom Head	No	No	No	No
Asteraceae	*Gnephosis tenuissima*	na	No	No	No	No
Asteraceae	*Hyalosperma cotula*	na	No	No	No	No
Asteraceae	*Podolepis aristata* subsp. *aristata*	na	No	No	No	No
Asteraceae	*Podotheca gnaphalioides*	Golden Long-heads	No	No	No	No
Asteraceae	*Pogonolepis stricta*	Stiff Angianthus	No	No	No	No
Asteraceae	*Pterochaeta paniculata*	Woolly Waitzia	No	No	No	No
Asteraceae	*Reichardia tingitana*	False Sowthistle	No	No	No	**Yes**
Asteraceae	*Senecio pinnatifolius*	na	No	No	No	No
Asteraceae	*Siemssenia capillaris*	Wiry Podolepis	No	No	No	No

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Asteraceae	*Siloxerus humifusus*	Procumbent Siloxerus	No	No	No	No
Asteraceae	*Waitzia acuminata* var. *acuminata*	Orange Immortelle	No	No	No	No
Asteraceae	*Waitzia acuminata* var. *albicans*	na	No	No	No	No
Boraginaceae	*Halgania argyrophylla*	na	No	No	No	No
Boraginaceae	*Halgania cyanea* var. Allambi Stn (B.W. Strong 676)	Rough Halgania	No	No	No	No
Boraginaceae	*Halgania littoralis*	na	No	No	No	No
Boraginaceae	*Halgania sericiflora*	na	No	No	No	No
Boraginaceae	*Trichodesma zeylanicum* var. *zeylanicum*	Camel Bush	No	No	No	No
Campanulaceae	*Isotoma hypocrateriformis*	Woodbridge Poison	No	No	No	No
Campanulaceae	*Lobelia cleistogamoides*	na	No	No	No	No
Campanulaceae	*Lobelia heterophylla*	Wing-seeded Lobelia	No	No	No	No
Campanulaceae	*Lobelia heterophylla* subsp. *heterophylla*	Wing-seeded Lobelia	No	No	No	No
Campanulaceae	*Lobelia rhytidosperma*	Wrinkled-seeded Lobelia	No	No	No	No
Campanulaceae	*Wahlenbergia capensis*	Cape Bluebell	No	No	No	**Yes**
Casuarinaceae	*Allocasuarina campestris*	na	No	No	No	No
Casuarinaceae	*Allocasuarina humilis*	Dwarf Sheoak	No	No	No	No
Celastraceae	*Stackhousia dielsii*	Yellow Stackhousia	No	No	No	No
Celastraceae	*Tripterococcus brunonis*	Winged Stackhousia	No	No	No	No
Chenopodiaceae	*Didymanthus roei*	na	No	No	No	No
Chenopodiaceae	*Enchylaena tomentosa*	Barrier Saltbush	No	No	No	No
Chenopodiaceae	*Salsola australis*	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
Chenopodiaceae	*Tecticornia indica* subsp. *bidens*	na	No	No	No	No
Convolvulaceae	*Bonamia rosea*	Felty Bellflower	No	No	No	No
Convolvulaceae	*Cuscuta planiflora*	na	No	No	No	**Yes**
Convolvulaceae	*Duperreya sericea*	na	No	No	No	No
Cupressaceae	*Callitris arenaria*	Sandplain Cypress	No	No	No	No
Cyperaceae	*Chrysitrix distigmatosa*	na	No	No	No	No
Cyperaceae	*Lepidosperma tenue*	na	No	No	No	No
Cyperaceae	*Mesomelaena preissii*	na	No	No	No	No
Cyperaceae	*Mesomelaena pseudostygia*	Semaphore Sedge	No	No	No	No
Cyperaceae	*Schoenus nanus*	Tiny Bog Rush	No	No	No	No
Dilleniaceae	*Hibbertia conspicua*	Leafless Hibbertia	No	No	No	No
