AN ANNOTATED PLANT CHECKLIST OF BUNGLE BUNGLE AND OSMOND RANGE, SOUTH-EASTERN KIMBERLEY, WESTERN AUSTRALIA.

NOTES ON THE COLLECTION

The following list contains all the species so far identified. It totals 403 species in which there are 9 fungi, 1 lichen, 7 liverworts, 14 mosses, 14 ferns, 1 cycad and 357 flowering plants (89 monocots, 268 dicots). The monocots belong to 47 genera in 12 families and the dicots to 151 genera in 68 families.

In terms of species numbers the Poaceae are the largest family recorded from the survey area, closely followed by the Cyperaceae. Table 1 lists the number of species in the larger families.

Table 1. Number of species in the larger families collected in the Bungle Bungle and Osmond Range.

FAMILY	NO. SPECIES	LARGEST GENERA
Poaceae	44	Eragrostis 5
Cyperaceae	31	Cyperus 13
Myrtaceae	27	Eucalyptus 18
Papilionaceae	26	Crotalaria 4 &
		Tephrosia 4
Mimosaceae	23	Acacia 23
Euphorbiaceae	14	Euphorbia 5
Asteraceae	11	Pterocaulon 4
Proteaceae	9	Grevillea 6
Rubiaceae	8	Oldenlandia 3
Malvaceae	8 8 7	Hibiscus 5
Moraceae		Ficus 7
Amaranthaceae	6	Ptilotus 2
Asclepiadaceae	6	Marsdenia 2
Combretaceae	6 6 . 5 5	Terminalia 6
Tiliaceae	6	Triumfetta 4
Convolvulaceae	. 5	
Loranthaceae	5	Amyema 2 &
		Lysiana 2
Sapindaceae	5	Dodonaea 3
Scrophulariaceae	5 5 5	Stemodia 4
Solanaceae	5	Solanum 4

ARRANGEMENT OF THE PLANT CHECKLIST

Genera and species are arranged alphabetically within families which are themselves alphabetical in each section. Introduced plants are indicated by an asterisk (*). Species are followed by a collector's number or numbers to assist location of the voucher collections. Initials cited in the text refer to the following collectors: MIB (M.I. Blackwell); EAC (E.A. Chesterfield); CD (C. Done); SJF (S.J. Forbes); KFK (K.F. Kenneally); MN (M. Newstead); WAP (W.A. Papst); DBR (D.B. Rose); NHS (N.H. Scarlett); ASW (A.S. Weston) and JHW (J.H. Willis). All specimens cited are represented by voucher specimens housed either in the Western Australian Herbarium (PERTH) or the National Herbarium of Victoria (MEL), unless indicated by the initials SR which denotes a sight record only.

Nomenclature for vascular plants (Tracheophyta) follows Green (1985) and families for Basidiomycetes follow Julich (1981). All other entries are in accord with recommendations of specialists for particular taxa.

PLANT CHECKLIST

EUMYCOPHYTA (Fungi and Lichens)

Fungi

BASIDIOMYCETES

CORIOLACEAE

Pycnoporus sanguineus (L. ex Fr.) Murr. JHW s.n. Sparse. On dead fallen branch in open woodland of Eucalyptus collina, plateau top above S. escarpments into Winnama Springs gorge.

LYCOPERDACEAE

Lycoperdon sp. (SR)

Noted on open grassy ground against Turkey Ck (upstream from Winnama Ck junct.) Mabel Downs Stn.

PISOLITHACEAE

Pisolithus tinctorius (Mich. ex Pers.) Coker & Couch KFK 9219, 9269 Noted in sand beside track along Turkey Ck (upstream from Winnama Ck junction), Mabel Downs Stn; in cemented grey clay adjacent to Red Rock Creek where it appeared to be associated with nest of red ants and in Piccaninny Gorge.

POLYPORACEAE

Polyporus udus Jungh. KFK 9213 On dead, fallen wood at Wulwuldji.

Pseudofavolus? vespaceus (Pers.) G.H.Cunn. JHW s.n.
On dead, fallen and charred branch in shade, beside Winnama Springs
Creek immediately below gorge, Mabel Downs Stn.

Trametes muelleri Berk. JHW s.n.

Dead fallen trunks of *Eucalyptus collina* on high rocky plateau above S declivities of Winnama Springs gorge.

Trichaptum venustum (Berk.) G.H.Cunn. JHW s.n.
On fallen, rotting trunks along Winnama Springs creek, immediately below mouth of gorge, Mabel Downs Stn.

Tyromyces? oviformis (G.H.Cunn.) G.H.Cunn. JHW s.n.
On hard bloodwood log at head of gorge on Winnama Springs creek,
Mabel Downs Stn.

SCHIZOPHYLLACEAE

Schizophyllum commune Fr. JHW s.n.

Very small young sporocarps on hymenial surface of an old *Trametes muelleri* bracket. High rocky plateau above S. declivities of Winnama Springs gorge, Mabel Downs Stn.

Lichens

PLEOSPORACEAE

Microthelia aterrima (Kremp. ex Anzi) Zahlbr. SJF 2620 Abundant black, crustose lithophyte, appearing granular. On sandstone pavement of Bungle Bungle massif.

BRYOPHYTA (Liverworts and Mosses)

HEPATICAE (Liverworts)

ANEURACEAE

Riccardia bipinnatifida (Colenso) Hewson EAC 196, 197 On roots of closed forest dominants in Winnama Gorge.

REBOULIACEAE

Asterella drummondii (Hook.f. & Tayl.) Schust. MIB/BB s.n. In Piccaninny Gorge.

RICCIACEAE

Riccia vesiculosa (Carr. & Pearson) Steph. KFK 9302

Thalloid liverwort on dried mud wall in gorge of Piccaninny Ck.

Riccia? deserticola Steph. EAC 238
On damp earth bank under swampy closed forest at Wulwuldji.

Riccia? lamellosa Raddi SJF 2653
On damp earth bank in savannah woodland at Blue Holes on Ord R.

Riccia muscicola Steph. MIB/BB 216, 376 In canyon to north east of Piccaninny Gorge.

Riccia sp. SJF 2652
On damp earth bank in savannah woodland at Blue Holes on Ord R.

MUSCI (Mosses)

ARCHIDIACEAE

Archidium indicum Hampe & C.Mull. MIB/BB 217, 421 In canyon to north east of Piccaninny Gorge.

Archidium rothii Watts ex Roth. SJF 2653
Forming broken turf. On steep earth bank adjacent to Ord R. at Blue Holes.

Archidium sp. SJF 2632
Occasional cushions. On sandstone shelves of entrenched creek valley on summit of Bungle Bungle massif.

BRYACEAE

Brachymenium aff. preissianum (Hampe) Jaeg. EAC 236 On damp, peaty coarse-sand bank beside stream in swampy closed forest at Wulwuldji.

Bryum cellulare Hook. JHW s.n.
Forming a dense turf on shaded peaty ground against edges of pools along Winnama Springs Ck (where associated with Colocasia at mouth of gorge).

Bryum sp. EAC 236
On damp, peaty coarse-sand bank beside stream in swampy closed forest at Wulwuldii.

Bryaceae sp. SJF 2652
Forming broken turf. On steep earth bank adjacent to Ord R. at Blue Holes.

DICRANACEAE

Trematodon acutus C.Mull. KFK 9203; EAC 237, 238
On damp earth bank under swampy closed forest at Wulwuldji; on seepage bank beside creek in Osmond Valley.

CALYMPERACEAE

Octoblepharum albidum Hedw. EAC 199
Forming loose mats beneath overhangs and tight, compact cushion on rockface. On sandstone in Winnama Gorge.

HYPNACEAE

Vesicularia aff. montagnei (Bel.) Broth. EAC 198
Forming mats over Nephrolepis hirsutula rhizomes. On sandstone cliffs of Winnama Gorge.

Vesicularia aff. rivalis Broth. JHW s.n.

Forming mats on wet shaded rock surfaces under perching colonies of ferns (chiefly *Nephrolepis hirsutula*), northern face of Winnama Springs gorge, Mabel Downs Stn.

PLAGIOTHECIACEAE

Isopterygium sp. JHW s.n.

Forming mats on wet shaded rock surfaces under perching colonies of ferns (chiefly *Nephrolepis hirsutula*), northern face of Winnama Springs gorge, Mabel Downs Stn.

POTTIACEAE

Splachnobryum aff. wiemansii Fleischer SJF 2653

Forming broken turf. On steep earth bank adjacent to Ord R. at Blue Holes.

Uleobryum peruvianum Broth. SJF 2652, 2553

Forming broken turf. On steep earth bank adjacent to Ord R. at Blue Holes.

TRACHEOPHYTA

PTERIDOPHYTA

Ferns and Fern Allies

ADIANTACEAE

Ceratopteris thalictroides (L.) Brongn. KFK 9203A

Emergent aquatic. In wet sand at edge of creek in Osmond Valley.

Cheilanthes brownii (Desv.) Domin SJF 2575, 2628; KFK 9250; MIB/BB 130, 132, 249

Tufted fern, rhizome short, fronds woolly. Common in sandstone crevices of Bungle Bungle massif.

Cheilanthes pumilio (R.Br.) F. Muell. SJF 2640, 2684; KFK 9285A;

MIB/BB 15, 131, 251, 256, 405

Tufted fern from short rhizome. In sheltered sandstone overhangs of Bungle Bungle massif and on sheltered clay-loam bank adjacent to drying pool on Red Rock Ck.

Cheilanthes tenuifolia (Burm.f.) Sw. MIB/BB 129, 201, 208 Dark, finely dissected fern to 0.3 m. On rocky ledge in Piccaninny Gorge.

Cheilanthes sp. SJF 2627

Tufted fern. In crevices of sandstone wall in creek valley on Bungle Bungle plateau.

BLECHNACEAE

Blechnum orientale L. SJF 1989
Tufted rhizomic fern to. 0.7 m high. At base of cliff amongst closed forest in Winnama Gorge.

GLEICHENIACEAE

Dicranopteris linearis (Burm.f.) L.Underw. ASW 14712 Scrambling fern. In shaded seepage area of cliff in Piccaninny Gorge.

HEMIONITIDACEAE

Taenitis pinnata (J.Sm.) Holtt. SJF 2596
Rhizomic, to 0.5 m. On sandstone wall in chasm of Bungle Bungle massif. First record for W.A.

LINDSAEACEAE

Lindsaea ensifolia Sw. SJF 1988; ASW 14710, 14711, 14713; MIB/BB 328

Rhizomic fern to 0.5 m. At base of sheltered cliff of Winnama Gorge under closed forest and on seepage area of shaded rock wall in Piccaninny Gorge.

MARSILEACEAE

Marsilea mutica Mett. SJF 2691; MIB/BB 189, 357
Stoloniferous fern with floating and emergent leaves. In and on sandy margins of drying pool of Red Rock Ck.

