# Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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## Mission grass (469)

**Relates to: Weeds** 



Photo 1. A dense stand of mission grass, Cenchrus polystachios.



Photo 2. A bank of mission grass, *Cenchrus polystachios*.



Photo 3. Seedheads, mission grass, Cenchrus polystachios.



Photo 4. Seedheads and leaves, mission grass, Cenchrus polystachios.



Photo 5. Close-up seedheads, mission grass, Cenchrus polystachios. Note, the long



Photo 6. Close-up seedheads, mission grass, *Cenchrus polystachios*. The spikelets are surrounded by numerous bristles.



Photo 7. A single flower spikelet of mission grass, *Cenchrus polystachios*, surrounded by feathery bristles.

### Summary

- Widespread. Asia, Africa, North, South and Central America, Caribbean, Oceania. In many Pacific islands.
- Perennial grass, impacting native species and crops, producing masses of seeds and forming large continuous expanses. Particularly invasive in fallows after crop harvests, but also along roadsides and in national parks. Remains green until late in dry season, providing fuel for hotter fires later.
- Upright, slender, hairless stems, arising from crown at the base, up to 3 m tall. Stems with 5-10 nodes, sometimes with roots. Leaves, with sheath partially enclosing stems; leaf blades up to 45 cm, with fringe of hairs where sheaths meets leaf blades. Seedheads, up to 35 cm long, erect or slightly drooping, yellow, with many densely packed, stalkless, flower spikelets, surrounded by numerous feathery bristles. Seeds with bristles.
- Spread: seed, by wind, animals; contaminated hay; vehicles and machinery; as a contaminant of seed; an ornamental.; or a pasture grass.
- Biosecurity: high risk of introduction; accidental contaminant of seeds; intentional as an ornamental or pasture grass. Noxious weed in parts of USA.
- Biocontrol: little reported.
- Cultural control: hand weeding, slashing or moving (before release of seed); plough and harrowing (replant with grass and/or legume); fire; vehicle hygiene; mission grass-free hay.
- Chemical control: in Australia, glyphosate (and Fiji); imazapyr; imazapyr + glyphosate.

### **Common Name**

Mission grass; it is also known as perennial mission grass, blue buffel grass, elephant grass.

#### Scientific Name

*Cenchrus polystachios*. It was previous known as *Pennisetum polystachion*. *Cenchrus polystachios* is similar to *Cenchrus pedicellatus* which is an annual. Both are members of the Poaceae.

(https://keyserver.lucidcentral.org/weeds/data/media/Html/cenchrus\_polystachios.htm); and additional information from CABI (2019) Pennisetum polystachion (mission grass). Invasive Species Compendium. (https://www.cabi.org/isc/dutasheet/39770); and Mission grass (2020) NT. GOV.AU. (https://nt.gov.au/environment/weeds/weeds-in-the-nt/A-Z-list-of-weeds-in-the-NT/mission-grass); and Elephant grass *Pennisetum purpureum* (2020) The State of Queensland, Department of Agriculture and Fisheries. Queensland Government. (https://www.cdai.org/isc/dutasheet/spdf\_file/0003/52581/Elephant-Grass-PP67.pdf); and from Mission grass, perennial *Cenchrus polystachios*. Northern Territory Government. (https://territorystories.nt.gov.au/\_gbui/bitsream/10070/7560431/Mission%20grass%20perennial%20factsheet.pdf). Photos 1,2,4,5 Forest and Kim Starr, Starr Environmental, bugwood.org. Photo 7 Julia Scher, Federal Noxious Weeds Disseminules, USDA APHISPPQ, Bugwood.org.

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This mini fact sheet is a part of the app Pacific Pests, Pathogens & Weeds

The mobile application is available from the Google Play Store and Apple iTunes.

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Adapted from Cenchrus polystachios (L.) Morrone (2016) Weeds of Australia. Biosecurity Queensland Edition. Queensland Government, Identic, Lucid



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