Dilleniaceae	*Hibbertia desmophylla*	na	No	No	No	No
Dilleniaceae	*Hibbertia spicata*	na	No	No	No	No
Dioscoreaceae	*Dioscorea hastifolia*	Warrine	No	No	No	No
Droseraceae	*Drosera omissa*	Bright Sundue	No	No	No	No
Ecdeiocoleaceae	*Ecdeiocolea monostachya*	na	No	No	No	No
Ecdeiocoleaceae	*Ecdeiocolea rigens*	na	No	No	No	No
Elatinaceae	*Elatine macrocalyx*	na	No	No	No	No
Ericaceae	*Lysinema pentapetalum*	Curry Flower	No	No	No	No
Ericaceae	*Styphelia cordifolia*	na	No	No	No	No
Ericaceae	*Styphelia serratifolia*	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
Euphorbiaceae	*Euphorbia tannensis* subsp. *eremophila*	na	No	No	No	No
Euphorbiaceae	*Monotaxis bracteata*	na	No	No	No	No
Fabaceae	*Acacia andrewsii*	na	No	No	No	No
Fabaceae	*Acacia cavealis*	na	No	No	No	No
Fabaceae	*Acacia latipes* subsp. *latipes*	na	No	No	No	No
Fabaceae	*Acacia plautella*	na	No	No	**Yes - P3 (WA)**	No
Fabaceae	*Acacia quadrisulcata*	na	No	No	No	No
Fabaceae	*Acacia ramulosa* var. *ramulosa*	na	No	No	No	No
Fabaceae	*Acacia rhodophloia*	na	No	No	No	No
Fabaceae	*Acacia scirpifolia*	na	No	No	No	No
Fabaceae	*Acacia signata*	na	No	No	No	No
Fabaceae	*Acacia stereophylla* var. *cylindrata*	na	No	No	**Yes - P2 (WA)**	No
Fabaceae	*Acacia tetragonophylla*	Kurara	No	No	No	No
Fabaceae	*Gompholobium tomentosum*	Hairy Yellow Pea	No	No	No	No
Fabaceae	*Jacksonia rigida*	na	No	No	No	No
Fabaceae	*Labichea cassioides*	na	No	No	No	No
Fabaceae	*Labichea lanceolata* subsp. *lanceolata*	Tall Labichea	No	No	No	No
Fabaceae	*Leptosema aphyllum*	na	No	No	No	No
Fabaceae	*Mirbelia balsiformis*	na	No	No	No	No
Fabaceae	*Mirbelia spinosa*	na	No	No	No	No
Fabaceae	*Mirbelia corallina*	na	No	No	**Yes - P3 (WA)**	No

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Fabaceae	*Sphaerolobium gracile*	na	No	No	No	No
Frankeniaceae	*Frankenia setosa*	Bristly Frankenia	No	No	No	No
Gentianaceae	*Centaurium tenuiflorum*	na	No	No	No	**Yes**
Geraniaceae	*Erodium cygnorum*	Blue Heronsbill	No	No	No	No
Goodeniaceae	*Brunonia australis*	na	No	No	No	No
Goodeniaceae	*Dampiera* aff. *spicigera*	Spiked Dampiera	No	No	No	No
Goodeniaceae	*Dampiera spicigera*	Spiked Dampiera	No	No	No	No
Goodeniaceae	*Goodenia berardiana*	na	No	No	No	No
Goodeniaceae	*Goodenia caerulea*	na	No	No	No	No
Goodeniaceae	*Goodenia occidentalis*	na	No	No	No	No
Goodeniaceae	*Goodenia trichophylla*	na	No	No	No	No
Goodeniaceae	*Lechenaultia linarioides*	Yellow Leschenaultia	No	No	No	No
Goodeniaceae	*Scaevola canescens*	Grey Scaevola	No	No	No	No
Goodeniaceae	*Scaevola chrysopogon*	na	No	No	**Yes - P2 (WA)**	No
Goodeniaceae	*Scaevola hamiltonii*	na	No	No	No	No
Goodeniaceae	*Scaevola phlebopetala*	Velvet Fanflower	No	No	No	No
Gyrostemonaceae	*Gyrostemon racemiger*	na	No	No	No	No