OLEANDRACEAE

Nephrolepis hirsutula (Forster) C.Presl. SJF 1990; JHW s.n. Rhizomic, to 0.5 m. On sheltered rock wall amongst closed forest in Winnama Gorge.

PSILOTACEAE

Psilotum nudum (L.) P. Beauv. SJF 1975; ASW 14716
Rhizomatous, dichotomously branched fern with linear stems, leaves absent. On sheltered rock wall amongst closed forest in Winnama Gorge and on seepage area of shaded rock wall amongst other ferns in Piccaninny Gorge.

SCHIZAEACEAE

Lygodium microphyllum (Cav.) R.Br. EAC 195; JHW s.n. Trailing and ascending into shrubs on sandstone cliffs amongst closed forest in Winnama Gorge. Also sighted in Piccaninny Gorge (ASW) and in Osmond Valley.

THELYPTERIDACEAE

Cyclosorus interruptus (Willd.) H.1to KFK 9187; EAC 231
Rhizomatous fern to 0.7 m. In open flat marshy areas along margins of Melaleuca leucadendra, Pandanus? semiarmatus swamps in Osmond Valley.

SPERMATOPHYTA

GYMNOSPERMAE

CYCADACEAE

Cycas pruinosa Maconochie SJF 2526; NHS 84-291; KFK 9200 Palm-like plant to 0.1 m with stout trunk, leaves glaucous, pruinose, dioecious. Localised on rocky outcrop of sandstone in Osmond Valley and on Osmond plateau in seasonally wet areas.

ANGIOSPERMAE

MONOCOTYLEDONAE

APONOGETONACEAE

Aponogeton elongatus F. Muell. ex Benth. MIB/BB 6, 165; ASW 14714 Aquatic with floating leaves and emergent inflorescences, corms edible, flowers yellow. In ephemeral pools to 2 m deep in Piccaninny Gorge.

ARACEAE

Colocasia esculenta (L.) Schott. SJF 2035S, 2516S; KFK 9188; NHS 84-290

Bulbous and rhizomatous semi-aquatic with erect stems to 0.8 m, rooting at nodes. In permanent creek on organic humus under riparian closed forest in Winnama Gorge and Osmond Valley. Populations sterile at time of visit.

ARECACEAE

Livistona sp. SJF 2535S; KFK 9212

Palm 2 m high, leaves grey-green. Adjacent to permanent creek in margin of riparian closed forest at Wulwuldji.

Livistona sp. 'Victoria River' sensu D. Jones (1984) SJF 2587, NHS 84-315; KFK 9260; MIB/BB 419

Palm to 20 m, trunk naked (although occasionally clothed by old fronds for whole length where sheltered and protected from fire), petioles pruinose, leaves grey-green, fruits spherical. In chasms and on cliffs of Bungle Bungle massif.

CYPERACEAE

Bulbostylis barbata (Rottb.) C.B.Clarke EAC 206, 223; MIB/BB 28, 30, 33, 44, 50, 204, 259, 261, 262, 267, 268, 281, 288, 290, 293, 306, 348, 380, 401, 406, 478, 490

Tufted sedge along drainage line of *Eucalyptus collina* dominated plateau above Winnama Gorge and in Piccaninny Gorge.

Cyperus breviculmis R.Br. MIB/BB 491 In Piccaninny Gorge.

Cyperus conicus (R.Br.) Boeckler MIB/BB 47, 294 In Piccaninny Gorge.

Cyperus cunninghamii (C.B. Clarke) C.Gardner subsp. ined. SJF 2636S; MIB/BB 468

Tufted resinous sedge with brittle spikelets. Along dry drainage line of Bungle Bungle plateau. Also in Piccaninny Gorge.

Cyperus cunninghamii (C.B. Clarke) C.Gardner subsp. ined. MIB/BB 49, 280

In sandstone fissure, Piccaninny Gorge.

Cyperus cuspidatus Kunth MIB/BB 31, 344 In Piccaninny Gorge.

- Cyperus eleusinoides Kunth KFK 9194
 Rhizomatous sedge, inflorescence pale straw coloured. On edge of flowing creek in riparian forest of Osmond Valley.
- Cyperus flaccidus R.Br. vel aff. MIB/BB 39, 34I In Piccaninny Gorge.
- Cyperus holoschoenus R.Br. SJF 2033, 2637; EAC 208; MIB/BB 46, 271 Rush-like perennial in sandy drainage lines.
- Cyperus microcephalus R.Br. subsp. microcephalus MIB/BB 336 In Piccaninny Gorge.
- Cyperus microcephalus R.Br. subsp. ined. EAC 211; JHW s.n. Tufted sedge along drainage line of Eucalyptus collina dominated plateau above Winnama Gorge.
- Cyperus polystachyos Rottb. SJF 1976
 Tufted sedge to 0.3 m. Amongst rocks in river sand under closed forest in Winnama Gorge. First record for W.A.
- Cyperus pulchellus R.Br. MIB/BB 35, 203 In Piccaninny Gorge.
- Cyperus sporobolus R.Br. subsp. nov. EAC 208; JHW s.n. Erect sedge to 0.3 m. Along drainage line of Eucalyptus collina dominated sandstone plateau above Winnama Gorge.
- Cyperus squarrosus L. MIB/BB 40, 48 In Piccaninny Gorge.
- Cyperus vaginatus R.Br. SJF 2545, 2659; NHS 84-320 Tussock to 0.5 m. On sandy strands of major creeks.
- Eleocharis atropurpurea Kunth MIB/BB 29, 226, 260, 282, 349, 489. In Piccaninny Gorge.
- Fimbristylis acuminata M.Vahl MIB/BB 350 In Piccaninny Gorge.
- Fimbristylis cinnamometorum (M.Vahl) Kunth EAC 207 Tufted sedge along drainage line of Eucalyptus collina dominated plateau above Winnama Gorge.
- Fimbristylis depauperata R.Br. M1B/BB 4I, 43, 161, 263, 264, 265, 266, 284, 285, 287, 292, 296, 325 In Piccaninny Gorge.
- Fimbristylis littoralis Gaudich. MIB/BB 37, 291, 295, 298, 327, 347 Sedge with flat succulent leaves. In Piccaninny Gorge.
- Fimbristylis microcarya F.Muell. vel aff. MIB/BB 273, 299, 300, 304, 307, 308, 315, 320, 322, 339, 345, 389, 470 In Piccaninny Gorge.
- Fimbristylis microcarya F.Muell. MIB/BB 27, 32, 45, 51, 76, 164b, 279, 286, 330, 335, 382, 411
 In Piccaninny Gorge.
- Fimbristylis aff. neilsonii F. Muell. MIB/BB 232 In Piccaninny Gorge.
- Fimbristylis nuda Boeckler MIB/BB 340, 487 In Piccaninny Gorge.
- Fimbristylis sphaerocephala Benth. EAC 205A; MIB/BB 42, 283, 319 Abundant sedge in small sandy spaces between rocks. Along drainage line of Eucalyptus collina dominated plateau above Winnama Gorge.

Fimbristylis tetragona R.Br. EAC 229

Tufted sedge to 0.5 m. Along permanent creek under riparian closed forest in Osmond Valley.

Fuirena ciliaris (L.) Roxb. MIB/BB 85, 289 In Piccaninny Gorge.

Fuirena umbellata Rottb. EAC 225; KFK 9193

Rhizomatous, broad leaved flaccid sedge to 1 m, inflorescence brown. In swampy stream of Osmond Valley with dense *Cyclosorus interruptus* and *Pandanus? seiniarmatus*.

Lipocarpha microcephala (R.Br.) Kunth JHW s.n.; MIB/BB 36, 38, 163, 334, 390

Ephemeral tufted sedge to 0.2 m. On dry quartzite hills forming Winnama Gorge.

Rhynchospora affinis W.Fitzg. MIB/BB 34, 159 Inflorescence bronze. In Piccaninny Gorge.

Schoenoplectus lateriflorus (J.Gmelin) Lye SJF 2690
Tufted sedge buried at tips. On sandy margins of drying pools along ephemeral stream.

Schoenoplectus mucronatus (L.) Palla ex Kerner KFK 9195 Rhizomatous sedge forming swards. On edge of flowing creek in Osmond Valley.

Scleria brownii Kunth SJF 1978; JHW s.n. Low sedge. On steep rocky northern slope above Winnama Gorge.

ERIOCAULACEAE

Eriocaulon cinereum R.Br. SJF 2685, 2689; MIB/BB 137, 162, 224, 332, 469

Rosetted herb with white flowers. On sandy margins of drying pools along Red Rock Ck.

Eriocaulon sp. EAC 194

Rosetted herb. On margin of semi-permanent stream at Winnama Gorge. Uncommon.

NAJADACEAE

Najas tenuifolia R.Br. JHW s.n.; MIB/BB 479B Aquatic herb. In permanent stream at Winnama Spring.

ORCHIDACEAE

Cymbidium canaliculatum R.Br. (SR)

Epiphytic orchid forming tussocks to 0.3 m. Typically on *Eucalyptus papuana*.

PANDANACEAE

Pandanus integer H.St.John vel aff. SJF 2517

Palm-like tree to 6 m, branched above. In swampy bed of permanent stream in Osmond Valley.

Pandanus spiralis R.Br. var. thermalis (St.John) B.C.Stone SJF 2027; KFK 9202

Palm-like to 10.m, branched in upper section. On levee above permanent stream at Winnama Springs and Wulwuldji.

PHILYDRACEAE

Philydrum lanuginosum Gaertner SJF 2036

Soft reed-like perennial with distichous leaves. In swamp at Winnama Spring,

POACEAE

Aristida browniana Henrard (SR)

Tufted perennial to 0.5 m with 3 partite awn on prominent column. Abundant on interfluves in Osmond Valley and near Winnama Gorge.

Arundinella nepalensis Trin. EAC 186; KFK 9209

Rhizomatous, caespitose grass forming tussocks to 1 m, deeply rooted, inflorescence straw-coloured. In sand on banks of ephemeral and semi-permanent streams and in damp areas under riparian forest.

Brachiaria piligera (F.Muell. ex Benth.) Hughes M1B/BB 317, 323 On creek bed. In Piccaninny Gorge.

*Cenchrus ciliaris L. WAP s.n.

Rhizomatous perennial grass to 0.1 m. Coloniser on scalds around Bungle Bungle Outcamp.

Coelorhachis rottboellioides (R.Br.) A.Camus JHW s.n.
Tussocks to 1 m. On banks of ephemeral and semi-permanent streams.

Cymbopogon bombycinus (R.Br.) Domin SJF 1974
Tussock to 0.3 m, leaves and base of shoots with strong ginger scent when crushed. On rocky slopes.

Cymbopogon procerus (R.Br.) Domin SJF 2606, 2623; MIB/BB 56 Tussock to 2 m, leaves and base of shoots with strong ginger scent when crushed. In crevices on rocky slopes and rock walls in Bungle Bungle massif.

