Plants Native to Black Cracking Clay Soil, Darling Downs.

P. Gardner.

GUMTREES

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Angophora floribunda ROUGH BARKED APPLEGUM	Hilly country, widespread	Medium to tall tree, to 25m	Young plants may be frost tender.	Various soils including blacksoil on higher ground.
Corymbia clarksoniana LONG-FRUITED BLOODWOOD	Pittsworth district and Gowrie Junction	Medium tree to 25m	Said to be frost tolerant (but probably not heavy frost)	Rocky black soil hillsides
Eucalyptus camaldulensis RIVER RED GUM	Creeks and drainage lines in on the inland side of the Range	Tree 10-20m Fast-growing	Severe or heavy (greater than -5°C)	**Heavy clay. Tolerates waterlogging and salt**
Eucalyptus conica FUZZY BOX	1. 7 km E of Kaimkillenbun 2. Gowrie little Plain	Tree 14-20m	Tolerates heavy frosts.	Various soils including **heavy clay.** Tolerates poor drainage.
Eucalyptus crebra NARROW LEAFED IRONBARK	Very widespread, various soil types. Grows in drier parts of the region.	Tree to 20m	Tolerates moderate frosts.	Various soils including **heavy clay. Tolerates some water-logging.**
Eucalyptus melanophloia SILVER LEAFED IRONBARK	Dry ridges near Toowoomba, Heavy blacksoil plains	Tree to 10m	Tolerates heavy frosts.	Various soils including **deep cracking clay. Tolerates occasional waterlogging.**
Eucalyptus moluccana GREY BOX, GUM-TOPPED BOX.	West of Range, on heavier soils. Known as an indicator for good dam-building soil.	Tree to 20m Fastest-growing Eucalyptus for black soil.	Tolerates heavy frosts (to at least -6°C)	Heavy clay soil, or lighter soil with a clay base.
Eucalyptus orgadophila MOUNTAIN COOLIBAH	On hills or cracking clay soil with some sandy admixture	Tree, 12m	Moderate frosts	Various soils including **deep cracking clay. Tolerates poor drainage.**
Eucalyptus populnea BIMBIL BOX	Widespread on black soil	Tree to 12m	Tolerates heavy frost	Various soils including **heavy clay.**
Eucalyptus tereticornis FOREST RED GUM	Blacksoil plains.	Tree, 20-40m Fast growing	Tolerates moderate to heavy frosts (to -7°C) if seed from frosty areas is used.	Various soils including **heavy clay. Tolerates poor drainage and occasional flooding.**
Eucalyptus woollsiana (Eucalyptus pilligaensis) NARROW-LEAFED GREY BOX	Blacksoil plains.	Tree to 25m. Fast growing.	Tolerates frost.	Prefers moderately fertile heavy soil.

WATTLES

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Acacia deanei DEANE'S WATTLE	McEwan SF. Woodland of Eucalyptus crebra, Geijera parviflora, Alphitonia excelsa and Pittosporum angustifolium, brown soil derived from basalt.	Tree to 5m	Heavy frost to -7°C (or more)	Various soils including blacksoil on higher ground
Acacia decora PRETTY WATTLE	e.g. Gowrie Junction, black soil hillsides	Shrub to 2m	Tolerates medium to heavy frost	Various soils including blacksoil on higher ground
Acacia harpophylla BRIGALOW	Drier parts of the region, grey clays.	Tree to 20m	Not recorded, but probably tolerates heavy frosts.	Various soils including **heavy clay. Tolerates poor drainage.**
Acacia implexa LIGHTWOOD	Shallow stony black soil near Pittsworth.	Medium tree	Variable. Heavy frosts, to-7°C, IF SEED OF LOCAL PROVENANCE.	Various soils including blacksoil on higher ground
Acacia irrorata	Eastern part of the region, at least as far west as Biddeston. DISTINGUISH from A. deanei by the leaflets which are more than 1mm wide.	Tree to 5m	Tolerates light frosts.	On slopes with moderately well drained soil.
Acacia maidenii MAIDEN'S WATTLE	Eastern part of region, often with Euc. orgadophila.	Tree, 10-15m	Heavy frosts, to -7°C or more.	Various soils including blacksoil on higher ground. **Tolerates poor drainage**.
Acacia melvillei YARRAN	Near Doctor's Creek, Jondaryan.	Tree, 10-15m	Not recorded, but probably tolerates heavy frosts.	Cracking clay. **Tolerates poor drainage**.
Acacia pendula WEEPING MYALL	Drier parts of the region, as far east as Biddeston.	Tree to 8m Slow growing	Tolerates heavy frost	Various soils including **heavy clay. Tolerates poor drainage.**
Acacia salicina BLACK SALLY WATTLE	Usually in the vicinity of creeklines	Tree 5-10 m tall Fast-growing. Lifespan to 15 years.	Tolerates heavy frost	Various soils including **heavy clay. Tolerates salinity, poor drainage and seasonal waterlogging.**
Acacia stenophylla RIVER COOBA	Usually in the vicinity of creeks and rivers. At Biddeston, and further west.	Tree to 5-10m Moderate to fast-growing. Long lived. Suit planting for shelterbelt and firewood.	Tolerates heavy frost	Various soils including **heavy clay. Tolerates waterlogging, salinity.**

