

**BS4 Marra Mambas Flora****Site** BNVR05**Described by** PLSW**Date** 06/08/2015**Type** Quadrat 40 x 60 m**Central Coordinate** 50 530129 mE, 7502348 mN**Habitat** Steep midslope below a low free face on a major range.**Soil** Dark reddish brown skeletal loamy sand.**Rock Type** Ironstone.**Vegetation** *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Triodia epactia*, *T. brizoides* hummock grassland.**Veg Condition** Excellent.**Fire Age** No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon</i> sp. Dioicum (A.A. Mitchell PRP 1618)	0.1	10		
<i>Acacia atkinsiana</i>	0.1	140		
<i>Acacia bivenosa</i>	0.1	160		
<i>Acacia exigua</i>	0.1	150		
<i>Acacia maitlandii</i>	0.1	110		
<i>Acacia pyrifolia</i> var. <i>pyrifolia</i>	0.1	40		
<i>Amaranthus cuspidifolius</i>	0.1	15	BNVR05-02	Confirmed by A. Perkins.
<i>Bulbostylis barbata</i>	0.1	10		
<i>Cheilanthes contigua</i>	0.1	10		
<i>Cymbopogon ambiguus</i>	0.1	40		
<i>Diplatia grandibractea</i>	0.1	250		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	15	BNVR05-01	
<i>Eremophila cuneifolia</i>	0.1	40		
<i>Eriachne mucronata</i> (typical form)	0.1	30		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	1	480		
<i>Euphorbia boophthona</i>	0.1	20		
<i>Euphorbia</i> sp. ( <i>biconvexa/coghlanii/trigonosperma</i> ; sterile)	0.1	15		Sterile.
<i>Goodenia forrestii</i>	0.1	10		
<i>Indigofera monophylla</i>	0.1	10		
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	25		
<i>Lobelia heterophylla</i> subsp. <i>pilbarensis</i>	0.1	15		
<i>Nicotiana benthamiana</i>	0.1	40		
<i>Oldenlandia crouchiana</i>	0.1	10		
<i>Paspalidium clementii</i>	0.1	10		
<i>Peripleura virgata</i>	0.1	25	BNVR05-03	
<i>Phyllanthus erwinii</i>	0.1	10		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	10		
<i>Polycarpaea holtzei</i>	0.1	5		
<i>Polygala glaucifolia</i>	0.1	5		
<i>Pterocaulon sphacelatum</i>	0.1	5		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	20		
<i>Ptilotus obovatus</i> var. <i>obovatus</i>	0.1	55		
<i>Rhodanthe margarethae</i>	0.1	90		
<i>Rhynchosia minima</i>	0.1	5		
<i>Schizachyrium fragile</i>	0.1	10		
<i>Senna ferraria</i>	0.1	80		sens. lat.
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	140		
<i>Solanum elatius</i>	0.1	70		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	10		
<i>Tribulus suberosus</i>	0.1	50		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	10		
<i>Triodia brizoides</i>	20	45		
<i>Triodia epactia</i>	20	45		



**BS4 Marra Mambas Flora**

Site BNVR07

Described by PLSW

Date 06/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 530115 mE, 7501990 mN

Habitat Hill slope: Southwest facing midslope of a long spur on a major range.

Soil Dark reddish brown skeletal sandy loam.

Rock Type Ironstone.

Vegetation *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia maitlandii* shrubland over *Triodia wiseana* open hummock grassland.

Veg Condition Excellent.

Fire Age Burnt 3-5 years ago.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Acacia aptaneura</i>	0.1	190		
<i>Acacia bivenosa</i>	0.1	120		
<i>Acacia exigua</i>	0.1	150		
<i>Acacia maitlandii</i>	27	160		
<i>Acacia marramamba</i>	0.1	170		
<i>Acacia pruinocarpa</i>	0.1	130		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	20		
<i>Bulbostylis barbata</i>	0.1	15		
<i>Cleome viscosa</i>	0.1	25		
<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>	0.1	30	BNVR07-05	
<i>Duperreya commixta</i>	0.1	90		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	8	BNVR07-01	
<i>Eriachne aristidea</i>	0.1	10		
<i>Eriachne pulchella</i>	0.1	15		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	1	650		
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	8		
<i>Goodenia microptera</i>	0.1	30		
<i>Goodenia stobbsiana</i>	0.1	10		
<i>Goodenia stobbsiana</i>	0.1	5		
<i>Hakea lorea</i> subsp. <i>lorea</i>	0.1	170		
<i>Haloragis gossei</i>	0.1	30	BNVR07-06	Insufficient material for further determination
<i>Indigofera monophylla</i>	0.1	40		
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	80		
<i>Keraudrenia nephrosperma</i>	0.1	10	BNVR07-04	
<i>Oldenlandia crouchiana</i>	0.1	5		
<i>Paraneurachne muelleri</i>	0.1	30		
<i>Polycarpaea holtzei</i>	0.1	3		
<i>Polycarpaea longiflora</i>	0.1	20		
<i>Polygala glaucifolia</i>	0.1	3	BNVR07-02	
<i>Ptilotus auriculifolius</i>	0.1	15		
<i>Ptilotus calostachyus</i>	0.1	50		
<i>Ptilotus clementii</i>	0.1	40		
<i>Ptilotus fusiformis</i>	0.1	40		
<i>Ptilotus helipteroides</i>	0.1	40		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	1	40		
<i>Ptilotus obovatus</i> var. <i>obovatus</i>	0.1	20		
<i>Ptilotus polystachyus</i>	0.1	30		
<i>Schizachyrium fragile</i>	0.1	15		
<i>Senna artemisioides</i> subsp. <i>helmsii</i>	0.1	80		
<i>Senna glaucifolia</i>	0.1	80	BNVR07-07	
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	160		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	140		
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i>	0.1	140		
<i>Solanum lasiophyllum</i>	0.1	50		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	50		
<i>Triodia epactia</i>	0.1	50		
<i>Triodia wiseana</i>	13	40		



**BS4 Marra Mambas Flora**

Site BROR42

Described by PLSW

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 526328 mE, 7500217 mN

Habitat Foot slope: Base of rocky hill slope.

