

VASCULAR FLORA OF DRYANDRA WOODLAND (LOL GRAY AND MONTAGUE STATE FORESTS)

By GREG KEIGHERY

Western Australian Conservation Science Centre, Department of Environment and Conservation, Locked Bag 104, Bentley Delivery Centre, Western Australia, 6983.

and

BRONWEN KEIGHERY

Office of the Environmental Protection Authority, Locked Bag 33, Cloisters Square, Perth, Western Australia, 6850.

ABSTRACT

A checklist of the vascular flora of Dryandra Woodland is presented for the first time. Dryandra Woodland contains a vascular flora of at least 928 taxa; 813 are natives and 115 are weeds. Of these taxa 10 are non-flowering plants (7 natives, 3 weeds), 256 are Monocotyledons (219 natives and 37 weeds) and 662 are Dicotyledons (587 natives and 75 weeds).

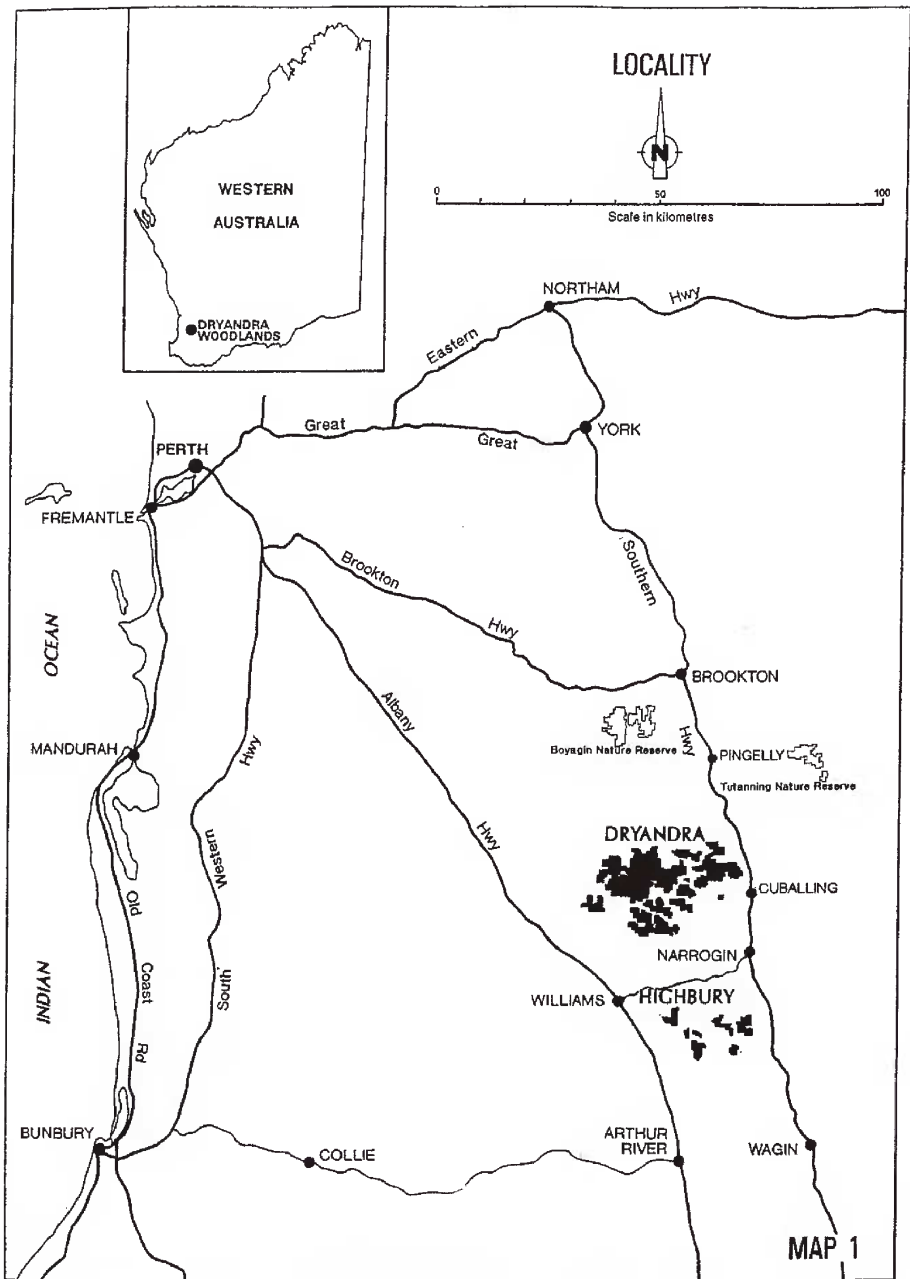
INTRODUCTION

Often referred to as Dryandra State Woodland or Dryandra Forest the Management Plan (CALM 1995) renamed the area comprising Lol Gray (State Forest number 52), Montague (number 53) and Highbury (number 52) State forests as Dryandra Woodland. In this paper we have studied the vascular flora of the first two blocks which are north of Narrogin (Map 1). Although these have always been historically referred to as Dryandra Forest (Roots *et al.* 2003), to avoid confusion we have used the name Dryandra Woodland.

Dryandra Woodland is located about 160 kilometres south-east

of Perth, and 22 kilometres north-east and north-west of Narrogin on the western margin of the Western Australian Wheatbelt, straddling the boundary between the Jarrah Forest and Avon-Wheatbelt Biogeographic regions (Department of the Environment and Water Resources 2007).

Dryandra Woodland comprises a total area of 27,947 hectares spread over 24 named forest blocks. Some of these are not contiguous, and there are 9 groups of discrete contiguous units (Department of Environment and Conservation, 1:50,000 Dryandra Map Sheet). The largest contiguous unit is formed by the



Map 1. Location of Dryandra Woodland and DEC Reserves and Forest (adapted from Department of Conservation and Land Management 1995).

Central Blocks of 12,192 hectares. The other eight units range in size from 87 hectares to 3,913 hectares. Prior to 1970 approximately 8,000 hectares of the woodland were converted to Mallet (*Eucalyptus astringens*) plantations to supply the tanning industry.

Dryandra Woodland experiences a typical Mediterranean climate receiving an annual rainfall of approximately 500–600 mm. The woodland has a low relief ranging from 240–440 metres above sea level, with the major landforms being low lateritic plateaus, slopes, flat sandplains and valleys.

Despite the Woodland being a large remnant of native vegetation of very high faunal and cultural significance (Serventy 1970 and CALM 1995), there is little published on the flora of Dryandra Woodland. This paper documents and discusses for the first time the vascular flora of this major reserve of the Western Australian Agricultural Zone.

SURVEY METHOD

Survey work in Dryandra Woodland Blocks was performed over many flowering seasons from 1983 to 2008, some of the latter period in conjunction with regional quadrat based survey work on the Salinity Action Plan (Keighery *et al.* 2004).

Opportunistic plant collections, that is collections made outside set quadrats, were made during vehicle and foot traverse at

various times of the year, especially during 1996 and 2008. Over 800 voucher collections were made and most are deposited in PERTH or KPBG.

Nomenclature generally follows that used that used in Florabase (Western Australian Herbarium 1998–), or in the most recent revisions. Conservation status of the flora is assigned in Smith (2010) as per Table 1.

GEOMORPHOLOGY AND SOILS

Dryandra Woodland lies on the Western Shield. The major landform units have been described by McArthur *et al.* (1977) as the Norrine and Noombling units. Norrine is a lateritic landform covering areas dominated by

Table 1. Categories of Conservation Listed Flora according to the degree of perceived threat

Category / Definition

P1 (Poorly known Flora) Taxa with less than 5 populations, which are under threat

P2 (Poorly known Flora) Taxa with less than 5 populations, at least some of which are not believed to be under immediate threat

P3 (Poorly known Flora) Taxa with several populations (more than 5), at least some of which are not believed to be under immediate threat

P4 (Rare Taxa) Taxa which are considered to be adequately surveyed and which while being rare are not currently threatened by any identifiable factors

lateritic duricrust, gravels and sand. Lateritic residuals are usually small and bounded by small escarpments. This unit occupies the upper landscape positions but occasionally extends as a spur to the lower slopes. The Noombling unit is an erosion surface covering areas stripped of lateritic materials, slopes are long and gentle and granite rock outcrops are common.

The other landform unit in the area, the Biberkine is a depositional landform which includes areas of alluvial valley fill and floors of major streams. This unit has been largely excised from the Woodland and is now cleared farmland.

VEGETATION

Beard (1979) described the original vegetation of the Dryandra area at a scale of 1:250,000 in six vegetation types:

1. Communities of granite rocks
2. Woodlands of Powderbark (*Eucalyptus accedens*) and Brown Mallet (*Eucalyptus astringens*) on lateritic uplands
3. Woodlands of Wandoo (*Eucalyptus wandoo*) on upper slopes
4. Woodlands of Marri and Wandoo on middle slopes
5. York Gum (*Eucalyptus loxophleba*) next to drainage channels
6. Flooded Gums (*Eucalyptus rudis*) lining creeks.

