

# *Cyclosorus interruptus*

## THELYPTERIDACEAE

### Status

Gradual Decline

### Description

A creeping fern with harsh, hairless, olive-green fronds to 0.8 m long. Frond stalks are slender, up to 0.6 m long by 5 mm wide, almost black at the base but becoming brownish. Frond leaflets (pinnae) occur in 9–15 pairs, the basal pair are larger and sickle-shaped with each successive pair becoming shorter. The spores are found in closely packed sori distributed nearer the midrib than the leaflet edge.

### Similar species

Could only be confused with *Pneumatopteris pennigera* with which it sometimes grows. However, this species has longer, narrower pale green, soft hairy fronds of even length and shape that wilt easily. *Pneumatopteris pennigera* also occupies different habitats, being found on stream-banks in kahikatea remnants, and on shaded limestone overhangs and cave entrances.

### Habitat

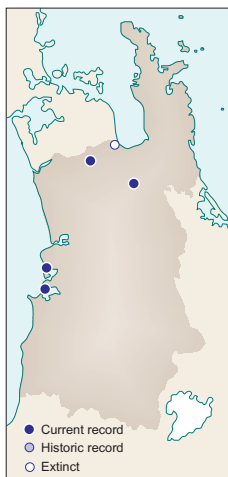
A species of geothermal habitats, but also present in frost-free, lowland wetlands, especially those dominated by raupo (*Typha orientalis*) and swamp millet grass (*Isachne globosa*).

### Distribution

Indigenous to the northern North Island, from near Kaitaia to Taupo and Mayor Island. Also known from Australia and throughout the tropical and warm-temperate Pacific where it is not threatened.

### Threats

Drainage, land development and fern collectors.



*Cyclosorus interruptus*.

Photo: J.C. Smith-Dodsworth.

# *Dactylanthus taylorii*

wood rose, dactylanthus; pua o te reinga

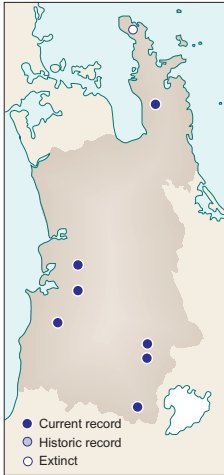
## BALANOPHORACEAE

### Status

Serious Decline

### Description

A root parasite forming a warty dark brown clump up to 300 mm in diameter at or just below the soil surface. Plants are either male or female and produce flowers from January to April. Flowering shoots are fleshy, un-branched, up to 200 mm long and covered with overlapping pinkish brown scale-like leaves to 15 mm long. When these shoots emerge, the uppermost scales part to expose many tiny flowers. Male flowers produce white pollen while female flowers are red-brown. The inflorescences of either sex produce nectar which can be detected by its characteristic fragrance. Fruits are about 2 mm long. Fruiting occurs from February to May.



*Dactylanthus taylorii* male flower.

Photo: A. Holzapfel.

**Similar species**

None. Root galls, *Rhizobium* and *Frankia* nodules and other growths on exposed roots and basal trunks have been collected as wood rose. *Dactylanthus* can be distinguished from these by the presence of small circular scars left by former buds and flowering shoots.

**Habitat**

Second-growth forest, parasitic on a number of native broadleaf species, including towai, lancewood, five finger, pate, mapou, *Pittosporum* and *Coprosma* species.

**Distribution**

Endemic to the North Island.

**Threats**

Forest clearance, collectors; pigs, possums and rats feed on (and damage) the flowers and plants.

**Comments**

*Dactylanthus* is difficult to find as plants are often underground and only the unbrowsed flowers are visible.

*Dactylanthus taylorii*.  
Photo: C. Ecroyd.



# *Deschampsia cespitosa*

tufted hair-grass

POACEAE

## Status

Gradual Decline

## Description

A stout, tussock-forming yellow-green grass to 0.5 m tall. Leaves are narrow (1–4 mm wide) with a sharp point; the upper surface is dull green and smooth while the lower leaf surface is bright green and ribbed. Golden flowering heads up to 1 m tall appear in January and seed in February.

## Similar species

Tall fescue (*Schedonorus phoenix* = *Festuca arundinacea*) can look similar when in seed, but this species has a taller seed head and the leaves are much larger and broader than tufted hair-grass.



## Habitat

Damp grass or sedge swards near lakes, rivers and swamps; also estuarine occurring amongst jointed rush (*Apodasmia similis*).