Soil Dark reddish brown skeletal clay loam.

Rock Type Ironstone. Solid ironstone with lots of angular ironstone pebbles on soil

Vegetation *Acacia synchronicia* scattered tall shrubs over *Senna glutinosa* subsp. *pruinosa*, *A. exigua* open shrubland over *Triodia brizoides* open hummock grassland.Veg Condition Very Good: a weed species present (\**Cenchrus ciliaris*).Fire Age Burnt 1-2 years ago.  
No sign of recent fire

Notes Site burnt since Phase 1. Some large/tall dominants are missing and vegetation strata have changed somewhat.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon lepidum</i>	0.1	20		
<i>Acacia bivenosa</i>	0.1	90		
<i>Acacia exigua</i>	1	120		
<i>Acacia synchronicia</i>	1	210		
<i>Aristida contorta</i>	0.1	15		
<i>Aristida latifolia</i>	0.1	30	BROR42-09	
<i>Brachyachne prostrata</i>	0.1	3		
<i>Bulbostylis barbata</i>	0.1	15		
<i>Cenchrus ciliaris</i>	0.1	40		1 plant.
<i>Codonocarpus cotinifolius</i>	0.1	10		
<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>	0.1	30		
<i>Dichanthium sericeum</i> subsp. <i>humilius</i>	0.1	20		
<i>Dysphania kalpari</i>	0.1	10		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	1	20	BROR42-01	
<i>Enneapogon caerulescens</i>	0.1	20		
<i>Enneapogon polyphyllus</i>	0.1	20		
<i>Eriachne aristidea</i>	0.1	25		
<i>Eriachne pulchella</i>	0.1	15		
<i>Euphorbia boophthona</i>	0.1	15		
<i>Fimbristylis simulans</i>	0.1	10		
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	20		
<i>Gomphrena cunninghamii</i>	0.1	20		
<i>Goodenia microptera</i>	0.1	10		
<i>Haloragis gossei</i>	0.1	15	BROR42-08	Insufficient material for further determination
<i>Heliotropium heteranthum</i>	0.1	2		
<i>Heliotropium inexplicitum</i>	0.1	10	MMF03=	
<i>Hibiscus sturtii</i> var. <i>campylochlamys</i>	0.1	20	BROR42-07	
<i>Hibiscus sturtii</i> var. <i>grandiflorus</i>	0.1	15		
<i>Iseilema dolichotrichum</i>	0.1	15	BROR42-05	
<i>Oldenlandia crouchiana</i>	0.1	20		
<i>Paraneurachne muelleri</i>	0.1	30		
<i>Paspalidium clementii</i>	0.1	10		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	10		
<i>Polycarpaea holtzei</i>	0.1	15		
<i>Polycarpaea longiflora</i>	0.1	15		
<i>Polygala glaucifolia</i>	0.1	5	BROR42-04	
<i>Portulaca oleracea</i> /intraterranea	0.1	5	MMF03-01=	
<i>Pterocaulon sphacelatum</i>	0.1	25	BROR42-06	
<i>Ptilotus aevroides</i>	0.1	3		
<i>Ptilotus astrolasius</i>	0.1	40		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Ptilotus auriculifolius</i>	0.1	20		
<i>Ptilotus calostachyus</i>	0.1	40		
<i>Ptilotus carinatus</i>	0.1	50		
<i>Ptilotus fusiformis</i>	0.1	40		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	2	45		
<i>Ptilotus polystachyus</i>	0.1	80		
<i>Salsola australis</i>	0.1	10		
<i>Schizachyrium fragile</i>	0.1	40		
<i>Sclerolaena</i> sp.	0.1	15	BROR42-10	Insufficient material for further determination
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	0.1	60	BROR42-02	
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	30		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	3	120		
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i>	0.1	110		
<i>Senna notabilis</i>	0.1	20		
<i>Sida echinocarpa</i>	0.1	20		
<i>Solanum diversiflorum</i>	0.1	10		
<i>Solanum lasiophyllum</i>	0.1	20		
<i>Sporobolus australasicus</i>	0.1	10		
<i>Stackhousia muricata</i> subsp. <i>annual</i> (W.R. Barker 2172)	0.1	30	BROR42-11	
<i>Streptoglossa bubakii</i>	0.1	15		
<i>Streptoglossa decurrens</i>	0.1	30		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	20		
<i>Tribulus suberosus</i>	0.1	3		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	70		
<i>Triodia brizoides</i>	22	30		
<i>Triodia epactia</i>	0.1	40		Sterile.
<i>Triodia longiceps</i>	0.1	50		



**BS4 Marra Mambas Flora**

Site MMFR01

Described by PLSW

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 526584 mE, 7499646 mN

**Habitat** Southwest facing slope of low rise amongst undulating plains.**Rock Type** Dolerite fine gravel, coarse gravel, pebbles, cobbles (51-70% Cover) with outcropping rock.**Vegetation** *Acacia exigua* tall open shrubland over *A. bivenosa* open shrubland over *Triodia wiseana* open hummock grassland.**Veg Condition** Excellent.**Fire Age** No sign of recent fire (mostly).