Digitaria bicornis (Lam.) Roemer & Schultes MIB/BB 69 In Piccaninny Gorge.

*Echinochloa colona (L.) Link. SJF 2031
Rhizomatous, with branched cane-like shoots to 0.3 m. On margin of ephemeral watercourse.

Echinochloa sp. MIB/BB 66 In Piccaninny Gorge.

Ectrosia scabrida C.E.Hubb. MIB/BB 55, 358, 367, 500 In Piccaninny Gorge.

Elytrophorus spicatus (Willd.) A.Camus SJF 2003, 2688; JHW s.n.; MIB/BB 56b, 95, 225, 314
Tufted, leaves vivid green, culms to 0.3 m. On sandy margins of drying

Tufted, leaves vivid green, culms to 0.3 m. On sandy margins of drying pools in Piccaninny Gorge.

Eragrostis cumingii Steudel MIB/BB 59, 61, 62, 272, 305, 309, 318, 331b, 338, 364, 387, 400

In creek bed of Piccaninny Gorge.

Eragrostis japonica (Thunb.) Trin. SJF 2030, 2681 Tufted purplish annual to 0.2 m. On sandy strands of ephemeral creeks.

Eragrostis speciosa (Roemer & Schultes) Steudel MIB/BB 64 In Piccaninny Gorge.

Eragrostis tenellula (Kunth) Steudel MIB/BB 499 In Piccaninny Gorge.

Eragrostis sp. nov. KFK 9253; MIB/BB 57, 270, 368
Caespitose grass, inflorescence straw coloured. Common in sandstone crevices of gorge on west side of Bungle Bungle.

Eriachne ciliata R.Br. JHW s.n.; NHS 84-292; MIB/BB 13, 65, 164, 239, 257, 303

Frequent annual to 0.3 m. Among quartzite declivities on southern side of Winnama Gorge and Osmond Valley, common in Piccaninny Gorge.

Eriachne obtusa R.Br. EAC 205

Robust cane-like perennial to 1 m, branched above. On *Eucalyptus collina* dominated plateau above Winnama Gorge.

Eriachne sp. nov. aff. tenuiculmis W.Hartley KFK 9251 Caespitose grass forming rank stands. Common in sheltered overhangs and crevices of sandstone in gorge on west side of Bungle Bungle.

Eulalia fulva (R.Br.) Kuntze SJF 1996

Tussock forming rhizomatous perennial to 1.5 m. Occasionally dominant along ephemeral streams and on stream levees.

Heteropogon contortus (L.) P.Beauv. ex Roemer & Schultes SJF 1995, 2607

Erect, reddish cane-like perennial to 0.5 m. Forming swards on degraded areas of plains.

Iseilema sp. affin. macratherum Domin JHW s.n.
Tufted reddish annual to 0.5 m. On sandy flat at mouth of Winnama Gorge.

Ophiuros exaltatus (L.) Kuntze SJF 2034
Cane-like perennial forming swards to 2 m. In sheltered positions on creek banks and low lying plains.

Panicum decompositum R.Br. SJF 2032 Tufted annual to 0.3 m. On margin of drying pool at Winnama Springs.

Panicum mindanaense Merr. MIB/BB 75, 191, 240 In Piccaninny Gorge.

Paspalidium clementii (Domin) C.E.Hubb. JHW s.n., EAC 210 Low, almost cushion-forming annual. Among rocks under Eucalyptus collina on rocky plateau above Winnama Gorge.

Paspalidium rarum (R.Br.) Hughes MIB/BB 67, 72, 73, 205, 342 In Piccaninny Gorge.

Perotis rara R.Br. M1B/BB 70 In Piccaninny Gorge.

Phragmites karka (Retz.) Trin. ex Steudel SJF 2655S Rhizomic with canes to 1 m. Forming sward on sandy bank of permanent pool on Ord River.

Plectrachne bynoei C.E.Hubb. SJF 2573; KFK 9254; M1B/BB 60, 466 Hummock grass. On ledges of scree and boulder slopes of Bungle Bungle massif.

Plectrachne pungens (R.Br.) C.E.Hubb. SJF 2556 Hummock grass to 1.5 m diameter and 0.5 m high. On grey sandy-loam floodplains amongst sand plains surrounding Bungle Bungle massif.

Plectrachne sp. MIB/BB 63 In Piccaninny Gorge.

Schizachyrium fragile (R.Br.) A.Camus MIB/BB 58,269. In Piccaninny Gorge.

Schizachyrium pseudeulalia (Hosowaka) S.T.Blake MIB/BB 321, 329, 333, 337, 481

In Piccaninny Gorge.

Sehima nervosum (Rottler.) Stapf. SJF 2012 Lax tussock grass to 1 m. On stream levee at Winnama Springs.

Themeda australis (R.Br.) Stapf. SJF 2664
Tufted perennial about 0.5 m. Extremely rare on black soil plain.

Triodia microstachya R.Br. KFK 9298
Viscid hummock grass, inflorescence maroon. Very common on sandstone in Piccaninny Gorge.

Triodia procera R.Br. NHS 84-370
Hummock grass to 2 m diameter and 0.5 m high, rather lax. In dry sandy bed of Red Rock Ck.

Tripogon loliiformis (F.Muell.) C.E.Hubb. MIB/BB 71 In Piccaninny Gorge.

Whiteochloa capillipes (Benth.) Lazarides MIB/BB 301 In Piccaninny Gorge.

Whiteochloa cymbiformis (Hughes) B.K.Simon MIB/BB 363 In Piccaninny Gorge.

Yakirra australiensis (Domin) Lazarides & R.Webster MIB/BB 464 In Piccaninny Gorge.

Yakirra muelleri (Hughes) Lazarides & R.Webster MIB/BB 78 In Piccaninny Gorge.

PONTEDERIACEAE

Monochoria cyanea (F.Muell.) F.Muell. MIB/BB 143, 255
Aquatic, leaves long-petioled, radical; flowers dark blue. On edge of ephemeral pools in Piccanniny Gorge.

TACCACEAE

Tacca leontopetaloides (L.) Kuntze MIB/BB 199, 214, 335 Bulbous renascent perennial, leaves lobed. In canyon north-east of Piccaninny Gorge.

DICOTYLEDONAE

ACANTHACEAE

Dicliptera glabra Decne. MIB/BB 128

Herb to 0.5 m, leaves linear lanceolate, stems with prominent ovate involucral bracts subtended by a pair of spines. Along stream frontage below Winnama Gorge.

Hypoestes floribunda R.Br. SJF 1981
Slender shrub to 0.5 m with magenta flowers. On steep quartzite rocky slope above Winnama Gorge. [Intergrade between vars. (Robyn Barker pers. comm.)]

Nelsonia campestris R.Br. SJF 2639; MIB/BB 155, 176 Sprawling herb with white flowers. On ephemeral stream draining Bungle Bungle massif and in Piccaninny Gorge.

AIZOACEAE

Glinus oppositifolius (L.) DC. MIB/BB 147, 494, 497 Prostrate herb, flowers white. In Piccaninny Gorge.

Trianthema pilosa F.Muell. MIB/BB 174, 452
Procumbent herb to 0.5 m, densely hispid, flowers pink, in axillary clusters. In Piccaninny Gorge.

AMARANTHACEAE

*Aerva javanica (Burm.f.) Juss. ex Schultes MN s.n. Shrub to 0.5 m, flowers woolly, pale grey. Occasional on degraded sites, especially black soil plains.

Alternanthera denticulata R.Br. var. micrantha Benth. SJF 2670; KFK 9299; JHW s.n.; NHS 84-375; MIB/BB 126

Open shrub to 0.3 m, flowers greenish/white. On rocky outcrops.

Amaranthus? cuspidifolia Domin MIB/BB 127

Herb, leaves spathulate, inflorescence axillary and forming terminal raceme. In Piccaninny Gorge.

Gomphrena canescens R.Br. MIB/BB 227

Herb to 0.5 m, flowers pink. In sand in Piccaninny Gorge.

Ptilotus capitatus (F.Muell.) C.Gardner CD 663

Perennial herb. On limestone ridge.

Ptilotus corymbosus R.Br. JHW s.n.

Erect herb, branched above to 0.5 m, flowers white and purple. On stream levee.

ANACARDIACEAE

Buchanania obovata Engl. SJF 2037S; NHS 84-314 Small tree to 2.5 m, bark rough, grey; trunk short, strong with spreading branches. On levees and terraces.

APOCYNACEAE

Alstonia actinophylla (Cunn.) K.Schumann MIB/BB 21
Tree to 6 m, bark deeply fissured forming broad vertical projections.
On scree and boulder slopes of Bungle Bungle massif.

Carissa lanceolata R.Br. (SR)

Rounded shrub to 1 m, exuding milky latex when broken. Occasional on levees, terraces and plains.

ASCLEPIADACEAE

* Calotropis procera (Aiton) W.T.Aiton SJF 2677
Shrub or small tree to 4 m, leaves more or less confined to branch tips, exuding milky latex when broken. On degraded black soil plains and occasional on levees and terraces. One plant recorded in Piccaninny Gorge.

Cynanchum pedunculatum R.Br. SJF 2534

Twiner to 1 m. On rocky slope at margin of closed forest in Osmond Valley.

Marsdenia cinerascens R.Br. MIB/BB 7

Twiner climbing and trailing in trees, leaves ovate-lanceolate, cordate to 10 cm, flowers pink. In Piccaninny Gorge.

Marsdenia velutina R.Br. SJF 2589A

Creeper with large, distant, velutinous leaves. In sandy streamcourse of gorge at Bungle Bungle massif.

Sarcostemma australe R.Br. SJF 2602; NHS 84-374A; MIB/BB 4 Leafless shrub to 0.3 m, exuding milky latex when broken. Rare on rocky outcrops and on scree and boulder slopes of Bungle Bungle massif.

Tylophora sp. MIB/BB 119

Climber, leaves ovate-lanceolate, to 10 cm. In Piccaninny Gorge.

ASTERACEAE

Blumea pungens W.Fitzg. SJF 2592; MIB/BB 201 Herb to 0.3 m. In gorge tract associated with Bungle Bungle massif.

First collection since Type.

Blumea sp. nov. EAC 209; JHW s.n.

Sticky, aromatic herb to 0.2 m. In dry drainage channels on *Eucalyptus collina* dominated rocky plateau above Winnama Gorge.

Centipeda sp. KFK 9291; MIB/BB 297 Herb to 0.2 m. In rock fissure of Piccaninny Gorge. An undescribed species.

Chrysogonum trichodesmoides (F.Muell.) F.Muell. CD 664 Erect herb. On limestone ridge.

Pterocaulon niveum Cabrera SJF 2597; EAC 188; KFK 9264 White-woolly sub-shrub to 0.5 m, flowers mauve. On rocky hills and boulder and scree slopes of Bungle Bungle massif.