A detailed vegetation map at a

scale of 1:12,500 of Dryandra Woodland was completed by Coates (1993). Coates listed 11 vegetation associations:

1. Woodland of western lateritic plateaus (*E. accedens* with *E. marginata*, *E. wandoo* and *Corymbia calophylla*.)
2. Woodland of *Eucalyptus wandoo* (extensive)
3. Woodland of *Eucalyptus accedens* (extensive)
4. Woodland of *Eucalyptus astringens* (common, largely planted)
5. Woodland of *Corymbia calophylla* and *Banksia* (localised)
6. Woodland of *Eucalyptus loxophleba* (small areas)
7. *Allocasuarina huegeliana* low woodland often with *E. wandoo* (common but localised)
8. *Acacia acuminata* low forest to woodland (occasional)
9. Low, species diverse Kwongan (slopes below lateritic residuals)
10. *Dryandra* (now *Banksia*) and *Petrophile* tall Shrubland, > 2 metres (duplex soils, shallow gravely soils)
11. Lithic (granite) complex.

At both of these scales the vegetation reflects the dominant landforms.

1. On the plateau are woodlands of Jarrah, mixed Jarrah-Marri and Powderbark, *Eucalyptus drummondii* Mallee heaths or mixed tall Kwongan.

2. The slopes are dominated by Brown Mallet woodlands which grade into Wandoo and mixed Wandoo/Powder bark woodlands.
3. A few areas of flat sandy or duplex soils support Kwongan or Banksia woodlands.
4. The valley bottoms have low open woodlands of Jam, Marri or rarely York Gum and Flooded Gums.
5. Scattered through the woodlands are granite outcrops with their own distinctive flora usually edged by Rock She-oak low forests or woodlands.
5. Heath on deep or duplex sandy loam soils corresponds to Coates vegetation association 10
6. Lateritic uplands (Powderbark Wandoo, *Eucalyptus drummondii* mallee heathlands and some Mallet areas) corresponds to Coates vegetation associations 3, 4 and 9
7. Jam woodlands, wet flats and creeklines corresponds to Coates vegetation associations 6 and 8
8. Disturbed areas (Paddocks, tracks, plantations, water points), except for vegetation association 4 not mapped by Coates or Beard

FLORA

Results

The flora list (Appendix) places records of the vascular flora into the major vegetation/landform units following Beard and Coates:

1. Woodlands of the western lateritic plateaus (normally dominated by Jarrah), corresponds to Coates vegetation association 1
2. Wandoo woodlands, corresponds to Coates vegetation association 2
3. Sandy woodlands (Marri and Banksia), corresponds to Coates vegetation association 5
4. Lithic complex (includes *Allocasuarina* low forest), corresponds to Coates vegetation associations 7 and 11

Species Richness

Dryandra Woodland contains a vascular flora of at least 928 taxa (Appendix 1); 813 are natives and 115 are weeds. Of these taxa 10 are non-flowering plants (7 natives, 3 weeds), 256 are Monocotyledons (219 natives and 37 weeds) and 662 are Dicotyledons (587 natives and 75 weeds).

The Orchidaceae (73 natives, 2 weeds), Myrtaceae (70 natives), Proteaceae (66 natives, 2 weeds), Papilionaceae (65 natives, 12 weeds), Asteraceae (60 natives, 15 weeds), Stylidiaceae (37 natives), Mimosaceae (30 natives, 3 weeds), Epacridaceae (29 natives), Anthericaceae (29 natives), Goodeniaceae (29 natives) and Cyperaceae (29 natives, 2 weeds) are the most species rich families. These comprise over 60% of the known flora of Dryandra Woodland.

The above are the typical species diverse families of the kwongan (heathlands) of southern Western Australia. This was also demonstrated in the Salinity Action Plan Survey of the Western Australian Wheatbelt (Gibson *et al.* 2004) who found that the Myrtaceae, Proteaceae, Papilionaceae, Asteraceae, Mimosaceae, Cyperaceae, Orchidaceae, Epacridaceae, Poaceae and Stylidiaceae were the 10 most speciose families comprising 63% of the flora recorded. The herbaceous Monocotyledon families, which are species diverse in the higher rainfall Warren bio-region (Lyons *et al.* 2000); Haemodoraceae (13), Apiaceae (19) and Dasypogonaceae (10) are here reduced in diversity. The only exception being the Cyperaceae, containing genera which are diverse in sandy soils and wetlands and is therefore, diverse in both areas.

The largest genera are *Stylidium* (32 taxa), *Acacia* (30), *Eucalyptus* (23), *Caladenia* (22), *Banksia* (19), *Hakea* (16), *Leucopogon* (15), *Gastrolobium* (15), *Petrophile* (14) and *Drosera* (13). Again the Salinity Action Plan Survey recorded the largest genera as *Acacia*, *Eucalyptus*, *Banksia*, *Stylidium*, *Leucopogon*, *Schoenus*, *Grevillea*, *Hibbertia*, *Caladenia* and *Daviesia*.

Priority Flora

Dryandra Woodland contains no declared rare flora but has 18 species of priority flora (Smith 2010):

Acacia alata var *platyptera* (P4); scattered populations from Mogumber south to Dryandra.

Acacia deflexa (P4); scattered populations from Dryandra south-east to the Wittenoon Hills (NE Esperance)

Andersonia bifida (P2); apparently confined to duplex soils in heathland in Dryandra

Anigozanthos bicolor subsp. *exstans* (P3); Meckering to Dryandra

Asterolasia pallida subsp. *hyalina* (P2); apparently confined to lateritic soils in heathland in Dryandra

Banksia cynaroides (P4); occurs from Brookton to Harrismith

Banksia subpinnatifida var *subpinnatifida* (P2); occurs from Pingelly to Birdwhistle nature reserve

Chamelaucium croxfordiae (P2); recorded only from Boyagin & Dryandra

Darwinia sp. Dryandra (GK 9295), (P4); occurs from Dryandra to Westdale

Darwinia thymoides subsp. *bella* (P4); occurs from York to Dryandra

Gastrolobium ovalifolium (P4); occurs from Boddington to Narrogin and Kojonup

Gastrolobium stipulare (P4); occurs from Brookton to Highbury

Gastrolobium tomentosum (P4); occurs from Willams to Dryandra to Darkan

Grevillea crowleyae (P2); occurs from Darradine to Dryandra to Jarrahdale

Hibbertia montana (P4); occurs from York to Dryandra

Marianthus dryandra (P2); Dryandra

Persoonia hakeiformis (P2); occurs from Dryandra to Newdegate

Xanthorrhoea brevistylis (P4); occurs from Dryandra to Albany

There are three taxa that may be endemic to Dryandra woodland (*Andersonia bifida*, *Asterolasia pallida* subsp. *hyalina* and *Marianthus dryandra*).

Hybrids

Five naturally occurring inter-specific hybrids were located in Dryandra Woodland, including: *Lechenaultia formosa* x *tubiflora* (GK 9327), *Caladenia flava* x *reptans* (GK 14987) and a series of hybrid eucalypts (*E. accedens* x *incrassata* (Brooker 9955), *E. aspera* x *pluricaulis* (Rose 621) and *E. subangusta* x *wandoo* (GK 9302). It is unknown whether this is unusual or a reflection of the intensive collecting within the study area. In this context Tutanning Nature Reserve has one recorded hybrid eucalypt.

Weeds

115 naturalised alien species (weeds) recorded for Dryandra Woodland, a higher percentage (12.4%) of the total flora than for the Avon-Wheatbelt IBRA, 9.1% (Keighery and Longman 2004). However, Dryandra Woodland has a long history of settlement and management disturbance. As a consequence, 31 of the weeds (28% of the total) were only

recorded from highly disturbed sites such as tracks, fire breaks, Mallet plantations, old and current settlements and dam sites. Many of these species will never become major weeds of the bushland areas.

The presence of an arboretum in Dryandra Woodland has also added some very unusual non local native weeds to the list where these species have seeded into the surrounding bushland. These include several *Callitris* species, *Hakea bucculenta*, *Hakea francisiana* and hybrids of the last two species. Species obviously planted and not spreading were recorded, but are not listed in this paper.

Of the remaining weeds, approximately 17 (15% of the total) are the major weeds of Dryandra Woodland. Granites and Wandoo woodlands are the areas where weeds are having the greatest impacts. In these areas the most serious invasive weeds present are: *Asparagus asparagoides*, *Monoculus monstrosus*, *Brassica tournefortii*, *Moraea flaccida*, *Moraea collina*, *Freesia* hybrid, *Romulea rosea*, *Acacia pycnatha*, *Oxalis purpurea*, *Trifolium arvense*, *T. campestre*, *T. dubium*, *Lotus angustissimus*, *Avena barbata*, *Briza maxima*, *B. minor* and *Bartsia trixago*.

DISCUSSION

We consider that over 90% of the known flora of Dryandra Woodland has now been recorded, and that new records will mainly be

recorded after sporadic events such as wildfires.

Since the woodland straddles the boundaries between the Jarrah Forest Bio-geographic region and the Avon-Wheatbelt it is perhaps not surprising that at least 60 taxa (ca. 7% of the total flora), normally components of the Jarrah Forest are at or near their eastern range limits, e.g.: *Ptilotus stirlingii*, *Thysanotus multiflorus*, *Xanthosia cilata*, *Pithocarpa pulchella*, *Carex inversa*, *Astroloma ciliatum*, *Scaevola platyphylla*, *Jacksonia sternbergiana*, *Stirlingia simplex*.

Another feature of interest as demonstrated by the priority flora list are the number of species, chiefly of the Wandoo woodlands that are at, or near, their northern or southern limits in Dryandra Woodland. It is probable that many of the species recorded in Dryandra Woodland from the heath and lateritic uplands are at, or near their Western range limits, but further surveys in the near-by forest estate are required to quantify this observation.

