PART V

THE FLORA OF THE DRYSDALE RIVER NATIONAL PARK NORTH KIMBERLEY, WESTERN AUSTRALIA

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INTRODUCTION

On the expedition to the Drysdale River National Park, we visited all thirteen camp sites. We spent 2-3 days at each site except for C5 at which we had a half day. A brief visit of one hour was made to Galaxy Swamp, just west of C5. The break-down of sites was as follows: ASG: A1, A4, B1, B4, C1, C4; KFK: A2, A3, B2, B3, C2, C3. We both visited C5 and Galaxy Swamp (see Kabay; this publication). The time at each site was limited and, as with the Prince Regent River expedition, we were there in the dry season. We sampled as many formations as possible, recorded structure and dominant species and collected all taxa seen. Many plants were sterile, and some have still not been identified.

Fires burnt out extensive areas around two sites (C1, C2) during the expedition, making it difficult to sample and record them.

Over 1700 plant collections were made. Fungi and lichens are poorly represented; they were less frequent than at the Prince Regent River, and lack of time precluded thorough collecting. A photographic record was made in both colour and black-and-white of most vegetation formations and of many individual species.

NOTES ON THE COLLECTION

The following list contains all the taxa so far identified, if only to family. It totals 594 taxa, in which there are 15 fungi, 14 lichens, 2 bryophytes, 25 ferns and fern allies, 1 gymnosperm and 537 flowering plants (129 monocots, 408 dicots). The monocots belong to 64 genera in 22 families, and the dicots to 229 genera in 77 families.

In terms of species numbers, the Poaceae are the largest family in the Park, closely followed by the Myrtaceae, though collecting in the wet season would add greatly to the former. The Papilionaceae and Cyperaceae are next, with lesser numbers again of Mimosaceae, Euphorbiaceae, Rubiaceae, Asteraceae and Scrophulariaceae. The remaining families are represented by less than 15 species. Table 1 lists the number of taxa in the larger families.

TABLE 1

NUMBER OF TAXA IN THE LARGER FAMILIES IN THE DRYSDALE RIVER NATIONAL PARK

Poaceae	****		****		53
Myrtaceae		1888		****	52 (Eucalyptus 31)
Papilionaceae	****	14940		****	35
Cyperaceae		+111	****	****	32
Mimosaceae		****	1500		27 (Acacia 26)
Euphorbiaceae	****	-442		****	20
Rubiaceae				Tees	18
Asteraceae	****	****		2000	16
Scrophulariaceae	****	****		200	15

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Once again there are many records previously unpublished for Western Australia. The list includes 35 taxa, but the undetermined material contains others. Eight of the new records are genera not previously known to occur in the State, viz Homalocalyx (Myrtaceae), Metrosideros (Myrtaceae), Micraira (Poaceae), Plagiocarpus (Papilionaceae), Pseudopogonatherum (Poaceae), Rapanea (Myrsinaceae), Syzygium (Myrtaceae) and Viscum (Viscaceae). The occurrence of Rapanea is of particular interest: the genus is widespread in tropical and sub-tropical countries and in Australia is known from north Queensland to eastern Victoria but has so far not been recorded in the Northern Territory.

Ferns and fern allies

Due to the relative dryness of the area ferns are rare over most of the Park, being restricted chiefly to moist, sheltered habitats. Only Platyzoma microphyllum occurs in dry sandy open-woodland. Seepages on cliffs and permanent pools or creeks in rocky gullies usually support one or more species of ferns. The most commonly seen are Lygodium microphyllum, Lindsaea ensifolia, Blechnum orientale and Selaginella ciliaris. Worriga Gorge (C1) has the richest fern populations in the Park due to its sheltered habitats with adequate permanent water. Here 13 species were recorded, two of them for the first time in W.A. (Christella dentata and Doryopteris concolor). At the edge of the vine forest in the gorge, the growth of Stenochlaena palustris, Lygodium microphyllum, Cyclosorus interruptus and Blechnum orientale forms the most luxuriant population of ferns yet seen in the State (colour plate 2, this bulletin).

Four species collected at other sites are also new records. Lygodium japonicum was found in seepages on sandstone cliffs in Glider Gorge (B1). Two collections made by P. G. Wilson in 1973 from a similar habitat on the south west island of the Osborne group, in Admiralty Gulf, have also been determined as this species. The Ophioglossum recorded among closed-grassland at C4 is a small leafless plant about 2 cm tall. Several of the specimens are fertile, but they do not match O. coriaceum A. Cunn., the common species of southern W.A. and the only one previously recorded for the State. Schizaea digitata was found in both arms of Forest Creek (C5), though it was uncommon. There appears to be no published record of the species for Australia. has also been no published record for W.A. of Isoetes muelleri, though there is another recent collection from the Kimberley—Galvins Gorge, late 1974, A. C. Beaugle-hole (C. Marsden, pers. comm.). In all, 25 ferns and fern allies were collected in the Park.

Aquatic plants

The aquatic and semi-aquatic flora was quite varied due to the diverse nature of the pools, creeks and rivers as to size, depth, substrate and associated vegetation. In view of the recent publication of "Aquatic Plants of Australia" by H. I. Aston (1973), it seems appropriate to provide a table of those species which we consider to

be aquatic in the Park, using Aston's definition (p. 1) but noting that the water in which the plants occur may not be permanent.

Table 2 lists 30 taxa and indicates that the Park contains a more diverse aquatic flora than that of the Prince Regent River Reserve. Although the latter receives a higher rainfall, the areas visited by us there in 1974 were mostly unsuited to aquatic plants, though it is likely that further collecting will add to the total for the Reserve.

TABLE 2

AQUATIC PLANTS RECORDED IN THE DRYSDALE RIVER NATIONAL PARK

Aponogeton elongatus F. Muell. ex Benth.

Blyxa aubertii Rich.

Blyxa echinosperma (Clark) Hook.f.

Caldesia oligococca (F. Muell.) Benth.

Dysophylla verticillata Benth.

Ebermaiera glauca Nees

Eriocaulon setaceum L.

Fimbristylis sp. (ASG 13543)

Fuirena umbellata Rottb.

Isoetes muelleri A. Br.

Limnophila chinensis (Osbeck.) Merr.

Limnophila indica (L.) Druce

Limnophila sp. (ASG 13551, 13737, 14161)

Marsilea angustifolia R.Br.

Marsilea ? mutica Mett.

Microcarpaea minima (Koen.) Merr.

Myriophyllum dicoccum F. Muell.

Myriophyllum trachycarpum F.Muell.

Myriophyllum sp. aff. trachycarpum (ASG 13545)

Myriophyllum verrucosum Lindl.

Naias tenuifolia R.Br.

Nymphaea gigantea Hook.

Nymphoides hydrocharoides (F.Muell.) Kuntze

Nymphoides indica (L.) Kuntze

Nymphoides minima (F.Muell.) Kuntze

Pseudoraphis abortiva (R.Br.) Pilger

Triglochin procera R.Br. var. dubia (R.Br.) Benth.

Utricularia exoleta R.Br.

Utricularia stellaris L.f.

Vallisneria spiralis L.

Several other plants should be mentioned here, since they are aquatic at first but flower well after the surface water has disappeared. They include Limnophila fragrans, a number of Eriocaulon species and Goodenia lamprosperma. The last has a rosette of leaves with floating lamina (like Potamogeton) which are replaced by the usual self-supporting leaves after the water dries up. The inflorescence develops later.

The semi-aquatic fern Ceratopteris thalictroides was found beneath a small waterfall in Worriga Gorge.

Comparison with the Prince Regent River Nature Reserve

Comparison with the Prince Regent River floristic list (George and Kenneally, 1975), shows that approximately 39 per cent of the taxa in the Park were recorded also in the PRRNR. Although this figure, based on two field trips, is a preliminary one, it indicates the difference in

floristics between the reserves and underlines their value in conserving a wide range of Kimberley plants. Table 3 highlights some of the differences.

TABLE 3

NUMBER OF TAXA IN SEVERAL FAMILIES AND GENERA SHOWING COMPARISON BETWEEN DRYSDALE RIVER NATIONAL PARK AND PRINCE REGENT RIVER NATURE RESERVE

		Total DRNP	Total PRRNR	Common to both
Poaceae	 97000	53	30	15
Myrtaceae		52	27	20
Eucalyptus	 ****	31	15	11
Mimosaceae	 ****	27	23	15
Acacia	 ****	26	21	14

There is also a marked difference in the number of Cyperaceae in the lists (DRNP 32, PRRNR 9) but when the Prince Regent list was published many collections of this family had not been determined and the species numbers are now similar.

ARRANGEMENT OF THE LIST OF SPECIES

The fungi and lichens are arranged alphabetically. The ferns, gymnosperms, monocots and dicots are arranged alphabetically within families which are themselves alphabetical in each section. New records are marked by a dagger (†). In the habitat notes, "obs." indicates a sight record only. Under the site headings, "GS" refers to Galaxy Swamp.

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Figure 1—The fern Nephrolepis hirsutula (Forst.) Pr. at Dulcis Falls (B1). ASG 13657.



Figure 2—The fan palm Livistona Ioriphylla near Solea Falls (B4). ASG 13758.



Figure 3—Two species of *Eriocaulon* in silt among sandstone rocks in the bed of Palmoondoora Creek above Morgan Falls (CI). Left: E. cinereum R.Br.; right: E. quinquangulare L.



Figure 4—Stenocarpus cunninghamii R.Br. in flower and fruit at Solea Falls (B4). ASG 13418.

LIST OF PLANT SPECIES

							SI	TE						
SPECIES	Al	A2	A3	A4	В1	B2	В3	B4	C1	C2	C3	C4	C5	GS
FUNGI										25.007				
Ganoderma applanatum (Pers.) Pat. On stem of living Acacia tumida (B2); on Eucalypt (C2).					V	X				X				
Ganoderma lucidum (Leys. ex Fr.) Karst On base of trunk of Terminalia grandiflora Gloeophyllum abietinum (Fr.) Karst On dead fallen wood, flood debris beside					X						X			
Planigale Creek. Gloeophyllum concentricum G. H. Cunn On dead wood among low open-woodland						X								
Lycoperdon sp. KFK 4210							X							
Osmoporus brunneo-leucus (Berk.) G. H. Cunn On dead fallen wood in low open-wood- land.							X							
Osmoporus strigatus (Berk.) G. H. Cunn Bracket fungus on dead stem of Owenia vernicosa.				X										
Panus fasciatus (Berk.) Pegler On dead wood (B2); on dead wood, flood debris beside Carson River (C2). Phellinus caryophylli (Raciborski) G. H. Cunn						X			X	X				
In vine forest. Phellinus nilgheriensis Mont On dead log by creek.									X					
Phellinus setulosus (Lloyd) Imazeki On bloodwood Eucalyptus (B4); on trunk of living Xanthostemon (C5).					X	X		X					X	
Phellinus spadiceus (Berk.) G. H. Cunn On Acacia aulacocarpa (A4); on dead limb of Eucalyptus near creek (B1). Polyporus arcularius Fr		X			A	Λ								
Pseudofavolus tenuis (Hook.) G. H. Cunn. Pycnoporus sanguineus (L. ex Fr.) Murr On dead wood (A4); on dead wood beside				X						X	X	X		
Carson River. Stereum strigoso-zonatum(Schw.) G. H. Cunn On dead limb of Eucalyptus oligantha.				X										
LICHENS Buellia disciformis (Fr.) Mudd		X									X			
Lichen on sandstone (A2) (C3). Buellia subdisciformis (Leight) Vain		X												
Lichen on sandstone Caloplaca fulgens Koerb		X												
Lichen on sandstone Candellaria xanthostigma (Pers. ex Ach.) Lett.		X								X				
Lichen on sandstone (A2) (C2). Diploschistes sp. A		X												
Lichen on sandstone. Diploschistes sp. B		X				1								
Lichen on sandstone. Parmelia (Melanoparmelia) sp		X	X											
Lichen on sandstone (A2) (A3). Parmelia (Parmelia) sp		X												
Lichen on sandstone. Parmelia (Xanthoparmelia) sp. A Lichen on sandstone.		X												

							SI	TE						
SPECIES	AI	A2	A3	A4	В1	B2	В3	В4	CI	C2	C3	C4	C5	GS
Pertusaria sp Lichen on sandstone. Pyxine petricola Nyl. Lichen on Buchanania, in low woodland. Pyxine sp. A		x										x		
Lichen on sandstone. Pyxine sp. B Lichen on sandstone, cliff edge. Relicina amphithrix Hale Lichen on Erythrophleum, in low woodland.		X		х										
BRYOPHYTA Anthoceros sp. ASG 14100 Below waterfall in gorge. Octoblepharum albidum Hedw. Moss in low closed-forest at head of Woorakin Creek (C2); in seepage at foot of sandstone cliff, in low closed-forest (C4); on damp gully walls of Schizaea Creek (C5).									х	X		X	X	
PTERIDOPHYTA Ferns and Fern Allies ADIANTACEAE Adiantum philippense L Dormant; in seepage at base of sandstone cliff (C1) (C4).									х			x		
BLECHNACEAE Blechnum orientale L		x							x	x		x	x	
GLEICHENIACEAE Dicranopteris linearis (Burm.f.) Underwood Scrambling fern on sandstone seepage areas (C1) (C2) (C5).									x	x			X	
GYMNOGRAMMACEAE Platyzoma microphyllum R.Br In wet areas beside creek under Pandanus (A2); in sand in low woodland (A4) (B1) (B4). On edge of open-woodland among broken siltstone by creek (B2).		x		x	x	x		х						
ISOETACEAE †Isoetes muelleri A.Br Aquatic. In pool 1.5 m deep.										X				
LINDSAEACEAE Lindsaea ensifolia Sw. On seepage area of sandstone gorge, common (A2) (B1) (C1) (C2) (C4) (C5). Lindsaea? orbiculata (Lam.) Mett. Rare on seepage area of sandstone cliff ledge.		x x			x				x	x		x	x	