Pterocaulon serrulatum (Montr.) Guill. SJF 2526 Erect, sparsely branched sub-shrub to 0.5 m. On rocky slopes.

Pterocaulon sphacelatum (Labill.) F.Muell. SJF 2017, 2588, 2635 Strongly scented, erect herb, to 0.7 m. On levees and terraces of lowland creek, also entrenched creek on summit of Bungle Bungle massif.

Pterocaulon verbascifolium F.Muell. SJF 2015
Few stemmed upright shrub to 1 m. On levees and terraces.

Vernonia cinerea Less. SJF 2520; KFK 9196 Straggly shrub to 0.7 m, leaves and stems pale green, with pink flowers. On low-lying plain adjacent to permanent stream at Wulwuldji.

Wedelia verbesinoides F.Muell. ex Benth. NHS 84-302 Strongly aromatic semi-shrub, unbranched above. On rocky limestone outcrop.

Asteraceae sp. SJF 2634
Densely tufted herb to 0.2 m. In sandy drainage line on Bungle Bungle plateau. Also known from Northern Territory, but undetermined.

BIGNONIACEAE

Dolichandrone heterophylla (R.Br.) F.Muell. NHS 84-329
Tree to 4 m. On sand plains surrounding Bungle Bungle massif.

Pandorea aff. doratoxylon (J. Black) J.Black KFK 9288; SJF 2638A; MIB/BB 211

Pendulous shrub with scandent branchlets to 1.5 m, leaves dark green, flowers white. On chasm walls and floors of Bungle Bungle massif.

BOMBACACEAE

Adansonia gregorii F.Muell. SJF 2007

Bottle-shaped tree to 15 m with smooth grey bark. Restricted to a few stream levees near Winnama Gorge and Bungle Bungle Outcamp.

BORAGINACEAE

Heliotropium diversifolium F.Muell. ex Benth. sens. lat. EAC 204; JHW s.n.

Dense rigid bushes to 0.3 m. In quartzite declivities of *Eucalyptus collina* dominated rocky plateau above Winnama Gorge.

Heliotropium sp. MIB/BB 453

Woody sub-shrub, flowers cream, leaves glabrous, lanceolate toothed, shortly petiolate. In Piccaninny Gorge.

Heliotropium sp. MIB/BB 171

Woody sub-shrub, flowers white. On bank of creek in Piccaninny Gorge.

Trichodesma zeylanicum (Burm.f.) R.Br. SJF 2679; KFK 9214

Much branched sub-shrub to 2 m with basal rosette of larger leaves, stems and leaves grey, flowers pale mauve. In riparian woodland adjacent to ephemeral stream.

BYBLIDACEAE

Byblis liniflora Salisb. MIB/BB 414, 459

Annual viscid herb, flowers mauve. In alluvial sand beside creek in Piccaninny Gorge.

CAESALPINIACEAE

Cassia venusta F.Muell. SJF 2568, 2612

Shrub to 1 m, flowers yellow. Occasional on black soil plains.

Lysiphyllum cunninghamii (Benth.) de Wit NHS 84-321

Tree to 6m, deciduous, flowers red. Dominant on stream levee and terrace and lowland plains on heavier soils.

* Parkinsonia aculeata L. SJF 2678

Spreading tree to 4 m with yellow flowers. Co-dominant in small, grossly degraded area around Bungle Bungle tank.

Petalostylis cassioides (F.Muell.) D.E.Symon SJF 2605, 2621; KFK 9279, 9286; MIB/BB 123, 361

Open shrub with slender arching branches to 2 m, flowers yellow. On Bungle Bungle plateau and along associated drainage.

CAPPARACEAE

Capparis lasiantha R.Br. ex DC. SJF 2650

Robust climber with recurved spines on branches climbing to 5 m on Hakea arborescens. On lowland plain near Ord R.

Capparis sepiaria L. NHS 84-326 Climber to 6 m twining on Eucalyptus sp. nov. 'Box'. In riparian forest associated with Red Rock Creek.

Capparis umbonata Lindley NHS 84-317, 84-331

Small tree. Extremely rare on rocky outcrops.

Cleome cleomoides (F.Muell.) Iltis (SR) Shrub to 40 cm, flowers yellow. Common in alluvial soil of Piccaninny Gorge

Cleome viscosa L. (SR)

Annual herb to 1 m, flowers yellow. Common in alluvial soil of Piccaninny Gorge and on sandplain surrounding Bungle Bungle.

CARYOPHYLLACEAE

Polycarpaea involucrata F.Muell. SJF 2626; MIB/BB 146, 169 Low herb. In crevices of sandstone wall of stream on Bungle Bungle plateau.

Polycarpaea longiflora F.Muell. SJF 2613

Slender herb to 0.3 m with pink flowers. On sandplain at base of Bungle Bungle massif.

Polycarpaea sp. EAC 200

Herb to 0.1 m with reddish stems. In quartzite crevices of steep slope above Winnama Gorge.

COCHLOSPERMACEAE

Cochlospermum fraseri Planchon SJF 2000: NHS 84-336 Small tree to 3 m, deciduous at time of visit, flowers yellow. Common on rocky slopes.

COMBRETACEAE

Terminalia arostrata Ewart & O.B.Davies SJF 2542; KFK 9224; NHS 84-295

Handsome tree to 10 m with pendulous foliage and long weeping branches, bark grey, persistent. On heavier soils of lowland plains.

Terminalia bursarina F.Muell. SJF 2656; NHS 84-366 Tree to 6 m, typically bent by floodwaters, bark with large, fissured plates, flowers cream. In beds of major ephemeral streams.

Terminalia canescens (DC.) Radkl. NHS 84-343, 84-384 Small tree to 4 m, leaves conspicuous silver-grey. Common on rocky slopes.

Terminalia carpentariae C.White SJF 2004; EAC 219
Tree to 6 m with stout trunk, bark flaking in patches. In quartzite crevices of steep slope above Winnama Gorge.

Terminalia platyphylla F.Muell. SJF 2544; KFK 9225; JHW s.n. Tree to 18 m, bark dark, fissured. Co-dominant in riparian forest along larger ephemeral streams.

Terminalia volucris R.Br. ex Benth. NHS 84-372, 84-383 Shrub to 1.5 m with open crown and straight branches. Dominant in some open scrubs at foot of stony hillslopes in Osmond Valley.

CONVOLVULACEAE

Bonamia linearis (R.Br.) H.Hallier MIB/BB 236, 381 Scandent herb with deep taproot trailing to 0.5 m, flowers white. In Piccaninny Gorge.

Ipomoea polymorpha Roemer & Schultes MIB/BB 235, 278, 360, 420, 430

Herb, flowers purple. In alluvial sand beside creek in Piccaninny Gorge.

Jacquemontia browniana Ooststr. SJF 2675
Shrub to 0.5 m, stems unbranched, leaves linear-lanceolate. At base of limestone outcrop at Giliwal.

Operculina brownii Ooststr. SJF 2548; NHS 84-297
Trailing perennial to 2 m, mature capsule with window over seeds. On basalt outcrop.

Polymeria sp. MIB/BB 362, 428
Tangled herb trailing to 0.5 m. In Piccaninny Gorge.

CUCURBITACEAE

* Citrullus lanatus (Thunb.) Matsumura & Nakai NHS 84-352
Trailer, stems dried. In disturbed areas near Red Rock Creek. Collected by aboriginal informants.

Trichosanthes cucumerina L. SJF 2641; KFK 9289; MIB/BB 384, 498 Weak climber to 1 m with tendrils, flowers white, perianth fringed, fruit orange, pear-shaped when mature, seeds covered in red flesh. Amongst spinifex, in alluvial sand of Piccaninny Gorge.

ELATINACEAE

Bergia pedicellaris (F.Muell.) Benth. SJF 2029, MIB/BB 492, 473, 493 Erect annual 0.1 m, leaves glossy, flowers pink. In sands along ephemeral watercourse.

EUPHORBIACEAE

- Bridelia tomentosa Blume var. glabrifolia (Merr.) Airy Shaw SJF 2595S Rampant shrub 2-3 m with arching cane-like branches. In sandy floor of gorge tract below Bungle Bungle massif.
- Bridelia tomentosa Blume var. trichadenia Muell.Arg. JHW s.n. Wide spreading bush to 2 m tall. Amongst rocks under cliff at mouth of Winnama Gorge with Petalostigma nummularium.
- Chamaesyce aff. micradenia (Boiss.) Hassall JHW s.n. Semi-shrub to 0.6 m with white petal-like appendages. Amongst fallen rocks at mouth of Winnama Gorge.
- Chamaesyce sp. JHW s.n.

 Low herb with a stout taproot, leaves purplish and sage green. At base of Osmond Range.
- Euphorbia coghlanii Bailey SJF 2608; MIB/BB 120, 253
 Open sprawling sub-shrub exuding copious milky latex when broken, flowers white. On sandy floodplain at base of Bungle Bungle massif and in Piccaninny Gorge.
- * Euphorbia hirta L. SJF 2018
 Prostrate sub-shrub exuding milky latex when broken, leaves with maroon blotch in middle. On stream levee.
 - Euphorbia tannensis Sprengel MIB/BB 404 Shrub to 1 m, leaves narrow, oblong. In Piccaninny Gorge.
 - Euphorbia aff. tannensis Sprengel JHW s.n.
 Virgate bushes to 1.5 m, typically to 0.7 m, leaves narrow lanceolate.
 Amongst rocks on W facing declivity at Winnama Gorge.
 - Euphorbia wheeleri Baillon SJF 1994 Semi-shrub to 0.4 m. On black soil stream levee.
 - Mallotus nesophilus Muell.Arg. NHS 84-376
 Small tree. In closed forest of Osmond Valley and gorges of Bungle Bungle massif.
 - Petalostigma nummularium Airy Shaw JHW s.n.
 Low bushes to 1 m tall. Amongst fallen rocks under cliff at mouth of Winnama Gorge.
 - Phyllanthus ciccoides Muell.Arg. NHS 84-309, 84-322; JHW s.n. Small tree to 4 m, drooping. On creek embankment at base of Osmond Range.
 - Phyllanthus virgatus G.Forster SJF 2576; MIB/BB 99, 188, 378 Sprawling sub-shrub. On sandy floodplain at base of Bungle Bungle massif and in Piccaninny Gorge.
 - Securinega melanthesoides (F.Muell.) Airy Shaw SJF 2669; NHS 84-338 Freely suckering shrub to 2 m with more or less remote cane-like stems. On limestone outcrop adjacent to permanent pool at Giliwal.

GOODENIACEAE

- Dampiera conospermoides W.Fitzg. SJF 2633; KFK 9270 Wispy, open-branched, few stemmed shrub to 1 m with deep pink flowers. On summit of Bungle Bungle massif and in Piccaninny Gorge.
- Goodenia heterochila F.Muell. JHW s.n.; MIB/BB 1, 77 Sprawling sub-shrub, flowers yellow. Between quartzite rocks on west facing declivities north of Winnama Gorge mouth.