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon lepidum</i>	0.1	10		
<i>Acacia bivenosa</i>	2	190		
<i>Acacia exigua</i>	8	220		
<i>Acacia inaequilatera</i>	0.1	50		
<i>Acacia maitlandii</i>	0.1	210		
<i>Acacia sibirica</i>	0.1	40	MMFR01-13	
<i>Aristida contorta</i>	0.1	10		
<i>Bulbostylis barbata</i>	0.1	10		
<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>	0.1	30	MMFR01-06	
<i>Cucumis variabilis</i>	0.1	10		
<i>Duperreya commixta</i>	0.1	20		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	20	MMFR01-03	
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	10	MMFR01-02	Confirmed by A. Perkins.
<i>Dysphania sphaerosperma</i>	0.1	10	MMFR01-05	
<i>Enneapogon caerulescens</i>	0.1	10		
<i>Eremophila fraseri</i> subsp. <i>fraseri</i>	0.1	110		
<i>Eriachne aristidea</i>	0.1	29		
<i>Eriachne mucronata</i> (typical form)	0.1	50		
<i>Euphorbia boophthona</i>	0.1	20		
<i>Euphorbia tannensis</i> subsp. <i>eremophila</i>	0.1	19		
<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>	0.1	10		
<i>Gomphrena cunninghamii</i>	0.1	20		
<i>Goodenia microptera</i>	0.1	20		
<i>Gossypium australe</i> (Burrup Peninsula form)	0.1	40		
<i>Gossypium australe</i> (Whim Creek form)	0.1	40		
<i>Haloragis gossei</i>	0.1	20	MMFR01-01	Insufficient material for further determination
<i>Heliotropium cunninghamii</i>	0.1	10	MMFR01-04	
<i>Heliotropium inexplicitum</i>	0.1	2	MMFR01-11	
<i>Indigofera monophylla</i>	0.1	40		
<i>Iseilema dolichotrichum</i>	0.1	10	MMFR01-07	
<i>Ixiochlamys cuneifolia</i>	0.1	3	MMFR01-10	
<i>Oldenlandia crouchiana</i>	0.1	10		
<i>Paraneurachne muelleri</i>	0.1	40		
<i>Paspalidium clementii</i>	0.1	10		
<i>Peripleura virgata</i>	0.1	10	MMFR01-09	
<i>Phyllanthus erwinii</i>	0.1	3		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	20		
<i>Polycarpaea holtzei</i>	0.1	3		
<i>Polygala glaucifolia</i>	0.1	50	MMFR01-12	
<i>Pterocaulon sphacelatum</i>	0.1	20		
<i>Ptilotus aervoides</i>	0.1	7		
<i>Ptilotus auriculifolius</i>	0.1	50		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Ptilotus calostachyus</i>	0.1	40		
<i>Ptilotus clementii</i>	0.1	10		
<i>Ptilotus obovatus</i> var. <i>obovatus</i>	0.1	40		
<i>Ptilotus rotundifolius</i>	0.1	100		
<i>Rhynchosia minima</i>	0.1	30		
<i>Senna artemisioides</i> subsp. <i>helmsii</i>	0.1	130		
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x subsp. <i>helmsii</i>	0.1	45		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	110		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	120		
<i>Sida echinocarpa</i>	0.1	10		
<i>Sida</i> sp. spiciform panicles (E. Leyland s.n. 14/8/90)	0.1	20		
<i>Solanum diversiflorum</i>	0.1	10		
<i>Solanum lasiophyllum</i>	0.1	20		
<i>Sporobolus australasicus</i>	0.1	10		
<i>Stackhousia muricata</i> subsp. <i>annual</i> (W.R. Barker 2172)	0.1	20		
<i>Streptoglossa bubakii</i>	0.1	20		
<i>Swainsona maccullochiana</i>	0.1	150		
<i>Themeda triandra</i>	0.1	70		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	59		
<i>Tribulus hirsutus</i>	0.1	10		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	80		
<i>Triodia brizoides</i>	0.1	40		
<i>Triodia epactia</i>	0.1	40		
<i>Triodia wiseana</i>	14	49		
<i>Zygophyllum eichleri</i>	0.1	10		



**BS4 Marra Mambas Flora**

Site MMFR02

Described by CEF

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 528702 mE, 7499790 mN

Habitat Undulating plain (gentle north facing aspect).

Soil Not recorded.

Rock Type &gt;70% ironstone and dolomite fine gravel, coarse gravel, pebbles, cobbles, rocks/stones and large rocks.

Vegetation *Acacia inaequilatera* scattered tall shrubs over *Senna artemisioides* subsp. *oligophylla* x subsp. *helmsii* scattered low shrubs over *Triodia wiseana* open hummock grassland.

Veg Condition Excellent; scats of grazing herbivores noted in Phase 1 but no signs of disturbance in Phase 2.

Fire Age No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon lepidum</i>	0.1	50	MMFR02-05	
<i>Acacia inaequilatera</i>	1	400		
<i>Aristida contorta</i>	0.1	30		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	25		
<i>Cleome viscosa</i>	0.1	35		
<i>Codonocarpus cotinifolius</i>	0.1	30		
<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>	0.1	35	MMFR02-03	
<i>Cymbopogon oblectus</i>	0.1	60		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	45	MMFR06-03=	
<i>Dysphania</i> sp.	0.1	15	MMFR02-04	Insufficient material for further determination
<i>Dysphania sphaerosperma</i>	0.1	5	MMFR02-02	
<i>Enneapogon polyphyllus</i>	0.1	25		
<i>Euphorbia australis</i> var. <i>subtomentosa</i>	0.1	10	MMFR02-06	
<i>Euphorbia australis</i> var. <i>subtomentosa</i>	0.1	5	MMFR02-09	
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	35		
<i>Gomphrena cunninghamii</i>	0.1	10		
<i>Goodenia microptera</i>	0.1	25		
<i>Haloragis gossei</i>	0.1	25		
<i>Heliotropium cunninghamii</i>	0.1	30	MMFR02-01	
<i>Hibiscus coatesii</i>	0.1	50		
<i>Hibiscus sturtii</i> var. <i>campylochlamys</i>	0.1	10	MMFR02-08	
<i>Indigofera monophylla</i>	0.1	30		
<i>Ixiochlamys cuneifolia</i>	0.1	10	MMFR02-07	
<i>Notoleptopus decaisnei</i>	0.1	40		
<i>Oldenlandia crouchiana</i>	0.1	15		
<i>Paspalidium clementii</i>	0.1	20		
<i>Polycarpaea holtzei</i>	0.1	5		
<i>Pterocaulon sphacelatum</i>	0.1	5		
<i>Ptilotus auriculifolius</i>	1	110		
<i>Ptilotus calostachyus</i>	0.1	50		
<i>Ptilotus clementii</i>	0.1	80		
<i>Ptilotus fusiformis</i>	0.1	40		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	120		
<i>Ptilotus rotundifolius</i>	0.1	120		
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x subsp. <i>helmsii</i>	1	60		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	200		
<i>Senna glutinosa</i> subsp. x <i>luerssenii</i> x <i>S. stricta</i>	0.1	100	MMFR02-10	
<i>Sida echinocarpa</i>	0.1	30		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Sida</i> sp. spiciform panicles (E. Leyland s.n. 14/8/90)	0.1	200		
<i>Solanum diversiflorum</i>	0.1	10		
<i>Solanum lasiophyllum</i>	0.1	10		
<i>Sporobolus australasicus</i>	0.1	10		
<i>Stackhousia muricata</i> subsp. annual (W.R. Barker 2172)	0.1	20	MMF06-04=	
<i>Streptoglossa bubakii</i>	0.1	30		
<i>Streptoglossa decurrens</i>	0.1	20		
<i>Swainsona maccullochiana</i>	2	210		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	1150		
<i>Tribulus hirsutus</i>	0.1	5		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	150		
<i>Triodia wiseana</i>	30	35		



