

# CHILEAN NEEDLE GRASS

## Weed of National Significance

Chilean Needle Grass (*Nassella neesiana*) is one of several needle grasses that invade and take over both natural ecosystems and agricultural land.

Only 1-3% of native grasslands are left in Victoria and needle grasses are damaging these grasslands by replacing native species.

Stock prefer not to eat mature Chilean Needle Grass (CNG), so if it invades paddocks, this reduces the amount of land available for grazing. The sharp seeds can also injure animals and lower wool quality.

It is a Noxious Weed (Restricted category) in Victoria.

### What does it look like?

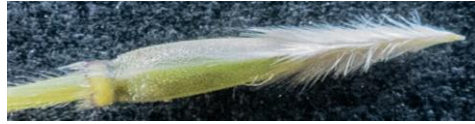
It's easiest to recognise in late spring or early summer, when flowering or seeding.



Erin Perkins castlemaine flora.org.au

Chilean Needle Grass seeding. Note the long awns.

It forms tufts about 60cm high and its heads look purplish at first, and fade to light reddish in summer. As the seeds ripen, the heads tend to nod to one side.



Euan Moore

Seed magnified 6 times

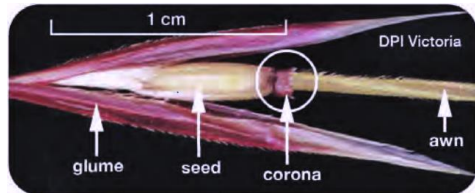
The seed has a sharp tip and a long tail (awn) with two bends and a corkscrew when dry. There is a collar (corona) - like a tiny party hat - where the awn comes out of the seed.



Charles Grech

Seed heads showing awns, purplish glumes and male flower with yellow pollen.

The corona distinguishes the needle grasses (which in Australia are all invasive weeds) from other grasses, some of which also look purplish and/or have long awns.



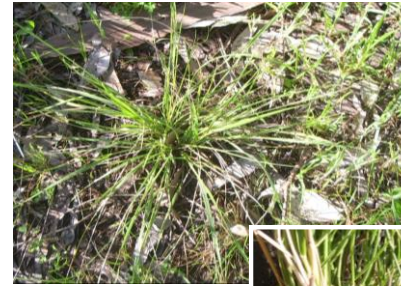
Charles Grech

Part of a seed still enclosed by purplish glumes

To see the corona, pull the seed out by its awn. The corona can also be felt by running a finger and thumb between the seed (lemma) and awn.

### Other needle grasses

Texas Needle Grass (*N. leucotricha*), Cane Needle Grass (*N. hyalina*) and their relative Espartillo (*Amelichloa caudata*) are equally harmful. Texas and Cane Needle Grass also have a corona. Espartillo has sharp leaf-tips.



Above: Young plant



Right: Bulbous base and shallow roots (basal "seeds" not present).

### How to recognise CNG when not seeding

- leaves are often more of a lime green (especially earlier in the season) than similar looking native grasses
- leaves are normally flat (not cylindrical) and a similar colour both sides (unlike *Rytidosperma fulvum*, a common flat-leaved wallaby grass, whose leaves are more silvery underneath)
- leaves are often stiffer than those of wallaby grasses, which tend to have softer, slightly droopier leaves
- when dug up, the bases of the stalks are bulbous and sometimes contain tear-drop shaped "seeds" (like tiny bulbs).



A plant early in the season showing plump purplish stems (enclosing the immature heads)

### How to get rid of it

It can be dug out and incinerated. Or double bag it and put in the bin. **Don't put it in the green waste collection**, as this

could spread the seeds elsewhere. A home compost heap is also not suitable, as it doesn't get hot enough for long enough.

Mulching with woodchips 10-20cm deep suppresses it. Seeds can stay viable in soil for many years, so the woodchips may have to be kept topped up for 15 years.

Solarising may also suppress it (but can also kill beneficial micro-organisms): when it's warm and sunny and the soil is wet, cover the ground where the plants are with sturdy, UV-stabilised black plastic to "cook" the plant. Weigh down the edges with bricks or planks to stop evaporation.

Herbicide spraying may be the only efficient way to get rid of big infestations. This is best done by skilled weed removers, using flupropanate (eg Taskforce) when seeding is months away, or a mixture of glyphosate (eg Roundup) and flupropanate when seeding is imminent. Herbicide doesn't kill the seeds, so if present, they must be cut off before spraying.

Infestations on nature strips can be reported to Council (phone 5471 1700).



Euan Moore

Part of an immature head with awned seeds (awns not yet bent) still attached

### More information

- *A Ute Guide to Chilean and Texas Needle Grass* [uppercampaspelandcare.org.au/wp-content/uploads/needle-grass-web-LR-1.pdf](http://uppercampaspelandcare.org.au/wp-content/uploads/needle-grass-web-LR-1.pdf)
- *Chilean Needle Grass Best Practice Management Manual* <https://api.ecan.govt.nz/TrimPublicAPI/documents/download/1865510>
- <https://agriculture.vic.gov.au/biosecurity/weeds/weeds-information/chilean-needle-grass>
- <https://castlemaine fieldnaturalists.org.au/important-weeds/>
- [www.connectingcountry.org.au](http://www.connectingcountry.org.au)
- [www.fobif.org.au](http://www.fobif.org.au)

Leaflet from Margaret Panter 5470 5072 (7am-7pm)  
9 Nov 22