							SI	TE						
SPECIES	Al	A2	A3	A4	В1	В2	В3	B4	CI	C2	C3	C4	C5	GS
LYCOPODIACEAE Lycopodium cernuum L Bright green fern. In black loam in seepages at foot of sandstone cliff (C1); by creek in closed-forest (C5).									x				X	
MARSILEACEAE Marsilea angustifolia R.Br Stems underground; leaflets broad on aquatic plants, narrow where emergent or on drying sand. By creek (B4); in sand, in low woodland near swamp (Galaxy Swamp). Marsilea? mutica Mett. ASG 13553 KFK 4402	x							X		X				X
OLEANDRACEAE †Nephrolepis hirsutula (Forst.) Pr Fern in wet crevices on sandstone cliff (B1); among sandstone rocks in gorge (C1).					X				X					
OPHIOGLOSSACEAE †Ophioglossum sp. ASG 13916 Minute herb; leafless; fertile. In seepage at top of scarp, around sandstone rocks in closed- grassland.												X		
PARKERIACEAE Ceratopteris thalictroides (L.) Brongn. Fern under low waterfall in gorge.									X					
**SCHIZAEACEAE †*Lygodium japonicum (Thunb.) Sw Climbing fern. On sandstone cliff, and in rocky sandstone gully in low closed-forest. Lygodium microphyllum (Cav.) R.Br Scrambling fern in sandstone gorge among Pandanus (A2) (C2); in seepages on sandstone cliff above river (B4); by creek at		X			X			x	X	X			X	
edge of vine forest, and at foot of sand- stone cliff (C1); on creek bank (C5). †Schizaea digitata (L.) Sw Common in wet moss wall of gorge; among sandstone rocks near creek, in low closed- forest.													X	
SELAGINELLACEAE Selaginella ciliaris (Retz.) Spring Under sheltered seepage area on sandstone scarp (A2) (A4) (B3) (C4); sheltered damp ledges of Morgan Falls (C1). Selaginella sp. KFK 4033, 4042 Small erect plant. On damp mud among closed-grassland on edge of Forrest River		X	X	X			X		X			X		
SINOPTERIDACEAE Cheilanthes tenuifolia (Burm.f.) Swartz In damp sand in shelter of sandstone rocks by pool (B4); growing from fissures in sandstone (C2).								X		X				

							SI	TE						
SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Cheilanthes vellea (R.Br.) F.Muell. Woolly fern, dry and dormant. Common in sand and among Triodia clumps (A2); on rocky scarp of Ashton Range (A4); near water seepage at base of sandstone cliff (B3). Cheilanthes sp. KFK 4408 In dried creek bed near junction of Woorakin Creek and Carson River. †Doryopteris concolor (Langsd. & Fischer) Kuhn Rhizomatous fern, becoming dormant. Among sandstone rocks in vine forest.		х		x			x		X	X				
THELYPTERIDACEAE †Christella dentata (Forsk.) Brownsey & Jermy Rhizomatous fern. Under waterfall in gorge. Cyclosorus interruptus (Willd.) Ching Rhizomatous fern. Among sandstone rocks by creek, at edge of vine forest.									x x					
GYMNOSPERMAE CUPRESSACEAE Callitris intratropica Baker & Smith Trees up to 12 m. In sand, in low openforest (A1) (A4); on sandstone (A3) (B3); on sandstone scarp, in low open-woodland (A4); on plain and on sandstone plateau in low woodland (B1) (B4) (C1) (C4); on siltstone (B2); in sandstone creek bed (C3).	x	х	х	X	X	x	x	x	X		x	X		
MONOCOTYLEDONAE ALISMATACEAE Caldesia oligococca (F.Muell.) Benth Aquatic; lvs floating; infl. emergent with white fls. In billabong (A1); in black drying mud (Galaxy Swamp).	х													X
AMARYLLIDACEAE Crinum? flaccidum Herbert Bulbous herb; in leaf only. On damp sandstone ledge by waterfall.									X					
APONOGETONACEAE Aponogeton elongatus F.Muell. ex Benth Aquatic; only inflorescence emergent; fls yellow (C3) (C5).											X		X	
ARACEAE Colocasia antiquorum Schott Rhizomatous perennial herb. In black loam by creek in low woodland.									X					
ARECACEAE †Livistona loriphylla Beccari Palm to 3 m; leaves cleanly abscised; fls cream, strongly sweetly scented. On sandstone (B3) (C3) (C5); in tall shrubland (B4).							X	x			X		X	

							SI	TE						
SPECIES	A1	A2	A3	A4	ВІ	B2	В3	B4	CI	C2	C3	C4	C5	GS
CENTROLEPIDACEAE Centrolepis banksii R. & S Caespitose reddish ephemeral. On damp river bank (A1) (B1). Centrolepis exserta (R.Br.) R. & S Ephemeral herb. On mud at edge of Drysdale River (A3) (B2); on sandy creek bank (A4) (B1) (B4); in sand, in low woodland near swamp (Galaxy Swamp). Centrolepis aff. pusilla R. & S. ASG 13911 Small sedge. In seepage at top of scarp, in closed-grassland.	X		x	X	x	X		X				X		x
CYPERACEAE Cyperus aquatilis R.Br. Ephemeral sedge. In mud of swamp (A3) (C3); in damp rocky soil along creek (C1); in black drying mud of swamp (Galaxy Swamp). Cyperus difformis L On edge of Woorakin Creek near junction with Carson River. Cyperus holoschoenus R.Br Perennial sedge. On damp sandy river bank (A1) (B3) (C3); in black mud on	X		X				X		X	X	x			x
edge of swamp (Galaxy Swamp). Cyperus sp. ASG 13194, 13444, 13487 Rhizomatous sedge. On river bank (A1); in sandy creek bed (A4) (B4). Cyperus sp. ASG 13442 Fls green. On sandy creek bank. Cyperus sp. ASG 13464, 13610 Ephemeral sedge. In damp sand under Melaleuca argentea by river. Cyperus sp. ASG 13712 Caespitose sedge; fls brown and green. In rocky sand in river bed (B1) (C4). ?Cyperus sp. ASG 14066 Perennial caespitose sedge; fls brown. In	x			x	X			X	X			X		
sandstone crevices near creek. Cyperus spp. KFK 4314, 3073, 3088, 4271, 3022 Beside creek (A2) (A2) (A2) (B2) (B2). Eleocharis sp. ASG 13739 Ephemeral herb. In sand between spinifex clumps, in tall shrubland. Eleocharis sp. ASG 13958 Small sedge. In river bed. Eleocharis sp. ASG 14137 Perennial sedge. In black mud, in wet		X				X		X				X		X
swamp. Fimbristylis arthrostyloides W. V. Fitzg Caespitose sedge. Among sandstone boulders under open-woodland. Fimbristylis? littoralis Gaud. ASG 13954 In damp sandy/rocky river bed. Fimbristylis aff. pauciflora R.Br. KFK 4088 In wet areas of remnant pools of Forrest River. Fimbristylis sp. KFK 4387 Semi-aquatic. On edge of creek.			x							X	X	X		

							S	ITE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	GS
Fimbristylis sp. ASG 13195, 13858, 13619, 14106 Small caespitose sedge. On sandy creek bank (A4) (B1); on peaty banks matted with roots, in sandstone gully in low				x	x							x	x	
closed-forest (C4) (C5). Fimbristylis sp. ASG 13283, 13584 Caespitose perennial sedge. In wet creek bed (A1); in closed-grassland (A4). Fimbristylis sp. ASG 13465	x			х										
Small caespitose sedge. In damp sand by river. Fimbristylis sp. ASG 13470, 13983														
Caespitose ephemeral sedge, dry. On dry sandy bank near river (A1); on wet sand-stone ledge by waterfall (C1).	X								X					
Sedge. In billabong, in fl. at water's edge. Fimbristylis sp. ASG 13603, 14089 Caespitose perennial sedge. In rocky basaltic loam by creek (B1); in black loam	X				X				X					
by seepage below cliff in gorge (C1). Fimbristylis sp. ASG 13644, 13619 Caespitose sedge. In rocky sandstone gully in low closed-forest. Fimbristylis sp. ASG 14058					X				X					
Sedge. On water's edge, along rocky creek on plateau. Fuirena ciliaris (L.) Roxb			v	v		37		v						
Ephemeral sedge; fls green. In sand in woodland (A4); in sand beside creek (A3) (B2) (C1); on mud by river (B4).			X	X		X		Х	Х					
Fuirena umbellata Rottb Aquatic sedge. In creek (A1) (C1). Lipocarpha microcephala Kunth	X								X		v			
Ephemeral sedge; fls green. In damp sand near river (A1); by creek (C1) (C3).	A								X	X	X			
Erect sedge. On mud flats near junction of Woorakin Creek and Carson River. Scirpus mucronatus L. subsp. robustus (Miq.) T.Koyama	x			x						Λ				
creek bed (A1) (A4). Scirpus? supinus L. KFK 4121 On wet mud (B3); in drying mud of swamp (Galaxy Swamp).							X							X
Scleria sp. KFK 4336 Perennial sedge up to 2 m, dense stand in seepage in sandstone gorge.										X				
ERIOCAULACEAE Eriocaulon cinereum R.Br	x					x		x	X					
Ephemeral herb; in damp sand by river (A1). Semi-aquatic herb. In damp areas of drying creek bed (B2) (B4) (C1). Eriocaulon aff. cinereum R.Br. ASG 13480	x													
In damp sand by river Eriocaulon pygmaeum Soland Semi-aquatic herb on mud banks.	^									X				

							SI	TE						
SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	CI	C2	C3	C4	C5	GS
Eriocaulon quinquangulare L In billabong and on bank (A1); on mud banks among sandstone rocks in creek bed (C1). Eriocaulon setaceum L	x	x	x	x	x	x	X	x	x					
Eriocaulon setaceum L. Aquatic herb; inflorescence emergent. Common in pools (A1 obs.) (A2) (A3) (A4) (B1) (B2) (B3) (B4) (C1 obs.). Eriocaulon sp. KFK 4089, 4120, 4270, 4493, ASG 13479, 13504, 13762, 13816, 14067	X	A	X	Α	Α	X	X	x			x			
Semi-aquatic herb. Beside pools (A1) (A3) (B2) (B3) (B4) (C3)	Α		Λ			14		**						
FLAGELLARIACEAE Flagellaria indica L Climbing liane; fls cream. In rocky sand- stone gully, in low closed-forest (B1 obs.); in sandstone (B3) (C3); in gorge in low- woodland near creek (C1).					x		x		x		х			
HAEMODORACEAE Haemodorum? flaviflorum W. V. Fitzg Dry herb, in old fruit. In closed-grassland				x										
HYDROCHARITACEAE Blyxa aubertii Rich Aquatic; fls white, emergent. Common in shaded pools (B3) (B4) (C5). †Blyxa echinosperma (Clark.) Hook.f	x						x	x x					X	
Aquatic; fls white, emergent. In pools of creek (A1) (B4); more robust than B. aubertii and occurring with it (B3). Vallisneria spiralis L	x						x		x					
UNCAGINACEAE Triglochin procera R.Br. var. dubia (R.Br.) Benth Erect, tuberous, aquatic herb up to 0.5 m; fls yellowish green; styles green; fruits green, cylindrical. In sand, in pools of creek (A1) (B2); among sandstone rocks in river (B4).	x					x		х						
Asparagus racemosus Willd. Climber, ± dead, with fruit. In rocky loam in low woodland. Smilax australis R.Br. Climber with tendrils and thorns. In dry sandy low woodland (A1); in rocky sand-	х				x		x		x	x	x		X	
sandy low woodland (A1), firstly sand stone gully, in low closed-forest (B1); on sandstone cliff (B3) (C2) (C3) (C5); in vine forest (C1). Thysanotus chinensis Benth. Herb with small rhizome; fls blue-mauve. In damp areas near creek (A2) (A3) (B2); in closed-grassland (A4) (B4).		X	x	x		x		х						

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SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Tricoryne elatior R.Br Diffuse rhizomatous herb; fls yellow. In damp closed-grassland near creek (A2); in sand in open-forest (A4); in low woodland (B4).				x				x						
NAJADACEAE Najas tenuifolia R.Br Aquatic, on mud banks of river.										x				
ORCHIDACEAE Cymbidium canaliculatum R.Br. Epiphytic plant in burnt out hollows of Eucalypt (A3); (B1 obs.) (C1 obs.) (C4 obs.)			X		x				x			х		
Dendrobium dicuphum F.Muell Epiphytic orchid on Pandanus, Tristania and Syzygium, in low closed-forest in gully (B1); by creek at edge of vine forest (C1 obs.); on Syzygium in low closed-forest (C4); on Pouteria in low closed-forest (C5).					X				х			Х	X	
PANDANACEAE Pandanus aquaticus F.Muell. Slender tree to 6 m; lvs ± bright green; aerial rootlets on stem; fruit very small, fallen. Common on river banks (A1) (B1) (B4 obs.) (C1) (C2).	x				x			x	х	х				
Pandanus spiralis R.Br. var. convexus (St. John) Stone		X		x						x				x
Pandanus spiralis R.Br. var. darwiniensis (St. John) Stone Tree to 6 m; fruit green turning yellowish. In sand in tall open-shrubland (A1) (A4). Pandanus spiralis R.Br. nr. var. thermalis (St. John) Stone ASG 13677	X			X	x							x		
Tree to 8 m; fr. red. In sand in woodland near creek and along rocky creek bed (B1); in seepage in valley at top of scarp (C4). Pandanus sp. ASG 14084 Tree to 8 m; fr. red. In black loam by creek, in low woodland.					- 82				x					
PHILYDRACEAE Philydrum lanuginosum Banks & Solander ex Gaertn Perennial herb; fls yellow. In pools and creek beds (A1 obs.) (A2) (A4) (B1 obs.) (B2) (B3) (C1 obs.) (C2) (C3).	x	X		x	x	x	x		x	x	x			
POACEAE Aristida ingrata Domin ± dry caespitose perennial grass. In sandyclay at edge of gully below escarpment (B1); in rocky sand in woodland at foot of scarp (C4).					x							x		