**BS4 Marra Mambas Flora**

Site MMFR03

Described by PLSW

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 526381 mE, 7500048 mN

Habitat Gentle south facing plain amongst undulating hills.

Soil Not recorded.

Rock Type Chert/ironstone fine gravel, coarse gravel, pebbles and cobbles.

Vegetation *Eucalyptus leucophloia* subsp. *leucophloia* low open woodland over *Triodia brizoides*, *T. longiceps* open hummock grassland.

Veg Condition Excellent.

Fire Age No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Acacia bivenosa</i>	0.1	15		
<i>Aristida contorta</i>	0.1	25		
<i>Brachyachne prostrata</i>	0.1	2		
<i>Bulbostylis barbata</i>	0.1	8		
<i>Capparis lasiantha</i>	0.1	130		
<i>Cullen pogonocarpum</i>	0.1	30	MMFR03-09	
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	25	MMFR03-03	
<i>Enneapogon caerulescens</i>	0.1	20		
<i>Enneapogon polyphyllus</i>	0.1	40		
<i>Eriachne pulchella</i>	0.1	15		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	2	600		
<i>Gomphrena cunninghamii</i>	0.1	15		
<i>Goodenia microptera</i>	0.1	20		
<i>Gossypium australe</i> (Burrup Peninsula form)	0.1	50		
<i>Gossypium robinsonii</i>	0.1	190		
<i>Haloragis gossei</i>	0.1	30	MMFR03-08	Insufficient material for further determination
<i>Heliotropium cunninghamii</i>	0.1	15		
<i>Heliotropium heteranthum</i>	0.1	0.5	MMFR03-10	
<i>Hibiscus sturtii</i> var. <i>platyklamys</i>	0.1	10	MMFR03-04	
<i>Iseilema dolichotrichum</i>	0.1	10	MMFR03-11	
<i>Lepidium pholidogynum</i>	0.1	20	MMFR03-05	
<i>Oldenlandia crouchiana</i>	0.1	10		
<i>Paspalidium clementii</i>	0.1	15		
<i>Polycarpha holtzei</i>	0.1	2		
<i>Portulaca oleracea/intraterranea</i>	0.1	2	MMFR03-01	
<i>Ptilotus aevoides</i>	0.1	6		
<i>Ptilotus astrolasius</i>	0.1	40		
<i>Ptilotus auriculifolius</i>	0.1	50		
<i>Ptilotus calostachyus</i>	0.1	80		
<i>Ptilotus fusiformis</i>	0.1	40		
<i>Ptilotus helipteroides</i>	0.1	40		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	1	90		
<i>Schizachyrium fragile</i>	0.1	20		
<i>Sclerolaena densiflora</i>	0.1	15	MMFR03-02	
<i>Sclerolaena eriacantha</i>	0.1	20	MMFR03-07	
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	0.1	40	MMFR03-06	
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	130		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	120		
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i>	0.1	90		
<i>Sida</i> sp. Pilbara (A.A. Mitchell PRP 1543)	0.1	35		
<i>Solanum diversiflorum</i>	0.1	25		
<i>Solanum</i> sp.	0.1	10		<i>S. cleistogamum</i> / <i>horridum</i> .
<i>Sporobolus australasicus</i>	0.1	15		
<i>Streptoglossa bubakii</i>	0.1	30		
<i>Streptoglossa decurrens</i>	0.1	45		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Tephrosia clementii</i>	0.1	8	MMFR03-12	
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	50		
<i>Tribulus hirsutus</i>	0.1	8		
<i>Triodia brizoides</i>	10	40		
<i>Triodia longiceps</i>	4	45		
<i>Triodia wiseana</i>	0.5	45		



