

NSW DEPARTMENT OF
PRIMARY INDUSTRIES

Weed Alert

HAVE YOU SEEN THIS PLANT?

Mexican feather grass

(*Nassella tenuissima*)



Mature Mexican feather grass plant once called *Stipa tenuissima*
Photo: L. Ayres

INTRODUCTION

Mexican feather grass (*Nassella tenuissima*), is a potentially serious new weed. It is feared that if Mexican feather grass becomes naturalised it has potential to infest up to 65% of NSW.

It is closely related to serrated tussock (*Nassella trichotoma*), a major pasture and environmental weed in temperate Australia. The two species can only be distinguished from each other when flowering. Mexican feather grass is also related to Chilean needle grass (*Nassella neesiana*) which is highly invasive in native grasslands.

Mexican feather grass is a highly adaptable grass species, and could spread throughout most of Australia, causing major economic and environmental damage. It is capable of surviving in extremely variable climates and soil types, and is able to tolerate prolonged periods of drought. Naturalised populations will be difficult to identify, as it is similar to other weedy grass species.

WORLD STATUS

Mexican feather grass is considered a weed in its native range, southern USA (New Mexico and Texas), Mexico, Chile and Argentina. In New Zealand and California, it has spread from cultivation as a garden plant and proven difficult to control.

Mexican feather grass was initially mislabelled and marketed in some nurseries in NSW as 'elegant spear grass' a name given to the native grass *Austrostipa elegantissima*. Mexican feather grass may also have been sold as *Stipa tenuissima*, *Stipa tenacissima*, White tussock, Texas tussock grass or Ponytail grass.



Mexican feather grass seed head and glume encasing the seed.
Photo: A. Maguire

In October and November 2004 plants were found, and destroyed, in gardens in Tamworth, Uralla and Tenterfield. Further plants could exist in gardens and nurseries, and should be destroyed, as they are a source for future infestations.

In 2008 a wholesale nursery based in Victoria imported seed of ornamental stipoid grasses to Australia from overseas. That seed was subsequently propagated for sale and sent interstate, including NSW. It is believed that the seed was either mislabelled or contaminated with Mexican feather grass seed.

These plants may be labelled as *Stipa lessingiana*, *S. capillata*, *S. capriccio*.

IDENTIFICATION

Mexican feather grass is a densely tufted perennial grass. It is almost identical to serrated tussock, except when it is in seed.

Leaves

The leaves are tightly rolled so that the edges overlap, 0.25–0.5 mm wide, up to 60 cm long; outer surface roughened, with a ligule 0.5 to

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2.5 mm long, opaque, papery and usually smooth and hairless. The leaves roll smoothly between the fingers like a needle.

Flowering stems

The stems (culms) are round, smooth and hairless, up to 70 cm high, with 2–3 unthickened nodes.

Flowering heads

The flower head is 15–25 cm long and is green or purplish. A leaf-like sheath encloses the lower section of the flower head. The flower head does not detach from the plant. This is one of the identifying features that differentiate it from serrated tussock. With serrated tussock the flower head fully projects from the leaf sheath and detaches at maturity.

Seed

The awn (bristle-like appendage) is 4.5–9 cm long and is attached to the end of the seed. The seed is 2–3 mm long encased by two purple or reddish-brown, 6–10 mm long glumes. Serrated tussock awns are 2–3.5 cm, and are offset in their attachment to the seed.

GROWTH AND SPREAD

In mid spring to summer, Mexican feather grass propagates freely from seed on well-drained soils where competition from other vegetation has been reduced.

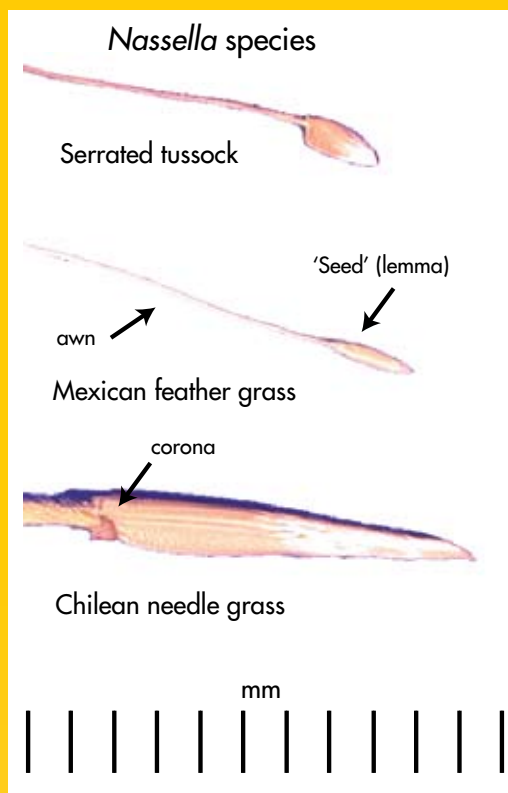
CONTROL

Suspect plants should be immediately reported to your local council weeds officer for identification and to determine the best form of destruction. Mexican feather grass should not be cultivated. There are no registered herbicides for Mexican feather grass control.

WATCH OUT FOR AND REPORT MEXICAN FEATHER GRASS

Nassella tenuissima is declared noxious throughout NSW as a Class 1 weed under the NSW Noxious Weeds Act 1993. As a notifiable weed, all outbreaks of Mexican feather grass must be reported to the local council within three days.

If you have seen this plant, please report it to your Council Weeds Officer or NSW Department of Primary Industries for positive identification.



Close up of seed and awn attachment for three similar weedy *Nassella* species. Source A. Maguire

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ACKNOWLEDGEMENTS

Written by Alan Maguire. Prepared by Annette McCaffery and Annie Johnson. Department of Primary Industries January 2009.

FOR MORE INFORMATION:

Contact your local council weeds officer or district agronomist, or telephone the NSW Department of Primary Industries Hotline on 1800 680 244