In the Wheatbelt Salinity Survey (Gibson *et al.* 2004), 52% of species recorded were shrubs, 13.5% annuals, 11% perennial herbs, 7% geophytes and 4% sedges. At Dryandra Woodland, 48.4% of species were shrubs, 13.1% annuals, 12.6% perennial herbs, 15.8% geophytes and 7.1% sedges. This increase in geophytes and sedges is also reflected in the observed species richness of the predominately herbaceous families: Cyperaceae, Asteraceae,

Orchidaceae, Stylidiaceae and Goodeniaceae in Dryandra Woodland. This increase is a reflection of the higher rainfall, hence fresher wetlands that retain soil saturation for longer and hence have a longer growing period for Dryandra Woodland compared to the Wheatbelt as a whole.

With over 800 native taxa listed, the flora of Dryandra Woodland is diverse; however, since few comparable areas have been surveyed it is not possible to determine if this diversity is unusual at a quadrat, local area or regional scale.

There are some limited data at the quadrat scale in the Wheatbelt Salinity Survey (Gibson *et al.* 2004), which suggests that the western heaths are rich in shrub species (43–45 species/100 m²) and the western Wandoo woodlands are species rich in herbaceous species. The Western woodlands were the richest of all Wheatbelt vegetation types with a mean of 52.3 species per site. Dryandra Woodland with a combination of both western heaths and western woodlands is species rich at the quadrat and reserve scale.

The only large near-by reserve that has been intensively studied is Tutanning Nature Reserve (26 km. N.W. Pingelly and 25 km. east of Dryandra Woodland, Map 1). This reserve, with an area 5,200 hectares has a known flora of 697 species, including 35 weeds (Langley pers. com.) Unpublished surveys of Boyagin Nature

Reserve (Map 1) with an area of 6,700 hectares, by the authors have currently recorded 767 taxa, including 61 weeds.

These studies suggest that the plant communities at the western margins of the Wheatbelt are species diverse at the quadrat and local scale. At the regional scale, information suggests that *Banksia* woodlands of the Swan Coastal Plain and Whicher Scarp are richer at a quadrat scale (Gibson *et al.*, 1994; Keighery *et al.*, 2008). Heathland communities of the northern and southern sandplains are also richer, but all are highly variable.

A high rate of species turnover is also apparent. Comparison of the known native flora of Tutanning and Dryandra Woodland shows that 1,041 taxa were listed from both reserves, 609 taxa are shared between the areas, 304 are only found in Dryandra Woodland and 128 only in Tutanning. That is only 58.4% of their total floras are shared between the reserves. Although only partially surveyed similar differences are already apparent with the known floras of Boyagin nature reserve and Highbury Forest.

In summary the vascular flora of Dryandra Woodland reflects the bio-geographic position of the bushland, containing elements of the Jarrah Forest and Avon-Wheatbelt, with many species at their geographic margins, contributing to the high level of turnover noted between reserves. The plant communities them-

selves are species rich contributing to the floristic diversity recorded.

ACKNOWLEDGEMENTS

Kings Park and Botanic Gardens, The Department of Fisheries and Wildlife, the Forests Department and the Department of Conservation and Land Management supported and funded this work over many years. David Rose (son of the Caretaker of Dryandra Lions Village) greatly assisted the list in collecting many records for the woodland during the major survey period in the 1987/8.

REFERENCES

- BEARD, J.S. 1979. The Vegetation of the Pinjarra Area, WA. Map and Memoir, Vegmap Publications, Perth.
- COATES, A.M. 1993. Vegetation Survey of Dryandra Forest. Department of Conservation and Land Management. Map and Memoir, Como.
- DEPARTMENT of CONSERVATION and LAND MANAGEMENT. 1995. Dryandra Woodland, Management Plan, 1995–2005. Department of Conservation and Land Management, Como.
- DEPARTMENT of the ENVIRONMENT and WATER RESOURCES. 2007. *IBRA Version 6.1*. Available at <http://www.environment.gov.au/parks/nrs/ibra/version6-1/index.html>.
- GIBSON, N., KEIGHERY, B.J., KEIGHERY, G.J., BURBIDGE, A.H.

- and LYONS, M.N. 1994. *A Floristic Survey of the Southern Swan Coastal Plain*. Report for the Australian Heritage Commission by the Department of Conservation and Land Management and the Conservation Council of Western Australia (Inc.).
- GIBSON, N., KEIGHERY, G.J., M.N. LYONS, M.N. and WEBB, A. 2004. Terrestrial flora and vegetation of the Western Australian Wheatbelt. *Records Western Australian Museum Supplement* 67: 139–189.
- KEIGHERY, G.J., HALSE, S.A., HARVEY, M.S., MCKENZIE, N.L. (eds.) 2004. *A biodiversity survey of the Western Australian agricultural zone*. *Records Western Australian Museum Supplement* 67.
- KEIGHERY, B.J., KEIGHERY, G.J., WEBB, A., LONGMAN, V., and GRIFFIN, E.A. 2008. *A Floristic Survey of the Whicher Scarp*. Department of Environment and Conservation, Kensington.
- KEIGHERY, G.J. and LONGMAN, V. 2004. The naturalized vascular plants of Western Australia 1: Checklist, Environmental Weeds and Distribution in IBRA regions. *Plant Protection Quarterly* 19: 12–32.
- LYONS, M.N., KEIGHERY, G.J., GIBSON, N. and WARDELL-JOHNSON, G. 2000. The vascular flora of the Warren bioregion, south-west Western Australia: composition, reservation status and endemism. *CALMScience* 3: 181–250.
- McARTHUR, W.M., CHURCHWARD, H.M. & HICK, P.T. 1977. *Landform and Soils of the Murray River Catchment Area of Western Australia*. CSIRO Div. Land Resour. Mgmt. Ser. No. 3, 1–23.
- ROOTS, E. DAWSON, B., BURGESS, W., PENNY, C. and WHIFORD, J. 2003. *Numbat Country; The Story of the Shire of Cuballing*. Shire of Cuballing.
- SERVENTY V. 1970. *Dryandra The Story of an Australian Forest*. Reed Publishers, Sydney.
- SMITH, M.G. 25/3/2010 Declared Rare and Priority List for Western Australia. Department of Conservation and Land Management, W.A.
- WESTERN AUSTRALIAN HERBARIUM 1998–. *FloraBase—The Western Australian Flora*. Department of Environment and Conservation.
<http://florabase.dec.wa.gov.au> (accessed 20 July 2010).

Appendix 1. Dryandra Woodland Flora List

Habitat Code: 1 – Woodlands of the western lateritic plateau (normally Jarrah dominated), 2 – Wandoo woodlands, 3 – Woodlands of sandy soils (Marri and/or Banksia), 4 – Lithic complex (Granite herbfield, heath, shrubland and *Allocasuarina huegeliana* low forest), 5 – Heath on sandy loam soils, 6 – lateritic upland (Powderbark woodlands, Mallee, Kwongan and Mallet) 7 – woodlands on wet flats and creeklines (normally Jam rarely York Gum), 8 – Disturbed areas (paddocks, tracks, roads, plantations and settlement area). * Naturalised species

Scientific name	1	2	3	4	5	6	7	8
Adiantaceae								
<i>Cheilanthes austrotenuifolia</i>				+				+
<i>Pleurosorus rutifolius</i>				+				
Aizoaceae								
<i>Carpobrotus modestus</i>		+			+			
Alliaceae								
* <i>Allium triquetrum</i>								+
Amaranthaceae								
<i>Ptilotus declinatus</i>	+							
<i>Ptilotus drummondii</i> var <i>drummondii</i>	+				+		+	
<i>Ptilotus humilis</i> var <i>humilis</i>		+	+		+			
<i>Ptilotus manglesii</i>	+		+				+	
<i>Ptilotus polystachyus</i>			+					
<i>Ptilotus spathulatus</i>	+		+					
<i>Ptilotus stirlingii</i> var <i>stirlingii</i>	+							
Amaryllidaceae								
* <i>Amaryllis belladonna</i>								+
* <i>Narcissus tazetta</i>								+
Anthericaceae								
<i>Agrostocrinum scabrum</i>				+				+
<i>Arthropodium capillipes</i>	+			+	+	+		
<i>Arthropodium curvipes</i> subsp. nov.				+				
<i>Arthropodium preissii</i>								+
<i>Borya constricta</i>				+				
<i>Borya laciniata</i>								+
<i>Borya scirpioidea</i>		+						+
<i>Borya sphaerocephala</i>			+					
<i>Caesia alfordii</i>								+
<i>Caesia micrantha</i>	+		+					
<i>Caesia occidentalis</i>						+		
<i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>				+				+
<i>Chamaescilla spiralis</i>		+	+		+			
<i>Corynotheca micrantha</i>	+		+					