SHE-OAKS AND CYPRESSES

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Callitris glaucophylla WHITE CYPRESS	Tends to grow on ridges where clay is shallow	Tree 10-20m. Slow growing.	Tolerates moderate frosts	Black soil if moderately well drained.
Casuarina cristata BELAH	Blacksoil slopes and hills.	Tree to 20m, Fast, growing.	Tolerates very heavy frosts (to at least -8°C)	Various soils including **heavy clay. Tolerates some poor drainage.**
Casuarina cunninghamiana RIVER SHE-OAK	Found in creeklines on blacksoil plains.	Tree, 10-12m	Tolerates very heavy frosts (to at least -8°C)	Various soils including **heavy clay. Tolerates all poor drainage, waterlogging and some salinity.**

SCRUB AND DRY RAINFOREST SPECIES

Alphitonia excelsa SOAP ASH	Blacksoil slopes and hills.	Tree, 10-15m	Tolerates moderate frosts	Black soil if moderately well drained.
Araucaria bidwillii BUNYA	Bunya mountains. (But, surprisingly, able to grow well on blacksoil plains.	Tree to 30m.	Tolerates very heavy frosts. (to at least -10°C)	All soils including black cracking clay
Auranticarpa rhombifolia GOLDEN HOLLYWOOD	Blacksoil slopes and hills.	Tree, 8m. Fast growing	Tolerates heavy frosts	Clay soil. Tolerates poor drainage.
Alectryon diversifolius SCRUB BOONAREE	Blacksoil slopes and hills.	Shrub or small tree, to 3m	Said to be frost hardy.	Various soils including **heavy clay. Tolerates poor drainage and occasional waterlogging.**
Brachychiton rupestris BOTTLE TREE	Blacksoil slopes and hills.	Tree to 12m	Tolerates moderate frosts	Black soil if moderately well drained.
Brachychiton populneus KURRAJONG	Blacksoil slopes and hills.	Tree to 12m, fast growing	Tolerates moderate frosts	Black soil if moderately well drained.
Bursaria spinosa SWEET BURSARIA	Blacksoil slopes and hills.	Prickly shrub, 2m, with showy white flowers in summer.	Tolerates heavy frosts	Various soils including **heavy clay.**
Capparis mitchellii NATIVE CAPER TREE	Blacksoil slopes and hills.	Small prickly tree to 5m	Tolerates moderate frosts	Black soil if moderately well drained.
Carissa ovata KUNKERBERRY	Blacksoil slopes and hills.	Small, dense, spiny shrub 1 to 2m.	Tolerates moderate frosts	Black soil if moderately well drained.