Goodenia scaevolina F.Muell. SJF 2570; KFK 9249

Ascending shrub to 1.5 m with viscid leaves and stems, very pungent, flowers with deep purple centres and mauve margins. Extremely common on scree and boulder slopes of Bungle Bungle massif.

GYROCARPACEAE

Gyrocarpus americanus Jacq. subsp. pachyphyllus Kubitzki NHS 84-388 Stout-trunked deciduous tree to 8 m. On dry creeks and plains close to Turkey Creek, and in rock scree at base of cliff-face in Bungle Bungle.

HALORAGACEAE

Gonocarpus leptothecus (F.Muell.) Orchard EAC 221; MIB/BB 10, 480b

Sub-shrub to 0.3 m. On *Eucalyptus collina* dominated rocky plateau above Winnama Gorge and growing by creek in Piccaninny Gorge.

LAMIACEAE

Coleus scutellarioides Benth. SJF 2532; KFK 9204

Herb to 0.3 m with square stem and opposite leaves, flowers mauve fading towards pedicel. Along semi-permanent stream under closed forest in the Osmond Valley.

LAURACEAE

Cassytha capillaris Meissner MIB/BB 110

Hemi-parasitic climber, stems glabrous. Scrambling over vegetation. In Piccaninny Gorge.

Cassytha filiformis L. MIB/BB 181

Hemi-parasitic climber, stems hairy, fruit large, black. In Piccaninny Gorge.

LENTIBULARIACEAE

Utricularia chrysantha R.Br. SJF 2671

Herb to 5 cm. In soft mud on margin of Osmond Creek at Giliwal.

LOBELIACEAE

Lobelia quadrangularis R.Br. NHS 84-294, 84-379; KFK 9192; EAC 230; MN s.n.

Prostrate creeping herb rooting at nodes, with blue flowers. Under riparian forest along permanent stream at Wulwuldji.

LOGANIACEAE

Mitrasacme elata R.Br. EAC 203; MIB/BB 467

Herb to 0.2 m, flowers white. In bed of ephemeral watercourse on *Eucalyptus collina* dominated rocky plateau above Winnama Gorge and in Winnama Gorge.

Mitrasacme pygmaea R.Br. SJF 2599; MIB/BB 12, 202, 274, 277, 412, 484

Herb to 0.1 m. In crevices of chasm wall in Bungle Bungle massif.

LORANTHACEAE

Amyema benthamii (Blakely) Danser JHW s.n.

Parasitic on Lysiphyllum cunninghamii. On Turkey Ck above junction with Winnama Springs Ck.

Amyema bifurcatum (Benth.) Tieghem var. eburneum Barlow SJF 2552; KFK 9230

Hemi-parasite on *Eucalyptus dichromophloia*, pendulous from simple haustorium. South of Bungle Bungle Outcamp.

Decaisnina petiolata (Barlow) Barlow subsp. angustata Barlow SJF 2615 Hemi-parasite on Buchanania obovata, pendulous from simple haustorium, corolla scarlet with green reflexed tips. On sandy floodplains of creek draining northern escarpment of Bungle Bungle massif.

Lysiana spathulata (Blakely) Barlow subsp. spathulata SJF 2616; JHW s.n.; MIB/BB 170

Hemi-parasite on Acacia stipuligera, simple haustorium, corolla scarlet with apex of tube and free segments yellow-green. On sandy floodplains of creek draining northern escarpment of Bungle Bungle massif and near Winnama Gorge.

Lysiana subfalcata (Hook.) Barlow SJF 2546, 2651, 2663; KFK 9226; EAC 227

Hemi-parasite on Lysiphyllum cunninghamii and Capparis lasiantha from simple haustorium, pendulous, corolla scarlet, becoming yellow to green at apex. Common on stream frontage and interfluves throughout the study area.

LYTHRACEAE

Ammania multiflora Roxb. SJF 2002; MIB/BB 310, 326 Herb to 0.1 m, flowers pale pink. In drying sand of Winnama Gorge and Piccaninny Gorge.

Rotala diandra (F.Muell.) Koehne SJF 2680; MIB/BB 346
Herb with ascending stems, rooting from nodes. On sandy margins of ephemeral pools along Red Rock Ck and in Piccaninny Gorge.

Rotala mexicana Cham. & Schldl. JHW s.n.; MIB/BB 403, 472, 495, 496 Semi-aquatic succulent, prostrate herb, to 0.2 m. Near Winnama Spring and in Piccaninny Gorge.

MALVACEAE

Gossypium australe F.Muell. SJF 2543, 2687A; KFK 9244; MIB/BB 426 Open shrub to 2 m, pctals pink with maroon blotch at base. Forming dense stands on heavier soils around Bungle Bungle massif.

Hibiscus leptocladus Benth. sens. lat. SJF 2646; JHW s.n.; EAC 233; MIB/BB 106, 158, 233

Few stemmed shrub to 1 m, petals pink with maroon blotch at base. In gorge tract of Piccaninny Ck and on stream levees around Winnama Gorge and Turkey Ck.

Hibiscus meraukensis Hochr. SJF 2524; EAC 234 Low shrub to 0.5 m. On low-lying plain adjacent to permanent stream of the Osmond Valley at Wulwuldji.

Hibiscus setulosus F.Muell. JHW s.n. Little-branched, very spiny sub-shrub to 0.6 m. Among quartzite rocks on west facing declivity above Winnama Gorge.

Hibiscus sp. nov. EAC 233A
Shrubs to 1 m. On levee of semi-permanent stream in the Osmond Valley.
An undescribed species = Fryxell & Craven 4000 (CANB).

Hibiscus sp. nov. 'Middle Springs' SJF 1977
Open shrub to 2 m, petals pink with maroon blotch at base. On steep rocky, quartzite slope at Winnama Gorge. Second record of species.

Sida rohlenae Domin MIB/BB 108, 207, 212 Shrub to 20 cm, leaves ovate-lanceolate, dentate, grey, grey-green. In Piccaninny Gorge.

Sida? spinosa L. MIB/BB 107 Shrub. In Piccaninny Gorge.

MELIACEAE

Melia azederach L. NHS 84-357

Tree to 6 m. Near spring sheltered under limestone cliffs at Djimbitjba.

Owenia vernicosa F.Muell. EAC 222

Tree to 4 m, branched above. In declivity on steep, rocky quartzite slope at Winnama Gorge.

MENISPERMACEAE

Stephania japonica (Thunb.) Miers var. timoriensis (DC.) Forman SJF 2589S; MIB/BB 9

Scrambler with peltate leaves, climbing 1-2 m. In gorge of Bungle Bungle massif. First record for Western Australia.

Tinospora smilacina Benth. JHW s.n. Climber to 5 m. Occasional on stream frontage and levees.

MENYANTHACEAE

Nymphoides indica (L.) Kuntze SJF 2693

Aquatic herb with floating leaves. Stranded on sandy margin of drying pool on Red Rock Ck.

MIMOSACEAE

Acacia acradenia F.Muell. KFK 9265; NHS 84-306, 84-327; MIB/BB 168, 402, 455

Slender low tree to 3 m, bark brown, smooth. Below limestone cliff and on plain near Bungle Bungle Outcamp, in reddish sandy soil and in Piccaninny Gorge.

Acacia coriacea DC. NHS 84-343

Low tree with hard black bark. In savanna woodland on undulating flats fringing Red Rock Ck.

Acacia cowleana Tate SJF 2561

Shrub to 1 m. On stony slope dominated by *Eucalyptus brevifolia* and spinifex.

Acacia dunnii (Maiden) Turrill EAC 213

Slender shrub to 4 m, glaucous, heavily predated by insects. On Eucalyptus collina dominated rocky plateau above Winnama Gorge.

Acacia eriopoda Maiden & Blakely SJF 2644; KFK 9274, 9297; MIB/BB

Small tree with open crown, to 8 m, phyllodes linear to 30 cm, bark smooth, flowers yellow. Associated with Bungle Bungle massif, especially along drainage lines.

Acacia farnesiana (L.) Willd. SJF 2566, 2672; NHS 84-363

Tree to 3 m, bark smooth with prominent lenticels. On degraded creekbanks at Bungle Bungle Outcamp and Giliwal.

Acacia gonocarpa F.Muell. NHS 84-310; SJF 2554; KFK 9234, 9287; CD 666: MIB/BB 256

Shrub to 2 m, bark smooth, dark with red-brown furrows, flowers yellow. On sandplains surrounding Bungle Bungle massif, forming dense understorey to *Eucalyptus collina*.

- Acacia hemignosta F.Muell. SJF 2540; KFK 9220
 Tree to 5 m with blue-grey glaucous leaves and rough, dark platey bark, flowers pale yellow. On quartzite rise and amongst levee and terrace complex near Dutbu.
- Acacia holosericea Cunn. ex Don SJF 2525, 2567
 Tree to 5 m with smooth dark bark and conspicuously angled stems.
 On stream levee and terrace complex.
- Acacia laccata Pedley KFK 9277

 Much branched shrub 2 m, bark smooth, brown. In massive rock of Bungle Bungle plateau.
- Acacia? leptophleba F.Muell. SJF 2008; JHW s.n. Shrub to 2 m. On permanent stream levee at Winnama Gorge.
- Acacia lycopodifolia Cunn. ex Hook. SJF 2024, 2647; EAC 189, 224; KFK 9199; JHW s.n.; M1B/BB 104, 247
 - Low straggly shrubs to 0.1 m, leaves grey-green, flowers yellow. On dry hillsides and sandstone scree slopes.
- Acacia lysiphloia F.Muell. KFK 9221, 9246; SJF 2539 Sprawling shrub to 4 m, bark reddish-brown, 'Minni Ritchi', flowers yellow, pods viscid. Forming dense stands in red soil over rocky scree.
- Acacia monticola J.Black SJF 2582; KFK 9248, 9290; CD 665; M1B/BB 105
 - Small tree to 3 m with reddish 'Minni Ritchi' bark, leaves viscid, flowers yellow. In sandy bank of ephemeral stream draining gorge of Bungle Bungle massif.
- Acacia orthocarpa F.Muell. JHW s.n. Shrub to 2 m with terete phyllodes and erect pods. At Winnama Gorge.
- Acacia pellita O.Schwarz KFK 9191; EAC 192; CD 662 Shrub to 7 m, bark smooth, grey, flowers yellow. Adjacent to permanent creek at Winnama Gorge and at Wulwuldji.
- Acacia platycarpa F.Muell. NHS 84-360 Upper trunk and branches glaucous, with platey fibrous bark at base, to over 2.5 m. Dominant in scrub at base of limestone cliffs.
- Acacia plectocarpa Cunn. ex Benth. SJF 2066, 2683; JHW s.n. Straight tree to 10 m, typically with crown confined to upper third, bark black, hard, deeply fissured. On stream strands and levees.
- Acacia retivenia F.Muell. SJF 2536; & glabrous var. SJF 2618; KFK 9215, 9278; CD 671; MIB/BB 100.
 - Shrub or small tree to 6 m, bark smooth, brown, flowers yellow. On stream levee; glabrous variant. On summit of Bungle Bungle massif and in Piccaninny Gorge.
- Acacia stipuligera F.Muell. SJF 2555, 2617; KFK 9233; NHS 84-311; CD 668
 - Shrub to 3 m with smooth, grey bark. On sandy banks of ephemeral streams draining gorges of Bungle Bungle massif.
- Acacia translucens Cunn. ex Hook. EAC 215; JHW s.n. Low shrub to 0.5 m. Around escarpment of Eucalyptus collina dominated rocky plateau above Winnama Gorge.
- Acacia tumida F.Muell. ex Benth. SJF 2662; EAC 226; NHS 84-312; KFK 9216, 9245, 9281; M1B/BB 102
 - Shrub or small tree to 4 m, stems and leaves glaucous, degree of glaucousness extremely variable; flowers yellow. On stream levees and interfluves.