Scientific name	1	2	3	4	5	6	7	8
<i>Laxmannia grandiflora</i> subsp. <i>grandiflora</i>		+				+		
<i>Laxmannia omnifertilis</i>					+			
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	+	+					+	
<i>Laxmannia squarrosa</i>	+		+					
<i>Sowerbaea laxiflora</i>	+	+	+		+	+	+	
<i>Thysanotus asper</i>					+			
<i>Thysanotus dichotomus</i>	+		+					
<i>Thysanotus manglesianus</i>	+						+	
<i>Thysanotus multiflorus</i>		+	+					
<i>Thysanotus patersonii</i>	+	+					+	
<i>Thysanotus pyramidalis</i>		+						
<i>Thysanotus sparteus</i>	+		+					
<i>Thysanotus tenellus</i>	+							
<i>Thysanotus thyrsoides</i>	+						+	+
<i>Thysanotus triandrus</i>			+		+			
<i>Tricoryne elatior</i>	+	+						
<i>Tricoryne tenella</i>			+					
Apiaceae								
<i>Actinotus glomeratus</i>							+	
<i>Actinotus leucocephalus</i>	+							
<i>Daucus glochidiatus</i>	+	+	+	+	+		+	
<i>Eryngium pinnatifidum</i> subsp. <i>minor</i>		+					+	
<i>Homalosciadium homalocarpum</i>		+		+			+	
<i>Hydrocotyle alata</i>					+		+	
<i>Hydrocotyle diantha</i>				+			+	
<i>Hydrocotyle callicarpa</i>	+	+			+			
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>		+						
<i>Hydrocotyle rugulosa</i>		+				+	+	
<i>Platysace juncea</i>						+	+	+
<i>Trachymene cyanopetala</i>		+					+	
<i>Trachymene ornata</i>		+				+	+	
<i>Trachymene pilosa</i>	+	+	+				+	
<i>Xanthosia atkinsoniana</i>	+	+			+			
<i>Xanthosia candida</i>							+	
<i>Xanthosia ciliata</i>	+							
<i>Xanthosia huegelii</i>	+							
<i>Xanthosia singuliflora</i>	+	+						
Apocynaceae								
* <i>Vinca major</i>								+
Araceae								
* <i>Zantedeschia aethiopica</i>							+	
Asparagaceae								
* <i>Asparagus asparagoides</i>		+						+

Scientific name	1	2	3	4	5	6	7	8
Asphodelaceae								
Bulbine semibarbata		+		+				+
Asteraceae								
Actinobole uliginosa		+		+				
Angianthus tomentosus						+		
Argentipallium niveum		+				+		
* Arctotheca calendula		+		+			+	+
Asteridea nivea		+				+		
Blennospora drummondii			+	+		+	+	
Brachyscome glandulosa				+				
Brachyscome bellidoides		+						
Brachyscome iberidiifolia	+	+	+	+				
Brachyscome perpusilla var tenella								+
Calocephalus angianthoides				+				
Calotis hispidula		+		+				
* Carduus pycnocephalus				+				+
* Centaurea melitensis		+				+	+	+
Ceratogyne obionoides		+						
Chrysocephalum semipapposum		+						
Chthonocephalus pseudevax				+				
* Cirsium vulgare		+		+				
* Conyza albida								+
Cotula australis		+					+	
* Cotula bipinnata		+						+
Cotula coronopifolia				+			+	
Cotula cotuloides							+	
Cotula drummondii		+						
Craspedia variabilis	+					+		
* Dittrichia graveolens								+
Euchiton sphaericus		+						
Gnephosis drummondii		+						
Gnephosis tenuissima	+	+			+			
Helichrysum leucopsidum		+			+			
* Helichrysum luteo-album								+
Hyalosperma cotula				+			+	
Hyalosperma demissum						+		
* Hypochaeris glabra		+	+	+	+	+	+	+
Ixiolaena viscosa					+			+
Lagenophora huegelii	+	+	+		+		+	
Lawrencella rosea		+						
Millotia myosotidifolia	+	+	+		+		+	
Millotia tenuifolia		+			+		+	
* Monoculus monstrosus		+		+			+	+
Myriocephalus occidentalis		+						
Myriocephalus rhizocephalus							+	
Olearia elaeophila							+	
Olearia muricata	+						+	

Scientific name	1	2	3	4	5	6	7	8
<i>Olearia rudis</i>	+					+		
<i>Pithocarpa pulchella</i> var <i>melanostigma</i>	+							
<i>Podolepis canescens</i>	+	+						
<i>Podolepis gracilis</i>		+						
<i>Podolepis lessonii</i>		+				+		
<i>Podotrochea angustifolia</i>	+	+				+		
<i>Podotrochea gnaphaloides</i>			+					
<i>Pterochaeta paniculata</i>	+		+		+	+		
<i>Quinetia urvillei</i>	+	+	+		+	+	+	
<i>Rhodanthe citrina</i>	+	+			+	+		
<i>Rhodanthe corymbosum</i>		+	+	+				
<i>Rhodanthe laevis</i>		+						
<i>Rhodanthe manglesii</i>		+		+				+
<i>Rhodanthe pygmaea</i>		+						+
<i>Senecio glossanthus</i>		+						
<i>Senecio hispidulus</i>	+	+						
<i>Senecio pinnatifolius</i>		+				+		
<i>Senecio quadridentatus</i>		+						+
<i>Siloxerus filifolius</i>					+			
<i>Siloxerus humifusus</i>	+		+		+			
<i>Siloxerus multiflorus</i>		+			+			
* <i>Soliva sessilis</i>		+						+
* <i>Sonchus asper</i>							+	+
* <i>Sonchus oleraceus</i>		+	+	+		+	+	+
<i>Trichocline spathulata</i>	+							
* <i>Ursinia anthemoides</i>	+	+	+	+				+
* <i>Vellereophyton dealbatum</i>		+		+				+
<i>Waitzia acuminata</i> var <i>acuminata</i>	+	+			+	+		
<i>Waitzia acuminata</i> var <i>albicans</i>		+						
<i>Waitzia nitida</i>	+	+				+		
<i>Waitzia suaveolens</i> var <i>suaveolens</i>	+		+					
Boraginaceae								
<i>Halgania anagaloides</i>		+						
* <i>Echium plantagineum</i>		+						+
Brassicaceae								
* <i>Brassica tournefortii</i>								+
<i>Lepidium rotundum</i>		+						
Campanulaceae								
<i>Wahlenbergia gracilentia</i>	+	+	+	+	+	+		
<i>Wahlenbergia multicaulis</i>				+			+	
<i>Wahlenbergia preissii</i>				+				
Caesalpiniaceae								
<i>Labichea lanceolata</i>				+				

Scientific name	1	2	3	4	5	6	7	8
Caryophyllaceae								
* <i>Cerastium glomeratum</i>				+				+
* <i>Moenchia erecta</i>								+
* <i>Petrorrhagia dubia</i>				+				+
* <i>Polycarpon tetraphyllum</i>								+
* <i>Silene gallica</i> var. <i>gallica</i>							+	+
* <i>Silene gallica</i> var. <i>quiquevulnera</i>								+
* <i>Spergula arvensis</i>								+
Casuarinaceae								
<i>Allocauarina campestris</i>					+	+		
<i>Allocauarina huegeliana</i>				+				
<i>Allocauarina humilis</i>	+		+		+			
<i>Allocauarina microstachya</i>					+			
<i>Allocauarina thuyoides</i>			+					
Centrolepidaceae								
<i>Aphelia brizula</i>								+
<i>Aphelia cyperoides</i>				+				+
<i>Aphelia drummondii</i>		+		+				
<i>Aphelia nutans</i>				+				+
<i>Centrolepis aristata</i>	+	+	+	+				
<i>Centrolepis drummondiana</i>	+	+	+		+	+		
<i>Centrolepis inconspicua</i>								+
<i>Centrolepis glabra</i>								+
<i>Centrolepis pilosa</i>		+		+			+	+
<i>Centrolepis polygyna</i>		+				+		
Chenopodiaceae								
* <i>Chenopodium album</i>								+
Clusiaceae								
<i>Hypericum gramineum</i>		+		+				
Colchicaceae								
<i>Burchardia congesta</i>	+	+	+		+			
<i>Burchardia multiflora</i>				+				+
<i>Wurmbea dioica</i> subsp. <i>alba</i>				+				
<i>Wurmbea sinora</i>				+				
<i>Wurmbea tenella</i>		+		+				+
Convolvulaceae								
<i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>		+						+
Crassulaceae								
<i>Crassula colorata</i> var. <i>colorata</i>	+		+	+	+		+	
* <i>Crassula decumbens</i>								+

Scientific name	1	2	3	4	5	6	7	8
Crassula exserta	+	+			+		+	
* Crassula natans var minus				+			+	
Crassula pedicellosa		+					+	
Crassula peduncularis				+				
Cupressaceae								
* Callitris columellaris								+
Callitris roei								+
* Callitris verrucosa								+
Cuscutaceae								
* Cuscuta epithymum						+		
Cyperaceae								
Carex inversa							+	
Carex preissii		+						
Caustis dioica		+			+	+		
Chorizandra enodis							+	
* Cyperus tenellus		+		+			+	+
Gahnia australis	+	+			+	+		
Gahnia drummondii						+		
Isolepis congrua								
Isolepis cyperoides								
* Isolepis marginata			+				+	
Isolepis stellata						+		
Lepidosperma leptostachyum	+				+	+		
Lepidosperma pubisquameum					+	+		
Lepidosperma resinosum				+				
Lepidosperma sp. Boorabbin (K.L. Wilson 2579)		+		+				
Mesomelaena preissii	+	+						
Mesomelaena stygia			+					
Schoenus armeria					+	+		
Schoenus ?clandestinus (G.Keighery 14984)		+						
Schoenus curvifolius	+		+					
Schoenus minutulus					+			
Schoenus nanus		+		+			+	
Schoenus odontocarpus				+				
Schoenus pleiostemoneus	+		+					
Schoenus subbulbosus			+					
Schoenus tenellus								+
Schoenus trachycarpus		+						
Schoenus unispiculatus		+		+				
Tetraria octandra	+	+						
Tricostularia compressa						+		
Tricostularia neesii		+						

