

## PLANT PEST CONTROL

### LAND PLANT PESTS

#### Johnson Grass: *Sorghum halepense*

##### **Why are we worried?**

Johnson Grass is one of the world's ten worst weeds. It poses a serious threat to agriculture because it has the potential to establish and spread in most agricultural areas in New Zealand. Once established, it is extremely difficult to control or eradicate, so any control programme is very long term.

Johnson Grass forms dense spreading patches completely smothering other grasses. Rhizomes are readily distributed by cultivation, with only a small section of rhizome being sufficiently viable to produce another plant. It has been estimated the plant can produce a 600 km length of rhizomes a hectare, weighing 33 tonnes. One plant can produce 80,000 seeds in a season and these can remain dormant for several seasons.

When Johnson Grass grows in adverse conditions, such as drought, frosts or high temperatures, hydrocyanic acid forms in the leaves and stems of both green and dried plants. All livestock may be poisoned by this, with second growth plants being particularly dangerous.

##### **What does it look like?**

- Johnson Grass is a stout, erect summer growing grass ranging from 50 cm to three metres in height.
- Seedling plants closely resemble young maize seedlings and even mature plants can be mistaken for maize.

- The leaf blades are flat and usually less than two cm wide with a whitish midrib on the underside.
- The panicle has long purplish hairy strands, is pyramid shaped and 15 to 50 cm long.
- Seed is usually ovate, 4.5 to 6 mm long and about 2 mm thick, with colour ranging from dark mahogany to light brown.
- Rhizomes are vigorous and highly adaptable with extensive creeping rhizomes developing below the soil surface. They range in thickness from five mm to 15 mm. Most are within 200mm of the surface but some occur



down to one metre. A number extend out from each plant. They are white when young, but often tinged red when older.

**Where is it found?**

Johnson Grass has been recorded in scattered locations throughout New Zealand, including Hawke's Bay. Currently we believe no plants exist in this region.

Johnson Grass has the potential to grow almost anywhere. The growth pattern and cropping practices associated with maize favour a rapid build up of this weed in maize crops. Extra care needs to be taken to check maize stands.

**What's the best way to control the plant?**

Any suspected plants must be reported to the Ministry of Agriculture. The Ministry will require any significant outbreak to be fenced off to ensure control is effective. In the protected area the land will be fallowed and intensively treated until all plants are known to be dead.

Isolated plants will need to be sprayed with glysohate at recommended rates or dug to remove the rhizomes.

It is critically important that plants are identified before they become established as individual plants can be eradicated much more easily than large infestations.

**For further information**

If you think you may have this plant pest on your property, please contact the Biosecurity Plant Officers at Hawke's Bay Regional Council for advice and we will work with you to eradicate it.

Wairoa	0-6-838 8527
Napier	0-6-835 9200
Waipukurau	0-6-858 8636
TOLL FREE	0800 108 838