**BS4 Marra Mambas Flora****Site** MMFR05**Described by** PLSW**Date** 06/08/2015**Type** Quadrat 50 x 50 m**Central Coordinate** 50 530998 mE, 7501721 mN**Habitat** Hill slope: Moderate southwest facing hill/midslope.**Soil** Red-brown sandy clay.**Rock Type** 11-30% Cover (%) of BIF/ironstone fine gravel, coarse gravel, pebbles, cobbles, rocks/stones, large rocks and angled outcropping.**Vegetation** *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia exigua* open shrubland over *Triodia wiseana*, (*T. epactia*) open hummock grassland.**Veg Condition** Excellent.**Fire Age** No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Acacia exigua</i>	2	160		
<i>Acacia kempeana</i>	0.1	150		
<i>Acacia maitlandii</i>	0.1	60		
<i>Acacia pruinocarpa</i>	0.1	140		
<i>Acacia sibirica</i>	0.1	60		
<i>Acacia trudgeniana</i>	0.1	70		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	20		
<i>Codonocarpus cotinifolius</i>	0.1	30		
<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>	0.1	25		
<i>Dampiera candicans</i>	0.1	50		
<i>Dichanthium sericeum</i> subsp. <i>humilius</i>	0.1	50		
<i>Dysphania kalpari</i>	0.1	20		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	15	MMFR05-03	
<i>Eriachne aristidea</i>	0.1	10		
<i>Eriachne mucronata</i> (arid form) (MET 12 736)	0.1	40		
<i>Eriachne mucronata</i> (typical form)	0.1	30		
<i>Eriachne pulchella</i>	0.1	10		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	1	320		
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	20		
<i>Goodenia microptera</i>	0.1	30		
<i>Goodenia stobbsiana</i>	0.1	10		
<i>Hakea chordophylla</i>	0.1	300		
<i>Indigofera monophylla</i>	0.1	20		
<i>Keraudrenia nephrosperma</i>	0.1	10	MMFR05-02	Juvenile.
<i>Keraudrenia nephrosperma</i>	0.1	49	MMFR05-01	
<i>Oldenlandia crouchiana</i>	0.1	10		
<i>Paraneurachne muelleri</i>	0.1	40		
<i>Paspalidium clementii</i>	0.1	10		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	15		
<i>Polycarpaea holtzei</i>	0.1	5		
<i>Polygala glaucifolia</i>	0.1	3		
<i>Ptilotus astrolasius</i>	0.1	30		
<i>Ptilotus auriculifolius</i>	0.1	30		
<i>Ptilotus calostachyus</i>	0.1	70		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	25		
<i>Ptilotus rotundifolius</i>	0.1	50		
<i>Schizachyrium fragile</i>	0.1	20		
<i>Senna artemisioides</i> subsp. <i>helmsii</i>	0.1	30		
<i>Senna ferraria</i>	0.1	240		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	210		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	150		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	40		
<i>Triodia epactia</i>	2	45		
<i>Triodia wiseana</i>	13	45		
<i>Velleia connata</i>	0.1	15		



**BS4 Marra Mambas Flora**

Site MMFR06

Described by CEF

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 528132 mE, 7500072 mN

Habitat Stony undulating plain in series of rolling plains with gentle southerly aspect.

Soil Not recorded.

Rock Type Continuous layer (70%) of angular ironstone gravel, stones and small rocks.

Vegetation *Triodia brizoides*, *T. angusta* hummock grassland.Veg Condition Excellent: In Phase 1, scats of feral herbivores were present and 1 individual of \**Cenchrus ciliaris* was found; no evidence of disturbance was noted in Phase 2.

Fire Age No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon lepidum</i>	0.1	130	MMFR02=	
<i>Acacia bivenosa</i>	0.1	160		
<i>Acacia exigua</i>	0.1	25		Juvenile.
<i>Acacia synchronicia</i>	0.1	50		
<i>Aristida contorta</i>	0.1	15		
<i>Brachyachne prostrata</i>	0.1	2		
<i>Bulbostylis barbata</i>	0.1	10		
<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>	0.1	20		
<i>Cymbopogon</i> sp.	0.1	40		Sterile.
<i>Dichanthium sericeum</i> subsp. <i>humilius</i>	0.1	25		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	15	MMF06-03	
<i>Enneapogon caerulescens</i>	0.1	10		
<i>Enneapogon polyphyllus</i>	0.1	20		
<i>Enneapogon polyphyllus</i>	0.1	25		
<i>Eremophila cuneifolia</i>	0.1	45		
<i>Eremophila fraseri</i> subsp. <i>fraseri</i>	0.1	25	MMF06-08	Juvenile.
<i>Eremophila longifolia</i>	0.1	120		
<i>Eriachne aristidea</i>	0.1	20		
<i>Eriachne pulchella</i>	0.1	10		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	0.1	260		
<i>Euphorbia boophthona</i>	0.1	25		
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	35		
<i>Gomphrena cunninghamii</i>	0.1	10		
<i>Goodenia forrestii</i>	0.1	25		
<i>Goodenia microptera</i>	0.1	35		
<i>Heliotropium chrysocarpum</i>	0.1	36		
<i>Heliotropium heteranthum</i>	0.1	1		
<i>Hibiscus sturtii</i> var. <i>platyklamys</i>	0.1	10		
<i>Iseilema dolichotrichum</i>	0.1	25	MMF06-05	
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	120		
<i>Lepidium pholidogynum</i>	0.1	8	MMF06-02	
<i>Maireana georgei</i>	0.1	25		
<i>Oldenlandia crouchiana</i>	0.1	15		
<i>Paspalidium clementii</i>	0.1	15		
<i>Polycarpaea holtzei</i>	0.1	2		
<i>Polygala glaucifolia</i>	0.1	5		
<i>Portulaca oleracea</i> /intraterranea	0.1	2	MMF06-07	Seeds nipped.
<i>Ptilotus aervoides</i>	0.1	5		
<i>Ptilotus auriculifolius</i>	0.1	35		
<i>Ptilotus calostachyus</i>	0.1	120		
<i>Ptilotus clementii</i>	0.1	80		
<i>Ptilotus fusiformis</i>	0.1	25		
<i>Ptilotus helipteroides</i>	0.1	45		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	55		
<i>Ptilotus obovatus</i> var. <i>obovatus</i>	0.1	35		
<i>Salsola australis</i>	0.1	15		
<i>Salsola australis</i>	0.1	25		
<i>Sclerolaena densiflora</i>	0.1	25	MMF06-01	
<i>Sclerolaena eriacantha</i>	0.1	15		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x subsp. <i>helmsii</i>	0.1	45		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	210		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	120		
<i>Senna glutinosa</i> subsp. x <i>luerssenii</i>	0.1	130		
<i>Sida echinocarpa</i>	0.1	10		
<i>Sida fibulifera</i>	0.1	8		
<i>Sporobolus australasicus</i>	0.1	15		
<i>Stackhousia muricata</i> subsp. <i>annual</i> (W.R. Barker 2172)	0.1	25	MMF06-04	
<i>Streptoglossa bubakii</i>	0.1	40		
<i>Streptoglossa decurrens</i>	0.1	30		
<i>Swainsona maccullochiana</i>	0.1	60		
<i>Templetonia egena</i>	0.1	170		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	35		
<i>Tribulus hirsutus</i>	0.1	3		
<i>Triodia angusta</i>	10	40		
<i>Triodia brizoides</i>	25	30		
<i>Triodia epactia</i>	0.1	25		
<i>Triodia wiseana</i>	0.1	30		
<i>Zygophyllum eichleri</i>	0.1	15		