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SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	Cl	C2	С3	C4	C5	GS
Arundinella nepalensis Trin	x	X		X					X			X		
in open-woodland, especially near creek (A4); by creek (C1). Cymbopogon bombycinus (R.Br.) Domin Ephemeral grass, dry. In sand in woodland (B1); on sandstone flats with Triodia (A3).			X		X									
Cymbopogon procerus (R.Br.) Domin Caespitose grass. Common along the sand- stone cliff base below Boiga Falls (A2); on sandstone flats (C3). Digitaria longiflora (Retz.) Pers		X			X	x					X			
Rhizomatous grass. On rocky basaltic creek bank (B1); on white river-washed sand beside creek (B2). Dimeria ornithopoda Trin Ephemeral grass. In wet crevices on sandstone cliff (B1) (C1); on wet area					X	х			X					
beside creek (B2). Ectrosia danesii Domin Perennial grass. In sandy-loam near swamp, in low woodland (Galaxy Swamp); in sand, in woodland (A4).				X										x
Ectrosia leporina Benth Ephemeral grass. In sand over sand- stone by billabong (A1); in sand in low woodland (A4); beside creek (B2) (C3); in damp sand near river (B4); in gorge, near cliff (C1); in seepage at top of scarp, in grassland among low open-woodland	X			X		х		X	X		X	X		
(C4). Ectrosia schultzii Benth Caespitose grass. In sand by creek (A1); at edge of swamp (Galaxy Swamp)	х													X
Elytrophorus spicatus (Willd.) A.Camus Bright green ephemeral grass. In damp sand by river (A1); dried, in closed-grassland (A4); in and around pools of rocky basaltic creek bed (B1); beside creek (B3) (C2); edge of swamp (Galaxy Swamp).	X			X	X		X			Х				X
Eragrostis japonica (Thunb.) Trin Ephemeral grass. On creek banks. Eragrostis aff. setifolia ASG 13184 Caespitose perennial grass. In sand in woodland.				x	X									
Eragrostis speciosa (R. & S.) Steud. Caespitose perennial grass. In sand, in tall open-shrubland (A1); in loam, in open-grassland among open-woodland (A4).	х			х										

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	CI	C2	С3	C4	C5	G
†Eragrostis tenax Jedw. Dried grass. On sandy bank near river (A1); in seepage at top of scarp, in grassland with low open-woodland (C4). Eragrostis sp. ASG 13225	х			x								x		
Eragrostis sp. KFK 4231, 4312, 4461, ASG 13467, 13786	x			x	x	X		x			x			
white sand banks of creeks (B2) (C3). Eriachne festucacea F.Muell. Perennial grass. In damp sand by river (A1) (B1) (C4); along creek banks (A2). Eriachne glauca R.Br.	X	х			х							x		X
Perennial grass. In black drying mud of swamp. Eriachne obtusa R.Br Perennial grass. In sand in open-forest. Eriachne sulcata Hartley			X	x										24
Caespitose perennial grass. Common in closed-grassland by river. Eriachne triodioides Domin Ephemeral grass 1 m high in small clumps, dry. On sandy bank near river.	X													
Eriachne triseta Nees Caespitose perennial grass. In sandy- loam over sandstone along dry creek, in tall shrubland (B4); in loam at foot of sandstone cliff (C1); in sandstone gully in low closed-forest (C5).								X	X				X	
Caespitose perennial grass. In sandstone gully, in low open-forest. ? Eriachne sp. KFK 4099 Caespitose perennial grass. Common in closed-grassland by river.			x										X	
Eriachne sp. KFK 4310, 4562 Caespitose perennial grass. On wet banks of creek (B2); among Triodia (C3). Eulalia fulva (R.Br.) O.Kuntze Heterachne abortiva (R.Br.) Druce				x	x	Х					X			
Ephemeral grass. In loam in grassland among open-woodland. Heteropogon contortus (L.) Beauv. ex R. & S. Perennial grass. In dry closed-grassland (A4); on Carson Volcanics under low				x						x				
open-woodland and along banks of Carson River (C2). Micraira aff. subulifolia F.Muell. Stoloniferous perennial grass; fls over. On wet, shaded sandstone ledges in					X				x	x	x			
gully in low closed-forest (B1); on rock ledges by waterfall (C1); on shaded gorge floor (C2); forming dense mats on cave floors (C3). Oryza australiensis Domin														х
Perennial grass. On drying mud in swamp. Panicum sp. ASG 13218 Caespitose perennial grass; fls over. In sand, in low open-forest.				x										Λ

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SPECIES	A1	A2	A3	A4	В1	B2	В3	B4	C1	C2	C3	C4	C5	SC
Paspalum commersonii Lam	X				X				X					
Caespitose perennial grass. In sand over sandstone by billabong (A1); on wet														
ledges of sandstone cliff (B1); creek banks in gorge (C1).														
Plectrachne bynoei C. E. Hubb.	X						X		X			X		
Spinifex in large, loose clumps. Common (A1); on rock ledges above Johnson														
Creek (B3); on rocky creek banks (C1); in														
low woodland (C4).	V			v				X						
Plectrachne pungens (R.Br.) C. E. Hubb Spinifex in loose clumps; lvs bright green,	X			X				Λ						
viscid; fl. over. On dry sandy bank near														
river (A1); in sand in low woodland (A4);														
on sandstone rises in tall shrubland and low open-woodland (B4).														
? Plectrachne sp. KFK 3096		X												
Spinifex forming loose clumps at bottom of Boiga Falls.														
†Pseudopogonatherum contortum (Brongn.) A.					X		1							
Camus							ŀ							
Ephemeral grass. In rocky basaltic loam, in grassland by creek.														
Pseudoraphis abortiva (R.Br.) Pilger	X													
Stoloniferous perennial grass, aquatic.														
In billabong. Sacciolepis indica (L.) Chase	X													
Perennial grass; fruiting stems submerged														
and seed germinating on surface. In creek. Sacciolepis myosuroides (R.Br.) A. Camus			X		X									
Ephemeral grass. On wet areas beside			Λ		Λ									
creek (A3); in rocky basaltic loam by														
creek (B1). Sclerandrium truncatiglume (F.Muell.) Stapf														
& Hubb					X	X	X					X		
Caespitose perennial grass. On wet ledges														
of sandstone cliff (B1); beside creek in deep alluvial sand (B2) (B3); in sandstone														
creek bed on scarp, in low woodland (C4).														
Setaria surgens Stapf Perennial grass. In grassland near river.			X											
Themeda australis (R.Br.) Stapf			X							X				
Caespitose perennial forming dense stands														
near campsite on Forrest River watershed (A3); forming dense stands with <i>Hetero</i> -														
pogon contortus on Carson Volcanics (C2).				i							37			
†Triodia microstachya R.Br Spinifex, in large loose clumps. Common											X			
in alluvium in rock fissures by creek.	1													
Triodia aff. mitchellii Benth. ASG 13832								X						
Spinifex; \pm lax, viscid. On sandstone rises in tall shrubland														
Trioida pungens R.Br							X	X	X			X		
Spinifex in large, coarse clumps, very														
viscid. Forming hummock grassland above Cracticus Falls (B3); among sand-														
stone rocks in tall shrubland and low														
open-woodland (B4) (C1); along rocky and sandy creek in low woodland (C4).														
? <i>Triodia</i> sp. KFK 4572, 4079	-		X								X			
Spinifex forming dense clumps on sand-														
stone under low open-woodland (A3) (C3).														

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Vetiveria pauciflora S. T. Blake Caespitose perennial grass; sterile. In sand by billabong (A1); in river washed sand (B2); along creek banks (B3); in black mud by swamp (Galaxy Swamp).	x					X	x				x			x
XANTHORRHOEACEAE Lomandra? elongata (Benth.) Ewart Caespitose perennial herb. In sand in open-woodland.				X										
XYRIDACEAE Xyris complanata R.Br. Caespitose, perennial herb; fls yellow. On edge of creek (A1) (A2) (A3) (B1) (B2) (B4) (C3); in closed-grassland (A4) (C4). Xyris aff. oligantha Steud. ASG 13827	x	x	х	X	х	X		X	X		х	X		
Ephemeral herb; stems red. In sandy hollow in open-woodland near river (B4); on wet bank by creek (C1); in seepage in valley at top of sandstone scarp, among grass in low open-woodland (C4).	X		X				X	Λ	X			Λ		37
Perennial herb; fls yellow. In damp areas and along creek banks (A1) (A3) (B3). Ephemeral herb; fls yellow. In sandy mud among sandstone rocks by creek on plateau (C1); in black drying	^		Λ				A		X					X
mud of swamp (Galaxy Swamp). Xyris aff. pauciflora Willd. KFK 4044 ? Perennial herb to 15 cm; fls yellow. In damp sand near creek. Xyris sp. ASG 13632 Plants single. In rocky basaltic creek bed.			X		X									
DICOTYLEDONAE ACANTHACEAE Dicliptera glabra Done On sandstone scree slope in gorge (A2) (B2). Dead ephemeral, in rocky basaltic		X			x	X								
soil near creek in low woodland (B1). Ebermaiera glauca Nees Semi-aquatic; fls lilac. Common in and by pools along creek (C1) (C2). Hypoestes floribunda R.Br		X			X				x	X		X		
Spindly, much branched plant up to 1.5 m; fls mauve or pink with white streaks. In sand over sandstone (A2); in rocky gully by creek in low closed-forest (B1); at base of sandstone cliff in low closed-forest (C4). Nelsonia brunellodes (Lam.) O.K	x			X		X								
Prostrate, hirsute herb; fls white. In white sand near creek (A1) (B2); in low-woodland (A4). Nelsonia campestris R.Br Ephemeral herb; fls white. In sand in river bed.					X									
AIZOACEAE Glinus oppositifolius (L.) DC Prostrate ephemeral. In sand near river (A1) (B1).	X				X									

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SPECIES	A1	A2	A3	A4	B1	B2	В3	В4	C1	C2	С3	C4	C5	GS
Macarthuria sp. nov. ASG 13767 Sprawling perennial herb. Among sandstone rocks, in tall shrubland. ? Trianthema sp. ASG 13275 Prostrate perennial herb. At foot of siltstone scarp in low open-woodland.				X				Х						
AMARANTHACEAE Achyranthes aspera L. Ephemeral herb; in fruit. On sandstone scarp, in low closed-forest. Alternanthera? angustifolia R.Br. ASG 13578 Ephemeral herb. In damp sand by river. Alternanthera? denticulata R.Br. var. micrantha Benth. ASG 13783 Ephemeral herb. In sand near river. Gomphrena canescens R.Br Ephemeral herb; flspink. In sand over sandstone in open eucalypt woodland (B2) (C3.) Gomphrena diffusa Spreng Prostrate ephemeral herb; fls pale pink. In sand in woodland. Gomphrena flaccida R.Br Ephemeral herb; fls pink. In rocky soil in woodland on Ashton Range (A4). Ptilotus exaltatus Nees Ephemeral herb 70 cm; fls pink.	X			x x	x x	X		X			X	X		
ANACARDIACEAE Buchanania obovata Engl Tree or shrub to 8 m; bark rough; fls cream, scented. In sand, in low openwoodland (A1) (A4) (B1); on sandstone (A2) (C2) (C3); siltstone (B2); in woodland (B4); in rocky river bed in gorge (C1); on sandstone scarp and plateau, in low woodland (C4) (C5).	X	X	X	X	X			X	X	X	X	X	X	
APIACEAE Trachymene hemicarpa (F.Muell.) Benth Perennial herb. In sand in woodland.				X										
APOCYNACEAE Alstonia actinophylla (A.Cunn.) K.Schum Tall tree; bark corky. Common along base of sandstone cliff. Carissa lanceolata R.Br Low, diffuse, spiny shrub up to 2 m. Common on sandstone (A3). Shrub to 3 m with several stems; bark grey, fissured. In low woodland on plain (B1). Parsonsia velutina R.Br Climber. In closed-forest (B3); among sandstone rocks above river (B4); on sandstone cliff edge (C3); on sandstone		x	X		X		X	X			X		X	
sandstone chin edge (C5), on sandstone slope of gully, in low closed-forest (C5). ASCLEPIADACEAE Gymnanthera nitida R.Br Climber with latex; fls pale cream. On sandy bank by river (A1); in rocky basaltic creek bed (B1).	x				x									

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SPECIES	A	I A	2 A	3 A	4 B1	B2	В3	В4	C1	C2	C 3	C4	C5	GS
Marsdenia sp. ASG 13651 Climber. In sandstone rocks in low woodland by clifftop. Sarcostemma australe R.Br. Leafless, many stemmed shrub, with latex. In rocky sandstone gully, in low closedforest (B1); on sandstone scree in low woodland (C1 obs.); on sandstone (C3).					X				X		X			
ASTERACEAE Blumea diffusa Benth Ephemeral herb; fls yellow. On sheltered ledges of sandstone cliff. Blumea integrifolia DC Ephemeral herb; fls yellow. In sand, in woodland and closed-grassland (A4); in sand, in low woodland near swamp (Galaxy Swamp).				X					X					X
Blumea mollis (G.Don) Merr. Aromatic ephemeral herb; fls pink. On sandy creek bank (B1) (C4). Diffuse herb on damp soil near Carson River (C2).					X					X		X		
Blumea saxatilis Zoll. et Mar Ephemeral herb; fls yellow. In damp sand by creek (A1) (A3) (B1); in seepage on sandstone scarp, in low open-woodland (C4).	X		X		X							X		
Blumea tenella DC Ephemeral herb; fls pink. In rocky basaltic loam by creek (B1); in sand near river (B4); near creek (C1). Blumea? tenella DC. KFK 4308					X	v		X	X					
Sprawling herb; fls yellow. Common on damp sand. Calotis breviseta Benth. Perennial herb; rays white. In sandy					X	X		X				X		
loam over sandstone, in low woodland (B1); in sand, in open-woodland near river (B4); in sand, in woodland below scarp (C4).														
Epaltes australis Less Ephemeral herb; fls white. On sandy riverbank (A1); in sand in woodland (A4); in washed sand by creek (B2).	X			X		X								
Helichrysum apiculatum (Labill.) G.Don Perennial herb; fls yellow. In sand in woodland (A4); low open-forest (B1). Pluchea rubelliflora (F.Muell.) Robinson				X	X									
Ephemeral herb; fls pink. In sand, in woodland. Pterigeron odorus (F.Muell.) Benth. Perennial herb; aromatic; fls pink. In gravelly loam, in woodland near river.												X		
Pterocaulon glandulosum (Benth.) F.Muell. Erect herb to 1 m. In closed-grassland. Pterocaulon sphacelatum (Labill.) F.Muell. Perennial herb to 1.5 m; fls mauve. In sand over sandstone, on creek bank (A1);	X	X	X	X					X					
on sandstone scree slopes (A2); in sand in woodland (A4); on ledge of sandstone cliff (C1).														