Acacia sp. sub-series Lycopodiifoliae SJF 2527; KFK 9197 Open shrub to 1.5 m, flowers yellow. On quartzite outcrop and sandstone scree slopes.

MORACEAE

Ficus coronulata F.Muell. NHS 84-365

Sub-dominant riparian tree to 10 m. On ephemeral and semi-permanent streams of plains and broad valleys of permanent streams.

Ficus leucotricha Miq. var. megacarpa F.Muell. KFK 9276; SJF 1982, 2630

Spreading shrub or small tree to 3 m, fruits yellow. On steep rocky hillsides and rock walls of sandstone.

Ficus opposita Miq. var. indecora (Miq.) Corner NHS 84-333 Low tree with virtually divaricate branches and rounded crown. In riparian open forest with Celtis philippinensis south of Bungle Bungle Outcamp.

Ficus opposita Miq. var. micracantha (Miq.) Corner SJF 2563; NHS 84-307

Rounded tree to 3 m with rough, dark, fissured bark. On steep limestone outcrop.

Ficus aff. opposita Miq. var. ? NHS 84-323

Spreading tree to 10 m with smooth grey bark. In rips

Spreading tree to 10 m with smooth grey bark. In riparian open forest near Bungle Bungle Outcamp.

Ficus platypoda (Miq.) Cunn. ex Miq. aff. var. cordata Specht SJF 2629

Tree to 3 m with meandering roots, fruits purple when mature. Over sandstone wall of ephemeral stream on Bungle Bungle plateau.

Ficus platypoda (Miq.) Cunn. ex Miq. var. lachnocaula (Miq.) Benth. SJF 2674

Tree to 6 m with roots running over limestone. On limestone outcrop at Giliwal with Celtis philippinensis and Lysiphyllum cunninghamii.

Ficus platypoda (Miq.) Cunn. ex Miq. var. minor Benth. KFK 9263 Rock fig to 5 m, bark grey, figs green subtended by three papery caducous bracts.

Ficus platypoda (Miq.) Cunn. ex Miq. var. platypoda KFK 9295; SJF-2604; NHS 84-303; MIB/BB 218

Spreading tree to 3 m x 3 m with aerial roots, fruits yellow. In sandstone declivity of ephemeral stream below Bungle Bungle massif.

Ficus racemosa L. var. racemosa KFK 9184; SJF 1979
Spreading tree to 10 m with multiple trunks, bark smooth pale grey with prominent lenticels, fruits cauliflorus, tan when mature. On permanent and semi-permanent streams.

Ficus tinctoria G.Forster subsp. tinctoria KFK 9236; MIB/BB 8, 98 Tree to 5 m, bark dark brown, fissured, figs pale green. In alluvium by creek. Only the fourth collection from W.A.

Ficus virens Aiton var. ? NHS 84-355

Low tree with short trunk, multibranched with smooth grey bark. At the base of limestone cliffs associated with *Celtis philippinensis* at Mawundungi.

MYOPORACEAE

Myoporum acuminatum R.Br. SJF 2591, 2598

Shrub to 2 m with conspicuously shiny leaves, flowers white with four mauve blotches, fruits maroon. Occasional on scree and boulder slopes of Bungle Bungle massif, and along streams draining the escarpment.

- Calytrix achaeta F.Muell. SJF 2577; KFK 9283
 Shrub to 1 m with cream flowers. On scree and boulder slope of Bungle Bungle massif.
- Calytrix brachychaeta (F.Muell.) Benth. SJF 2009; JHW s.n. Shrub to 1.5 m with white flowers. Amongst rocks in riparian forest at Winnama Spring.
- Calytrix exstipulata DC. SJF 1980, 2574; KFK 9284; JHW s.n.; NHS 84-362
 - Shrub to 1.5 m with pink flowers. Abundant on sandstone and quartzite throughout the study area.
- Eucalyptus aspera F, Muell. SJF 2583; KFK 9256; JHW s.n.; MIB/BB 93 Much branched tree to 8 m with sage-green leaves and smooth grey bark shedding in darker grey patches. Along ephemeral creeks of sandstone and quartzite plateaus and escarpments.
- Eucalyptus brachyandra F.Muell. SJF 2571; CD 669 Crooked tree to 3 m, branching low to ground, bark thick, box-like, fibrous and furrowed on trunk, branches smooth white. On boulder and scree slopes of Bungle Bungle massif and in deep sandstone gorge.
- Eucalyptus brevifolia F.Muell. JHW s.n.; NHS 84-318, 84-330 Tree to 5 m with grey-green leaves and smooth white bark. Dominant on rocky slopes and skeletal soils.
- Eucalyptus sp. aff. brevifolia F.Muell. 'Silvery' EAC 235
 Tree to 5 m with smooth white bark and silvery shoots. On low lying plain in Turkey Ck catchment.
- Eucalyptus sp. aff. brevifolia F.Muell. 'Grey-green' SJF 2560; NHS 84-301
 - Tree to 5 m with smooth white bark, grey-green leaves and large fruits. On rocky slope.
- Eucalyptus camaldulensis Dehn. SJF 2661; NHS 84-364
 Tree to 10 m with smooth white bark. Riparian on major ephemeral streams and Ord R.
- Eucalyptus cliftoniana W.Fitzg. ex Maiden SJF 2569; EAC 217; JHW s.n.; KFK 9257, 9280
 - Tree to 10 m with new shoots yellow-green, bark tessellate, papery, persistent. Common and dominant on steep slopes and rocky plateaus of Osmond Range and Bungle Bungle massif.
- Eucalyptus collina W.Fitzg. SJF 2559; KFK 9235, 9271; JHW s.n.; NHS 84-299, 84-300
 - Tree to 9 m with new shoots silvery, bark silvery-white, smooth with some cream and grey mottling, fibrous to flaky. On sandplains surrounding Bungle Bungle massif and on Osmond Ranges, also associated with streams on massif plateau.
- Eucalyptus confertiflora F.Muell. KFK 9261; NHS 84-324
 Tree to 15 m with stocking of dark, rough bark, remainder white, smooth. Abundant on stream levees and terraces.
- Eucalyptus cupularis C.Gardner (SR)
 Recorded by C. Done from the Osmond Range.
- Eucalyptus dichromophloia F.Muell. SJF 2014, 2551; KFK 9229; JHW s.n.
 - Tree to 10 m with new shoots yellow-green, bark tesselated, flaking and mottled below, smooth above. Common on stream levees and terraces, interfluves and rocky slopes.

Eucalyptus herbertiana Maiden SJF 2631
Crooked tree to 6 m with smooth white bark and some grey and red mottling. In gorge of ephemeral stream on Bungle Bungle plateau.

Eucalyptus papuana F.Muell. (SR)

Tree 10 m with smooth white bark. Common along Red Rock Ck.

Eucalyptus sp. aff. papuana F.Muell. SJF 2665; NHS 84-351 Tree to 8 m with smooth white bark, and large leaves. On levee of Red Rock Creek.

Eucalyptus pruinosa Schauer SJF 2016, 2541; KFK 9223 Crooked tree to 6 m with silvery pruinose leaves, bark rough fissured and persistent. On terraces of Osmond and Turkey Cks.

Eucalyptus aff. pruinosa Schauer SJF 2553; KFK 9232

Tree to 6 m with conspicuously pruinose, silver-blue lanceolate leaves and rough grey-brown bark, flowers white. On grey clay-loam plain and on calcareous red earths.

Eucalyptus ptychocarpa F.Muell. SJF 2025; KFK 9218 Spreading tree to 8 m with discolorous, large, vertically hanging leaves, bark rough, fibrous, furrowed and persistent. On low lying plains adjacent to semi-permanent creeks of Osmond Valley.

Eucalyptus aff. terminalis F.Muell. SJF 2550; KFK 9222, 9228, 9238 Tree to 10 m, bark tesselated, flaking and mottled orange-white below, smooth above, leaves dark green, vertically hanging. On brown sandy loam adjacent to ephemeral creek west of Bungle Bungle massif.

Eucalyptus sp. nov. 'Box' KFK 9267; NHS 84-325, 84-350 Tree to 8 m, bark fibrous. In alluvium and sandstone scree.

Leptospermum parviflorum Valeton KFK 9301; SJF 2638B Tree to 5 m, bark papery, reddish, branchlets weeping, flowers cream. On Piccaninny Ck and associated with seepage on chasm walls of Bungle Bungle massif. First record for W.A.

Lophostemon grandiflorus (Benth.) Peter G. Wilson & J.T. Waterhouse subsp. riparius (Domin) Peter G. Wilson & J.T. Waterhouse SJF 2645; MIB/BB 87

Tree to 6 m with dark, rough, fissured bark. Dominant along ephemeral streamcourses of lowlands and plains; also in Piccaninny Gorge.

Melaleuca leucadendra (L.) L. SJF 2522; KFK 9186

Tree to 20 m with white papery bark. Co-dominant along permanent and semi-permanent creeks of Osmond Valley.

Melaleuca nervosa (Lindley) E.Cheel subsp. nov. NHS 84-344, 84-345 Tree to 5 m with tough paperbark to major branches. Dominant on some seasonally inundated flats of Red Rock Creek.

Syzygium angophoroides (F.Muell.) B.Hyland SJF 2529S; KFK 9205 Tree to 15 m, bark papery, grey with reddish blotches, new shoots red. Sub-dominant in closed forest along semi-permanent stream in Osmond Valley, restricted to sheltered gully.

Syzygium eucalyptoides (F.Muell.) B.Hyland subsp. eucalyptoides SJF 2658

Graceful tree to 6 m, widely spreading with foliage drooping to ground. In riparian forest on strand of Ord R. at Blue Holes.