**BS4 Marra Mambas Flora**

Site MMFR07

Described by CEF

Date 05/08/2015

Type Quadrat 50 x 50 m

Central Coordinate 50 532277 mE, 7501461 mN

Habitat Hilltop/ridge top.

Soil Red to red-brown sandy clay.

Rock Type 11-30% Cover of ironstone coarse gravel, pebbles and cobbles.

Vegetation *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia deserticola* subsp. *deserticola* scattered low trees over *Triodia wiseana* open hummock

Veg Condition Excellent.

Fire Age No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Acacia atkinsiana</i>	0.1	100		
<i>Acacia bivenosa</i>	0.1	95		
<i>Acacia maitlandii</i>	0.1	80		
<i>Acacia marramamba</i>	0.1	90		
<i>Acacia trudgeniana</i>	0.1	130		
<i>Codonocarpus cotinifolius</i>	0.1	159		
<i>Corymbia deserticola</i> subsp. <i>deserticola</i>	0.5	160		
<i>Dampiera candidans</i>	0.1	2		
<i>Dodonaea coriacea</i>	0.1	70		
<i>Dysphania rhadinostachya</i>	0.1	10		Insufficient material for further determination
<i>Eriachne aristidea</i>	0.1	10		
<i>Eriachne pulchella</i>	0.1	10		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	0.5	450		
<i>Gomphrena cunninghamii</i>	0.1	10		
<i>Goodenia microptera</i>	0.1	25		
<i>Goodenia stobbsiana</i>	0.1	10		
<i>Gossypium robinsonii</i>	0.1	90		
<i>Indigofera monophylla</i>	0.1	40		
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	30		
<i>Keraudrenia nephrosperma</i>	0.1	70		
<i>Oldenlandia crouchiana</i>	0.1	2		
<i>Polycarpaea holtzei</i>	0.1	3		
<i>Ptilotus auriculifolius</i>	0.1	20		
<i>Ptilotus calostachyus</i>	0.1	80		
<i>Ptilotus fusiformis</i>	0.1	35		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	60		
<i>Schizachyrium fragile</i>	0.1	5		
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	0.1	150	MMF07-01	Hairs appressed.
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x subsp. <i>helmsii</i>	0.1	50		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	90		
<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	0.1	150		
<i>Solanum lasiophyllum</i>	0.1	50		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	10		
<i>Triodia wiseana</i>	25	30		



**BS4 Marra Mambas Flora****Site** MMFR08**Described by** PLSW**Date** 01/08/2015**Type** Quadrat 50 x 50 m**Central Coordinate** 50 531780 mE, 7500506 mN**Habitat** Undulating plain at base of large ridge.**Soil** Red-brown sandy loam with a continuous ironstone lag gravel of pebbles and rocks.**Rock Type** continuous ironstone lag gravel of pebbles and rocks.**Vegetation** *Acacia ancistrocarpa*, *A. citrinoviridis* tall open shrubland over *Senna glutinosa* subsp. x *luerssenii* scattered shrubs over *Triodia epactia* open hummock grassland.**Veg Condition** Excellent to Very Good; 1 plant of \**Cenchrus ciliaris*.**Fire Age** No sign of recent fire.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon otocarpum</i>	0.1	10		
<i>Acacia ancistrocarpa</i>	2	155		
<i>Acacia bivenosa</i>	0.1	140		
<i>Acacia citrinoviridis</i>	2	250		
<i>Acacia pyrifolia</i> var. <i>pyrifolia</i>	0.1	129		
<i>Acacia synchronicia</i>	0.1	210		
<i>Aristida contorta</i>	0.1	20		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	40		
<i>Boerhavia coccinea</i>	0.1	20		
<i>Bonamia erecta</i>	0.1	35		
<i>Brachyachne prostrata</i>	0.1	3		
<i>Bulbostylis barbata</i>	0.1	10		
<i>Cenchrus ciliaris</i>	0.1	40		1 plant.
<i>Cleome viscosa</i>	0.1	40		
<i>Corchorus lasiocarpus</i> subsp. <i>parvus</i>	0.1	60		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	15	MMFR08-01	
<i>Enneapogon caerulescens</i>	0.1	25		
<i>Enneapogon polyphyllus</i>	0.1	40		
<i>Eriachne pulchella</i>	0.1	10		
<i>Euphorbia australis</i> var. <i>subtomentosa</i>	0.1	10	MMFR08-04	
<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>	0.1	30		
<i>Gomphrena cunninghamii</i>	0.1	10		
<i>Gomphrena kanisii</i>	0.1	20	MMFR08-06	
<i>Goodenia forrestii</i>	0.1	25		
<i>Goodenia microptera</i>	0.1	30		
<i>Goodenia microptera</i>	0.1	30		
<i>Goodenia nuda</i>	0.1	40	MMFR08-03	10 plants.
<i>Gossypium australe</i> (Burrup Peninsula form)	0.1	30		
<i>Hakea lorea</i> subsp. <i>lorea</i>	0.1	220		
<i>Indigofera monophylla</i>	0.1	40		
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	100		
<i>Maireana georgei</i>	0.1	25		
<i>Maireana villosa</i>	0.1	45		
<i>Paspalidium clementii</i>	0.1	20		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	20		
<i>Polycarpaea holtzei</i>	0.1	10		
<i>Polycarpaea longiflora</i>	0.1	30		
<i>Portulaca oleracea</i> /intra-terreana	0.1	6	MMFR08-02	Seeds nipped.
<i>Ptilotus auriculifolius</i>	0.1	40		
<i>Ptilotus calostachyus</i>	0.1			
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	80		
<i>Rhynchosia minima</i>	0.1	110		
<i>Scaevola spinescens</i>	0.1	50		
<i>Schizachyrium fragile</i>	0.1	25		
<i>Sclerolaena densiflora</i>	0.1	15	MMFR08-05	
<i>Senna artemisioides</i> subsp. <i>helmsii</i>	0.1	110		