## Distribution

Known in New Zealand from North, South, Stewart, Chatham and Subantarctic Islands. Also in many other temperate parts of the World. The sole Waikato record came from Lake Waikare, where it was collected by Thomas Cheeseman during the 1800s. It may now be extinct in the region.

*Deschampsia cespitosa*. Photo: G.M. Crowcroft.

### Threats

Habitat loss through weed encroachment and development. In many areas where it was recorded in the past, tall fescue now occurs. New Zealand material of this species appears to be highly palatable to livestock, goats and deer. Only in the far south of New Zealand does this species remain common. According to the late Tony (A.P.) Druce who witnessed its decline, the loss of tufted hair-grass (*D. cespitosa*) can be directly linked to increasing deer numbers during the 1950s.

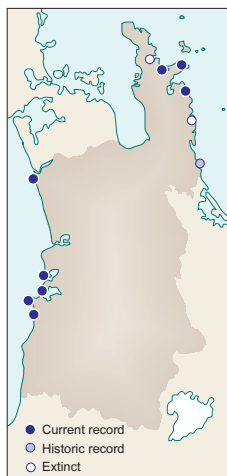


*Deschampsia cespitosa*.

Photo: G. Walls.

# *Desmoschoenus spiralis*

pingao



CYPERACEAE

## Status

Gradual Decline

## Description

Pingao is a distinctive, sand-binding sedge with orange to kowhai-yellow leaves arranged in dense, 0.3–0.7 m tall tufts, along a stout, woody, rhizome. The rope-like rhizome is covered in old shattered, frayed leaf bases. The conspicuous brown or black flower heads are produced in tall, cats-tail like spikes. With each cluster of flowers spirally arranged around the central stem, and subtended by a stiff, orange to kowhai-yellow leaf-like bract. Pingao flowers from November to December and fruits from January onwards.

## Similar species

None

## Habitat

Coastal sand dunes. It is more commonly found on the front face of active dunes on more or less unstable slopes and wherever there is wind-blown sand.

## Distribution

North, South, Stewart and Chatham Islands. This species has been in decline throughout its range and is now quite limited. In the Waikato, pingao is found on some of the eastern Coromandel beaches, and sparingly along the west coast from Port Waikato to Taharoa.

## Threats

Competition from marram grass (*Ammophila arenaria*), dune stabilisation and compaction, harvesting, trampling, vehicle traffic and browsing animals. Because this species is wind-pollinated, individuals of small, isolated populations may not receive pollen during flowering, and therefore there will be no seed production.

### Comment

This species is of considerable cultural significance. The dried leaf, golden in colour, is used in traditional decorative arts and crafts.



*Desmoschoenus spiralis*.  
Photos: (right) J.R. Rolfe;  
(below left) J.D. Sawyer;  
(below right) M. Orchard.



# *Epacris sinclairii*

## EPACRIDACEAE

### Status

Nationally Endangered

### Description

Densely branched shrub or small tree up to 9 m tall (but usually much less). Leaves broad, 5–15 mm long, densely packed around stem, bronze-green to grass-green, terminating with either a blunt end or cream-coloured ‘knob’. Flowers clumped towards the branchlet tip, white, star-like with 5 yellow stamens. Flowering occurs mainly during late March to April, with very rare sporadic flowering through winter to October.

### Similar species

*Epacris pauciflora* which is a more spindly shrub with a more open branching, ‘pitch fork’ habit. Stems are finer and more brittle, leaves are smaller, darker green to red-brown with acute apices, that are often extended into a small, sharp needle-like tips. *Epacris pauciflora* flowers year round with no obvious peak-time, and is a species more frequently found in acidic bogs, pakihi and gumland scrub.

### Habitat

Montane kauri-dominated cloud forest and associated rock outcrops, very rarely colonising open gumland scrub on Great Barrier Island.

*Epacris sinclairii*.

Photo: P.J. de Lange.



### Distribution

Endemic to Great Barrier Island and the upper Kauaeranga Valley behind Thames. An extremely localised species, whose current scarcity seems largely attributable to past kauri logging on Great Barrier Island and the Coromandel Peninsula. Where present it can be locally common. On Great Barrier it is confined to the central portion of the island, whilst the peculiar disjunct distribution on the adjacent Coromandel Peninsula seems natural (being paralleled by the related *Dracophyllum patens*).

### Threats

Small range size.