Scientific name	1	2	3	4	5	6	7	8
Dasygonaceae								
<i>Chaemaxeros serra</i>	+		+			+		
<i>Lomandra collina</i>	+							
<i>Lomandra effusa</i>		+			+	+		
<i>Lomandra micrantha</i> subsp. <i>micrantha</i>	+	+						+
<i>Lomandra micrantha</i> subsp. <i>teretifolia</i>						+		
<i>Lomandra mucronata</i>						+		
<i>Lomandra nutans</i>	+					+		
<i>Lomandra preissii</i>	+		+					
<i>Lomandra purpurea</i>	+							
<i>Lomandra suaveolens</i>			+					
Dilleniaceae								
<i>Hibbertia acerosa</i>		+						
<i>Hibbertia commutata</i>	+	+			+	+		
<i>Hibbertia exasperata</i>		+				+		
<i>Hibbertia hemignosta</i>		+			+	+		
<i>Hibbertia hibbertioides</i> var. <i>hibbertioides</i>		+				+		
<i>Hibbertia hibbertioides</i> var. <i>pedunculata</i>		+	+		+			
<i>Hibberia hypericoides</i>	+		+			+		
<i>Hibberia microphylla</i>				+		+		
<i>Hibbertia montana</i>	+					+		
<i>Hibbertia polystachya</i>		+				+		
<i>Hibbertia rupicola</i>		+						
Droseraceae								
<i>Drosera androsace</i>					+			
<i>Drosera bulbosa</i> subsp. <i>bulbosa</i>		+						+
<i>Drosera erythrorhiza</i> subsp. <i>squamosa</i>			+					
<i>Drosera gigantea</i> subsp. <i>gigantea</i>								
<i>Drosera glanduligera</i>	+	+	+	+		+	+	
<i>Drosera hyperostigma</i>						+		
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	+	+	+					
<i>Drosera menziesii</i> subsp. <i>menziesii</i>	+	+						+
<i>Drosera purpurascens</i>		+						
<i>Drosera pallida</i>	+							
<i>Drosera spilos</i>		+						
<i>Drosera stolonifera</i>		+	+					+
<i>Drosera subhirtella</i>		+						+
Epacridaceae								
<i>Andersonia bifida</i>					+			
<i>Andersonia caerulea</i>	+		+		+	+		
<i>Andersonia lehmanniana</i> subsp. <i>pubescens</i>					+	+		
<i>Andersonia parviflora</i>		+			+			
<i>Astroloma cataphractum</i>		+			+			
<i>Astroloma ciliatum</i>	+	+						

Scientific name	1	2	3	4	5	6	7	8
<i>Astroloma compactum</i>		+			+			
<i>Astroloma drummondii</i>	+	+						
<i>Astroloma epacridis</i>	+	+				+		
<i>Astroloma pallidum</i>	+		+					
<i>Astroloma serratifolium</i>		+			+	+		
<i>Astroloma</i> sp.Tutanning (A.S. George 7779)		+			+			
<i>Leucopogon conostephioides</i>	+							
<i>Leucopogon dielsianus</i>		+			+			
<i>Leucopogon fimbriatus</i>		+			+			
<i>Leucopogon glabellus</i>	+		+					
<i>Leucopogon nutans</i>						+		
<i>Leucopogon obtusatus</i>		+						
<i>Leucopogon oxycedrus</i>	+	+						
<i>Leucopogon pendulus</i>				+				
<i>Leucopogon propinquus</i>	+					+		
<i>Leucopogon pubescens</i>						+		
<i>Leucopogon</i> sp.Boddington(D. Halford 80746)	+	+						
<i>Leucopogon</i> sp.Darling Range(F.&J.Hort 1804)	+					+		
<i>Leucopogon</i> sp.Great Southern(Cowan A586)						+		
<i>Leucopogon</i> sp.Wandering(F.Hort 419)						+		
<i>Leucopogon strictus</i>						+		
<i>Lysinema pentapeltum</i>	+		+		+			
<i>Styphelia tenuiflora</i>	+	+			+	+		
Euphorbiaceae								
<i>Beyeria lechenaultii</i>		+			+	+		
* <i>Euphorbia pepylus</i>				+				+
<i>Monotaxis grandiflora</i> var <i>grandiflora</i>						+		
<i>Phyllanthus calycinus</i>	+							
<i>Poranthera ericoides</i>	+	+						
<i>Poranthera microphylla</i>	+	+			+		+	
<i>Stachystemon virgatus</i>	+							
Fumariaceae								
* <i>Fumaria capreolata</i>								+
* <i>Fumaria muralis</i>								+
Gentianaceae								
* <i>Centaurium erythraea</i>		+					+	+
* <i>Cicendia filiformis</i>		+					+	
* <i>Cicendia quadrangularis</i>		+					+	
<i>Sebaea ovata</i>				+			+	
Geraniaceae								
* <i>Erodium botrys</i>		+		+				+
* <i>Erodium cicutarium</i>		+						+
<i>Erodium cygnorum</i>	+				+		+	

Scientific name	1	2	3	4	5	6	7	8
<i>Geranium retrorsum</i>		+			+			
<i>Pelargonium littorale</i>							+	
<i>Pelargonium havlasae</i>		+						
Goodeniaceae								
<i>Anthotium odontophyllum</i>	+	+						
<i>Dampiera eriocephala</i>					+			
<i>Dampiera juncea</i>	+	+				+		
<i>Dampiera lavandulacea</i>	+							
<i>Dampiera lindleyi</i>	+	+			+			
<i>Dampiera obliqua</i>	+	+			+			
<i>Dampiera sacculata</i>			+					
<i>Dampiera wellsiana</i>					+	+		
<i>Goodenia berardiana</i>		+						+
<i>Goodenia coerulea</i>						+		
<i>Goodenia convexa</i>						+		
<i>Goodenia fasciculata</i>	+					+		
<i>Goodenia helmsii</i>				+				
<i>Goodenia incana</i>		+						
<i>Goodenia micrantha</i>								+
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>				+		+		
<i>Goodenia ?quasilibera</i> (GK/JA 1539)					+			
<i>Goodenia pulchella</i>		+		+				
<i>Goodenia watsonii</i> subsp. <i>glandulosa</i>						+		
<i>Lechenaultia biloba</i>	+		+			+		
<i>Lechenaultia formosa</i>		+			+	+		
<i>Lechenaultia tubiflora</i>		+						
<i>Scaevola calliptera</i>						+		
<i>Scaevola humifusa</i>		+						+
<i>Scaevola platyphylla</i>	+							
<i>Scaevola repens</i>			+					
<i>Velleia cynopotamica</i>		+		+				
<i>Velleia trinervis</i>		+						
<i>Verreauxia reinwardtii</i>	+		+			+		
Gyrostemonaceae								
<i>Gyrostemon subnudus</i>				+				
Haemodoraceae								
<i>Anigozanthos bicolor</i> subsp. <i>exstans</i>		+						
<i>Anigozanthos humilis</i> subsp. <i>humilis</i>	+							
<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	+							
<i>Conostylis aculeata</i> subsp. <i>bromelioides</i>	+	+	+					
<i>Conostylis petrophiloides</i>	+							
<i>Conostylis serrulata</i>	+							
<i>Conostylis setigera</i> subsp. <i>setigera</i>							+	
<i>Haemodorum discolor</i>	+	+					+	
<i>Haemodorum laxum</i>			+					

Scientific name	1	2	3	4	5	6	7	8
Haemodorum simplex				+				+
Haemodorum sparsiflorum				+				+
Haemodorum spicatum	+		+		+			
Tribonanthes longipetala		+						+
Tribonanthes violacea				+				+
Haloragaceae								
Glischrocaryon angustifolium	+							
Glischrocaryon aureum		+			+			
Glischrocaryon flavescens		+			+	+		
Gonocarpus cordiger	+	+	+		+			
Gonocarpus nodulosus		+		+				+
Hydatellaceae								
Trithuria bibracteata								+
Trithuria submersa								+
Hypoxidaceae								
Hypoxis glabella var. glabella		+		+				+
Hypoxis occidentalis var. quadriloba		+						+
Iridaceae								
* Chasmanthe floribunda								+
* Freesia hybrid		+						+
* Gladiolus tristis								+
* Iris germanica								+
* Ixia maculata								+
* Moraea faccida		+					+	+
* Moraea collina		+					+	+
* Moraea setifolia		+					+	+
Orthrosanthus laxus var. gramineus	+					+		
Patersonia juncea					+	+		
Patersonia occidentalis var. occidentalis	+		+					
Patersonia pygmaea					+	+		
* Romulea rosea var. australis		+					+	+
* Romulea rosea var. rosea		+		+	+		+	+
Juncaceae								
* Juncus bufonius		+					+	
* Juncus capitatus		+					+	+
Juncus pallidus							+	+
Juncus pauciflorus							+	
Luzula meridionalis	+	+						
Juncaginaceae								
Triglochin calcitrapa		+					+	
Triglochin lineare							+	
Triglochin nana		+		+				