Haemodoraceae	*Anigozanthos kalbarriensis*	Kalbarri Catspaw	No	No	No	No
Haemodoraceae	*Conostylis aculeata* subsp. *echinissima*	Prickly Conostylis	No	No	No	No
Haemodoraceae	*Conostylis prolifera*	Mat Cottonheads	No	No	No	No
Haemodoraceae	*Conostylis robusta*	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
Haemodoraceae	*Haemodorum discolor*	na	No	No	No	No
Haemodoraceae	*Haemodorum simulans*	na	No	No	No	No
Haloragaceae	*Glischrocaryon aureum*	Common Popflower	No	No	No	No
Haloragaceae	*Gonocarpus confertifolius* var. *confertifolius*	na	No	No	No	No
Hemerocallidaceae	*Corynotheca dichotoma*	Intricate Zigzag Lily	No	No	No	No
Hemerocallidaceae	*Dianella revoluta* var. *divaricata*	Blueberry Lily	No	No	No	No
Hemerocallidaceae	*Tricoryne elatior*	Yellow Autumn Lily	No	No	No	No
Hemerocallidaceae	*Tricoryne* sp. Mullewa (G.J. Keighery 12080)	na	No	No	No	No
Iridaceae	*Patersonia drummondii*	Drummond's Patersonia	No	No	No	No
Iridaceae	*Patersonia drummondii* subsp. Northern (R.D. Royce UWA 777)	Drummond's Patersonia	No	No	No	No
Iridaceae	*Patersonia graminea*	Grass-leaved Patersonia	No	No	No	No
Iridaceae	*Patersonia occidentalis*	Purple Flag	No	No	No	No
Iridaceae	*Patersonia occidentalis* var. *latifolia*	Purple Flag	No	No	No	No
Lamiaceae	*Dicrastylis fulva*	na	No	No	No	No
Lamiaceae	*Hemigenia macrantha*	na	No	No	No	No
Lamiaceae	*Hemigenia scabra*	na	No	No	No	No
Lamiaceae	*Lachnostachys eriobotrya*	Lambswool	No	No	No	No
Lamiaceae	*Microcorys tenuifolia*	na	No	No	**Yes - P3 (WA)**	No

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Lamiaceae	*Pityrodia hemigenioides*	na	No	No	No	No
Lamiaceae	*Quoya atriplicina*	na	No	No	No	No
Lamiaceae	*Quoya loxocarpa*	na	No	No	No	No
Lamiaceae	*Quoya oldfieldii*	Oldfields Foxglove	No	No	No	No
Lamiaceae	*Quoya verbascina*	Golden Bush	No	No	No	No
Lauraceae	*Cassytha pomiformis*	Dodder Laurel	No	No	No	No
Loganiaceae	*Orianthera spermacocea*	na	No	No	No	No
Loranthaceae	*Nuytsia floribunda*	Christmas Tree	No	No	No	No
Macarthuriaceae	*Macarthuria intricata*	na	No	No	**Yes - P3 (WA)**	No
Malvaceae	*Alyogyne hakeifolia*	na	No	No	No	No
Malvaceae	*Brachychiton gregorii*	Desert Kurrajong	No	No	No	No
Malvaceae	*Seringia hermanniifolia*	Crinkle-leaved firebush	No	No	No	No
Malvaceae	*Sida* sp. dark green fruits (S. van Leeuwen 2260)	na	No	No	No	No
Menyanthaceae	*Liparophyllum congestiflorum*	na	No	No	**Yes - P4 (WA)**	No
Montiaceae	*Calandrinia baccata*	na	No	No	No	No
Montiaceae	*Calandrinia liniflora*	Parakeelya	No	No	No	No
Montiaceae	*Calandrinia polyandra*	Parakeelya	No	No	No	No
Montiaceae	*Calandrinia polypetala*	na	No	No	No	No
Montiaceae	*Calandrinia remota*	na	No	No	No	No