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Pterocaulon verbascifolium (Benth.) F.Muell. Erect herb to 1 m. Very common on sandstone (C2). ? Genus ASG 13190 Perennial herb to 1 m; fls yellow. In				X	X					X				
sand in low woodland. ? Genus ASG 13211, 13979 Perennial herb 70 cm. In sand in low open-forest (A4) (B1 s.n.) (C4).				X	X							X		
BARRINGTONIACEAE Barringtonia acutangula Gaertn Shrub to 3 m; fls red, pendulous. On rocky or sandy river and creek banks (A1)	X				X		X	X			X			
(B1) (B3) (B4) (C3). Planchonia australis (F.Muell.) Kunth Erect tree to 4 m; leaves turning reddish, deciduous. Common on sandstone (A1 obs.) (A2) (A3); in sand in low open- forest (A4); on sandstone plateau in low woodland and on loamy plain in woodland (fls white) (B1).	X	X	X	X	X									
BIGNONIACEAE Dolichandrone filiformis Fenzl Tree to 3 m; bark tessellated; fruit brown and curved, up to 24 cm long. Dolichandrone heterophylla F.Muell Shrub on dry sandstone. Common among Melaleuca minutifolia (A3). Tree 9 m; bark finely tessellated, dark grey. On sandstone scarp, in low open-forest (C4).			X									X		
Adansonia gregorii F.Muell. 1 tree obs. in basaltic loam in low woodland. Bombax ceiba L. var. leiocarpum A.Robyns Deciduous tree up to 20 m, with thorns; fls deep red. In sandstone in vine forest (C1); on edge of Carson River (C2). Tree to 12 m, deciduous; bark fissured, grey; fls deep red. On sandstone scarp as emergent above low closed-forest (C4).					X				х	X		X		
BORAGINACEAE Trichodesma zeylanicum (Burm.) R.Br Perennial herb; fls pale blue. Regenerating after fire in sandy open woodland.					X									
BURSERACEAE Canarium australianum F.Muell Tree to 8 m. In low closed-forest (B1); common on sandstone along creeks (B3); on sandstone scree in low open-forest (B4). Tree 15 m; bark tessellated, grey. In loam/sandstone in vine forest (C1). Canarium? australianum F.Muell. KFK 3008 Erect, spindly tree to 4 m; petioles ferruginous-tomentose. On sandstone cliff near seepage line.		X			X		X	X	X					

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	CI	C2	C3	C4	C5	GS
BYBLIDACEAE Byblis liniflora Salisb. Glandular-pubescent herb; in flower and fruit; fls pink, cream outside. By sandy creek bed (A1 obs.); in closed-grassland (A4); in sand near river(B4); in seepage at top of scarp, in closed-grassland (C4); in sand, in low woodland near swamp (Galaxy Swamp).	X		X	x	х	х		х				X		X
CAESALPINIACEAE Cassia mimosoides L. Ephemeral herb to 30 cm; fls yellow. In damp creek bed (A3) (C5): in closed-grassland (A4); among grass by rocky basaltic creek bed (B1); in sand in open-woodland near river (B4). Cassia aff. occidentalis L. ASG 13970 Herb to 2 m; in fruit. On sandstone scarp, in low closed-forest. Cassia oligoclada F.Muell. Ephemeral herb. On sandy bank near river (A1). Small shrub; fls yellow. On sandstone among Triodia (A2). Cassia venusta F.Muell. Spindly perennial herb to 1 m; fls yellow. In sand in open-shrubland (A1); on sandstone (B3); in laterite/sandstone in low open-forest (C1). Erythrophleum chlorostachys (F.Muell.) Baill. Tree to 4 m with E. tetrodonta on sandstone (A2) (A3) (B2). Shrub or tree to 10 m; bark corky. In sand in low openforest (A4); among sandstone rocks in low woodland (B4) (C1); on sandstone (C2); on sandstone scarp in low open-forest (C4) and in sand in woodland (C4).	x	x	x	x	X	X	X	x	x x	x		x	X	
CAMPANULACEAE Wahlenbergia sp. KFK 3054, ASG 13434, 14152 Diffuse herb; fls lilac/mauve. In sand over sandstone near creek, common (A2); among Triodia (A3) (A4); in sand, in low woodland near swamp (Galaxy Swamp).		x	x	X										X
CAPPARIDACEAE Capparis lucida (Banks ex DC.) Benth. Shrub 3 m. On sandstone slope of gully, in low closed-forest. Capparis sepiaria L. ASG 13284 Leafless shrub 50 cm. In sand in low open-woodland. Capparis umbonata Lindl. Shrub 4 m; bark fissured, grey; branchlets pendulous. On sandstone ridge, in low woodland. Capparis sp. KFK 4184, 4476, 4405, ? ASG 13730, 13751 Scrambling shrub with recurved spines. Common on sandstone (B3) (B4) (C3); in sandstone gully, in tall shrubland (B1).				X	X		x	x x			X		X	

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SPECIES	A1	A2	A3	A4	В1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Capparis sp. ASG 13931 Shrub 3 m. On sandstone scarp, in low closed-forest.												X		
CARYOPHYLLACEAE Polycarpaea longiflora F.Muell Ephemeral herb; fls red. On sandstone (A3); on sandstone plateau in low wood- land (A4). Polycarpaea staminodina F.Muell Dry ephemeral herb. In sand in low open-forest. Polycarpaea sp. ASG 14047 Tufted ephemeral herb; fls pale pink. On lateritic knoll in low woodland.			X	x x					X					
CELASTRACEAE Cassine melanocarpa (F.Muell.) O.Kuntze Tree to 10 m; fruit green, shining. In loam/sandstone in vine forest (C1); on sandstone scarp in low open-forest (C4). Tree to 8 m, in low closed-forest in sand- stone gorge (C5). Denhamia obscura (A.Rich.) Meisn. Shrub or tree 2-9 m; bark grey, lightly fissured; fruit orange. In sand over sand- stone in low open-woodland (A1); in sandstone (A2) (C3) (C5); in sand in low open-forest (A4); in sand, in low open- forest above seepage on plateau (C4)	X	X		X					X		X	x	x	
CLEOMACEAE Cleome viscosa L Erect, aromatic ephemeral herb. Among basalt rocks by creek.					X									
COCHLOSPERMACEAE Cochlospermum fraseri Planch. Openly branched shrub/tree to 3 m, deciduous; fls yellow, scented; pods inflated, green. Sandstone (A3); in sand in woodland and on siltstone scarp in tall open-shrubland (A4); in basaltic loam in low open-woodland (B1) (C4); on siltstone (B2) (C2).			Х	X	X	X				X		X		
Terminalia bursarina F.Muell Tree 8 m; bark rough, corky. On dry sand banks in river bed (A1); in rocky river bed (B4). Terminalia canescens (DC.) Radlk. Tree to 5 m; in fruit. On sandstone rise, in tall shrubland. Terminalia? canescens (DC.) Radlk. KFK 4157, 4106, 4364 Tree to 4 m; foliage silver. Common on sandstone (A3) (C2).	x		x					x		x	٠			

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SPECIES	Al	A2	A3	A4	BI	В2	В3	B4	CI	C2	C3	C4	C5	G:
Terminalia grandiflora Benth. Tree to 12 m with corky bark. In sand in open-forest by creek (A1); in fl. (cream) in sandy woodland (B1); in sand, in low open-forest above seepage on plateau (C4). Tree to 4 m; bark corky. In sand in woodland (A4).	X			x	x							X		
Terminalia latipes Benth. Tree to 10 m. Common on sandstone and along cliff edges (A2) (B3) (C2) (C3); on siltstone scarp in tall open-shrubland (A4). Terminalia platyphylla F.Muell. Tree to 10 m; bark grey, fissured; fruit fallen; exocarp fleshy. In basaltic sandy loam on creek bank.		X		X	X		X			X	X			
? Terminalia sp. ASG 13631, KFK 4066 Tree 6 m. Along basaltic creek bed. Terminalia sp. ASG 13940 Tree to 20 m; bark grey, fissured; fruit purple. On sandy creek banks in woodland.					X							X		
CONVOLVULACEAE Evolvulus alsinoides L. Small herb; fls blue. On dry Triodia flat. Ipomoea aff. costata F.Muell. ex Benth. ASG 13732 Shrub with arching stems to 2 m. In sand over sandstone in low woodland (B1); in sandstone gully in low closed-forest (C5). Ipomoea? muelleri Benth. ASG 13586, 13785 Prostrate herb. In sand over sandstone by creek (A1) (B4). Ipomoea sp. KFK 4489 Climber on Acacia sp. Plants dead, only fruits collected. Merremia tridenta (L.) Hall.f. ssp. hastata (Hall.f.) Oostr. Sprawling herb. In white sand near creek.	X		X		X	X		X			x		X	
PILLENIACEAE †Hibbertia? cistifolia R.Br. ASG 13636 Shrub 1·5 m. In rocky loam in low open-forest. Hibbertia kimberleyensis C.A.Gardn. Erect herb up to 1 m; fls yellow. In damp sandstone gorge. Hibbertia ledifolia Benth. Low shrub to 0·5 m. Common on sandstone. †Hibbertia lepidota R.Br. Straggly shrub to 50 cm; sterile. In sand, in low open-woodland (A1); common among Triodia between sandstone boulders (A2) (B3); on sandstone (C2) (C3). Shrub 1·5 m in old fruit. On sandstone plateau in woodland (A4). Shrub 1 m. Among sandstone rocks in low open woodland (B4).	X	x		X	X		x	X		x x	X		X	

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	CI	C2	C3	C4	C5	GS
†Hibbertia? oblongata R.Br. ASG 13564, 13748, 13834	x						X	x				x	X	
DROSERACEAE Drosera burmannii Vahl Herb with rosette of reddish lvs; fls white. On damp areas (A3) (B4); on wet sandstone cliff on scarp, in low woodland (C4); in sand, in low woodland near swamp (Galaxy Swamp). Drosera indica L Lax ephemeral herb; fls pink. Common on damp areas (A3) (B2); in damp sandy hollow near river (B4); in sand in low woodland near swamp (Galaxy Swamp). Fls white, anthers red; in seepage at top of scarp, in closed-grassland (C4). Drosera petiolaris R.Br. ex DC Perennial herb with rosette; fls white. Common on damp areas (A2) (A3) (B2) (C1); in sand in open-forest (A4). Drosera aff. petiolaris R.Br. ASG 13676 Perennial herb, regenerating in burnt woodland. Drosera sp. ASG 13905		X	x x	X	X	X		X	X			x		X
EBENACEAE Diospyros ferrea (Willd.) Bakh. var. humilis (R.Br.) Bakh					X				x			X		
ELATINACEAE Bergia pedicellaris (F.Muell.) Benth. Small ephemeral herb; fls pink. On damp soil in drying creek bed (B1) (C1) (C2).					X				X	X	F.			
ERYTHROXYLACEAE Erythroxylum ellipticum R.Br Shrub to 3 m. Common on sandstone (A3); by dry rocky creek bed at foot of siltstone scarp in low open-woodland (A4).	1		х	x										

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SPECIES	A1	A2	A	B A	4 B1	B2	2 B3	B4	C1	C2	C3	C4	C5	GS
EUPHORBIACEAE Antidesma ghaesembilla Gaertn. Spreading shrub to 5 m. In sand, in low open-forest near creek (A1). Spreading tree 10 m with new lvs and fls. Along rocky/sandy creek bank in woodland (B1); in rocky sandstone gully, in low closed-	x				X							X		
forest (C4). Bridelia ? tomentosa B1. KFK 3087 Erect shrub to 2 m. Common on sand- stone (A2) (B3).		X					X							
†Chamaesyce hirta (L.) Millsp Ephemeral herb. On loamy river bank in open areas.					X									
†Chamaesyce vachellii (Hook et Arn.) Hara Ephemeral herb; fls white. In river bed (B1) (C1).					X				X					
Glochidion? disparipes Airy Shaw Shrub 2m. In sand, in open-forest by creek. Petalostigma pubescens Domin Shrub or tree 1-6 m; fruit orange. In	X	x		X	x	x	X		X	X				
sand in low open-woodland (A1) (A4) (B1); on sandstone plateau in low woodland (C1 obs.). Common on sandstone (A2) (B2) (B3) (C2).														
Petalostigma quadriloculare F.Muell. Shrub to 0·5 m; fruit yellow. Common on sandstone between <i>Triodia</i> clumps (A2) (A3).		X	X											
Phyllanthus baccatus F.Muell. ex Benth. Semi-climber. In rocky sandstone gully, in low closed-forest (B1) (C4); on rocky basaltic creek-bank in low open-woodland (B1). Shrub to 1 m. Common on sandstone (C2). Shrub 2 m; fls pale green; fr. red. On sandy creek banks in woodland					X					X		X		
(C4). Phyllanthus maderaspatensis L In sand in river bed (B1) (C4). Phyllanthus minutiflorus F.Muell Small ephemeral herb. In damp sand of creek (A1) (B1) (B2); in seepage at top of	X				X X	X						X X		
scarp, in grassland with low open- woodland (C4). Phyllanthus aff. minutiflorus F.Muell. ASG 13792 In damp sand near river.								X						
Phyllanthus sp. KFK 3074, 4537, ASG 13882 In seepage on sandstone in low open- woodland (A2) (C4) (C5).		X										X	X	
Low herb; leaves ? deciduous. Common on sandstone (A2) (C3). Phyllanthus sp. KFK 4369, ASG 13294		X		X						X	X			
Erect spindly herb. On siltstone scarp in tall open-shrubland (A4); common on sandstone (C2). Phyllanthus sp. ASG 13625					X									
Herb. In rocky creek bed. Poranthera microphylla Brongn Ephemeral herb. In sandy-clay in grassy creek bed.				X	-									

