
palms and cycads

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Byfield fern

Bowenia serrulata (Zamiaceae)

Description

Habit: small, palm-like plant that is not a fern; one or more leaves on long stalks growing from a short stem which is scarcely raised above ground level.

Leaves: nearly 1 m long, fern-like; bright, shiny, green leaflets, leathery in texture with toothed margins.

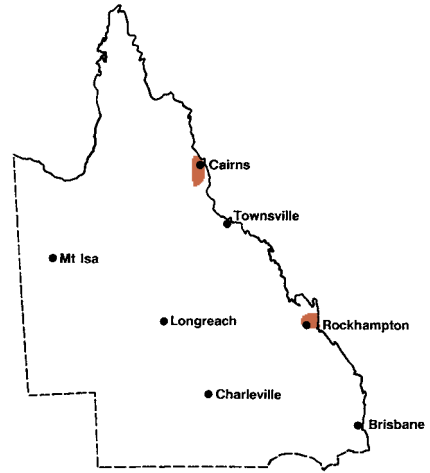
Fruits: male and female cones on separate plants. Female cones are rounded, usually 10 to 15cm long in groups on top of the underground stem at ground level.

Habitat

Sandy and rocky soils in rather moist eucalypt forests where the plant grows as an understorey.

Distribution

At Byfield, north of Yeppoon, and on the Atherton Tableland.



Notes

Feeding tests have shown Byfield fern can kill sheep and cattle. The leaves are commonly used as a floral decoration because of their lasting qualities.

Byfield fern: Leathery, shiny, green, fern-like fronds.



Tree zamia

Cycas media (complex) (Cycadaceae)

Other common names: zamia palm, zamia, nut palm

Description

Habit: palm like with a woody trunk, usually unbranched, 1 to 3 m tall; crown of many large leaves at the top of the trunk.

Leaves: feathery, palm-like appearance, up to 1.5 m long; leaflets have a distinct midrib.

Fruits: male and female cones on separate plants. Male cones are slender, oval, 12 to 20 cm long and set upright on top of the trunk. Female plants develop large, oval, woody fruits 2 to 4 cm long that hang down on velvet stems all around the top of the trunk when ripe. Ripening seeds are orange finally turning brown.

Habitat

Stony hills of eucalypt open forests and woodlands.

Distribution

Tropical and subtropical, mostly coastal and subcoastal areas of Queensland to Cape York and across northern Australia in the Northern Territory and Western Australia.



Notes

Recently, there has been major taxonomic revision within the "*Cycas media* complex." Three species are now recognised. Two new species, *C. sylvestris* from far north Cape York Peninsula and *C. megacarpa* from Mt Morgan to Goomeri, have been described. *C. media* occurs from around Cardwell to St Lawrence. In addition populations on serpentinite between Marlborough and Rockhampton belong to *C. ophiolita*.

Feeding tests have shown the seeds of tree zamia to be very poisonous. Young leaves are also poisonous, but the mature or dried leaves are apparently non-poisonous. In the field, animals rarely eat the seeds unless forced to do so by lack of other feed; however, cattle often eat the young leaves. Raw seeds are highly poisonous and, as many early explorers found, they remain poisonous even after cooking, even though the taste is pleasant. The seeds had a high food value for Aborigines, who processed them to negate the poison by laborious combinations of cracking, soaking, grinding and baking.

Tree zamia belongs to a group of plants known as 'living fossils' because the living representatives are a small remnant of a group which was very widespread in earlier geological ages.

Tree zamia: Left, palm-like plant with woody trunk; above, oval, orange, woody fruits.



Cabbage palm

Livistona decipiens (Arecaceae)

Description

Habit: medium-sized tree to 20 m tall; single trunk; leaves form a dense crown on top.

Leaves: approaching 2 m in length, deeply divided into many segments, with a long stalk up to 1.5 m long with a few spines along its margins.

Flowers: creamy yellow in dense sprays up to 2 m long arising from the leaf bases; August to October.

Fruits: usually black, round, 12 to 14 mm in diameter.

Habitat

Areas where there is access to constant water supply, such as those with a high watertable or swampy areas; along the banks of streams in sub-coastal areas.

Cabbage palm: 10 to 15 m tall trees in a swampy area.



Distribution

Mainly along coastal and near-coastal areas of eastern Queensland, from north of Brisbane to about Townsville.

Notes

Aborigines eat the young growing tip of cabbage palm raw or roasted. The leaves are used to make baskets, ornamental bracelets and neckbands.



Zamia

Macrozamia miquelii (Zamiaceae)

Other common names: *zamia palm*,
wild pineapple

Description

Habit: Palm-like, with little trunk above ground and a well-developed, thick stem beneath the surface.

Leaves: feathery and palm-like, up to 2 m long, glossy blue-green; leaflets without a distinct midrib.

Fruits: male and female cones on separate plants. Male cones are cylindrical, about 30 cm long and 7 cm wide and slightly curved. Female cones are 'pineapple' - shaped, about 40 cm long and 12 cm wide, producing bright reddish orange seeds.

Habitat

Eucalypt open forests with sandy or stony soils.

Distribution

Predominantly in coastal districts from about Rockhampton to northern New South Wales.



Notes

Zamia causes mortalities in the field, both severe poisoning from ingestion of seeds and 'staggers' from eating the leaves. ('Staggers' is a swaying in cattle from loss of proper function in the hindquarters brought on by a toxin that causes damage to the central nervous system in the spinal cord.) Seeds were eaten by Aborigines after suitable preparation.



Zamia: Far left, 2 m tall, palm-like plant with little trunk; bottom, 'pineapple' - shaped cone on female plant; left, 30 cm long male cone.



Zamia

Macrozamia moorei (Zamiaceae)

Other common name: **zamia palm**

Description

Habit: plant resembling a date palm up to 5 m tall, with leaves arising from the top of the stout trunk; trunk covered with knobby projections of discarded leaves.

Leaves: feathery and palm-like, glossy dark green, 2 to 3 m long, spiny at the base.

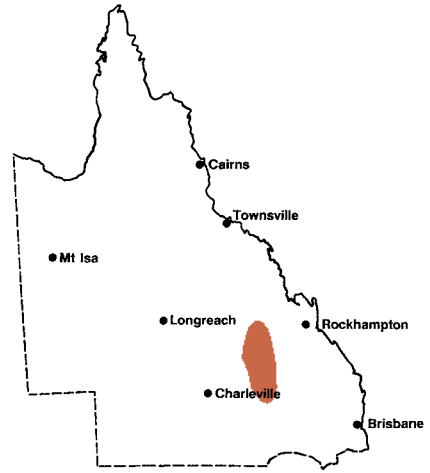
Fruits: male and female cones on separate plants. Female cones are large, about 60 cm long, with many large seeds that ripen to a bright orange-red.

Habitat

Eucalypt woodlands with sandy or rocky soils or rocky hills of basaltic origin.

Distribution

Around Springsure and Carnarvon Gorge in central Queensland and at the head of the Clarence River in north-eastern New South Wales.



Notes

Cattle have died after eating zamia seeds, but losses from eating the leaves are less common. 'Staggers' (see p.9) or 'rickets' is most common in seasons when large seed crops occur and fall from the trees. It is probable that leaves, particularly young leaves, would be deadly if eaten in sufficient quantity, but generally they are out of reach of cattle, except on young plants.

Zamia: 4 m tall plant resembling a date palm.