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Cassinia laevis COUGH BUSH	Blacksoil slopes and hills.	Fast growing semi-woody short-lived shrub to 1.5m	Tolerates moderate frosts	Black soil if moderately well drained.
Denhamia bilocularis HEDGE ORANGEBARK	Blacksoil slopes and hills.	Shrub or small tree to 4m	Tolerates heavy frost	Black soil if moderately well drained.
Diospyros humilis SMALL LEAFED NATIVE EBONY	Blacksoil slopes and hills.	Small tree to 6m.	Frost tender when young, but becomes very hardy.	Black soil if moderately well drained.
Dodonaea sinuolata THREADY LEAFED HOPBUSH	Well-drained black soil near Pittsworth	Shrub to 1.5m	Tolerates moderate frosts.	Black soil if moderately well drained.
Dodonaea viscosa subsp angustifolia NARROW LEAFED HOPBUSH	Widespread, blacksoil slopes	Shrub to 2m.	Tolerates moderate frosts.	Black soil if moderately well drained.
Ehretia membranifolia THIN LEAFED KODA	Blacksoil slopes and hills.	Small tree to 8m, or can be encouraged to be a multi-stemmed shrub.	Tolerates some frost.	Black soil if moderately well drained.
Elaeodendron australe var. integrifolium RED OLIVE PLUM	Blacksoil slopes and hills.	Fast growing small tree to 8m.	Frost tolerance not known, but likely to tolerate light to moderate frosts.	Black soil if moderately well drained.
Eremophila deserti ELLANGOWAN TURKEY BUSH	Blacksoil slopes and hills.	Usually a shrub to 2m but can be a small narrow tree to 4m.	Tolerates light frost.	Black soil if moderately well drained.
Flindersia collina LEOPARD ASH	Blacksoil slopes and hills.	Medium tree 15-20m	Tolerates light frost.	Black soil if moderately well drained.
Geijera parviflora COMMON WILGA	Blacksoil slopes and hills.	Large rounded shrub, to 3m.	Tolerates light frost.	Black soil. **Tolerates poor drainage.**
Geijera salicifolia SCRUB WILGA	Blacksoil slopes and hills.	Fast growing medium tree to 15m	Tolerates heavy frost.	Black soil if moderately well drained.
Grevillea robusta SILKY OAK	Grows on moderately well-drained black soil	Tree to 20m Fast growing.	Frost hardy to -4°C or more.	Black soil if moderately well drained.
Hovea longipes BRUSH HOVEA	Blacksoil slopes and hills.	Long lived shrub to 2m.	Tolerates light frost.	Black soil if moderately well drained.

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Notelaea microcarpa SMALL FRUITED MOCK OLIVE	Blacksoil slopes and hills.	Large shrub or small tree to 5m	Frost tender when young	Black soil if moderately well drained.
Pittosporum angustifolium GUMBY GUMBY	Widespread in region.	Shrub or tree to 5m.	Frost hardy to -8°C or more.	Black soil . Tolerates poor drainage. drained.
Psydrax odorata subsp buxifolia CANTHIUM	Blacksoil slopes and hills.	Small tree to 6 metres.	Tolerates light frost.	Black soil if moderately well drained.
Santalum lanceolatum NORTHERN SANDALWOOD	Blacksoil slopes and hills.	Fast growing tall shrub or small tree to 4m.	Frost hardy.	Black soil if moderately well drained.
Senna coronilloides NATIVE CASSIA	Blacksoil slopes and hills.	Fast-growing short-lived shrub to 1.5m.	Tolerates moderate frost.	Black soil if moderately well drained.
Spartothamnella juncea BEAD BUSH	Blacksoil slopes and hills.	Dense, almost leafless shrub to 1m	Tolerates light frost	Black soil if moderately well drained.

MELALEUCAS

Melaleuca lanceolata DRYLAND TEA TREE	With Brigalow, in western part of the region	Shrub or small tree, 2-5m.	Frost hardy	Various soils including heavy clay. Regarded as the best Melaleuca for windbreaks on blacksoil plains.
Melaleuca quercina OAKEY BOTTLEBRUSH	Creeklines. Rare. Known from 4 sites only incl. Oakey, Felton.	Small tree to 9m	Tolerates moderate frost.	Various soils including heavy clay.
Melaleuca viminalis (Callistemon viminalis) WEEPING RED BOTTLEBRUSH	Grows in creeklines	Small tree to 9m	Tolerates moderate frost.	Various soils including heavy clay.

SALTBUSHES

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Einadia nutans NODDING SALTBUSH	Semi-open sites, often with scrub.	Groundcover subshrub to 30cm high. Red and yellow fruited varieties come true from seed.	Frost hardy	On the slightly better-drained black soil.
Enchylaena tomentosa RUBY SALTBUSH	Semi-open sites with scrub, or Eucalyptus populnea woodland	Groundcover subshrub to 40cm	Moderate frosts	Cracking clay. Tolerates salinity and waterlogging.

