

Chemical control of gamba grass will require at least two treatments within a growing season. The initial treatment of existing mature plants and any seedlings should ideally occur following the onset of initial wet season rains, when there is active growth (usually November to December). A follow up treatment should be undertaken in approximately two to four weeks time. This treatment is necessary to treat plants which may have been missed or newly germinating seedlings. A further inspection of the management area will be required prior to April (when gamba grass is beginning to set seed) to ensure no plants have survived or any seeds have germinated. The introduction or production of any new seeds will mean the plant's life cycle will continue and the infestation will persist.

The results of a strict chemical control program will become more evident with each application. Continual maintenance is imperative as the introduction or production of any new seeds will enable the infestation to persist.

6.2.3 How to apply herbicide

Herbicide should be sprayed over the entire tussock to increase and allow effective uptake, as not all tillers in the tussock are connected. A fine spray with low application pressure enables good coverage of the whole plant.

A range of dyes are commonly available where herbicides are sold. These can be used in the spray to identify when herbicide has been applied to the entire tussock. The recommended time of year for spraying includes parts of the wet season, so a wetting agent may be used to reduce the chances of wash-off.

To treat large infestation areas, start at the edges and work inwards, gradually reducing infestation size. Linear infestations should also be controlled in a strategic manner. Control of plants high in the catchment should be prioritised. Along transport corridors the outbreaks furthest from major/source infestations should be targeted first, working towards the major infestation to avoid inadvertent spread.

6.2.4 Monitoring results and follow-up

Treatment areas must be revisited no less than four weeks after spraying, but prior to seed-set in May to ensure the plants are dead. Follow-up control to kill any gamba grass seedlings is to be done for at least three years after treatment, this time period takes into account remaining seeds in the soil which may remain viable for extended periods. Areas are to be checked, as part of an on-going monitoring program, early in each calendar year prior to seed set after eradication is thought to have been achieved.

6.2.5 Mission Grass (*Pennisetum polystachion*)

This same herbicide mix described above is used to kill mission grass. Mission grass may invade areas after local eradication of gamba grass; the two should therefore be managed simultaneously if both grasses are present.

6.3 Non-chemical control

6.3.1 Physical removal

Individual plants can be removed by hand or by using a mattock. The entire root mat should be removed and excess soil shaken off the root system to ensure the plant dies. Physical removal is very laborious and may therefore only be effective and/or feasible where plant numbers are limited. For almost all populations, chemical control provides the most efficient management approach available.