

# *Austrofestuca littoralis*

hinarepe, sand tussock

POACEAE

## Status

Gradual Decline

## Description

A stout, tufted, erect grass forming pale yellow-green tussocks, to 1 m tall. The leaves are fine, rolled and needle-like. Seed heads are buried within foliage, are flattened, yellowish-white and have a zigzag appearance.

## Similar species

Marram has larger blue-green leaves and is a much more robust plant. The cat-tail-like seed heads of marram are considerably more crowded and are held above the foliage.

## Habitat

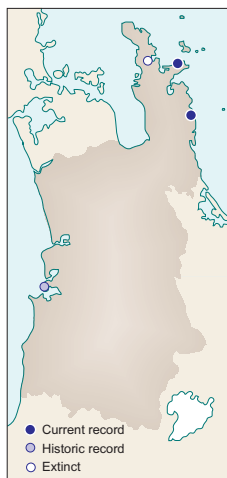
Sandy beaches, though it occasionally grows on damp sand on coastal stream margins.

## Distribution

Australia, where very common and New Zealand. In New Zealand locally distributed on North, South, and Stewart Islands, apparently now extinct on the Chatham Islands (Walls et al. 2003). In the Waikato it is known from a couple of eastern Coromandel beaches, and at one site on the west coast near Kawhia.

## Threats

Exact cause of past decline has not been established, though sand tussock is palatable to cattle and horses, and it is thought to have been displaced by marram grass (*Ammophila arenaria*). Sand tussock is also vulnerable to trampling and vehicle disturbance and so has declined in the vicinity of many coastal resorts.



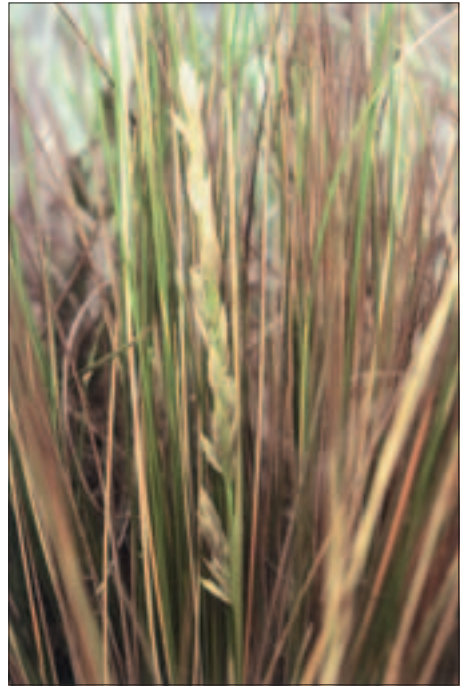
*Austrofestuca littoralis*  
habitat.

Photo: S.P. Courtney.





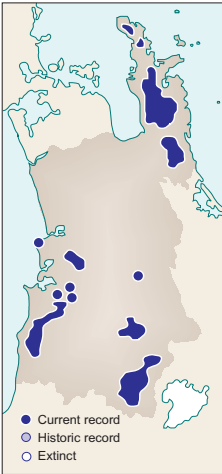
*Austrofestuca littoralis*.  
Illustration by C. Beard.



*Austrofestuca littoralis*. Photo: B. Mitcalfe.

# *Brachyglottis kirkii* var. *kirkii*

Kirk's daisy



ASTERACEAE

## Status

Serious Decline

## Description

A spring flowering, usually epiphytic shrub to 1.5 m tall with purple stems and grey bark developed on old wood. Leaves 40–100 × 20–40 mm, fleshy or variable in shape, usually toothed in upper third, hairless, upper surface pale to dark green, often tinged maroon, undersides paler. Flowers 30–40 mm diameter, borne in dense inflorescences of 3–20 flowers, the individual daisy-like flowers have white 'petals' (rays). Fruits dry, windborne, dandelion structures.

## Similar species

A very distinctive species. However, because it is usually epiphytic and so often well out of reach, plants could be confused with the epiphytic *Pittosporum kirkii* and *P. cornifolium*. These pittosporums have leathery leaves, non-daisy like flowers and round fruits which split to reveal hard black seeds embedded within sticky gum.



## Habitat

An epiphyte of lowland to lower montane forest, sometimes terrestrial.

## Distribution

Endemic to the North Island. Locally scattered throughout the conservancy.

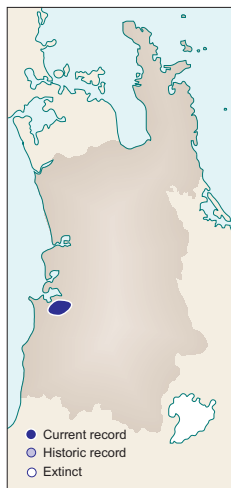
## Threats

This plant is intolerant of browse and targeted by possums, goats and deer.

*Brachyglottis kirkii* var. *kirkii*. Photo: A.J. Townsend.