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SPECIES	A 1	A2	A3	A4	B 1	B2	В3	B4	C1	C2	С3	C4	C5	GS
Ricinocarpos ? sp. nov. KFK 4460 Spindly herb up to 0.5 m. Common on sandstone. Ricinocarpos sp. ASG 13757 Slender shrub 70 cm. Among sandstone rocks in tall shrubland. Ricinocarpos sp. ASG 14118 Erect, little-branched shrub 1.5 m. On sandstone slope of gully, in low woodland. Sebastiana chamaelea (L.) Muell. Arg Perennial herb. On sandy bank by river (A1); in sand in open-forest (A4). GENTIANACEAE Canscora diffusa R.Br	X			x				X	X		X		X	
ledges by waterfall GOODENIACEAE Calogyne holtzeana F.Muell. ex Specht Sprawling perennial herb. In shelter of low Eucalypt in closed-grassland (A4); on dry sandstone with Triodia (A3). Dampiera candicans F.Muell. Shrub/perennial herb to 70 cm; fls purple inside. Among sandstone rocks in tall open shrubland (A1); on sandstone outcrop (C2). Goodenia bicolor F.Muell.	x		X	x		X				X				
Robust herb; fls yellow. Damp area by creek. Goodenia lamprosperma F.Muell Herb to 50 cm; rootstock woody; fls yellow. On damp sandy river bank (A1) (B4); common around remnant pools (B3); aquatic with floating lvs, fl. when water level falls; common along creek on plateau (C1). Goodenia sp. ASG 13285, 13905, KFK 4036	X			X			X	X	X			X		
Ephemeral herb; fls yellow. In sand in open-grassland (A4); in seepage with grassland (C4). Goodenia sp. ASG 13522 Sprawling perennial herb; no fls. In damp sandy-clay, among dense grass in open-woodland														
Goodenia sp. ASG 13573, 13824 Ephemeral herb. In closed-grassland among low open-woodland on swamp flat (A1); in sand in open-woodland by river (B4). Goodenia sp. ASG s.n Erect herb; in old fruit. Among sand-stone rocks in shrubland. Goodenia sp. ASG 13675					X			X						
Perennial herb; fls yellow. Regenerating in burnt woodland. Scaevola macrostachya Benth. Herb to 50 cm; fls white. On sandstone (A1) (B2)	X					X								

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SPECIES	A	I A	2	А3	A4	ВІ	B2	В3	B4	C1	C2	C3	C4	C5	G
GYROCARPACEAE Gyrocarpus americanus Jacq Tree to 12 m; bark ± smooth, pale brown; deciduous; in fruit. On sandstone scarp as emergent over low closed-forest.													x		
HALORAGACEAE Gonocarpus chinensis (Lour.) Orchard Perennial herb. On sandy creek banks (A4) (C1).					X					X					
Gonocarpus leptothecus (F.Muell.) Orchard Perennial herb. Growing in open-grassland; common (A2); by creek (B1). †Myriophyllum dicoccum F.Muell	x	X				X				X	x	v			
Aquatic rooted in mud in shallow pools and along creek banks (C1) (C2) (C3). Myriophyllum sp. aff. trachycarpum ASG 13545 Aquatic. In billabong. Myriophyllum verrucosum Lindl Aquatic; infl. emergent. In pools of Carson River.	X					X				Λ	^	X			
HYPERICACEAE Hypericum gramineum Forst.f. Ephemeral herb; fls yellow. Common in rocky sandy ground beside creek (A3); in dry grassy creek bed (A4); in sand in open-woodland near river (B4).				X	X				X						
Coleus scutellarioides (L.) Benth. Perennial herb 1 m; fls blue. In damp sandy-clay among dense grass in openwoodland (A1); in wet crevices of sandstone cliff on scarp, in shelter of low closed-forest (C4). Dysophylla verticillata Benth.	x x									X			X		
Aquatic herb; infl. emergent; fls mauve. In billabong (A1); in rocky creek (C1).										A					
AURACEAE Cassytha filiformis L. Parasite; fls pale green to white. On Acacia tumida on sandy bank near river (A1) (B4); on Acacia sp. in sandstone gorge (A2). Hirsute form (C3).	X	X							X			X			
ENTIBULARIACEAE Utricularia aff. albiflora R.Br. Minute herb; fls white. In seepage at top of scarp, in closed-grassland. Utricularia caerulea L. (previously recorded for W.A. as U. charnleyensis) Fls purple, pale outside. Among matted roots in seepage on sandstone scarp, in low woodland (C4); among moss banks and mud under low closed-forest (C5).													x x	X	

							SI	TE						
SPECIES	A1	A2	A3	A4	B1	В2	В3	B4	Cl	C2	C3	C4	C5	GS
Utricularia chrysantha R.Br Slender herb with bright yellow fls. In river-washed sand of creek (A3) (B2) (C1 obs.); in damp loam among basaltic rocks by creek (B1). † Utricularia exoleta R.Br Aquatic herb; fls yellow. In mud of remnent pool in sandstone (B3); in stagnant billabong and in pools of creek (A1); in swamp (Galaxy Swamp). Utricularia kimberleyensis C.A.Gardn Fls purple with yellow line at base of lower lip, pale mauve outside. In seepage at top of scarp, in closed-grassland. † Utricularia stellaris L.f Aquatic; fls yellow. In pools of river. Utricularia uliginosa Vahl Lvs submerged; fls blue, spur cream, upper calyx-lobe grey. On peaty banks matted with roots; by pools in sandstone gully, in low closed-forest (C4); by pools in Schizaea Creek (C5).	X		X		X	X	X	X	X			x	X	X
tobelia quadrangularis R.Br. Lobelia quadrangularis R.Br. Straggly herb; fls blue. On damp mud at edge of Carson River.			X					X		x				X
†Mitrasacme? ambigua R.Br. ASG 13904 Delicate much-branched ephemeral herb; fls white. On sheltered ledge among sandstone rocks of seepage at top of scarp, in low open-woodland. †Mitrasacme commutata Leenh. Ephemeral herb; fls white. In sand among thick grass in open-woodland and near river (B4); in sand, in low woodland near swamp (Galaxy Swamp). Mitrasacme constricta F.Muell. Herb; lvs and scapes orange; fls white, throat yellow. Common in river washed sand of Nymphaea Creek. Mitrasacme exserta F.Muell.						x		x				X		X
Ephemeral herb; fls white. In sand among grass in open woodland near river. Mitrasacme gentianea F.Muell. Ephemeral herb; fls white. In sand in low woodland (A4); in sand near creek (B4).				X				X						

							SI	TE						
SPECIES	A1	A2	A3	A4	B1	В2	В3	B4	CI	C2	C3	C4	C5	GS
Mitrasacme aff. laevis Benth. Straggling herb; fls large, cream with orange centre. On damp flat. Mitrasacme aff. lepidocalyx W.V.Fitzg. KFK 4006, ? ASG 13187, 13598, 13502, 13795			x x	X	x x	x		x				X	x	
LORANTHACEAE Amyema bifurcatum (Benth.) Tiegh. Hemi-parasite; perianth scurfy white, red inside. On Eucalyptus sp. Amyema miquelii (Lehm. ex Miq.) Tiegh. Hemi-parasite; perianth tube red, base yellow. On Eucalyptus tetrodonta (A2.) (A3) † Decaisnina brittenii (Blakely) Barlow Common on Melaleuca argentea and Barringtonia acutangula, in fringing forest. Decaisnina signata (F.Muell. ex Benth.) Tiegh. Hemi-parasite; fls flesh pink; reflexed perianth lobes yellow/green; staminal filaments green. On Buchanania obovata and Erythrophleum chlorostachys (A1) (A2). ? Decaisnina signata (F.Muell. ex Benth.) Tiegh. KFK 4245 Hemi-parasite. On Eucalyptus polycarpa. Dendrophthoë acacioides (A.Cunn. ex Benth.) Tiegh. Hemi-parasite; fls orange-red. On Acacia tumida (A1); on Acacia dunnii and Melaleuca minutifolia (C3); on Metrosideros eucalyptoides (C5).	X X	x x	X			x					x			X
Ammannia multiflora Roxb Small herb; fls white; fr. red. In sand (B1); in damp soil in dried creek bed (C2).					X					X				

							SI	TE						
SPECIES	A1	A2	A3	A4	В1	B2	В3	В4	Cl	C2	C3	C4	C5	GS
Rotala diandra (F.Muell.) Koehne Ephemeral herb; fls blue. In damp sand by river (A1); on mud at edge of creek (B1) (C1) (C2). Rotala roxburghiana Wight Ephemeral herb; reddish in colour. In damp sand by river (A1) (C1); in sand at edge of swamp (Galaxy Swamp).	x				X				x x	X				X
ALVACEAE Gossypium populifolium (Benth.) F.Muell. ex Tod	x	X		X		x	x x		X		X			
MELASTOMATACEAE Melastoma malabathricum L. Perennial herb to 3 m; fls deep pink. In loam over sandstone by creek and at foot of cliff (C1). Shrub to 2 m. In sandstone gully, in low closed-forest by creek (C5). Osbeckia australiana Naud Dense shrub to 1 m; fls deep pink. Forming thicket beside creek in sandstone gorge (A2) (C2); in white sand near creek (B2); on sandstone scarp, in seepage area in low open-woodland (C4).		X				x			X	X		X	X	
MELIACEAE Owenia vernicosa F.Muell Shrub or tree to 8 m. In sand in low open-woodland (A1) (A4); along base of sandstone cliff (A2) (B3); on sandstone plateau in low woodland (B1) (B4) (C1) (C4); on scree slopes of flat topped hills (B2) (C2).	х	X		X	X	X	X	X	X	X		X		

							S	ITE						
SPECIES	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	C5	GS
MENISPERMACEAE Tinospora smilacina Benth. Vigorous liane; deciduous; bark becoming corky; fls pale green. In sand over sandstone in tall open-shrubland (A1) (C3); in sand in low open-forest (A4); in rocky sandstone gully, in low closed-forest (B1).	x			x	x						X			
MENYANTHACEAE Nymphoides hydrocharoides (F.Muell.) Kuntze Aquatic; fls yellow. In billabong (A1); along creek (A4) (C1 obs.); in swamp (Galaxy Swamp); (B3).	X			X					X					X
Nymphoides indica (L.) Kuntze Aquatic; fls white. In billabong (A1); (A3) (B3) (C2) (C3); along creek (A4). Nymphoides minima (F.Muell.) Kuntze Aquatic herb; lvs ± convex above, red and rugose below; fls white. In creek in gorge.	х		X	х			X		X	х	X			
MIMOSACEAE Acacia aulacocarpa A.Cunn. ex Benth. Tree 4-10 m with cracked, fibrous but not peeling bark. Common on sandstone (A3); in sand, in open-forest (A4).			X	х										
Acacia brevifolia Benth. Shrub 2-4 m with smooth bark. On sandstone (A2); on siltstone scarp in low woodland (A4); in rocky creek bed (B1); common (B2) (B3).		X		х	X	х	X							
Acacia delibrata A.Cunn. ex Benth. Shrub 4 m with "minnie ritchie" bark (in curled strips). In rocky basaltic loam, in low open-forest. Acacia deltoidea A.Cunn. ex G. Don					X					X				
Shrubs to 2 m. Common on sandstone. Acacia dunnii (Maiden) Turrill Shrub to 4 m; little-branched; stems and leaves bluish/glaucous. In sandstone in low woodland and tall shrubland (B1 obs.) (B2) (B3) (B4) (C1 obs.) (C3) (C5					X	Х	x	X	X		X		X	
obs.). Acacia hemignosta F.Muell Shrub 1.5 m. In sand, in open-forest. Acacia holosericea A.Cunn. ex G.Don Tree to 8 m with lightly fissured grey bark. On sandy or loamy river levee (A1)	x	x		X		X		X		X		X		
(A2) (B2) (B4) (C2) (C4). Acacia humifusa A.Cunn. ex Benth. Low dense shrub to 1 m. On edge of sandstone cliff, common (A2) (C2); on siltstone scarp in low woodland (A4). Shrub to 2 m, spreading. On rocky scarp		X		X						X		x	X	
with open-woodland (C4) (C5). Acacia kelleri F.Muell. Slender, openly-branched shrub to 7 m with pendulous branchlets. Common in sandstone in open-woodland (A1) (B3) (B4) (C3); in rocky creek bed in low woodland (C4).	x						X	x			X	х		

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SPECIES	Al	A2	A3	A4	Bl	B2	В3	B4	Cl	C2	C3	C4	C5	GS
Acacia laccata Pedley Low shrub to 2 m, bark smooth. Very common on sandstone flat. Acacia sp. aff. latescens Benth. ASG 13274 Several-stemmed shrub to 2 m. In sand in open-forest.			X	X										
Acacia latifolia Benth. Erect, open shrub 2-4 m; bark smooth, glaucous. In sand over sandstone, in gully with tall shrubland (B4). Shrub to 2 m. Common in sand over sandstone (C3). Acacia aff. leptophleba F.Muell. ASG 13764 Shrub or tree to 6 m, with grey bark. In rocky sandstone, in tall shrubland.								X			X			
Acacia nuperrima E.G.Baker Spreading shrub to 50 cm. In lateritic loam, with low shrubland. Acacia platycarpa F.Muell		X							X					
Low straggly shrub. In sandstone gorge; sterile. Acacia plectocarpa A.Cunn. ex Benth. Tree 4-10 m with fissured, dark grey bark. In rocky sandstone bank of river bed (A1) (C1); on siltstone scarp, in low woodland (A4); common on sandstone near creek and in gorge (B3) (C2); in	Х			X			X		X	X		X		
rocky creek bed in low woodland (C4). Acacia? retinervis Benth. KFK 4383, ASG 13868		4								X		X		
Acacia sericata A.Cunn. ex Benth Tree 6 m with rough grey bark. On sandy river levee.	X		X											
Acacia simsii Benth. var. multisiliqua Benth. Shrub to 3 m. Scattered on sandstone plain. Acacia stigmatophylla A.Cunn. ex Benth. Small shrub on sandstone (C2). Shrub to 2 m; foliage ± bright green. Locally common, in basaltic loam in open-wood-			Λ							x		X		
land (C4). Acacia stipuligera F.Muell Openly-branched shrub 2 m. On sandy creek bank below scarp.												X		
Acacia sutherlandii (F.Muell.) F.Muell Depauperate shrub to 1 m or small tree to 6 m, bark corky. Common on Carson Volcanics in open-woodland (C2) (C4).						**		T 7		X	37	X		
Acacia translucens A.Cunn. in Hook. Low shrub to 2 m, much branched; bark fissured, fibrous. Common on sandstone (A2) (A3) (B2) (C2) (C3). In sand, in woodland and on siltstone scarp (A4); in tall shrubland (B4).		X	X	X		X		X		X	X			