Montiaceae	*Calandrinia* sp. Bungalbin (G.J. Keighery & N. Gibson 1656)	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
Montiaceae	*Calandrinia transluscens*	na	No	No	No	No
Myrtaceae	*Baeckea pentagonantha*	na	No	No	No	No
Myrtaceae	*Baeckea robusta*	na	No	No	No	No
Myrtaceae	*Baeckea* sp. aff *muricata*	na	No	No	No	No
Myrtaceae	*Baeckea* sp. East Nabawa (M.E. Trudgen MET 21623)	na	No	No	No	No
Myrtaceae	*Beaufortia aestiva*	Kalbarri Beaufortia	No	No	No	No
Myrtaceae	*Calothamnus chrysanthereus*	na	No	No	No	No
Myrtaceae	*Calothamnus glaber*	na	No	No	No	No
Myrtaceae	*Calothamnus quadrifidus* subsp. *obtusus*	na	No	No	No	No
Myrtaceae	*Calothamnus quadrifidus* subsp. *homalophyllus*	Murchison Clawflower	No	No	No	No
Myrtaceae	*Calytrix* aff. *harvestiana*	na	No	No	No	No
Myrtaceae	*Calytrix brevifolia*	na	No	No	No	No
Myrtaceae	*Calytrix depressa*	na	No	No	No	No
Myrtaceae	*Calytrix formosa*	na	No	No	**Yes - P3 (WA)**	No
Myrtaceae	*Calytrix harvestiana*	na	No	No	**Yes - P2 (WA)**	No
Myrtaceae	*Calytrix oldfieldii*	na	No	No	No	No
Myrtaceae	*Calytrix paucicostata*	na	No	No	**Yes - P2 (WA)**	No
Myrtaceae	*Calytrix* sp.	na	**Yes**	No	No	No
Myrtaceae	*Calytrix strigosa*	na	No	No	No	No
Myrtaceae	*Chamelaucium marchantii*	na	No	No	**Yes - P3 (WA)**	No

Family	Species	Common name	Species new to science	Threatened species (EPBC Act)	Threatened species (Biodiversity Conservation Act 2016)	Introduced species
Myrtaceae	*Chamelaucium* sp. Coolcalalaya (A.H. Burbidge 4233)	na	No	No	**Yes - P1 (WA)**	No
Myrtaceae	*Chamelaucium uncinatum*	Geraldton Wax	No	No	No	No
Myrtaceae	*Darwinia capitellata*	na	No	No	No	No
Myrtaceae	*Darwinia virescens*	Murchison Darwinia	No	No	No	No
Myrtaceae	*Eremaea ebracteata* subsp. *ebracteata*	na	No	No	No	No
Myrtaceae	*Eucalyptus eudesmioides*	na	No	No	No	No
Myrtaceae	*Eucalyptus gittinsii* subsp. *gittinsii*	Northern Sandplain Mallee	No	No	No	No
Myrtaceae	*Eucalyptus loxophleba* subsp. *supralaevis*	Blackbutt York Gum	No	No	No	No
Myrtaceae	*Eucalyptus oraria*	Ooragmandee	No	No	No	No
Myrtaceae	*Homalocalyx aureus*	na	No	No	No	No
Myrtaceae	*Malleostemon* cf. *hursthousei*	na	No	No	No	No
Myrtaceae	*Melaleuca adnata*	na	No	No	No	No
Myrtaceae	*Melaleuca calothamnoides*	na	No	No	No	No
Myrtaceae	*Melaleuca campanae*	na	No	No	No	No
Myrtaceae	*Melaleuca concreta*	na	No	No	No	No
Myrtaceae	*Melaleuca cordata*	na	No	No	No	No
Myrtaceae	*Melaleuca eleuterostachya*	na	No	No	No	No
Myrtaceae	*Melaleuca filifolia*	Wiry Honeymyrtle	No	No	No	No
Myrtaceae	*Melaleuca fulgens* subsp. *steedmanii*	na	No	No	No	No
Myrtaceae	*Melaleuca hamata*	na	No	No	No	No
Myrtaceae	*Melaleuca lara*	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