Scientific name	1	2	3	4	5	6	7	8
Lamiaceae								
Chloanthes coccinea	+				+			
Hemiandra incana		+				+		
Hemiandra pungens				+				
Hemigenia humilis		+				+		
Hemigenia incana		+				+		
Hemigenia rigida		+				+		
Hemigenia argentea		+				+		
Hemigenia wandoohana		+						
Microcorys barbata						+		
Microcorys capitata						+		
Microcorys ericifolia						+		
Microcorys subcanescens						+		
* Stachys arvensis		+						+
Lauraceae								
Cassytha flava	+				+			
Cassytha glabella		+				+		
Cassytha racemosa		+		+				+
Lentibulariaceae								
Polypompholyx multifida		+		+				+
Polypomphylx tenella		+		+				+
Utricularia menziesii				+				
Linaceae								
Linum marginale	+	+			+			
Lobeliaceae								
Isotoma hypocrateriformis	+	+	+			+		
Isotoma scapigera				+				+
Lobelia cleistogamoides				+	+	+		
Lobelia gibbosa	+				+	+		
Lobelia rariflora		+						
Lobelia rhombifolia		+	+					
Lobelia rhytidosperra	+	+		+				
* Monopsis debilis								+
Loganiaceae								
Logania campanulata	+							
Logania flaviflora					+			
Logania tortuosa					+			
Phyllangium sulcatum		+		+				+
Loranthaceae								
Amyema miquelii	+	+						
Amyema preissii								+
Nuytsia floribunda	+		+					

Scientific name	1	2	3	4	5	6	7	8
Lycopodiaceae								
Phylloglossum drummondii		+		+			+	
Lythraceae								
* Lythrum hyssopifolium								+
Mimosaceae								
Acacia acuminata		+		+			+	
Acacia alata var. platyptera				+				
Acacia applanata		+						
* Acacia baileyana								+
Acacia celastrifolia						+		
Acacia chrysocephala						+		
Acacia browniana var. intermedia		+			+			
* Acacia dealbata								+
Acacia deflexa					+	+		
Acacia dentifera		+						
Acacia drummondii subsp. candolleana		+						
Acacia drummondii subsp. drummondii		+						
* Acacia floribunda								+
Acacia gilbertii			+					
Acacia huegelii	+		+					
Acacia insolita subsp. insolita	+	+						
Acacia lanei		+				+		
Acacia lasiocarpa subsp. sedifolia		+			+	+		
Acacia latericola	+					+		
Acacia latipes subsp. latipes	+							
Acacia leptospermoides subsp. leptospermoides	+							
Acacia microbotrya		+					+	
Acacia pulchella var. glaberrima	+	+	+		+			
Acacia pulchella var. goadbeyi						+		
* Acacia pycnantha		+				+		+
Acacia rigida		+						
Acacia sp. 174 (J. Brown 228)						+		
Acacia saligna	+	+		+				
Acacia sphacelata subsp. sphacelata						+		
Acacia squamata		+						
Acacia stenoptera	+							
Acacia subflexuosa subsp. subflexuosa	+	+						
Acacia willdenowiana	+	+	+					
Molluginaceae								
Macarthuria apetala								+
Myrtaceae								
Baeckea camphorosmae		+			+	+		
Baeckea corymbulosa					+			
Baeckea crispiflora	+							

Scientific name	1	2	3	4	5	6	7	8
Beaufortia bracteosa						+		
Beaufortia incana						+		
Beaufortia micrantha var puberula								
Callistemon phoenicus							+	
Calothamnus planifolius var planifolius						+		
Calothamnus preissii						+		
Calothamnus quadrifidus	+				+	+		
Calothamnus sanguineus	+							
Calytrix angulata	+		+					
Calytrix flavescens			+					
Calytrix leschenaultii						+		
Calytrix simplex subsp. suboppositifolia		+						
Chamelaucium croxfordii		+				+		
Corymbia calophylla	+	+						
Darwinia sp. Dryandra (GK 9295)	+					+		
Darwinia thymoides subsp. bella		+				+		
Eremaea pauciflora	+				+			
Eucalyptus accedens		+				+		
Eucalyptus argyphaea						+		+
Eucalyptus aspersa						+		
Eucalyptus astringens						+		+
Eucalyptus drummondii						+		
Eucalyptus falcata						+		
Eucalyptus gardneri subsp. gardneri						+		+
Eucalyptus hebetifolia						+		
Eucalyptus incrassata					+			
Eucalyptus latens	+					+		
Eucalyptus loxophleba		+					+	
Eucalyptus marginata subsp. marginata	+	+						
Eucalyptus pachyloma		+				+		
Eucalyptus patens							+	
Eucalyptus phenax	+							
Eucalyptus pluricaulis subsp. pluricaulis						+		
Eucalyptus rudis subsp. rudis							+	
Eucalyptus thamnoides subsp. megista						+		
Eucalyptus uncinata						+		
Eucalyptus wandoo	+	+				+		
Eucalyptus ?accedens (mallee, GK & JA 1524)						+		
Eucalyptus x accedens (GK & JA 1530)						+		
Eucalyptus sp (GK & JA 1531)						+		
Hypocalymma angustifolium	+	+					+	+
Kunzea micromera					+			
Kunzea preissiana					+			
Kunzea ?recurva							+	
Leptospermum erubescens	+	+		+	+			
Leptospermum oligandrum			+					
Leptospermum spinescens	+				+			

Scientific name	1	2	3	4	5	6	7	8
Melaleuca acuminata								+
Melaleuca hamata		+						
Melaleuca incana subsp. incana								+
Melaleuca platycalyx					+			
Melaleuca pungens	+							
Melaleuca radula				+				
Melaleuca subtrigona		+						
Melaleuca tuberculata subsp. tuberculata							+	
Melaleuca undulata							+	
Regelia inops		+			+			
Rinzia fumana							+	
Thryptomene australis subsp. australis				+				
Verticordia bifimbriata	+							
Verticordia densiflora var caespitosa		+					+	
Verticordia grandiflora					+			
Verticordia huegelii var stylosa				+				+
Verticordia insignis subsp. compta							+	
Verticordia insignis subsp. insignis	+							
Verticordia pennigera		+						
Verticordia serrata var serrata		+						
Olacaceae								
Olax benthamiana	+				+	+		
Onagraceae								
Epilobium billardierianum subsp. cinereum							+	+
* Oenothera stricta								+
Ophioglossaceae								
Ophioglossum lusitanicum		+		+				+
Orchidaceae								
Caladenia barbarossa		+			+	+		
Caladenia cairnsiana			+		+			
Caladenia dimidia							+	
Caladenia discoidea	+		+					
Caladenia falcata				+				
Caladenia filifera		+						
Caladenia flava subsp. flava	+	+	+					
Caladenia footeana		+						
Caladenia hirta subsp. rosea		+		+				
Caladenia integra		+						
Caladenia latifolia				+				
Caladenia longicauda subsp. eminens	+	+						
Caladenia longiclavata		+						
Caladenia macrostylis	+							
Caladenia marginata				+				

Scientific name	1	2	3	4	5	6	7	8
<i>Caladenia nana</i> subsp. <i>nana</i>		+			+	+		
<i>Caladenia pendens</i> subsp. <i>talbotii</i>							+	
<i>Caladenia polychroma</i>		+					+	
<i>Caladenia reptans</i> subsp. <i>reptans</i>	+				+			
<i>Caladenia uliginosa</i> subsp. <i>candicans</i>		+						
<i>Caladenia uliginosa</i> subsp. <i>uliginosa</i>		+					+	
<i>Caladenia xantha</i>		+				+	+	
<i>Calochilus stramenicola</i>						+		
<i>Cyanicula gemmata</i>		+					+	
<i>Cyanicula sericea</i>		+			+			
<i>Cyrtostylis huegelii</i>				+				
* <i>Disa bracteata</i>		+						+
<i>Diuris corymbosa</i>	+	+		+	+			
<i>Diuris laxiflora</i>		+					+	
<i>Diuris setacea</i>		+						
<i>Drakaea glyptodon</i>			+					
<i>Elythranthera brunonis</i>	+	+	+		+			
<i>Elythranthera emarginata</i>		+	+					
<i>Ericksonella saccharata</i>		+						
<i>Eriochilus dilatatus</i> subsp. <i>undulatus</i>	+					+		
<i>Eriochilus scaber</i> subsp. <i>scaber</i>				+			+	
<i>Leptoceras menziesii</i>		+			+			
<i>Leporella fimbriata</i>	+	+						
<i>Lyperanthus serratus</i>	+							
<i>Microtis alba</i>							+	
<i>Microtis media</i> subsp. <i>media</i>		+		+				
<i>Paracaleana triens</i>	+							
<i>Pheladenia deformis</i>	+							
<i>Prasophyllum cyphochilum</i>		+						
<i>Prasophyllum macrostachyum</i>				+				
<i>Prasophyllum parvifolium</i>				+			+	
<i>Prasophyllum sargentii</i>	+							
<i>Pterostylis</i> aff. <i>nana</i>	+	+	+	+				
<i>Pterostylis barbata</i>	+	+	+	+				
<i>Pterostylis dilatata</i>				+				
<i>Pterostylis hamiltonii</i>		+						
<i>Pterostylis recurva</i>	+	+	+					
<i>Pterostylis sanguinea</i>	+	+	+	+				
<i>Pterostylis sargentii</i>		+						
<i>Pyrorchis nigricans</i>	+		+	+	+			
<i>Spiculea ciliata</i>				+				
<i>Thelymitra antennifera</i>				+			+	
<i>Thelymitra benthamiana</i>				+				
<i>Thelymitra crinita</i>	+		+					
<i>Thelymitra flexuosa</i>							+	
<i>Thelymitra graminea</i>						+		
<i>Thelymitra latiloba</i>		+						