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	G
Acacia tumida F.Muell. ex Benth Tree to 9 m with fissured bark and well developed canopy. On sandy river levee (A1); on sandy creek bank (A4); on sandstone (B2); in alluvium beside creek (B3); in rocky sandstone, in woodland (B4). Acacia sp. ASG 13841, 14046	X			X	X	X	X	X	X			X		
Tree 20 m; bark rough, dark grey; fls cream. In loam/sandstone in vine forest.									X					
MORACEAE Ficus coronulata F.Muell Tree 7 m; bark smooth. In sandy-loam on creek bank (B1) (C4). Tree to 3 m; leaves pendulous. On edge of Carson					X					X		x		
River (C2) Ficus leucotricha Miq. Tree to 8 m; fruit yellow-green, silky hairy. Sandstone cliff edge (B3) (C3); in sandstone rocks beside creek (C2). Ficus leucotricha Miq. var. megacarpa		ì					X			X	X			
F.Muell fruit yellow, turning red. Growing out of fissures in sandstone (B3); on sandstone cliff (C1). Ficus leucotricha Miq. var. sessilis Corner Tree 5 m with latex. On sandstone ridge							X	X	X					
in low woodland. Ficus opposita Miq. var. indecora (A.Cunn.) Corner Several-stemmed shrub 4 m; bark fissured, grey. In dry sandy creek bed (A1); in rocky sandstone gully, in low closed-forest (B1); in sand, in woodland at foot of	x				X							X		
scarp (C4). Ficus opposita Miq. var. micracantha (Miq.) Corner Low rough-lvd shrub. In sandstone gorge (B3) (C5). Ficus platypoda A.Cunn Spreading shrub or small tree to 5 m;		X					X		X		X	X	x	
fruit pale yellow. Common on sandstone ledges near creek (A2) (C1) (C3); on sandstone scarp in low open-forest (C4). Ficus platypoda A.Cunn. var. minor Benth. Spreading tree with aerial roots. On sandstone scree in low open-forest (B1); among sandstone rocks by river (B4).					X			X						
Ficus racemosa L. Tree 20 m with stout trunk; cauliflorous. In loam/sandstone in vine forest (C1); in sand over sandstone on banks of Woorakin Creek (C2); on river banks (C4).									X	X		X		

							SI	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	GS
Ficus subpuberula Corner Much-branched shrub; fruit pale yellow. In sandstone in tall shrubland. Ficus virens Ait. var. sublanceolata Miq Tree growing out of cracks in sandstone, sterile at time of collection (A2) (B3) (C3). Erect tree to 11 m; fruit white/cream turning maroon. On sandstone cliff (B1). Tree 18 m; bark smooth, creamy-grey. On creek bank in vine forest (C1); shrub among sandstone rocks by water fall(C1). Common in sandstone gorge (C2). Ficus sp. ASG 13650 Tree 5 m; fr. yellow. At edge of sandstone cliff.		X			x		x	X	X	X	x			
MYRISTICACEAE Myristica? insipida R.Br. ASG 13672 Tree 10 m; bark dark grey. In rocky sandstone gully, in low closed-forest.					X									
MYRSINACEAE † Rapanea? porosa (F.Muell.) Mez. ASG 14128 Several-stemmed shrub 3 m. On sandstone slope of gully, in low closed-forest.													X	
MYRTACEAE Calytrix achaeta F.Muell Dense shrub to 2 m; fls cream-white. Common on sandstone (A2) (A4) (B2) (C3); on sandstone plateau in low woodland (C4). Calytrix brachychaeta F.Muell	x	X		X		X	X	X	X	x	X	х		
Dense shrub to 4 m; fls cream-white. In rocky sandstone river bed (A1) (C1); on sandstone near creek (B3) (C2) (C3); among sandstone rocks in tall shrubland (B4).			v	V										
Calytrix conferta A.Cunn Dense shrub to 4 m; fls pink. Common on sandstone (A3); on sandstone plateau in low woodland (A4). Calytrix microphylla A.Cunn Sprawling to erect shrub to 4 m; fls pink. Common on sandstone (A1) (A2) (B2) (C3). Eucalyptus aff. alba Reinw. ex Blume. ASG	X	X	X	х		X					X			
Tree to 5 m; stems glaucous. Edge of sandstone plateau Eucalyptus apodophylla Blakely et Jacobs Tree to 20 m; smooth white bark. In damp sandy-clay as emergent above low open-woodland (A1); in closed grassland		x	x	x	X							x		
and along edge of creek (A3); on sandy creek bank (A4) (C4). Eucalyptus bleeseri Blakely Tree to 16 m; bark grey/orange brown, flaky. On sandstone (A2) (B2) (B4) (C3). Tree 12 m; lvs ± shining; bark ± smooth with red flakes. On sandstone plateau in low woodland (A4). On sandstone near dried creek (C3).		X		X		X		X			X			

							S	ITE						
SPECIES	Al	A2	. A3	A4	В1	B2	В3	B4	CI	C2	C3	C4	C5	G
Eucalyptus brachyandra F.Muell						Ī	Ī	İ	x	Ī				
Tree 5 m; ± straggling; bark fibrous, grey; in old fruit. On sandstone cliff.														ľ
Eucalyptus camaldulensis Dehn.	X				X	X	X	X						
Erect tree to 20 m; smooth white bark. By billabong (A1); on banks of Carson														
River (B1); common along creek bed (B2)									1		1			
(B3); on river bank by pool (B4). Eucalyptus clavigera A.Cunn. ex Schau			1				X					1		
Tree to 6 m; bark fibrous. On sandstone.					1		^	1			-			
Eucalyptus confertiflora F.Muell Tree to 10 m; lower bark rough and		X		X	X	X						X		
flaking, greyish/black; upper bark smooth.														
light grey peeling to expose cream bark														
underneath. On sandstone (A2); on siltstone scarp, in tall open-shrubland (A4).			1								ľ			
on dry scarp in woodland (B1); on silt-														
stone hill (B2); on sandstone plateau in low woodland (C4).							1							
Eucalyptus ferruginea Schau.		X												
Tree to 4 m; young lvs rusty brown tomentose; bark rough, fibrous; in heavy fruit.														
Common on sandstone.														
Eucalyptus foelscheana F.Muell.					X			X						
Tree to 10 m; lvs ± shining; bark flaky, grey/orange. In basaltic loam in wood-								1						
land (B1) (C4).			1											
Eucalyptus grandifolia R.Br. ex Benth Tree to 6 m; bark white. On sandstone.	4	1	X		ľ									
Eucalyptus herbertiana Maiden	1					1		X						
Tree to 6 m with several trunks; bark								7.						
white, \pm powdery. On sandstone ridge in tall shrubland.						1								
Eucalyptus? herbertiana Maiden KFK 4463							li .				X			
Tree to 10 m; bark grey, smooth. Near dried creek in sandstone.														
Eucalyptus? houseana W.V.Fitzg. ex Maiden														
ASG 13921												X		
Spreading tree 15 m; stout trunk; bark smooth, cream. At edge of seepage at top														
of scarp.														
Eucalyptus jensenii Maiden Tree to 4 m; bark rough, fibrous; fruit			X											
small. Common on sandstone.														
Erect tree to 12 m, lower bark rough,	X		X	X						X				
upper smooth. Among sandstone rocks														
in low woodland (A1); on flat near creek													- 1	
(A3) (C2). Tree to 7 m. On siltstone scarp in tall open-shrubland (A4); in														
sand in woodland (A4).														
Eucalyptus aff. leucophloia Brooker Tree to 7 m; fruits small; bark white.					X				X	X		X		
Common on sandstone plateau (B1) (C1)											1			
(C2) (C4).														
Eucalyptus? microtheca F.Muell. KFK 4058 Tree to 6 m; bark rough; fruits small.	- 1		X											
Common on sandstone.		GGA												
Eucalyptus miniata A.Cunn. ex Schau. Tree to 20m; fls orange. Common on sand-	X	X	X		X		X	X	X			X		
stone (A1) (A2) (A3) (B1) (B3) (B4) (C1):														
in rocky gully, in low woodland (C4 obs.)														

							SI	TE						
SPECIES	A 1	A2	A3	A4	B1	B2	В3	B4	C1	C2	С3	C4	C5	G
Eucalyptus oligantha Schau Tree to 10 m; bark grey, fissured. In sand in woodland (A4); and as shrub to 1.5 m in closed-grassland.				X										
Eucalyptus papuana F.Muell Tree to 8 m; bark white, grey when newly exposed. In open-grassland. Eucalyptus perplexa Maiden & Blakely			X	X										
Ironbarked tree to 8 m. On sandstone plateau in low woodland. Eucalyptus polycarpa F.Muell	X			11		X								
Tree to 14 m; bark fibrous. In low openwoodland (A1); in sand over sandstone (B2).	**													
Eucalyptus ptychocarpa F.Muell Tree to 14 m; canopy well developed; bark fibrous. In sand in woodland along creek (A1 obs.); in sand, in woodland along creek (A4); on sandstone—not common (B2) (C2) (C3); in seepage on steep slope of gorge (C1); in rocky sandstone gully in low woodland (C4 obs.)	X			X		X			X	X	X	X	X	
(C5 obs.) Eucalyptus tectifica F.Muell Tree to 5 m; bark fibrous. Common on sandstone (B2). Tree to 12 m. In basaltic loam in woodland (B1) (C4 obs.).					X	X						X		
Eucalyptus tetrodonta F.Muell Tree to 18 m; bark stringy, grey; fls cream. In sand in low open-woodland (A1); on sandstone (A2) (B2) (C3); in sand in woodland (A4) (B4) (C1 obs.).	X	X		X		X		X	X		X			
Eucalyptus zygophylla Blakely Tree to 4 m; bark rough, fibrous. On sandstone scree slope.			X											
Eucalyptus sp. ASG 13308, 13313, 13547, 13869, 13893, KFK 3079, 4073, s.n. C2 Bloodwood; tree to 8 m; bark ± smooth with red flakes. In sand over sandstone, in low open-woodland (A1); on sandstone scree above gorge (A2) (A3); on sandstone plateau, in low woodland (A4). Tree to 15 m. On sandstone plateau, in low woodland (C4).	X	X	X	X						X		X		
Eucalyptus sp. ASG 14071, KFK 4486 Bloodwood; tree to 6 m; bark rough. At edge of sandstone cliff above waterfall (C1); on sandstone (C3).									X		X			
Eucalyptus sp. ASG 13753 Bloodwood; tree 7 m; bark rough, flaked. In sandstone, in low open-woodland.								X			37			
Eucalyptus sp. ASG 13653, KFK 4466 Bloodwood; spreading tree 12 m; bark rough. On sandstone plateau, in low woodland (B1); on sandstone near creek (C3).					X		**				X			
Eucalyptus sp. KFK 4172 Tree to 18 m; bark fibrous. Common at base of sandstone cliff.							X							

							S	ITE						
SPECIES	Al	A2	. A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Eugenia bleeseri O.Schwarz Shrub to 5 m. In sand in low woodland (A4). Tree 8 m; bark finely tessellated, pale grey. In sand over sandstone near river (B4). Shrub/tree to 10 m. In sand, in low open-forest above seepage on plateau (C4).				x				x				х		
Eugenia eucalyptoides F.Muell Diffuse shrub to small tree; fls white. Growing with Melaleuca argentea and M. leucadendron along creeks (B3) (C3). Shrub to 4 m with several stems; fls cream; fruit pink. In rocky river bed (B4). Eugenia sp. ASG 13476, 13488 Shrub 4 m; petioles red. In rocky river bed.	х						X	X			X			
Eugenia sp. ASG 13663 Shrub or tree 3-6 m; lvs dark green, shining. In rocky sandstone gully in low closed-forest.					X									
Eugenia sp. ASG 13846 Shrub 4 m; bark dark grey, finely fissured; lvs shining. In rocky sandstone gully, in low closed-forest.												X		
Fenzlia phebalioides W.V.Fitzg Spindly shrub 2–3 m; bark fissured; mature fruits maroon. On sandstone cliff (A2) (B1) (C3); in sandstone gully, in low closed-forest (C4) (C5).		X			X						X	X	X	
†Homalocalyx ericaeus F.Muell Low, spindly shrub to 1 m. In low woodland (B1); common on sandstone (B3) (C3).					X		X				X			
Melaleuca argentea W.V.Fitzg. Tree/shrub to 6 m. On sandy/rocky river banks (A1) (B4). Trees to 25 m; fls cream, sweet-scented. Common along creek and river banks with M. leucadendron (B2). Low trees to 4 m. Common	х					Х	X	X			X			
on edge of creek and pools (B3) (C3). Melaleuca leucadendron (L.) L Trees up to 30 m. Common along creeks and rivers (A1) (B3) (C3); Carson River (B1) (B4) (C1); in tall closed-forest along creek (C5).	X				X		X	х	X		X		X	
Melaleuca minutifolia F.Muell Small trees 4–8 m with white paper bark. Common on sandstone.			X									1		
Melaleuca? nervosa (Lindl.) Cheel Slender tree to 5 m. In sand in low openforest.				Х										
Melaleuca viridiflora Soland. ex Gaertn Tree to 15 m. In gorge (A2) (A3) (C5); common in sand near creek (B2) (C3). Emergent in closed-grassland (dry in winter) and along creek (A4); along creek below escarpment (B1); on sandy platform on sandstone scarp, in low woodland (C4); in black mud, around swamp in low open-woodland (Galaxy Swamp).		X	х	X	X	X					X	X	X	X