Myrtaceae	*Melaleuca leuropoma*	na	No	No	No	No
Myrtaceae	*Melaleuca megacephala*	na	No	No	No	No
Myrtaceae	*Melaleuca psammophila*	na	No	No	No	No
Myrtaceae	*Melaleuca radula*	Graceful Honeymyrtle	No	No	No	No
Myrtaceae	*Melaleuca* sp.	na	No	No	No	No
Myrtaceae	*Melaleuca trichophylla*	na	No	No	No	No
Myrtaceae	*Micromyrtus greeniana*	na	No	No	**Yes - P1 (WA)**	No
Myrtaceae	*Phymatocarpus porphyrocephalus*	na	No	No	No	No
Myrtaceae	*Pileanthus bellus*	na	No	No	**Yes - P3 (WA)**	No
Myrtaceae	*Pileanthus peduncularis*	Coppercups	No	No	No	No
Myrtaceae	*Pileanthus peduncularis* subsp. *pilifer*	Coppercups	No	No	No	No
Myrtaceae	*Pileanthus rubrinitidus*	na	No	No	No	No
Myrtaceae	*Pileanthus vernicosus*	na	No	No	No	No
Myrtaceae	*Scholtzia capitata*	Pom-pom Scholtzia	No	No	No	No
Myrtaceae	*Scholtzia corrugata*	na	No	No	**Yes - P2 (WA)**	No
Myrtaceae	*Scholtzia obovata*	na	No	No	No	No
Myrtaceae	*Scholtzia peltigera*	Eurardy Scholtzia	No	No	**Yes - P1 (WA)**	No
Myrtaceae	*Scholtzia* sp.	na	No	No	No	No
Myrtaceae	*Scholtzia spatulata*	na	No	No	No	No
Myrtaceae	*Verticordia capillaris*	na	No	No	**Yes - P4 (WA)**	No
Myrtaceae	*Verticordia chrysantha*	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
Myrtaceae	*Verticordia cooloomia*	na	No	No	**Yes - P3 (WA)**	No
Myrtaceae	*Verticordia densiflora*	Compacted Featherflower	No	No	No	No
Myrtaceae	*Verticordia dichroma*	na	No	No	No	No
Myrtaceae	*Verticordia dichroma* var. *dichroma*	na	No	No	**Yes - P3 (WA)**	No
Myrtaceae	*Verticordia etheliana*	na	No	No	No	No
Myrtaceae	*Verticordia lepidophylla*	na	No	No	No	No
Myrtaceae	*Verticordia monadelpha*	Pink Woolly Featherflower	No	No	No	No
Myrtaceae	*Verticordia monadelpha* var. *callitricha*	na	No	No	No	No
Myrtaceae	*Verticordia oculata*	na	No	No	No	No
Myrtaceae	*Verticordia polytricha*	Northern Cauliflower	No	No	**Yes - P4 (WA)**	No
Myrtaceae	*Verticordia spicata*	Spiked Featherflower	No	No	No	No
Myrtaceae	*Verticordia spicata* subsp. *spicata*	Spiked Featherflower	No	No	No	No
Nyctaginaceae	*Commicarpus australis*	Perennial Tar Vine	No	No	No	No
Orchidaceae	*Paracaleana terminalis*	Smooth-billed Duck Orchid	No	No	No	No
Phrymaceae	*Glossostigma drummondii*	Mudmat	No	No	No	No
Phyllanthaceae	*Poranthera drummondii*	na	No	No	No	No
Phyllanthaceae	*Synostemon crassifolius*	na	No	No	No	No
Poaceae	*Amphipogon caricinus*	Long Greybeard Grass	No	No	No	No
Poaceae	*Aristida holathera* var. *holathera*	na	No	No	No	No
Poaceae	*Austrostipa elegantissima*	na	No	No	No	No
Poaceae	*Austrostipa macalpinei*	na	No	No	No	No

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Poaceae	*Austrostipa scabra*	na	No	No	No	No
Poaceae	*Cenchrus setaceus*	Fountain Grass	No	No	No	**Yes**