NYCTAGINACEAE

Boerhavia paludosa (Domin) Meikle JHW s.n.; MIB/BB 175
Tangled herb to 1.3 m tall. On scree slope under quartzite bluff of Winnama Gorge and in Piccaninny Gorge.

OLEACEAE

Jasminum molle R.Br. NHS 84-346

Semi-shrub to 0.5 m. In savanna woodland on undulating flats fringing Red Rock Ck.

ONAGRACEAE

Ludwigia octovalvis (Jacq.) Raven SJF 1999, 2682 Sub-shrub to 1 m with primrose flowers. On sandy strands of ephemeral streams.

Ludwigia perennis L. SJF 2001; MIB/BB 144
Herb. to 0.5 m with primrose flowers. On sandy course of drainage line at Winnama Gorge and in Piccaninny Gorge.

OPILIACEAE

Opilia amentacea Roxb. SJF 2668; NHS 84-37 Scandent shrub to 4 m, bark with prominent vertical lenticels, leaves olive-yellow. On limestone outcrop at Giliwal.

PAPILIONACEAE

Atylosia pubescens (Ewart & Morrison) Reynolds & Pedley SJF 2538 Open shrub to 0.7 m, flowers yellow. On ephemeral stream levee in Osmond Valley.

Atylosia reticulata (Dryander) Benth. SJF 2581, 2676, 2687; EAC 193; JHW s.n.; KFK 9292; MIB/BB 118, 177

Open shrub to 2 m with arching branches and yellow flowers. On rocky and sandy sites associated with Bungle Bungle massif surrounds and rocky slopes.

Canavalia papuana Merr. & Perry SJF 2537; NHS 84-339; KFK 9217; JHW s.n.

Climber to 5 m with pods to 15 cm. In riparian fringe of ephemeral streams.

Crotalaria cunninghamii R.Br. SJF 2666, KFK 9239
Shrub to 4 m, leaves grey-green, flowers olive-green. On sandy banks under riparian forest on Red Rock Ck; in red soil over scree at base of Bungle Bungle massif.

Crotalaria linifolia L.f. SJF 1987 Erect few-stemmed semi-shrub to 0.5 m with yellow flowers. On stream levee at Winnama Gorge.

Crotalaria novae-hollandiae DC. SJF 2011
Sub-shrub to 0.3 m with yellow flowers. Amongst levee woodland of Osmond Valley and Turkey Ck. catchment.

Crotalaria verrucosa L. EAC 323
Shrub to 0.3 m with blue flowers. Amongst degraded levee woodland of Osmond Valley.

Desmodium filiforme Zoll. & Moritzi MIB/BB 180; 180b; 187 Sprawling herb to 0.5 m with articulated pods. In Piccaninny Gorge.

Erythrina vespertilio Benth. NHS 84-387
Rare tree to 6 m. Only noted on Blackfellows Ck on Texas Downs Stn.

Indigofera colutea (Burm.f.) Merr. SJF 2022
Trailing herb with scarlet flowers. On rocky outcrop at Wulwuldji.

Indigofera monophylla DC. MIB/BB 92 Semi-shrub to 0.7 m, leaves ovate-oblong. In Piccaninny Gorge.

- Jacksonia odontoclada F.Muell. ex Benth. DBR s.n.; MIB/BB 167 Cupressus-like upright woody shrub. On south-west slopes of Bungle Bungle massif and in Piccaninny Gorge. First record for W.A.
- Jacksonia thesioides (Cunn.) Benth. SJF 2648; M1B/BB 141 Shrub to 2 m with silver-grey leaves and yellow flowers. Abundant on streamlines of Bungle Bungle massif and surrounds.
- Mirbelia viminalis (Cunn.) C.Gardner JHW s.n.; SJF 2601 Intricately branched, almost divaricate shrub to 0.7 m with yellow flowers. On slopes of Bungle Bungle massif and Winnama Gorge.
- Plagiocarpus axillaris Benth. EAC 212 Low shrub. On Eucalyptus collina dominated rocky plateau above Winnama Gorge.
- Psoralea badocana (Blanco) Blanco SJF 2686; KFK 9268
 Spreading shrub to 1 m with white-grey felted leaves, flowers pale magenta. Amongst riparian forest along Red Rock Ck.
- Psoralea martinii F.Muell. KFK 9268

 Erect shrub to 1 m, flowers mauve. In rocky scree under Eucalyptus brevifolia.
- Rhynchosia rhomboidea F.Muell. ex Benth. SJF 2518; NHS 84-341; JHW s.n.
 - Prostrate twiner, leaves viscid, flowers white, fruits viscid. On lowlying plains adjacent to semi-permanent streams of Osmond Valley.
- Sesbania cannabina (Retz.) Poiret SJF 1993; MN s.n.; M1B/BB 415 Slender shrub to 2 m with yellow flowers flecked red. In levee woodland at Winnama Gorge, occasional in Piccaninny Gorge and common on creek banks at edge of range.
- Sesbania formosa (F.Muell.) N.Burb. (SR)
 Tree to 10 m, bark corky, flowers white. In riparian forest along semipermanent streams of Osmond Valley and Turkey Ck catchment.
- Templetonia hookeri (F.Muell.) Benth. SJF 2586 Shrub to 3 m with weeping foliage and yellow flowers. On sandy bank of ephemeral creek draining gorge of Bungle Bungle massif.
- Tephrosia remotiflora F, Muell. ex Benth. SJF 2020 Slender, spreading sub-shrub with magenta-pink flowers. Occasional on rocky outcrop at Wulwuldji.
- Tephrosia rosea F. Muell. ex Benth. SJF 1986, 2609 Slender erect weakly branched shrub to 0.7 m, leaves silky silvery-grey, flowers magenta. On stream levees.
- Tephrosia uniovulata F.Muell. M1B/BB 275, Shrub to 1 m, leaves ovate, velutinous, flowers pink. In Piccaninny Gorge.
- Tephrosia virens Pedley SJF 2013, 2611; MIB/BB 116, 417 Slender sparsely branched shrub to 1 m, flowers orange. On stream levees.
- Vigna lanceolata Benth. var. latifolia C.T.White NHS 84-337, 84-349 Trailing herb with slender stems. Amongst riparian forest on Red Rock Ck.
- Zornia nervata Mohl. MIB/BB 2, 25, 179
 Spreading wiry herb with long tap-root and paired leaflets. In Piccaninny Gorge.

PASSIFLORACEAE

* Passiflora foetida L. var. hispida (DC. ex Triana & Planchon) Killip SJF 2023 Rampant sprawling streambank climber to 4 m, fruits tan. Common in Osmond Valley.

PEDALIACEAE

Josephinia sp. nov. SJF 2028
Sub-shrub to 0.5 m, corolla mauve. Sprawling amongst rocks at Winnama Gorge.

PITTOSPORACEAE

Citriobatus spinescens (F.Muell.) Druce JHW s.n. Small, spreading rough-barked tree to 3.5 m. In shaded sandstone ravine under *Melaleuca leucadendra*, *Ficus* spp. and other riparian forest trees at Winnama Gorge.

POLYGALACEAE

Comesperma sp. nov. SJF 2579; KFK 9242, 9247 Spindly shrub to 1 m, leaves pale blue-green, flowers pale yellow. On scree and boulder slopes of Bungle Bungle massif.

Polygala chinensis L. ASW 14717 Annual herb. In alluvial soil of creek bed in Piccaninny Gorge.

POLYGONACEAE

Polygonum barbatum L. KFK 9190 Creeping, stoloniferous sub-shrub, flowers white. In alluvial sand banks and submerged in creek in Osmond Valley.

PORTULACACEAE

Calandrinia sp. MIB/BB 451
Sprawling succulent herb, flowers pink. Amongst spinifex in Piccaninny Gorge.

Portulaca? intraterranea J. Black JHW s.n. Herb to 10 cm. On damp sandy ground below mouth of Winnama Gorge.

Portulaca? pilosa L. MIB/BB 178
Succulent herb to 0.1 m, spreading, flowers small, pinkish-yellow. In Piccaninny Gorge.

Portulaca sp. MIB/BB 14
Succulent dwarf herb rooting at nodes, leaves cordate, flowers orange.
In sand on bank of creek in Piccaninny Gorge.

PROTEACEAE

Grevillea agrifolia Cunn. ex R.Br. SJF 2019 Spreading shrub to 4 m, flowers white. Along ephemeral watercourse in Osmond Valley.

Grevillea miniata W.Fitzg. SJF 2558, 2580; KFK 9201; EAC 218; CD 667; NHS 84-313; MIB/BB 18
Spindly tree to 4 m with typically ascending branches, flowers orange.

Abundant on sandplain surrounding Bungle Bungle massif.

Grevillea psilantha McGillivray SJF 2643; KFK 9282; MN s.n.; MIB/BB 52

Much branched showy shrub to I m, buds green, flowers cream. On steep and occasionally precipitous walls of Piccaninny Gorge. Type locality.

Grevillea pyramidalis Cunn. ex R.Br. SJF 2657; NHS 84-353 Showy tree to 3 m, flowers cream. On red shaley outcrop adjacent to Ord R, at Blue Holes.

Grevillea refracta R.Br. SJF 2584, 26191; KFK 9272; EAC 190; JHW s.n.; MIB/BB 54, 244, 456

Slender tree to 6 m, bark deep brown, flowers yellow to red. On summit and surrounds of Bungle Bungle massif and Winnama Gorge.

Grevillea sp. aff. wickhamii Meissner SJF 2557, 2622; KFK 9273; NHS 84-298; EAC 187

Small tree to 8 m, branching typically horizontal, flowers red, perianth lobes black. Very common on summit and surrounds of Bungle Bungle massif

Hakea arborescens R.Br. (SR)

Tree to 4 m, bark dark fissured; leaves linear-lanceolate young shoots bronzey. Common on interfluves and stream frontage woodlands.

Persoonia falcata R.Br. SJF 2578; KFK 9252; MIB/BB 474 Small tree to 4.5 m, bark brown almost papery, shedding in chunky flakes, new shoots maroon, flowers yellow. On sand plain surrounding Bungle Bungle massif.

Stenocarpus salignus R.Br. var. concolor F.Muell. ex Benth. MIB/BB 23 In sandstone gorge of Piccaninny Creek.

RHAMNACEAE

Ventilago viminalis Hook. NHS 84-328

Tree to 4 m, bark black fissured, leaves pendulous, narrow-lanceolate. On black soil plain near Bungle Bungle Outcamp.

Zizyphus oenoplia Mill. SJF 1992S

Shrub to 1 m, with spiny stipules to I cm. Under closed forest in sheltered tract of Winnama Gorge.

Zizyphus quadrilocularis F.Muell. SJF 1998; JHW s.n.; NHS 84-377 Small tree to 5 m with grey bark, shade branches with spiny stipules, mature fruit purplish. On rocky quartzite slope at Winnama Gorge.