							SI	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
†Metrosideros eucalyptoides (F.Muell.)													х	
F.Muell Tree 25 m; bark ± rough, grey. In sandyloam in fringing tall closed-forest by creek.														
†Syzygium suborbiculare (Benth.) Hartley & Perry					X							X		
Tree to 15 m; lvs bright shining green; fls white. In rocky sandstone gully in low closed-forest (B1) (C4).														
Tristania? suaveolens Sm. ASG 13627 Spreading tree to 10 m; bark grey, fibrous. Along creek banks (B1); in crevices on sandstone cliff above river (B4) (C1). Spreading tree to 18 m; bark grey, ±					X			X	Х			X		
fibrous. On sandy creek banks, in woodland (C4).	x	X	x	X	X			X			X	X		
Verticordia cunninghamii Schau. Tree to 7 m. In sand over sandstone in tall open-shrubland near river (A1); in sand in low open-forest (A4) (B1); in tall shrubland (B4); on sandstone plateau in low woodland (C4 obs.). Spindly shrub to 2 m; fls white. In sandstone gorge, not common (A2); on sandstone near	^	A	Α	A	A			A						
dried creek (A3) (C3). Xanthostemon paradoxus F.Muell Tree to 6 m. In rocky sandstone river bed (A1); on sandstone plateau in low woodland and in gully (B1); common on summit of siltstone hill (B2) and along edge of sandstone cliff (B3) (C1); in low open-woodland (B4).	X				X	X	X	X	X					
NYMPHAEACEAE Nymphaea gigantea Hook Aquatic perennial herb; lvs floating, reddish below; fls blue with yellow anthers, sweetly scented; fruit submerged. In creek and river pools. (A3) (A4) (B1) (B2) (B3) (C2) (C3).			х	x	X	x	X			x	X			
OLEACEAE Jasminum didymum G.Forst Straggling shrub/climber. On sand- stone scarp in low closed-forest.												X		
ONAGRACEAE Ludwigia parviflora Roxb Ephemeral herb; fls yellow. In wet sandy creek bed (A1) (B1). Ludwigia suffruticosa (L.) Walt Perennial herb to 3 m; fls yellow. In sandy creek bed (A1); on edge of sandstone creek bed (B3) (C2).	x x				X		X			X				
OPILIACEAE Cansjera leptostachya Benth. Shrub 30 cm; several stems; lvs bright green. In sand in low open-forest.				X										

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SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	G
PAPILIONACEAE	İ				T									
Abrus precatorius L	1						X		X					
Ephemeral climber; in heavy fruit at time of visit. On sandstone rock ledge									1000					
(B3); on sandstone scree in low wood-	1													
land (C1).														
Atylosia cinerea F.Muell. ex Benth.		1					X				X	X		
Straggly shrub on sandstone (B3) (C3);							**				1	1		
in low woodland (C4).														
Bossiaea bossiaeoides (A.Cunn. ex Benth.) A.B.Court	X	v	v	37		3.7					3	Jane I		
Sprawling leafless shrub to 1 m; stems	^	X	X	X		X			1		X	X		
flat; fls yellow. In sand in low woodland/					1									
open-woodland (A1) (A4); forming thick-		1												
ets on sandstone (A2) (A3) (B2) (C3); on														
sandstone plateau in low woodland (C4).	1										33	330		
Burtonia subulata (Benth.) Benth Diffuse shrub 70 cm-1 m; fls yellow. In	X	X		X				X			X	X		
sand in low open-woodland (A1) (A4)								-						
(B4); common on sandstone (A2) (C3); on														
sandstone plateau in low woodland (C4).														
Crotalaria alata Hamilt.						X								X
Ephemeral herb; fls yellow. In white sand near edge of Eucalyptus woodland														
(B2); on edge of swamp (Galaxy Swamp).														
Crotalaria calycina Schranck.									х					
Ephemeral herb.									1					
Crotalaria crassipes Hook										X				
Sparsley branched ephemeral herb; fls yellow. In creek bed among scree.			1							120				
Crotalaria crispata A.Cunn. ex Benth	X			X				1			1			
Perennial herb. In sandy creek bed in	^			Λ										
tall open-shrubland (A1) (A4).	1													
Crotalaria retusa L	X				X									
Herb 1 m; fls yellow. In sand, in low open-woodland (A1); by creek (B1).										7 1				
Crotalaria trifoliastrum Willd					37									
Erect ephemeral herb. On rocky basaltic					X					S 1				
creek bank in low open-woodland.														
Crotalaria sp. ASG 13583	X								1					
Ephemeral herb 2.5 m. In sand over sandstone on creek bank.											- 1			
Dannadium muellari Danth	v													
Prostrate herb. In sand by creek (A1);	X													X
in sand, in low woodland near swamp						1								
(Galaxy Swamp).						70.	- 1							
Desmodium trichostachyum Benth			- 1		X	X			1			X		
Prostrate herb. In sand near creek (B1) (B2); in seepage at top of scarp, in grass-	1													
land with low open-woodland (C4).														
Dicerma biarticulatum (L.) DC	X	X	- 1							- 1	- 1	X		
Perennial legume to 1.5 m. In sand over							- 1					^	- 1	
sandstone, in tall open-shrubland near					- 1								- 1	
river (A1). Diffuse herb. On damp sand near creek (A2). In seepage on sand-														
stone scarp; in low open-woodland (C4).												1		
Erythrina vespertilio Benth									x			v		
Erect tree 12 m; deciduous; bark corky.									Λ			X		
pale; fls bright red. In black loam, in low														
woodland in gorge (C1); in basaltic loam													1	
in open-woodland (C4).	- 1				- 1	110			- 1					

SPECIES							SI	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	GS
? Galactia sp. ASG s.n Sprawling perennial herb with buried legumes. In sand in low open-woodland near creek.		1		x										
Glycine tomentosa Benth Prostrate among sandstone on scree slope. Jacksonia argentea C.A.Gardn Shrub to 2.5 m; fls yellow. In sand over sandstone in low open-woodland (A1); in tall shrubland (B4); in lateritic loam on plateau, in low shrubland (C1); on sandstone (C2) (C3); in sandstone gully, in law search force (C5)	х		х					x	х	х	x		X	
in low open-forest (C5). Jacksonia thesioides A.Cunn. ex Benth. Small, slender shrub to 2 m; fls yellow. In sand over sandstone on bank near river (A1); common along creeks (B2); in sand in fringing woodland by creek (B4); common on sandstone (C3); in sandstone gully in low open-forest (C5). Mirbelia viminalis (A.Cunn.) C.A.Gardn. Much branched shrub to 1 m; fls deep yellow. Common on sandstone (A2) (A4); on sandstone plateau, in low woodland	X	x		X		X		X			X	X	X	
(C4). ? Piliostigma malabaricum (Roxb.) Benth. ASG 13929 Several-stemmed shrub 2 m; deciduous; bark ± fibrous. In sand in woodland at												X		
foot of scarp. †Plagiocarpus axillaris Benth. Compact shrub to 0.5 m. In low woodland (B1); on sandstone (C3). Shrub 1m. Among sandstone rocks in low openwoodland (B4); in sandstone gully, in					X			x			х	X	X	
low open-forest (C4) (C5). Psoralea pustulata F.Muell Erect herb (? ephemeral) to 2 m. On scree at foot of escarpment, in low woodland (B1) (C4). Rhynchosia aff. australis Benth. ASG 14096					х				X			X		
Perennial herb to 1 m, semi-scandent; viscid-aromatic; fls yellow. In black loam at foot of sandstone cliff. Sesbania bispinosa (Jacq.) Faur. et Rendle Shrub 2 m; in fr. Among basalt rocks of river bed.					х									
Sesbania formosa F.Muell Tree 4 m; bark corky. On sandy creek bank (B1). Tree to 20 m. In loam/sandstone by creek in vine forest (C1). Tree 12 m; bark corky; fls white, sweetly scented. On loamy river bank (C4). Tephrosia coriacea Benth	X				X				X			X		
Single-stemmed perennial herb. In sand in tall open-shrubland. Tephrosia rosea (F.Muell.) Benth Sparsely branched shrub. On sandstone. Tephrosia sp. ASG 13273 Slender shrub 70 cm. In sand in openforest (A4); in laterite/sandstone in low open-forest (C1).				x			X		х					

SPECIES							SI	TE						
SPECIES	A1	A2	A3	A4	В1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Tephrosia sp. ASG 13309 Shrub 1 m. On rocky sandstone plateau in woodland. Tephrosia sp. ASG 13498 Perennial herb 1.5 m. In sandy creek bed. Tephrosia sp. ASG 14050 Sterile shrub 60 cm. In laterite/sandstone in low open-forest. Tephrosia sp. KFK 3091	X	X		X	x	X			X					
PASSIFLORACEAE Adenia heterophylla (B1.) Koord. ssp. australis (DC.) de Wilde					X	X	x x		X	x		x		
PITTOSPORACEAE Citriobatus spinescens (F.Muell.) Druce Tree 6 m; several stems; bark smooth, grey. In loam/sandstone in vine forest.									X					
PLUMBAGINACEAE Plumbago? zeylanica L Dead plants obs. in gorge near creek.									x					
POLYGALACEAE Polygala sp. ASG 13234 Ephemeral herb. In closed-grassland. Polygala sp. ASG 13594 Reddish ephemeral herb. In rocky basaltic loam by creek.				х	X									
POLYGONACEAE Polygonum attenuatum R.Br Low herb; fls white. On alluvium by creek.							X							
PORTULACEAE Calandrinia quadrivalvis F.Muell. Ephemeral herb; fls bright pink. In dry sand near river (A1); in sandy-clay in grassy creek bed (A4); in sand in grassy creek bed (B2); in sand, in low woodland near swamp (Galaxy Swamp).	х			X		X								X

							SI	TE						
SPECIES	Al	A2	A3	A4	В1	B2	В3	B4	Cl	C2	C3	C4	C5	GS
PROTEACEAE									Î					
Banksia dentata L.f Tree to 5 m; in young fruit. In low open woodland on swamp flat (A1); in swampy	X			X				X				X		X
area (A4) (B4) (Galaxy Swamp). Tree to 10 m. In low open-forest at edge of seepage at top of scarp (C4).														
Grevillea agrifolia A.Cunn. ex R.Br. Shrub to 4 m; fls cream, sweetly scented. Near river (A1) (C1 obs.); on sandstone (A2) (A4) (B3) (C2); in sand over sand-	X	X		X			X	X	X	X				
stone in tall shrubland (B4). Grevillea cunninghamii R.Br								X			X		Х	
Shrub to 3 m; fls red. Among sandstone rocks in low open-woodland (B4); in sandstone gully, in low woodland (C5). Shrub to 1.5m; fls red. On sandstone (C3).														
Grevillea erythroclada W.V.Fitzg Erect, little-branched shrub/tree to 8 m; fls cream. In sand in open woodland/				X										
low open-forest. Grevillea heliosperma R.Br	X	X		X										
Erect shrub to 3 m or tree to 6 m; rough dark grey bark. In sand, in low openwoodland (A1); common on sandstone														
plateau (A2); in open-forest (A4). Grevillea mimosoides R.Br Tree to 10 m. In basaltic loam in woodland (B1). Shrub to 3 m; bark corky; fls					X					X				
cream. Common on Carson Volcanics (C2) and sandstone (C2). Grevillea pteridifolia Knight	X			X		X	x	X			х	X		
Tree to 10 m; fls orange. Near creek (A1) (C3); in sand in open-forest, and as emergent in closed-grassland (A4); on	Λ			^		^	Α	^			۸	Λ		
alluvial sand on fringe of cadjeput closed- forest (B2); on sandstone (B3); on sand- stone in gully (B4) (C4 obs.).														
Grevillea refracta R.Br Shrub to 4 m; fls orange or red with yellow limb. Common on sandstone (A1)	Х	X					X				X			
(A2) (B3) (C3). Grevillea viscidula C.A.Gardn Tree to 4 m; fls greenish yellow; fruit			X				X							
viscid. Emergent in closed-grassland (A3); on sandstone (B3).				-										
Hakea arborescens R.Br Erect shrub to 3 m. On sandstone (A3) (C2); in sand in low open-forest (A4). Small tree to 6 m; in fruit. On basaltic			X	X						X		X		
scree, in low open-woodland (C4). Persoonia falcata R.Br Tree to 4 m; fls yellow. Common on		X		X		X	X	X				X		
siltstone (A2) (B2) (B3); in sand in open- woodland (A4); in sand over sandstone in tall shrubland (B4); on sandstone plateau														
and scarp, in low woodland (C4 obs.) Stenocarpus cunninghamii R.Br					X	X	X	X	X		Х	X		
Shrub to 6 m; fls cream. In sandstone gully on escarpment, in low open-forest (B1) (C4); on siltstone (B2); sandstone (B3) (C3); in sandstone rocks above river (B4) (C1).														

							SI	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
RHAMNACEAE Alphitonia excelsa (Fenzl) Benth Low shrub in gorge (A2). In rocky sandstone gully, in low closed-forest (B1) (C4); on sandstone scree in low woodland (C1). Tree to 12 m in sandstone gorge, fruit black (C2) (C5). Zizyphus sp. ASG 13935 Shrub 2-5 m. On sandstone scarp in low open-forest.		X			X				x	x		X	X	
RHIZOPHORACEAE Carallia brachiata (Lour.) Merrill Tree to 20 m; bark irregularly tessellated, grey. In loam/sandstone by creek, in vine forest (C1). Tree 5 m; lvs shining; fls pale green. In sandstone gully, in low closed-forest (C4). Tree 20 m. By creek in fringing tall closed-forest (C5).									X			X	X	
RUBIACEAE Borreria? australiana Specht Prostrate herb. On damp sand near creek. Canthium sp. ASG 13302, 13768, KFK 3043 Shrub 3 m; rough grey bark; Ivs ± yellow-green. On sandstone plateau in low woodland (A4) (B4). Dentella repens J.R. & G. Forst. Prostrate ephemeral herb; fls white. In sand over basalt rocks in river bed. Gardenia megasperma F.Muell. Tree 5 m; bark smooth. On sandstone scarp in low closed-forest. Gardenia pantonii F.Muell. Tree to 3 m. On sandstone cliff-top above river (B4); common on sandstone		X		X	X			x		x	X	x		
(C2) (C3). Gardenia sp. ASG 13196 Several-stemmed shrub 1 m. In sand in				X										
woodland. Gardenia sp. ASG 13268 Shrub 2 m; bark brown-grey. In sand in open-forest. Gardenia sp. ASG 13572 Tree 4 m; in fruit. Among sandstone rocks in low woodland.	X			X		W.							77	
Gardenia sp. KFK 4287, ASG 14122 Shrub to 2 m. Common on sandstone (B2); On sandstone slope of gully, in low closed-forest (C5). Gardenia sp. KFK 3098, ASG 13290 Tree to 3 m; smooth-barked. Common along edge of sandstone cliff (A2); on silt-		X		X		X							X	
stone scarp in tall open-shrubland (A4). Gardenia sp. KFK 4290 Tree to 3 m. On sandstone. Gardenia sp. KFK 4075 Shrub to 4 m; stems and trunk orange. On sandstone.			X			X								