Poaceae	*Ehrharta longiflora*	Annual Veldt Grass	No	No	No	**Yes**
Poaceae	*Eragrostis dielsii*	Mallee Lovegrass	No	No	No	No
Poaceae	*Monachather paradoxus*	na	No	No	No	No
Poaceae	*Neurachne alopecuroidea*	Foxtail Mulga Grass	No	No	No	No
Poaceae	*Pentameris airoides*	False Hairgrass	No	No	No	**Yes**
Poaceae	*Polypogon monspeliensis*	Annual Beardgrass	No	No	No	**Yes**
Poaceae	*Triodia bromoides*	na	No	No	**Yes - P4 (WA)**	No
Poaceae	*Triodia dielsii*	na	No	No	**Yes - P3 (WA)**	No
Polygalaceae	*Comesperma integerrimum*	na	No	No	No	No
Polygalaceae	*Comesperma scoparium*	Broom Milkwort	No	No	No	No
Polygonaceae	*Rumex vesicarius*	Ruby Dock	No	No	No	**Yes**
Primulaceae	*Lysimachia loeflingii*	Pimpernel	No	No	No	**Yes**
Primulaceae	*Samolus repens*	Creeping Brookweed	No	No	No	No
Proteaceae	*Banksia ashbyi*	Ashby's Banksia	No	No	No	No
Proteaceae	*Banksia attenuata*	Slender Banksia	No	No	No	No
Proteaceae	*Banksia borealis* subsp. *borealis*	na	No	No	No	No
Proteaceae	*Banksia prionotes*	Acorn Banksia	No	No	No	No
Proteaceae	*Banksia sceptrum*	Sceptre Banksia	No	No	No	No
Proteaceae	*Conospermum microflorum*	na	No	No	No	No

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Proteaceae	*Conospermum stoechadis* subsp. *stoechadis*	Common Smokebush	No	No	No	No
Proteaceae	*Conostylis candicans* subsp. *flavifolia*	Grey Cottonhead	No	No	No	No
Proteaceae	*Grevillea annulifera*	Prickly Plume Grevillea	No	No	No	No
Proteaceae	*Grevillea biformis* subsp. *biformis*	na	No	No	No	No
Proteaceae	*Grevillea candelabroides*	na	No	No	No	No
Proteaceae	*Grevillea commutata* subsp. *commutata*	na	No	No	No	No
Proteaceae	*Grevillea didymobotrya* subsp. *didymobotrya*	na	No	No	No	No
Proteaceae	*Grevillea eriostachya*	Flame Grevillea	No	No	No	No
Proteaceae	*Grevillea gordoniana*	na	No	No	No	No
Proteaceae	*Grevillea leucopteris*	White Plume Grevillea	No	No	No	No
Proteaceae	*Grevillea obliquistigma* subsp. *obliquistigma*	na	No	No	No	No
Proteaceae	*Grevillea petrophiloides* subsp. *petrophiloides*	Pink Pokers	No	No	No	No
Proteaceae	*Grevillea pinaster*	na	No	No	No	No
Proteaceae	*Grevillea rogersoniana*	Rogersons' Grevillea	No	No	**Yes - P3 (WA)**	No
Proteaceae	*Grevillea stenomera*	Lace Net Greveillea	No	No	**Yes - P2 (WA)**	No
Proteaceae	*Hakea orthorrhyncha* var. *filiformis*	Bird Hakea	No	No	No	No
Proteaceae	*Hakea preissii*	Needle Tree	No	No	No	No
Proteaceae	*Hakea stenophylla* subsp. *notialis*	na	No	No	No	No
Proteaceae	*Persoonia acicularis*	na	No	No	No	No

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Proteaceae	*Persoonia biglandulosa*	na	No	No	No	No
Proteaceae	*Persoonia brachystylis*	Short-styled Persoonia	No	No	**Yes - P2 (WA)**	No
Proteaceae	*Persoonia hexagona*	na	No	No	No	No
