

PLANT PEST

Chilean Needle Grass

(Nassella neesiana)

Chilean needle grass is a major problem for dry hill country farmers in Marlborough and Hawke's Bay. It has also been found on a North Canterbury property - its first known incidence in Canterbury.

Environment Canterbury has declared a small-scale management programme aimed at eradicating the plant pest from the region.

Chilean needle grass produces sharp cork-screw shaped seedheads which catch easily in passing animals particularly sheep and burrow into skin damaging hides and downgrading carcasses. Lambs are particularly vulnerable to seeds penetrating their eyes causing blindness.

It is safer to remove sheep from infested areas between November and March to avoid contact with seeds.

Chilean needle grass forms dense stands in pasture drastically reducing productivity after a few years.

Chilean needle grass is most likely to be spread by stock, machinery, hay and humans rather than wind because the seeds are heavy and tend to fall close to the plant.

The point of the seed is extremely sharp and hairy so catches onto passing animals, vehicles, and humans socks and is easily spread to new sites.

**A threat to
Canterbury's environment**

Chilean needle grass invades a North Canterbury hillside



Chilean needle grass taking over from pasture



Chilean needle grass seed head



Chilean needle grass heads caught in footwear



Chilean needle grass seed and glume (sheath)

Identification of Chilean needle grass

Chilean needle grass is more like a grass than a tussock.

Unlike nassella tussock which is wind spread, the seeds of Chilean needle grass are not generally wind dispersed.

Chilean needle grass while related to nassella tussock is more likened to puna grass (*Achnatherum caudatum*)

Chilean needle grass produces seed heads and seeds at the nodes in the plant leaves or panicles that are spread by stock, in hay, and by people and machinery.

The seed head, referred to as 'little dart' in its native South America, has a sharp point and hair like barbs that can penetrate the skin of stock. The seed head is assisted by a cork screw shaped tail that enables the seed to burrow through the skin and into the tissue.

The leaves are bright green and harsh to the touch. The plant may grow to 1m in the absence of grazing.

Plants will grow into dense stands and exclude other species.

The flowers have a purple tinge and ripen into hard, sharp seeds with long twisting tails.

It is a difficult plant to identify but is easiest to see when the sun is lower in the sky and the flowering stems glow silver.

Management

Individual plants should be grubbed out and destroyed by burning.

Larger patches can be sprayed with glyphosate but seedlings will readily invade bare soil and must be sprayed before they produce seed.

It flowers between November and March.

Further information

Anyone who has sighted the plant or requires further information should contact Environment Canterbury's Amberley office on (03) 314 8014.