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	0.1	110		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i>	0.1	90		
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i>	1	110		
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i> x <i>S. stricta</i>	0.1	90		
<i>Senna notabilis</i>	0.1	30		
<i>Sida echinocarpa</i>	0.1	30		
<i>Solanum diversiflorum</i>	0.1	20		
<i>Solanum lasiophyllum</i>	0.1	50		
<i>Sporobolus australasicus</i>	0.1	15		
<i>Streptoglossa bubakii</i>	0.1	10		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	40		
<i>Tribulus suberosus</i>	0.1	60		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	110		
<i>Triodia epactia</i>	20	60		



**BS4 Marra Mambas Flora****Site** MMFR10**Described by** CEF**Date** 06/08/2015**Type** Quadrat 50 x 50 m**Central Coordinate** 50 530313 mE, 7500356 mN**Habitat** Very gently undulating stony plain at base of large ridge.**Soil** Red-brown sandy clay.**Rock Type** Ironstone continuous surface layer of gravel, pebbles and rocks.**Vegetation** *Acacia xiphophylla*, *Acacia aptaneura* tall open shrubland over *Senna glutinosa* subsp. x *luerssenii*, *S. stricta* open shrubland over *Triodia epactia*, *T. brizoides* very open hummock grasses.**Veg Condition** Very Good.**Fire Age** Burnt 1-2 years ago.**Notes** One individual of \**Cenchrus ciliaris*.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon lepidum</i>	0.1	10		
<i>Abutilon</i> sp.	0.1	5	MMF10-06	Insufficient material for further determination
<i>Acacia aptaneura</i>	0.1	250	MMF10-02	
<i>Acacia aptaneura</i>	0.5	450	MMF10-11	
<i>Acacia atkinsiana</i>	0.1	200		
<i>Acacia bivenosa</i>	0.1	55		
<i>Acacia maitlandii</i>	0.1	250		
<i>Acacia synchronicia</i>	0.1	45		
<i>Acacia tenuissima</i>	0.1	90		
<i>Acacia xiphophylla</i>	3	250		
<i>Aristida contorta</i>	0.1	15		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	20		
<i>Brachyachne prostrata</i>	0.1	2		
<i>Bulbostylis barbata</i>	0.1	10		
<i>Cenchrus ciliaris</i>	0.1	15		1 plant.
<i>Corchorus crozophorifolius</i>	0.1	45		
<i>Corchorus</i> sp.	0.1	5	MMF10-07	Insufficient material for further determination
<i>Cullen pogonocarpum</i>	0.1	20		
<i>Cymbopogon</i> sp.	0.1	15		Sterile.
<i>Duperreya commixta</i>	0.1	130		
<i>Dysphania kalpari</i>	0.1	15	MMF10-08	
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	15	MMF10-01	
<i>Enneapogon caerulescens</i>	0.1	50		
<i>Enneapogon polyphyllus</i>	0.1	15		
<i>Eremophila cuneifolia</i>	0.1	80		
<i>Eriachne pulchella</i>	0.1	10		
<i>Euphorbia australis</i> var. <i>hispidula</i>	0.1	12	MMF10-04	
<i>Euphorbia</i> sp. ( <i>biconvexa</i> / <i>coghlanii</i> / <i>trigonosperma</i> ; sterile)	0.1	20	MMF10-12	Sterile.
<i>Goodenia forrestii</i>	0.1	10		
<i>Goodenia microptera</i>	0.1	20		
<i>Haloragis gossei</i>	0.1	10		
<i>Heliotropium inexplicitum</i>	0.1	3		
<i>Hibiscus burtonii</i>	0.1	90		
<i>Hibiscus coatesii</i>	0.1	6		
<i>Hibiscus sturtii</i> var. <i>grandiflorus</i>	0.1	25	MMF10-09	
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	150		
<i>Keraudrenia nephrosperma</i>	0.1	50		
<i>Lepidium pholidogynum</i>	0.1	15	MMF10-10	