Maireana microphylla SMALL LEAFED BLUEBUSH	Grassy, eroded or degraded sites.	Small shrub to 80cm.	Moderate frosts	Cracking clay. Usually on well-drained sites, but said to tolerate some waterlogging.
Rhagodia parabolica FRAGRANT SALTBUSH	Irongate.	Fast-growing perennial spreading shrub to 1m	Moderate frosts	On the slightly better-drained black soil.
Rhagodia spinescens HEDGE SALTBUSH	Irongate.	Sub-Shrub to 60cm.	Moderate frosts	On the slightly better-drained black soil.

WILDFLOWERS AND GROUNDCOVERS

	SIZE AND PLANT TYPE	**FROST TOLERANCE**	**BLACKSOIL TYPE, DRAINAGE**
Chrysocephalum apiculatum YELLOW BUTTONS	Small perennial.	Frost hardy	Various soils including heavy clay.
Dianella longifolia PALE FLAX LILY	Slender perennial tussock to 1m.	Frost hardy	Various soils including heavy clay. Tolerates some waterlogging.
Dianella revoluta BLACK ANTHER FLAX LILY	Tussock to 1m, can form large clumps. Usually on at least moderately well-drained sites	Frost hardy	Cracking clay. Ttolerates some waterlogging.
Eremophila debilis DEVIL'S MARBLES	Groundcover to 1m diameter. Makes dense cover if planted at 30cm centres.	Frost hardy	Various soils including heavy clay.
Leiocarpa brevicompta PLOVER DAISY	Small, short-lived groundcover perennial.	Frost hardy	Various soils including heavy clay.
Lomandra longifolia LONG LEAFED MATRUSH	Tussock to 1m, can form large clumps.	Frost hardy	Clay soil. Accepts some waterlogging.
Mentha satureioides NATIVE MINT	Small plant to 15cm high, spreading by underground roots.	Frost hardy	Various soils including **heavy clay. Tolerates poor drainage and some waterlogging.**
Rhaponticum australe AUSTRAL CORNFLOWER	Annual or biennial.	Frost hardy	On the slightly better-drained black soil.
Senecio pinnatifolius var pinnatifolius YELLOWTOP DAISY	Small, biennial daisy bush.	Frost hardy	On the slightly better-drained black soil.
Swainsona brachycarpa SLENDER DARLING PEA	Perennial, spreads by underground stolons.	Dies back underground in winter, which keeps it safe from frost.	Various soils including **heavy clay. Tolerates poor drainage and some waterlogging.**
Swainsona queenslandica QUEENSLAND DARLING PEA	Perennial, spreads by underground stolons.	Dies back underground in winter, which keeps it safe from frost.	On the slightly better-drained black soil.
Wahlenbergia communis AUSTRALIAN BLUEBELL	Perennial, to 40cm. Lifespan of over 5 years.	Frost hardy	Various soils including **heavy clay.**

CLIMBERS

	NATURAL OCCURRENCE, SITE DESCRIPTIONS	SIZE AND PLANT TYPE	FROST TOLERANCE	BLACKSOIL TYPE, DRAINAGE
Clematis microphylla YELLOW FLOWERED CLEMATIS	Usually on slopes and hillsides.	Light climber	Tolerates moderate frost.	Various soils including **heavy clay. Tolerates poor drainage**
Eustrephus latifolius WOMBAT BERRY	Usually on slopes and hillsides.	Light climber	Tolerates light frost	On the slightly better-drained black soil.
Geitonoplesium cymosum SCRAMBLING LILY	Usually on slopes and hillsides.	Light climber	Tolerates light frost	On the slightly better-drained black soil.
Jasminum didymum subsp. racemosum TRIPLE-LEAF JASMINE	Usually on slopes and hillsides.	Substantial scrambling climber	Tolerates light frost	On the slightly better-drained black soil.
Jasminum simplicifolium STIFF JASMINE	Usually on slopes and hillsides.	Large scrambling climber	Frost tender	On the slightly better-drained black soil.
Pandorea pandorana WONGA VINE	Usually on slopes and hillsides.	Large climber	Tolerates light frosts.	On the slightly better-drained black soil.
Parsonsia eucalyptophylla GARGALOO	Usually on slopes and hillsides.	Large climber	Tolerates moderate frosts.	On the slightly better-drained black soil.
Secamone elliptica CORKY MILK VINE	Usually on slopes and hillsides.	Medium to large climber	Probably frost tender	On the slightly better-drained black soil.