



1. Upright stems growing up to 1.5m 2. Much-branched feathery seed-heads 3. Close-up of small flowering branches with hairy seeds 4. Infestation in the Brisbane Koala Bushlands at Burbank



## Little bluestem (*Schizachyrium microstachyum*)

Introduced

Not Declared

Little bluestem is a long-lived clumping grass that is invading grassy vegetation, pastures, roadsides, disturbed sites and waste areas in south-east Queensland. This species is native to large parts of Central and South America, from Mexico to Uruguay, but it has only come to our attention in Australia in the last 5 years or so.

### Distribution

This species has already become naturalised in many parts of south-eastern Queensland. It is most prominent in the eastern suburbs of Brisbane and in parts of the Moreton Bay Regional Council area, and has also been recorded from the Gold Coast area. During early 2011 Little bluestem has been reported from at least three sites in Brisbane, two of which are conservation reserves (i.e. in the Brisbane Koala Bushlands at Burbank and the Chermside Hills Reserve). Currently Little bluestem is restricted to the wetter coastal districts of south-eastern Queensland, but in its native range in America it is quite widespread and is found in many inland districts.

### Description

Little bluestem is an upright tufted grass usually growing 60-100 cm tall, but may sometimes reach up to 1.5 m in height. Its upright stems are slender, often somewhat oval in cross-section, and have upwardly projecting branches. New stems are produced each year from the long-lived base of the plant. The alternately arranged leaves are long and narrow (up to 40 cm long and 3-8 mm wide), mostly hairless, and have a stem-clasping sheath at the base.

The seed-heads are produced during late spring and summer, and are densely clustered at the top of the stems. They are made up of numerous small flowering branches (about 25 mm long), each contained inside a leafy bract (13-18 mm long) that is coiled inwards. These flowering branches are jointed and bear several small flower spikelets, some of which emerge from the top of the leafy bract as they mature. The parts of the flowering branches between the joints, and the flower spikelets themselves, are covered in whitish hairs which give the mature seed-heads a very feathery appearance. They also bear a slender bristle-like structure (i.e. awn) 11-16 mm long.

### Quick Facts

- > A clumping grass often growing to about 1 m tall
- > Its stems are very upright and densely tufted.
- > These stems are topped with feathery seed-heads in summer
- > Older stems and leaves turn reddish-brown in autumn.

### Habitat

Little bluestem grows in grasslands, open woodlands, urban bushland, along roadsides, and in disturbed sites and waste areas.



■ Documented distribution  
Potential distribution is unknown



1. Habit in late spring with upright stems 2. Dense infestation in the Birkdale area

## Reproduction and Dispersal

When mature, the small flowering branches break apart into segments. Each of these feathery segments contains a small seed, hidden inside the older parts of the flowering spikelets. Because of their light and feathery nature, they are easily spread about by the wind. They may also be dispersed by water, vehicles, mowing equipment and in contaminated soil.

## Why is it an Emerging Threat?

Little bluestem is a particular threat to natural grassland and open woodlands that have a grassy understorey. Like many exotic weeds, it has the potential to form dense infestations that replace native species in the understorey of these plant communities and prevent their regeneration. It may also replace more palatable grasses in pastures, thereby reducing pasture productivity.

## Control Methods

Isolated Little bluestem plants may be removed manually, ideally prior to seeding if early identification is possible. If this method is applied, care should be taken to remove all of the tussock of the plant while at the same time minimising any soil disturbance. Any mature seed-heads should be collected, bagged and disposed of in a sanitary manner to prevent the spread of seed.

Regular mowing or slashing of heavily infested areas during spring and summer may be used as a means of preventing seed production and spread in the short term. But this may not be viable in the longer term, as it would need to be conducted often enough so that seed-heads are not able to reach maturity.

No chemicals are currently specifically registered for the control of Little bluestem in Australia. However within Queensland, the control of environmental grass weeds (such as Little bluestem) is permitted under the conditions outlined in APVMA off-label permit 11463 (<http://permits.apvma.gov.au/PERI1463.PDF>). This temporary permit allows for the spot spraying of annual and perennial grass weeds in non-crop situations with certain herbicides spraying of annual and perennial grass weeds in non-crop situations with certain herbicides (e.g. glyphosate, fluzifop and haloxyfop). If this course is to be taken, read and follow the conditions on this permit and the relevant product label. Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label. Within other state boundaries, it is recommended that all managers consult any relevant permits or government legislation applicable to their region.

*The control methods referred to in Weed Watch™ should be used in accordance with the restrictions (federal and state legislation and local government laws) directly or indirectly related to each control method. These restrictions may prevent the utilisation of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, Technigro does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.*

*This information has been developed with the assistance of Dr Sheldon Navie. Photographs are also courtesy of Dr Navie. © Technigro Australia Pty Ltd 2011*

## Look a-likes

Little bluestem is very similar to another introduced weed known as whisky grass or broom sedge (i.e. *Andropogon virginicus*). It has a very similar habit and also turns reddish-brown during autumn. However, whisky grass is usually more than 1 m tall and its seed-heads are elongated and loosely tufted.



Top. Close-up of mature flower spikelets topped with awns up to 25 mm long.

Bottom. Upright habit with elongated and loosely clustered seed-heads