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Maireana georgei</i>	0.1	15		
<i>Maireana melanocoma</i>	0.1	45		
<i>Maireana thesioides</i>	0.1	120		
<i>Mollugo molluginea</i>	0.1	10		
<i>Oldenlandia crouchiana</i>	0.1	8		
<i>Paspalidium clementii</i>	0.1	15		
<i>Polycarpaea corymbosa</i> var. <i>corymbosa</i>	0.1	15		
<i>Polycarpaea holtzei</i>	0.1	2		
<i>Portulaca oleracea</i> /intraterranea	0.1	2	MMF10-03	Seeds nipped.
<i>Ptilotus aervoides</i>	0.1	2		
<i>Ptilotus astrolasius</i>	0.1	35		
<i>Ptilotus auriculifolius</i>	0.1	15		
<i>Ptilotus calostachyus</i>	0.1	60		
<i>Ptilotus fusiformis</i>	0.1	25		
<i>Ptilotus helipteroides</i>	0.1	20		
<i>Ptilotus nobilis</i> subsp. <i>nobilis</i>	0.1	25		
<i>Ptilotus schwartzii</i> var. <i>schwartzii</i>	0.1	25		
<i>Salsola australis</i>	0.1	10		
<i>Sclerolaena densiflora</i>	0.1	5	MMFR10-05	
<i>Sclerolaena eriakantha</i>	0.1	15		
<i>Senna artemisioides</i> subsp. <i>oligophylla</i>	0.1	130		
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> x subsp. <i>helmsii</i>	0.1	25		
<i>Senna glutinosa</i> subsp. <i>glutinosa</i> x <i>S. stricta</i>	0.1	50		
<i>Senna glutinosa</i> subsp. x <i>luerssenii</i>	1	120		
<i>Senna stricta</i>	1	120		
<i>Sida arsinata</i>	0.1	20		
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	0.1	15		
<i>Sida</i> sp. Pilbara (A.A. Mitchell PRP 1543)	0.1	10		
<i>Sida</i> sp. spiciform panicles (E. Leyland s.n. 14/8/90)	0.1	25		
<i>Sida</i> sp. verrucose glands (F.H. Mollemans 2423)	0.1	5	MMF10-13	
<i>Sporobolus australasicus</i>	0.1	12		
<i>Streptoglossa bubakii</i>	0.1	10		
<i>Swainsona maccullochiana</i>	0.1	40		
<i>Trachymene oleracea</i> subsp. <i>oleracea</i>	0.1	10		
<i>Tribulus suberosus</i>	0.1	110		
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i>	0.1	20		
<i>Triodia brizoides</i>	1	50		
<i>Triodia epactia</i>	1	35		
<i>Triodia wiseana</i>	0.1	30		



**BS4 Marra Mambas Flora**

Site MMFR12

Described by CEF

Date 06/08/2015

Type Quadrat 20 x 125 m

Central Coordinate 50 530186 mE, 7500076 mN

Habitat Moderate sized creek incised up to 3m.

Soil Bed: Red-brown sand; Bank: Red-brown sandy clay.

Rock Type Ironstone, some calcareous material and river stones.

Vegetation *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Acacia citrinoviridis*, (*Petalostylis labicheoides*, *Acacia bivenosa*, *Stylobasium spathulatum*, *Gossypium robinsonii*) tall shrubland over *Androcalva luteiflora* scattered shrubs over *Triodia epactia* very open hummock grassland.Veg Condition Very Good; 5 plants of \**Cenchrus ciliaris*.

Fire Age Burnt 5+ years ago.

Species	Cover (%)	Height (cm)	Specimen	Notes
<i>Abutilon</i> sp. <i>Dioicum</i> (A.A. Mitchell PRP 1618)	0.1	150		
<i>Acacia atkinsiana</i>	0.1	130		
<i>Acacia bivenosa</i>	5	300		
<i>Acacia citrinoviridis</i>	20	400		
<i>Acacia maitlandii</i>	0.1	110		
<i>Acacia pyrifolia</i> var. <i>pyrifolia</i>	0.1	250	MMFR12-10	
<i>Acacia synchronicia</i>	0.1	80		
<i>Amaranthus cuspidifolius</i>	0.1	35	MMFR12-01	
<i>Androcalva luteiflora</i>	1	150		
<i>Aristida contorta</i>	0.1	15		
<i>Aristida holathera</i> var. <i>holathera</i>	0.1	35		
<i>Capparis lasiantha</i>	0.1	10		
<i>Cenchrus ciliaris</i>	0.1	70		5 plants.
<i>Chrysopogon fallax</i>	0.1	35		
<i>Codonocarpus cotinifolius</i>	0.1	160		
<i>Cymbopogon ambiguus</i>	0.1	130		
<i>Cymbopogon procerus</i>	0.1	140	MMF12-09	
<i>Digitaria brownii</i>	0.1	60	MMF12-04	
<i>Dipteracanthus australasicus</i> subsp. <i>australasicus</i>	0.1	35		
<i>Dodonaea lanceolata</i> var. <i>lanceolata</i>	0.1	150		
<i>Duperreya commixta</i>	0.1	220		
<i>Dysphania rhadinostachya</i> subsp. <i>rhadinostachya</i>	0.1	10	MMF12-05	
<i>Enneapogon lindleyanus</i>	0.1	45		
<i>Enneapogon polyphyllus</i>	0.1	15		
<i>Eremophila longifolia</i>	0.1	130		
<i>Eriachne mucronata</i> (typical form)	0.1	40		
<i>Eriachne pulchella</i>	0.1	10		
<i>Eriachne tenuiculmis</i>	0.1	35		
<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>	1	500		
<i>Eulalia aurea</i>	0.1	100		
<i>Euphorbia australis</i> var. <i>subtomentosa</i>	0.1	5	MMF12-02	
<i>Euphorbia biconvexa</i>	0.1	25	MMF12-08	
<i>Euphorbia tannensis</i> subsp. <i>eremophila</i>	0.1	15		
<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>	0.1	20		
<i>Gomphrena canescens</i> subsp. <i>canescens</i>	0.1	15		
<i>Goodenia forrestii</i>	0.1	30		
<i>Goodenia microptera</i>	0.1	20		
<i>Goodenia stobbsiana</i>	0.1	10		
<i>Gossypium australe</i> (Burrup Peninsula form)	0.1	10		
<i>Gossypium robinsonii</i>	1	340		
<i>Heliotropium inexplicitum</i>	0.1	15	MMF12-06	
<i>Hibiscus coatesii</i>	0.1	110		
<i>Hybanthus aurantiacus</i>	0.1	50		
<i>Indigofera monophylla</i>	0.1	45		
<i>Jasminum didymum</i> subsp. <i>lineare</i>	0.1	400		
<i>Lepidium pedicellusum</i>	0.1	35		