SPECIES							S	ITE						
SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	CI	C2	C3	C4	C5	GS
Ixora? tomentosa Roxb. ASG 13289, 14048 Several-stemmed shrub to 70 cm. On silt- stone scarp in tall open-shrubland (A4). Tree 4 m; bark ± stringy, grey. On lateritic knoll in low woodland (C1). †Morinda? acutifolia F.Muell. ASG 14136 Small, slender shrub, with latex. In sand near creek, in closed-forest. Nauclea coadnata J.E. Sm Tree to 9 m; dark grey, roughish. Com- mon along bed and banks of tributary of Carson River (B1) and Drysdale River (B2). Tree to 18 m. In loam/sandstone near creek, in vine forest (C1). Tree to				x	x	x			x			X	X	
20 m; bark tessellated. On sandy creek bank in woodland (C4). Oldenlandia galioides (F.Muell.) F.Muell. Small, spreading ephemeral herb; fls white. In damp sand by river (A1); beside creek (A4) (B2); on wet sandstone	x			х		x						X		
cliff or scarp, in low woodland (C4). Randia cochinchinensis (Lour.) Merrill Spreading tree; bark smooth, grey. In rocky sandstone gully in low closed-forest (B1) (C4). Shrub 3 m. On ledge at base of sandstone cliff (B3); on sandstone near creek (C3). Tree 10 m; fruit orange-red. In loam/sandstone in vine forest (C1). Shrub 2 m. On sandstone slope of gully, in low closed-forest (C5). Timonius timon (Spreng.) Merrill Tree 6 m. In loam/sandstone, in vine forest (C1). Shrub to 2 m; fls white. In sand beside creek (C2). Pyramidal tree 10 m; bark brown, fissured; lvs ### And the start of the same start of the					x		x		x	X	X	x	x	
shining; fls creamy-white. On loamy river bank (C4). RUTACEAE Boronia lanuginosa Endl Shrub to 1.5 m; a few late fls (cream). Among sandstone rocks in low openwoodland (A1); in sand over sandstone (A2); in tall shrubland (B4); on sand-	X	x						X			X	x	x	
stone scree slope (C3); in sandstone gully, at edge of low closed-forest (C4) (C5). Fls pale pink, centre darker (C5). Glycosmis pentaphylla (Retz.) DC Shrub on sandstone (C3). Tree 5 m; bark slightly rough, grey. In rocky sandstone											X	x		
gully, in low closed-forest (C4). †Glycosmis trifoliata (Blume) Spreng Shrub to 2 m. On sandstone (C3). Shrub 3 m. On sandstone slope of gully, in low closed-forest (C5). Micromelum minutum (Forst. f.) W. & A. Several-stemmed shrub 3 m. On sandstone scree, in low woodland									x		X		X	
SANTALACEAE Exocarpos latifolius R.Br Shrub to 2 m. Common on sandstone cliff.		x												

							SI	TE						
SPECIES	Al	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Santalum lanceolatum R.Br. Tree to 3 m. In sand in low open-forest (A4); on sandstone plateau in low woodland (B1); beside creek (B3) (C2); in tall shrubland (B4); on sandstone (C3); in low woodland (C4).				X	X		X	x		X	X	x		
APINDACEAE Atalaya hemiglauca F.Muell. ex Benth Shrub 4 m. In rocky sandstone soil near creek. Atalaya variifolia (F.Muell.) F.Muell. ex Benth Shrub 3 m with several stems. On sandstone scree in low open-forest (B1). Tree 10 m; crown small; bark tessellated. grey; in bud. In sand, in woodland at foot of scarp (C4). Distichostemon hispidulus (Endl.) Baill Spreading shrub to 2 m; ♂ fls green turning brown then red, ♀ fls with red styles; fruit developing. In sandy creek bed (A1); on rocky plateau in woodland (A4); on sandstone (A2) (B2) (C3); at side of creek (B3). Dodonaea sp. KFK 4112 Low, much-branched shrub; lvs pinnate. On sandstone.	X	X	x	X	X	X	x		X		X	X		The second secon
Planchonella arnhemica (F.Muell.)Van Royen Tree to 9 m with corky fissured bark and dense canopy; fruit green. In sand, in low open-woodland (A1); on sandstone hill (A2) (B2) (C3); among sandstone rocks in low open-woodland (B4); in sand, in woodland (B4); on sandstone scree in low woodland (C1). †Planchonella pohlmanniana (F.Muell.) Pierre ex Dubard var. vestita V.Royen Tree to 8 m; leaves green/grey, felty;	X	X				X	X	X	X		x		X	
canopy well developed. Common on sandstone (B3) (C5). Pouteria sericea (Ait.) Baehri Dense shrub to 5 m. In rocky river bed (A1); in sandstone gully, in low closed-forest (B1 obs.); on sandstone near creek (B3). Tree 15 m. In loam/sandstone in vine forest, being strangled by Ficus? virens (C1). Shrub to 2 m; fls cream. Common on sandstone (C3). Tree to 6 m. In sandstone gully in low closed-forest (C5).	X				X		X		X		X		X	
SCROPHULARIACEAE Buchnera linearis R.Br. Erect ephemeral herb; fls white suffused pink or pale lilac. In damp soil near remnant pool (A3) (B2); in closed-grassland (A4).			X	X		X								

SPECIES							SI	TE						
SPECIES	A 1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	G
Buchnera ramosissima R.Br. Ephemeral herb; fls white or pink. On sandstone (A2) (B2) (C2); on sandstone plateau in low woodland (A4) (C4). Buchnera urticifolia R.Br Erect herb; fls white, tinged pink. On edge of swamp (Galaxy Swamp); in sand near river (B4); in rocky creek bed (C1). Buchnera sp. ASG 13724		X		X	X	X		X	X	X		X		X
Ephemeral herb 2 m; fls white. On rocky scree in low woodland. Hemiarrhena plantaginea Benth. Ephemeral rossetted herb; fls blue, sometimes white. Very common in wet areas havida greeks and mocks (A2) (A4) (B1)		X		X	x	X		x	X					
beside creeks and pools (A2) (A4) (B1) (B2) (B4) (C1 obs.). Limnophila chinensis (Osbeck) Merr. Semi-aquatic herb; fls lilac. Forming dense mats in pool (A1) (A4) (B2) (B4). Limnophila fragrans (Forst.f.) Seem. Small semi-aquatic herb; fls pale pink. In sand by creek (B1) (C4); on mud bank	х			X	X	X		X			X	x	X	
beside creek (C3) (C5). Limnophila indica (L.) Druce Aquatic. On edge of mud bank. Limnophila sp. ASG 13551, 13737, 14161 Aquatic herb; fls mauve. In billabong (A1); in black drying mud of swamp (Galaxy Swamp).	X									х				×
Lindernia subulata R.Br. var. glanduligera Specht Ephemeral herb, fls purple. In seepage at top of scarp, in grassland among low open-woodland. Microcarpaea minima (Koen.) Merr. (Pre- viously recorded for W.A. as M. muscosa												х		
R.Br.) Small matted herb forming sward on mud, beside creek (A4) (B3) (C1). Mimulus linearis (R.Br.) Wettst Ephemeral herb; fls mauve, throat yellow with orange spots (B4); in sandy clay in low woodland near swamp (Galaxy Swamp)				X			X	x	Х					X
Mimulus sp. ASG 13789 Ephemeral herb, fls yellow. In sandy hollow near river. Stemodia coerulea Benth Aromatic ephemeral herb; fls blue/mauve. Common on sandstone (A2) (A3) (B3); in sand, in dry grassy creek bed (A4) (B1); in rock crevices by river (B4), in seepage at base of wet sandstone cliff on scarp, in low woodland (C4).		x	X	X	X		X	x				x		
Stemodia viscosa Roxb. Perennial viscid herb; fls blue. On edge of Carson Volcanics. DLANACEAE Nicotiana benthamiana Domin. Aromatic herb to 30 cm; fls white. On ledge at base of sandstone cliff.							x			х				

SPECIES							Si	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	CI	C2	C3	C4	C5	GS
Solanum dioicum W.V. Fitzg Slender shrub 80 cm. In sand, in low open-woodland (A1); on sandstone scarp, in low woodland (C4). Solanum sp. ASG 14068 Spreading shrub to 70 cm; fls pale purple. Among sandstone rocks near creek.	X								X			X		
STACKHOUSIACEAE Stackhousia viminea Sm Slender ephemeral herb; fls yellow. In closed grassland (A4); in rocky basaltic loam by creek (B1); in sand in woodland (B4); on sandstone scarp, in seepage area among grass in low open-woodland (C4).				X	x			X				X		
STERCULIACEAE Brachychiton diversifolium R.Br Tree to 12 m; bark grey, lightly tessellated; fls yellow-green with red streaks. In sand, in low woodland (A1) (A4) (C4). Brachychiton paradoxum Schott Deciduous tree to 3 m, no flowers but mature fruits; on scree slope on edge of	X		X	х			X			X		X		
open-woodland (A3) (B3). Brachychiton sp. ASG 13251 Deciduous shrub with several stems to 70 cm; fls orange-red. In sand, in low open-forest. Brachychiton sp. ASG 13728, 13772, 13933 Tree 6 m; deciduous; fls pale red, green at base. On sandstone scree in low open-forest (B1) (C4); among sandstone rocks				X	X			X				X		
in low woodland (B4). Sterculia viridiflora W.V. Fitzg. Deciduous tree to 8 m, flowers small and pink; common on sandstone areas (B3) (C2) (C3).	x	v	v				X		X	X X	X	X		
Sterculia viscidula W.V. Fitzg Tree 5 m; fls red. In sand, in low openwoodland (A1) (C1 obs.) (C4 obs.). Waltheria indica L Diffuse shrub to 2 m; fls yellow. In sand near dry creek bed, in open-woodland (A1); common near creek (A3); on dry flat (A3); in open-woodland (A4) (B2).	X	X	x	x		X			Α	Λ		A		
STYLIDIACEAE Stylidium aff. ceratophorum O.Schwarz KFK 4030, 4012, ASG 13914 Fls pink with white throat, red outside. In wet soil of closed-grassland (A3); in seepage at top of scarp, in closed-grassland (C4). Stylidium claytonioides W.V. Fitzg			X									x x		
Corolla bright pink with yellow throat, brownish outside, column claw dark brown. In seepage area, in closed-grassland among low open-woodland, at top of scarp.														

SPECIES							SI	TE						
SPECIES	A1	A2	A3	A4	В1	B2	В3	B4	C1	C2	C3	C4	C5	GS
Stylidium fissilobum F.Muell. Fls white. In wet soil of closed-grassland (A3); in sand in low woodland near creek (B4).			X					X						
Stylidium aff. floribundum R.Br. KFK 4037 Basally rosetted herb; scape with silky glandless hairs; fls pale pink, throat deep pink. In wet soil of closed-grassland. Stylidium multiscapum O.Schwarz Ephemeral herb; fls deep pink inside, pale outside. In white sand along grassy banks of Nymphaea Creek (A3); in sandyclay along grassy creek bed (A4) (B4); closed-grassland (Galaxy Swamp).		4.0	X	X					X					X
Stylidium muscicola F.Muell Delicate ephemeral herb, fls pink, cream outside. Seepage areas on sandstone cliff ledges (A2); on wet, shaded sandstone ledges in gully, in low closed-forest (B1)		X			X				X			X		
(C4); on wet sandstone ledges of cliff (C1). Stylidium pachyrrhizum F. Muell Ephemeral herb; fls magenta, white outside. On damp area of closed-grassland near Lorikeet Creek. Stylidium aff. pachyrrhizum F.Muell. ASG		X												
Fls pale pink with red throat markings. In sand by creek. Stylidium aff. rotundifolia R.Br. ASG s.n. In damp sand near river. Stylidium schizanthum F.Muell Ephemeral herb; fls white. In clay, in low woodland near swamp (Galaxy Swamp); in damp soil of closed-grassland (A3).			X					X						X
Stylidium sp. KFK 4224, 4008, ASG 13484, s.n	X		X			X		X	X					
CILIACEAE Grewia polygama Roxb Spindly shrub. On sandstone ledge (A2); in sand, in low open-forest (A4); in basaltic loam in woodland (B1).		X		X	x									
Triumfetta denticulata Benth Spindly, much branched shrub. In sand, in tall open-shrubland near dry creek (A1); common on sandstone (B3). Triumfetta plumigera F.Muell Erect shrub to 2 m; in fruit. On sandstone plateau among hummock grass (A2);	X	Х					X					х		
in low open-forest (C4). Triumfetta sp. KFK 4274, 4215, 4508, ASG 13501 Sparsely-branched shrub; fruit fallen. In sand in low woodland (A1); on sand over sandstone (B2) (C3).	X					X					X			

SPECIES							SI	TE						
SPECIES	A1	A2	A3	A4	B1	B2	В3	B4	Cl	C2	C3	C4	C5	GS
Triumfetta sp. ASG 13492, KFK 4269 Slender, short-lived shrub to 80 cm. In sand over sandstone, in low open-woodland.	X													
Celtis philippensis Blanco					X				X	X		X		
2 m. On Carson Volcanics (C2). Trema aspera (Brongn.) Bl Shrub 1 m; lvs bright green. In rocky basaltic loam by creek in low woodland (B1). Shrub in sandstone gorge (B3) (C2).					X		X			X				
CERBENACEAE Clerodendrum tomentosum R.Br Diffuse, much branched shrub to 2 m; fls white. On edge of creek (B3) (C2); on sandstone cliff-top above river (B4); in rocky sandstone gully, in low closed-							x	X		X		X		
forest (C4). Vitex glabrata R.Br Straggling shrub 4 m. In rocky sandstone gully, in low closed-forest (B1). Tree to 10 m; deciduous, fls only. Sandstone gorge (B3). Tree 10 m; bark grey, lightly fissured. In rocky sandstone gully, in low closed-forest (C4); Tree 6 m; bark ± fibrous, grey; fls pale blue. In sandstone gully on scarp, in low woodland (C4). Tree 8 m. On sandstone slope of gully, in low closed-forest (C5).					X		X					X	X	
VISCACEAE †Viscum flexicaule Barlow Pendulous hemi-parasite; fls. minute; fr. globular, opaque, whitish. On Terminalia canescens.			X											