# Carex litorosa

sea sedge



CYPERACEAE

## Status

Serious Decline

## Description

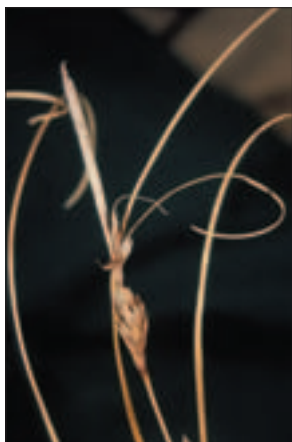
An upright sedge to 0.8 m tall (but usually smaller), that forms pale green or reddish, dense tussocks with curly tops. Leaves are flat on one side, curved on the other and slightly serrated along the edge, 1.5 mm wide and about the same length as the flower stem. Flower stems are cylindrical and upright, with light brown spikes.

## Similar species

*Carex divisa*, which also grows in saltmarshes but has blue-grey leaves, and smaller, compact black spikes borne on long stems near the apex of the leaves of each tussock.

## Habitat

Coastal in salty marshes and on sandy, tidal river banks.



## Distribution

Endemic to North, South and Stewart Islands.

## Threats

Habitat loss through coastal development. Encroachment by weeds is a serious problem in the North Island, especially from species such as spartina, tall fescue and *Carex divisa*.

*Carex litorosa*. Photos: (left) C.C. Ogle; (right): C. Jones.

# *Carmichaelia williamsii*

## Giant-flowered broom

### FABACEAE

#### Status

Nationally Endangered

#### Description

A shrub up to 4 m tall with distinctive flattened, grooved yellow-green branchlets, 8–12 mm wide. Leaves only occur on young or shaded plants. Flowers occur in clusters of up to six, each flower up to 30 mm long. Petals are yellowish with purple or red veins. Pods are dark brown-black, up to 30 mm long; seeds orange-red, often mottled with black splotches. Flowering and fruiting occurs throughout the year.

#### Similar species

This is the only yellow-flowered native New Zealand broom, and may be distinguished from the common introduced broom (*Cytisus*

*scoparius*) by the non-leafy, light green, much wider, flattened branches, the larger, pale-yellow flowers with purple or red veins, and the late-winter flowering habit.

#### Habitat

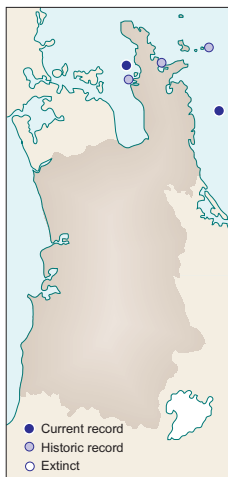
Open forest or scrub on steep coastal sites.

#### Distribution

Endemic to northern New Zealand from the northern offshore islands to East Cape. Only two sites are on the mainland.

*Carmichaelia williamsii*.

Photo: A. Brandon.



### Threats

Flowers, fruits and seed are palatable to rats. Some populations are at risk from coastal erosion. Plants tend to be short-lived, and are often inflicted with lemon tree borer (*Oeomona hirta*). Because the species is principally bird-pollinated, by New Zealand honeyeaters, the loss of these pollinators may affect reproductive effort (Heenan & de Lange 1999).

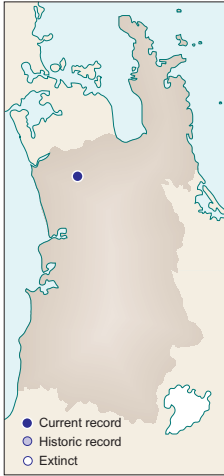


*Carmichaelia williamsii*.

Photo: A. Brandon.

# *Centipeda minima* subsp. *minima*

sneezeweed



## ASTERACEAE

### Status

Nationally Critical

### Description

A prostrate, aromatic, annual, bright green, creeping herb, with many slender, finely hairy basal stems usually 50–100 mm long. Leaves are 3–15 mm long, mostly without hairs, and either entire or with a few large teeth on their edges. Flower heads lack stalks and are 2–4 mm in diameter. Seeds are up to 1.4 mm long.

### Similar species

The other three native species of *Centipeda*, which are much larger plants. Distinction between these species and *C. minima* subsp. *minima* is not easy. As a rule *C. minima* subsp. *minima* is a strict annual, much smaller in all parts, with bright green leaves that are roughly kite-shaped in outline, and only sparingly (though deeply) toothed toward the leaf apex.

### Habitat

Wet, or dried out margins of lakes, ponds and streams; swamps and waste places. It cannot tolerate any competition, so grows in the most open sites it can find. The largest recently discovered populations in New Zealand come from rubbish dumps and muddy ground associated with poorly drained airstrips.

### Distribution

Scarce. Past distribution records have been confused by the failure to recognise that there were three other species present in New Zealand. Recent records have come from the North and South Islands, with most records from the Waikato north. Most previous Waikato records refer to *C. elatinooides*, *C. cunninghamii* and *C. aotearoana*. However,

bona fide *C. minima* has been sparingly recorded from some of the lower Waikato lakes.

### Threats

The major threats come from aggressive wetland weeds, such as Mercer grass, which rapidly smother the open muddy ground this species favours. This species is weedy and opportunistic and so can potentially be found anywhere there is suitable muddy, open ground.



*Centipeda minima*. Photos:  
(above) P.J. de Lange;  
(right) B. Stanley.