Proteaceae	*Persoonia stricta*	na	No	No	No	No
Proteaceae	*Petrophile semifurcata*	na	No	No	No	No
Proteaceae	*Stirlingia latifolia*	Blueboy	No	No	No	No
Proteaceae	*Synaphea spinulosa* subsp. *spinulosa*	na	No	No	No	No
Proteaceae	*Xylomelum angustifolium*	Sandplain Woody Pear	No	No	No	No
Pteridaceae	*Cheilanthes sieberi* subsp. *sieberi*	Mulga Fern	No	No	No	No
Restionaceae	*Lepidobolus* aff. *eurardyensis*	na	No	No	No	No
Rhamnaceae	*Stenanthemum* aff. *complicatum*	na	No	No	No	No
Rhamnaceae	*Stenanthemum complicatum*	na	No	No	No	No
Rhamnaceae	*Stenanthemum intricatum*	na	No	No	No	No
Rutaceae	*Cyanothamnus coerulescens*	na	No	No	No	No
Rutaceae	*Cyanothamnus coerulescens* subsp. *spinescens*	na	No	No	No	No
Rutaceae	*Cyanothamnus coerulescens* subsp. *spicatus*	na	No	No	No	No
Rutaceae	*Diplolaena mollis*	na	No	No	No	No
Rutaceae	*Geleznowia uberiflora*	na	No	No	No	No
Santalaceae	*Leptomeria preissiana*	na	No	No	No	No
Scrophulariaceae	*Eremophila clarkei*	Turpentine Bush	No	No	No	No

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Scrophulariaceae	*Eremophila glabra* subsp. *tomentosa*	Tar Bush	No	No	No	No
Scrophulariaceae	*Eremophila microtheca*	Heath-like Eremophila	No	No	**Yes - P4 (WA)**	No
Scrophulariaceae	*Eremophila oldfieldii* subsp. *oldfieldii*	Pixie Bush	No	No	No	No
Scrophulariaceae	*Myoporum caprarioides*	Slender Myoporum	No	No	No	No
Solanaceae	*Anthocercis ilicifolia* subsp. *caldariola*	Holly-leaf Tailflower	No	No	No	No
Solanaceae	*Anthotroche walcottii*	na	No	No	No	No
Solanaceae	*Anthotroche myoporoides*	Myoporum-like Anthotroche	No	No	**Yes - P3 (WA)**	No
Solanaceae	*Cyphanthera racemosa*	na	No	No	No	No
Solanaceae	*Solanum nigrum*	Black Berry Nightshade	No	No	No	**Yes**
Solanaceae	*Solanum orbiculatum* subsp. *orbiculatum*	Round-leaved Solanum	No	No	No	No
Stylidiaceae	*Levenhookia leptantha*	Trumpet Stylewort	No	No	No	No
Stylidiaceae	*Levenhookia octomaculata*	Dotted Stylewort	No	No	No	No
Stylidiaceae	*Levenhookia stipitata*	Common Stylewort	No	No	No	No
Stylidiaceae	*Stylidium burbidgeanum*	na	No	No	No	No
Stylidiaceae	*Stylidium calcaratum*	Book Triggerplant	No	No	No	No
Stylidiaceae	*Stylidium despectum*	Dwarf Triggerplant	No	No	No	No
Stylidiaceae	*Stylidium dispermum*	na	No	No	No	No
Stylidiaceae	*Stylidium elongatum*	Tall Triggerplant	No	No	No	No
Stylidiaceae	*Stylidium kalbarriense*	na	No	No	No	No
Stylidiaceae	*Stylidium ponticulus*	na	No	No	No	No
Stylidiaceae	*Stylidium* sp. nov	na	No	No	No	No

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Thymelaeaceae	*Pimelea angustifolia*	Narrow-leaved Pimelea	No	No	No	No
Zygophyllaceae	*Roepera fruticulosa*	Shrubby Twinleaf	No	No	No	No

na Not available