Scientific name	1	2	3	4	5	6	7	8
<i>Thelymitra petrophila</i>		+		+				
<i>Thelymitra villosa</i>					+			
Orobanchaceae								
* <i>Orobanche minor</i>		+						+
Oxalidaceae								
<i>Oxalis exilis</i>	+	+		+			+	
* <i>Oxalis pes-caprae</i>								+
* <i>Oxalis purpurea</i>								+
Papilionaceae								
<i>Bossiaea concinna</i>		+						
<i>Bossiaea eriocarpa</i>	+	+	+			+		
<i>Bossiaea spinescens</i>				+	+	+		
* <i>Chamaecytissus palmensis</i>		+						+
<i>Chorizema aciculare</i>					+			
<i>Chorizema dicksonii</i>							+	
<i>Daviesia articulata</i>							+	
<i>Daviesia cardiophylla</i>					+	+		
<i>Daviesia costata</i>	+			+				
<i>Daviesia decipiens</i>							+	
<i>Daviesia decurrens</i>		+			+	+		
<i>Daviesia hakeoides</i> subsp. <i>subnuda</i>		+					+	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	+							
<i>Daviesia longifolia</i>	+					+		
<i>Daviesia nudiflora</i>	+		+					
<i>Daviesia preissii</i>	+		+					
<i>Daviesia rhombifolia</i>		+					+	
<i>Daviesia triflora</i>								
<i>Eutaxia microphylla</i>					+			
<i>Dillwynia laxiflora</i>	+	+				+		
<i>Gastrolobium bilobum</i>				+				
<i>Gastrolobium calycinum</i>		+						
<i>Gastrolobium hookeri</i>		+						+
<i>Gastrolobium microcarpum</i>		+					+	
<i>Gastrolobium obovatum</i>							+	
<i>Gastrolobium ovalifolium</i>		+						
<i>Gastrolobium parviflorum</i>								
<i>Gastrolobium reticulatum</i>	+		+					
<i>Gastrolobium spatulatum</i>		+						
<i>Gastrolobium spinosum</i>		+					+	
<i>Gastrolobium stipulare</i>	+	+						
<i>Gastrolobium stowardii</i>							+	
<i>Gastrolobium trilobum</i>							+	
<i>Gastrolobium tomentosum</i>	+							
<i>Gastrolobium villosum</i>	+			+				
<i>Gompholobium burtonioides</i>		+			+			

Scientific name	1	2	3	4	5	6	7	8
Gompholobium confertum	+		+					
Gompholobium cyaninum	+							
Gompholobium knightianum	+	+	+					
Gompholobium marginatum	+							
Gompholobium preissii	+				+	+		
Gompholobium scabrum	+	+				+		
Gompholobium tomentosum	+							
Goodia lotifolia	+			+				
Hardenbergia comptoniana	+							
Hovea chorizemifolia	+				+	+		
Hovea trisperma subsp. trisperma	+		+					
Isotropis cuneifolia subsp. cuenifolia	+	+	+		+			
Isotropis drummondii		+			+			
Jacksonia alata			+	+	+			
Jacksonia condensata			+		+			
Jacksonia epiphyllum							+	
Jacksonia floribunda	+	+	+					
Jacksonia furcellata	+	+	+					
Jacksonia racemosa					+			
Jacksonia restioides					+			
Jacksonia sternbergiana	+		+					
Kennedia coccinea	+	+	+		+			
Kennedia prostrata	+			+	+		+	
* Lotus angustissimus		+		+			+	
* Lotus suaveolens		+					+	+
* Medicago polymorpha								+
Mirbelia dilatata	+					+		
Mirbelia floribunda		+						
Mirbelia spinosa					+	+		
* Ornithopus compressus		+						+
* Ornithopus sativus								+
Pultenaea ericifolia						+		
Sphaerolobium medium		+						
Templetonia drummondii				+				
* Trifolium arvense		+						+
* Trifolium campestre				+				+
* Trifolium dubium		+						+
* Trifolium glomeratum		+						+
* Trifolium subterraneum		+						+
* Trifolium tomentosum var tomentosum								+
Viminaria juncea							+	
Philydraceae								
Philydrella pygmaea		+		+				
Phormiaceae								
Dianella brevicaulis	+	+				+		

Scientific name	1	2	3	4	5	6	7	8
<i>Dianella revoluta</i> var. <i>revoluta</i>		+	+	+	+	+		
<i>Stypandra glauca</i>				+				
Pinaceae								
* <i>Pinus pinaster</i>		+				+		+
Pittosporaceae								
<i>Billardiera coriacea</i>	+							
<i>Billardiera erubescens</i>		+				+		
<i>Billardiera fraseri</i>				+				
<i>Billardiera fusiformis</i>	+			+	+			
<i>Billardiera variifolia</i>					+	+		
<i>Cheiranthra preissiana</i>				+	+			
<i>Marianthus bicolor</i>	+				+			
<i>Marianthus dryandra</i>						+		
<i>Pittosporum angustifolium</i>								+
Plantaginaceae								
<i>Plantago debilis</i>		+						
Poaceae								
* <i>Aira cupaniana</i>			+	+	+	+	+	
<i>Amphibromus nervosus</i>								+
<i>Amphipogon strictus</i>	+			+				
<i>Amphipogon turbinatus</i>			+					
<i>Aristida contorta</i>		+						
<i>Austrodanthonia caespitosa</i>	+			+				
<i>Austrodanthonia occidentalis</i>	+			+				
<i>Austrodanthonia setacea</i>							+	+
<i>Austrostipa compressa</i>					+			
<i>Austrostipa elegantissima</i>	+			+	+		+	
<i>Austrostipa flavescens</i>				+				
<i>Austrostipa semibarbata</i>			+		+		+	+
<i>Austrostipa trichophylla</i>	+	+				+		
* <i>Avena barbata</i>		+		+			+	+
* <i>Avena fatua</i>		+						+
* <i>Avena sativa</i>								+
* <i>Briza maxima</i>		+					+	+
* <i>Briza minor</i>		+		+			+	+
* <i>Bromus diandrus</i>		+						+
<i>Cymbyopogon obtectus</i>				+			+	
* <i>Cynodon dactylon</i>								+
* <i>Digitaria sanguinalis</i>								+
* <i>Ehrharta longiflora</i>		+	+	+			+	+
* <i>Hordeum leporinum</i>								+
<i>Lachnagrostis filiformis</i>							+	
* <i>Lolium multiflorum</i>		+		+				+

Scientific name	1	2	3	4	5	6	7	8
Microlaena stipoides	+	+					+	
* Molineriella minuta		+						+
Neurachne alopecuroidea	+		+		+			
* Paraphlois incurva							+	+
* Pentaschistis airoides		+	+	+				+
* Poa annua		+						+
Poa drummondiana	+			+	+			
Poa serpentum		+					+	
Spartochloa scirpoidea				+				
Themeda australis		+		+			+	
* Vulpia myuros	+	+	+	+		+		+
Polygalaceae								
Comesperma calymega	+	+	+					
Comesperma scoparium					+			
Comesperma volubile	+	+					+	
Comesperma virgatum							+	
Polygonaceae								
* Acetosella vulgaris		+						+
* Emex australis								+
Muehlenbeckia adpressa	+	+	+					
Persicaria prostrata							+	
* Polygonum arenastrum								+
* Rumex crispus								+
Portulacaceae								
Calandrinia calyptrata	+	+						
Calandrinia corrigioloides			+					
Calandrinia granulifera	+		+		+	+		
Primulaceae								
* Anagallis arvensis var. arvensis				+				+
* Anagallis arvensis var. caerulea		+		+				+
Proteaceae								
Adenanthos cygnorum	+		+		+	+		
Banksia acanthopoda					+			
Banksia armata var. armata	+	+			+			
Banksia attenuata			+					
Banksia bipinnatifida subsp. bipinnatifida	+	+						
Banksia columnaris					+	+		
Banksia cynaroides							+	
Banksia dallanneyi subsp. sylvestris		+						
Banksia drummondii subsp. hiemalis					+	+		
Banksia fraseri var. fraseri		+	+					
Banksia grandis			+					

Scientific name	1	2	3	4	5	6	7	8
<i>Banksia nivea</i> subsp. <i>nivea</i>	+	+				+		
<i>Banksia nobilis</i> subsp. <i>nobilis</i>	+	+				+		
<i>Banksia proteoides</i>						+		
<i>Banksia sessilis</i> var. <i>sessilis</i>	+					+		
<i>Banksia sphaerocarpa</i> var. <i>caesia</i>						+		
<i>Banksia sphaerocarpa</i> var. <i>sphaerocarpa</i>	+				+			
<i>Banksia squarrosa</i> subsp. <i>squarrosa</i>	+	+				+		
<i>Banksia stiposa</i>						+		
<i>Banksia subpinnatifida</i> var. <i>subpinnatifida</i>						+		
<i>Conospermum amoenum</i> subsp. <i>cuneatum</i>		+			+			
<i>Conospermum densiflorum</i> subsp. <i>densiflorum</i>	+				+			
<i>Conospermum filifolium</i> subsp. <i>filifolium</i>				+	+			
<i>Conospermum stoechadis</i> subsp. <i>sclerophyllum</i>		+		+	+			
<i>Conospermum stoechadis</i> subsp. <i>stoechadis</i>	+	+		+				
<i>Grevillea crowleyae</i>	+				+			
<i>Grevillea integrifolia</i>		+			+	+		
<i>Grevillea hookeriana</i> subsp. <i>hookeriana</i>					+	+		
<i>Grevillea leptobotrys</i>	+					+		
<i>Grevillea pulchella</i>	+	+						
<i>Grevillea tenuifolia</i>		+				+		
<i>Grevillea umbellata</i>					+			
<i>Hakea amplexicaulis</i>				+				
<i>Hakea ?anadenia</i> (Rose 659)						+		
<i>Hakea brownii</i>						+		
* <i>Hakea bucculenta</i> x <i>francisiana</i>		+						+
<i>Hakea erinacea</i>	+							
<i>Hakea gilbertii</i>					+	+		
<i>Hakea incrassata</i>		+						
<i>Hakea lehmanniana</i>		+				+		
<i>Hakea lissocarpa</i>	+	+	+			+		
* <i>Hakea multilineata</i>		+						+
<i>Hakea petiolaris</i> subsp. <i>petiolaris</i>				+				
<i>Hakea ?pritzelii</i> (Rose 281)						+		
<i>Hakea prostrata</i>	+	+	+		+			
<i>Hakea ruscifolia</i>		+				+	+	
<i>Hakea trifurcata</i>	+	+	+	+		+	+	
<i>Hakea undulata</i>	+					+		
<i>Isopogon crithmifolius</i>	+	+			+	+		
<i>Isopogon divergens</i>	+	+						
<i>Isopogon dubius</i>		+			+	+		
<i>Isopogon sphaerocephalus</i>	+			+				
<i>Isopogon teretifolius</i>					+			
<i>Lambertia illicifolia</i>		+				+		
<i>Persoonia elliptica</i>	+	+						
<i>Persoonia hakeiformis</i>					+	+		