RHIZOPHORACEAE

Carallia brachiata (Lour.) Merr. SJF 1984, 2531; KFK 9207; NHS 84-293 Tree to 15 m bark pale corky, juvenile leaves narrow, light green. Codominant in sheltered riparian closed forest on semi-permanent streams of Osmond Valley and Winnama Gorge.

RUBIACEAE

Canthium attenuatum R.Br. ex Benth. SJF 2547; KFK 9227; NHS 84-296 Tree to 6 m with grey-black, fissured bark, foliage light green, fruit green. On ephemeral stream on plain near Bungle Bungle Outcamp.

Gardenia pyriformis Cunn. ex Benth. SJF 2572; KFK 9255, 9296; EAC 216; JHW s.n.; MIB/BB 352

Tree to 4 m with bark dull mauve, mottled yellow and flaky. On scree and boulder slopes of Bungle Bungle massif and Winnama Gorge.

Nauclea orientalis (L.) L. SJF 2533; KFK 9206

Tree to 15 m, bark pale, corky. Co-dominant in sheltered riparian closed forest on semi-permanent stream near Wulwuldji.

Oldenlandia crouchiana (F.Muell.) F.Muell. MIB/BB 17, 463 Spreading herb to 0.1 m, leaves linear-lanceolate. In Piccaninny Gorge.

Oldenlandia galioides (F.Muell.) F.Muell. M1B/BB 149, 150, 202b, 413, 458, 488

Diffuse herb to 0.5 m, leaves linear. In Piccaninny Gorge.

Oldenlandia mitrasacmoides (F.Muell.) F.Muell. M1B/BB 166, 173 Delicate erect herb to 0.3 m, leaves linear. In Piccaninny Gorge.

Pavetta brownii Bremek. KFK 9210; SJF 2534A; MIB/BB 152 Small tree to 3 m, bark smooth, mature fruits shiny black. On sandstone scree slope adjacent to riparian closed forest in Osmond Valley and in Piccaninny Gorge.

Timonius timon (Sprengel) Merr. SJF 2005, 2026, 2521; KFK 9185; NHS 84-380

Tree to over 15 m, bark smooth grey, flowers white. Co-dominant in sheltered riparian closed forest on semi-permanent streams of Osmond Valley and Winnama Gorge.

RUTACEAE

Boronia? pauciflora W.Fitzg. EAC 214; JHW s.n.

Low shrub to 0.5 m, flowers pale pink. On plateau dominated by *Eucalyptus collina* above Winnama Gorge.

Euodia elleryana F.Muell. KFK 9208; SJF 1991S

Tree to 20 m, bark buff-coloured, corky. In riparian forest beside running creek in Osmond Valley and in sheltered tracts of Winnama Gorge.

SANTALACEAE

Santalum lanceolatum R.Br. NHS 84-386; KFK 9259; JHW s.n.; M1B/BB 427

Slender tree to 3 m with pendulous branches, bark dark, foliage glaucous, flowers cream. On levee of creek in Osmond Valley, and in sandstone gorge.

SAPINDACEAE

Atalaya hemiglauca (F.Muell.) F.Muell. ex Benth. KFK 9262; NHS 84-382

Tree to 10 m with smooth grey bark. In savanna woodland of Osmond Valley.

Distichostemon hispidulus (Endl.) Baillon SJF 2624; EAC 191; JHW s.n. Shrub to 1.5 m. In sandstone gullies of Bungle Bungle plateau and in quartzite declivities of Winnama Gorge.

Dodonaea lanceolata F.Muell. var. lanceolata SJF 2603; JHW s.n. Shrub to 2 m. On scree and boulder slopes of Bungle Bungle massif and Winnama Gorge.

Dodonaea polyzyga F.Muell. SJF 2565, 2667 Shrub to 2 m with viscid leaves, stem and fruits. Bark on trunk reddish, decorticating in strips. Commonly associated with limestone outcrops.

Dodonaea viscosa Jacq. subsp. mucronata J.G.West SJF 2593; KFK 9241; CD 670; M1B/BB 383

Shrub to 2 m, fruits plum-coloured. Adjacent to ephemeral stream draining scree and boulder slopes of Bungle Bungle massif.

SAPOTACEAE

Planchonella arnhemica (F.Muell. ex Benth.) Royen CD 672; MIB/BB 22

Tree to 8 m, bark dark grey, very fissured and corky. In sandy soil at foot of sandstone cliff by spring in Bungle Bungle massif.

SCROPHULARIACEAE

Buchnera ramosissima R.Br. MIB/BB 238
Sub-shrub to 0.8 m, flowers mauve. In sand in Piccaninny Gorge.

Stemodia grossa Benth. NHS 84-342; KFK 9266 Low soft herb to 20 cm, flowers purple. In sand on edge of permanent spring south-west of Bungle Bungle Outcamp and on Tickalara Track.

Stemodia lythrifolia F.Muell. ex Benth. MIB 133, 134, 135, 223 Woolly aromatic sub-shrub to 0.2 m, flowers purple. In Piccaninny Gorge.

Stemodia viscosa Roxb. SJF 2590, 2625 Herb to 0.2 m with viscid leaves. In sheltered crevices on sandstone walls on and around Bungle Bungle massif.

Stemodia sp. KFK 9285/B; MIB/BB II5, 276; ASW 14715 Clumped semi-pendulous herb, flowers pale lavendar, throat white. Growing in rock fissures and crevices of gorge wall in Piccaninny Ck. An undescribed species.

SIMARUBACEAE

Brucea javanica (L.) Merr. SJF 2600; KFK 9258; MIB/BB 3, 138 Single stemmed shrub to 3 m, stems cream, compound leaves confined to apex, mature fruits purple-black. Associated with streams in scree boulder slopes of Bungle Bungle massif.

SOLANACEAE

Nicotiana benthamiana Domin NHS 84-354; MIB/BB 24 Low herb. In limestone rock shelters at base of limestone cliffs on Red Rock Creek and on sandstone in Piccaninny Gorge.

Solanum aff. dioicum W.Fitzg. JHW s.n. Low sparsely branched under shrub to 0.6 m. Amongst quartzite rocks on steep west facing declivities at Winnama Gorge.

Solanum echinatum R.Br. NHS 84-316, 84-340; EAC 228 Prickly low growing semi-shrub to 0.5 m. On rocky northern slope in Osmond Valley.

Solanum lucani F.Muell. SJF 2523; NHS 84-335; JHW s.n. Prickly low sprawling semi-shrub to 0.2 m. On open scalds at Wulwuldji, in rocky declivities at Winnama Gorge and in Piccaninny Gorge.

Solanum quadriloculatum F.Muell. JHW s.n. Low shrub. Among quartzite rocks above southern declivities of creek at Winnama Gorge.

STACKHOUSIACEAE

Stackhousia intermedia Bailey EAC 202

Herb to 0.3 m. Amongst spinifex on Eucalyptus collina dominated rocky plateau near Winnama Gorge.

STERCULIACEAE

Brachychiton diversifolius R.Br. SJF 2660; NHS 84-332
Tree to 6 m, bark rough grey-black, flowers green, streaked maroon.
In riparian forest on Red Rock Ck.

Brachychiton viscidulus (W.Fitzg.) Guymer SJF 1985, 2528; KFK 9198; NHS 84-381

Deciduous tree to 5 m, bark rough, dark, flowers showy red-pink. On rocky slopes of Bungle Bungle massif.

STYLIDIACEAE

Stylidium muscicola F.Muell. MIB/BB 11

Flowers deep pink. In moss at side of semi-permanent pool in Piccaninny Gorge.

Stylidium schizanthum F.Muell. EAC 201; JHW s.n.; MIB/BB 486 Small pink ephemeral. Confined to watercourse bed on Eucalyptus collina dominated rocky plateau above Winnama Gorge.

TILIACEAE

Corchorus sidoides F.Muell. SJF 2610; MIB/BB 83, 86, 388 Slender sparsely branched shrub to 0.8 m with yellow flowers. Associated with streams in scree and boulder slopes of Bungle Bungle massif.

Grewia polygama Roxb. SJF 2021; NHS 84-348, 84-378 Open semi-shrub with arching branches to 0.3 m with tan, fleshy berries. On stream terrace at Wulwuldji.

Triumfetta appendiculata F.Muell. SJF 2585; KFK 9240; MIB/BB 79 Few stemmed spindly shrub to 1 m, branching from base, flowers yellow, forming dense stands. On terrace of stream draining scree and boulder slopes of Bungle Bungle massif.

Triumfetta glaucescens (R.Br.) Benth. SJF 2614
Few stemmed slender shrub with arching branches to 0.5 m. On terrace of stream draining scree and boulder slopes of Bungle Bungle massif.

Triumfetta micracantha F.Muell. MIB/BB 376 Shrub to 0.5 m, leaves elliptic to 5 cm. In Piccaninny Gorge.

Triumfetta plumigera F.Muell. SJF 2692; EAC 220; JHW s.n.; MIB/BB 82, 416, 418, 485

Strictly erect spindly semi-shrub to 1 m. On rocky slopes of Winnama Gorge and Osmond Range and in Piccaninny Gorge.

ULMACEAE

Celtis philippinensis Blanco SJF 1997; JHW s.n.; KFK 9231; NHS 84-319, 84-334, 84-356

Small spreading tree to 5 m, bark grey, shade leaves spiny, mature fruits tan. On rocky slopes and outcrops.

Trema aspera Blume SJF 2519; JHW s.n.

Small tree to 2 m with smooth brown bark and shiny black fruits. On lowlying plain adjacent to semi-permanent creek at Wulwuldji.

VERBENACEAE

Clerodendrum floribundum R.Br. SJF 2638; KFK 9294; MIB/BB 136, 475

Small tree to 3 m, bark pale. In riparian woodland in Piccaninny Gorge.

Clerodendrum tomentosum (Vent.) R.Br. SJF 2564, 2594, 2642; KFK 9293

Tree to 3 m with grey fissured bark, flowers white. On rocky slopes and outcrops.

Premna acuminata R.Br. SJF 2549; NHS 84-305, 84-347 Tree to 3 m with hard grey fissured bark. On rocky slopes and outcrops. Vitex glabrata R.Br. NHS 84-304; KFK 9300; MIB/BB 140, 409; SJF 2660A

Tree to 5 m. Occasional in riparian woodland on ephemeral streams and fringing incised stream beds on Bungle Bungle massif.

VIOLACEAE

Hybanthus aurantiacus (F.Muell. ex Benth.) F.Muell. MIB/BB 193, 234 Shrub to 1 m, flowers orange. In Piccaninny Gorge.

ZYGOPHYLLACEAE

Tribulopsis sp. MIB/BB 186, 237, 467, 477 Sprawling herb, flowers yellow. In Piccaninny Gorge.