

Chilean Needle Grass

Frequently Asked Questions

December 2014

Why is Chilean needle grass a problem?

Chilean needle grass can displace desirable pasture leading to a reduction in pasture and crop yields. This, together with the fact that it is unpalatable to stock when seeding from late October to March, results in a reduction in the number of stock able to be carried on an infested property.

In addition, the sharp, needle-like seeds of Chilean needle grass can penetrate skin and muscle, causing major health and welfare issues for stock including painful abscesses and blindness. This often necessitates removal of stock from infested land to avoid contact with seeds.

Chilean needle grass is difficult to contain once established. Further, effective control requires a long-term management programme which can be expensive.

The cost of control and the restrictive containment requirements combined with reduced stock-carrying capacity, potential inability to sell stock (except for slaughter) or crops including hay, could have a major impact on income and the financial viability of a property.

Why is Chilean needle grass considered a pest compared with other grasses with sharp seeds?

Chilean needle grass is very difficult to identify in grass pastures from April to October, even to a trained eye. It can therefore establish over large areas of land before it is recognised. The time between the movement of seed to a property, the establishment of a plant or plants and Chilean needle grass being detected on a property can be many years.

Chilean needle grass is particularly invasive in low fertility soils and poor pastures. It can be most difficult to control and contain on the most susceptible land (dry hill faces). Very low palatability during the summer months, drought tolerance, the harm it can cause to stock, animals and people, combined with the difficulty and costs of control, make Chilean needle grass a pest that can have an extremely severe impact on our environment and economy.

Where is Chilean needle grass found?

Chilean needle grass is widespread in Marlborough and to a lesser degree in Hawke's Bay. It was detected in North Canterbury in 2008 and now affects 300 hectares in Cheviot, Parnassus and Omihi.

Chilean needle grass has the potential to infest an estimated 15 million hectares nationwide.

More than half the Canterbury region is at risk due to climatic suitability and the movement of seed by various means.

There may be many undetected infestations throughout our region. See the map of current and potential distribution on the Chilean Needle Grass Awareness Programme Facebook page (www.facebook.com/chileanneedlegrass).

How does Chilean needle grass spread?

Chilean needle grass is spread long distances (between districts or regions) by human activities on clothing and footwear, animals (domestic and stock), vehicles, machinery and equipment as well as in soil, mud and contaminated feed. Chilean needle grass seeds are also spread short distances by water and wild animals.

How can I prevent Chilean needle grass from spreading to my property?

Have a farm biosecurity plan. The key is prevention. Limit access points, put up signage and make sure any people, vehicles, machinery, equipment, stock and feed crops entering your property are free of Chilean needle grass seeds.

Implement basic vehicle hygiene and farm biosecurity practices on your property for yourself, your family, staff and any visitors to minimise the risk of spread to your property.

For more information about farm biosecurity, request a brochure from Environment Canterbury via 0800 324 636 or go to www.ecan.govt.nz

What does Chilean needle grass look like?

Chilean needle grass is an erect, tufted grass. Its bright green leaves are 2–8 mm wide, flat and rough to touch when stroked downwards towards the base of the plant.

Look for a lighter green grass that, when in large infestations, shines in the sun from a distance. Tufts of grass appear in pasture from October until March as stock eat the more palatable and desirable pasture species around the Chilean needle grass.

Seed panicles are present from late October until March when the plant can be identified by the distinctive reddish purple colour of the seed heads when they first emerge from the panicle and their long, twisting awns (tails).

As the seeds mature, the seed heads fade to light brown and the awns intertwine to form clusters of seed before detaching from the panicle.

What do Chilean needle grass seeds look like?

Chilean needle grass seeds are approximately 7 – 9 cm in length and light brown with a distinctive dart-like appearance.

The seeds consist of a hard, sharply pointed seed head which is barbed with backward-facing hairs and a long, twisted, corkscrew-like awn.

Learn more about how to identify Chilean needle grass and its seed by requesting a brochure and seed identification card from Environment Canterbury or watching the short video on the Chilean Needle Grass Awareness Programme Facebook page (www.facebook.com/chileanneedlegrass).

When is the best time to look for Chilean needle grass?

The best time to check pastures for Chilean needle grass is from late October until March when it is flowering and/or seeds are present. It is difficult to identify between April and October, when it is hidden among other grasses.

Keep an eye out year round for its distinctive seed on your footwear and clothing as well as on your stock, farm dogs and horses.

What is Environment Canterbury doing about Chilean needle grass?

Chilean needle grass is declared as a pest in the Regional Pest Management Plan 2011 – 15. The objective of the Plan for Chilean needle grass is to reduce the population at known infestations and prevent its establishment elsewhere in the region.

Environment Canterbury is implementing a programme to ensure Chilean needle grass is contained and controlled at existing sites and is searching land thought to be at high risk of potential infestation to prevent spread. An education programme raising awareness of Chilean needle grass including prevention, identification and control tools and programmes is being implemented throughout the region in partnership with Marlborough District Council, Hawke's Bay Regional Council and the Ministry for Primary Industries.

How is Chilean needle grass controlled?

Control options vary depending on land use and topography. Options include grazing (from April until October), fencing, herbicide control and cropping. Usually a combination of all of these options gives the best results, particularly on flat land and rolling hill country that is accessible to machinery. On inaccessible land which is moderately steep to very steep, control options may be limited to herbicide applications. The choice of herbicide is also very important. For more information, contact your local biosecurity officer.

What should I do if I find Chilean needle grass?

If you think you have found Chilean needle grass or suspect that you have purchased contaminated stock, seed or feed, report it to Environment Canterbury (0800 EC INFO, 0800 324 636) immediately.

A biosecurity officer will contact you and arrange a visit to confirm the presence of Chilean needle grass. If it is Chilean needle grass, the officer will provide advice on containment and control options. Environment Canterbury will provide some initial assistance with any control work required.

More information

For more information on Environment Canterbury's Chilean needle grass programme, contact Laurence Smith, Principal Resource Management Advisor for Biosecurity, 03 314 7034, 027 231 6478, laurence.smith@ecan.govt.nz