Scientific name	1	2	3	4	5	6	7	8
<i>Persoonia quiquenervia</i>					+	+		
<i>Persoonia trinervis</i>					+	+		
<i>Petrophile brevifolia</i>					+	+		
<i>Petrophile circinata</i>		+			+	+		
<i>Petrophile divaricata</i>		+				+		
<i>Petrophile filifolia</i> subsp. <i>filifolia</i>	+				+			
<i>Petrophile heterophylla</i>	+	+				+		
<i>Petrophile imbricata</i>						+		
<i>Petrophile seminuda</i>		+						+
<i>Petrophile serruriae</i>		+				+		
<i>Petrophile squamata</i>	+	+			+	+		
<i>Petrophile striata</i>	+							
<i>Stirlingia latifolia</i>	+	+						
<i>Stirlingia simplex</i>				+				
<i>Synaphea flabelliformis</i>	+	+	+		+			+
<i>Synaphea interioris</i>					+			
<i>Synaphea obtusata</i>		+						
Rafflesiaceae								
<i>Pilostyles hamiltonii</i>					+	+		
Ranunculaceae								
<i>Ranunculus pumilio</i>								+
<i>Ranunculus sessiliflorus</i>		+						
Restionaceae								
<i>Alexgeorgea nitens</i>			+					
<i>Desmocladius asper</i>	+		+					
<i>Desmocladius fasciculatus</i>								
<i>Desmocladius parthenicus</i>	+							
<i>Desmocladius flexuosus</i>					+			
<i>Harperia lateriflora</i>	+	+						
<i>Hypolaena exsulca</i>	+		+					
<i>Lepidobolus chaetacephalus</i>	+	+					+	
<i>Lepidobolus preissianus</i>					+			
<i>Loxocarya striata</i>	+	+			+			
<i>Lyginia barbata</i>	+		+					
Rhamnaceae								
<i>Cryptandra arbutiflora</i> var. <i>arbutiflora</i>		+					+	
<i>Cryptandra leucopogon</i>					+			
<i>Cryptandra myriantha</i>					+			
<i>Cryptandra nutans</i>	+	+						
<i>Cryptandra pungens</i>					+			
<i>Polianthion wichurae</i>							+	
<i>Stenanthemum coronatum</i>							+	
<i>Stenanthemum emarginatum</i>							+	

Scientific name	1	2	3	4	5	6	7	8
<i>Stenanthemum tridentatum</i>	+	+						
<i>Trymalium angustifolium</i>		+						
<i>Trymalium ledifolium</i> var. <i>lineare</i>	+	+			+	+		
Rosaceae								
<i>Acaena echinata</i>		+				+		
Rubiaceae								
* <i>Galium divaricatum</i>								
* <i>Galium murale</i>		+		+				+
<i>Opercularia apiciflora</i>	+	+						
<i>Opercularia vaginata</i>	+		+		+			
Rutaceae								
<i>Asterolasia pallida</i> subsp. <i>hyalina</i>							+	
<i>Asterolasia squameligerus</i>		+					+	
<i>Boronia busselliana</i>					+			+
<i>Boronia capitata</i> subsp. <i>clavata</i>			+		+			
<i>Boronia crassifolia</i>								+
<i>Boronia crenulata</i>								+
<i>Boronia ramosa</i> subsp. <i>anethifolia</i>					+			
<i>Boronia scabra</i> subsp. <i>scabra</i>								+
<i>Diplolaena graniticola</i>				+				
<i>Philotheca spicata</i>	+			+				
Santalaceae								
<i>Choretrum glomeratum</i>		+						
<i>Exocarpus sparteus</i>	+				+			
<i>Leptomeria ellytes</i>	+		+		+			
<i>Leptomeria pauciflora</i>	+							
<i>Santalum acuminatum</i>		+						
<i>Santalum murrayanum</i>		+				+		
<i>Santalum spicatum</i>								+
Sapindaceae								
<i>Dodonaea bursariifolia</i>		+				+	+	
<i>Dodonaea ceratocarpa</i>				+				
<i>Dodonaea humifusa</i>		+						
<i>Dodonaea pinifolia</i>					+	+		
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>				+				
Scrophulariaceae								
* <i>Bartsia trixago</i>		+		+				+
<i>Glossostigma drummondii</i>							+	
<i>Gratiola pubescens</i>							+	
<i>Limosella australis</i>							+	
* <i>Parentucellia latifolia</i>		+		+				
* <i>Parentucellia viscosa</i>				+				
* <i>Veronica arvensis</i>		+						+

Scientific name	1	2	3	4	5	6	7	8
Selaginellaceae								
<i>Selaginella gracillima</i>						+		+
Solanaceae								
<i>Nicotiana rotundifolia</i>				+				+
* <i>Solanum nigrum</i>		+		+			+	+
<i>Solanum simile</i>				+				+
Stackhousiaceae								
<i>Stackhousia pubescens</i>	+	+	+	+	+			
<i>Stackhousia scoparia</i>		+			+			
<i>Tripterococcus brunonis</i>	+	+			+			
Sterculiaceae								
<i>Lasiopetalum bracteatum</i>		+						
<i>Lasiopetalum microcardium</i>					+	+		
<i>Thomasia foliosum</i>		+			+	+		
<i>Thomasia macrocalyx</i>		+						
Stylidiaceae								
<i>Levenhookia dubia</i>	+	+		+		+		
<i>Levenhookia leptantha</i>					+			
<i>Levenhookia octomaculata</i>					+			
<i>Levenhookia pusilla</i>	+	+					+	
<i>Levenhookia stipitata</i>			+	+				
<i>Stylidium adpressum</i>						+		
<i>Stylidium amoenum</i>	+	+				+		
<i>Stylidium androsaceum</i>		+						
<i>Stylidium brunonianum</i>			+		+		+	
<i>Stylidium calcaratum</i>			+		+			
<i>Stylidium caricifolium</i>	+	+						
<i>Stylidium carnosum</i>		+						
<i>Stylidium caricifolium</i>	+	+			+			
<i>Stylidium crassifolium</i>								+
<i>Stylidium ciliatum</i>		+				+		
<i>Stylidium despectum</i>		+						
<i>Stylidium ecorne</i>				+				+
<i>Stylidium emarginatum</i> subsp. <i>emarginatum</i>				+				
<i>Stylidium eriopodum</i>						+		
<i>Stylidium guttatum</i>		+						
<i>Stylidium hirsutum</i>	+					+		
<i>Stylidium inundatum</i>				+				+
<i>Stylidium leptophyllum</i>	+							
<i>Stylidium lineatum</i>	+					+		
<i>Stylidium obtustatum</i>	+	+						
<i>Stylidium perula</i>						+		
<i>Stylidium petiolare</i>	+							

Scientific name	1	2	3	4	5	6	7	8
<i>Stylidium piliferum</i>	+		+					
<i>Stylidium pulchellum</i>				+				
<i>Stylidium pycnostachyum</i>		+				+		
<i>Stylidium repens</i>			+					
<i>Stylidium rhynchocarpum</i>						+		
<i>Stylidium roseo-alatum</i>	+			+			+	
<i>Stylidium roseo-nanum</i>				+				
<i>Stylidium schoenoides</i>	+		+					
<i>Stylidium uniflorum</i>		+						
<i>Stylidium zeicolor</i>						+		
Thymelaeaceae								
<i>Pimelea argentea</i>				+			+	
<i>Pimelea cilata</i> subsp. <i>ciliata</i>				+				
<i>Pimelea imbricata</i> var. <i>imbricata</i>				+				
<i>Pimelea preissii</i>						+		
<i>Pimelea spectabilis</i>	+					+		
<i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>	+					+		
<i>Pimelea sylvestris</i>						+		
Tremandraceae								
<i>Platytheca galioides</i>				+				
<i>Tetratheca hispidissima</i>	+				+	+		
<i>Tetratheca virgata</i>	+	+		+				
Urticaceae								
<i>Parietaria debilis</i>				+				
Violaceae								
<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>	+		+					
Xanthorrhoeaceae								
<i>Xanthorrhoea drummondii</i>		+			+	+		
<i>Xanthorrhoea gracilis</i>	+							
<i>Xanthorrhoea brevistylis</i>		+						
Zamiaceae								
<i>Macrozamia riedlei</i>	+	+	+					
Zanichelliaceae								
<i>Lepilaena australis</i>		+						