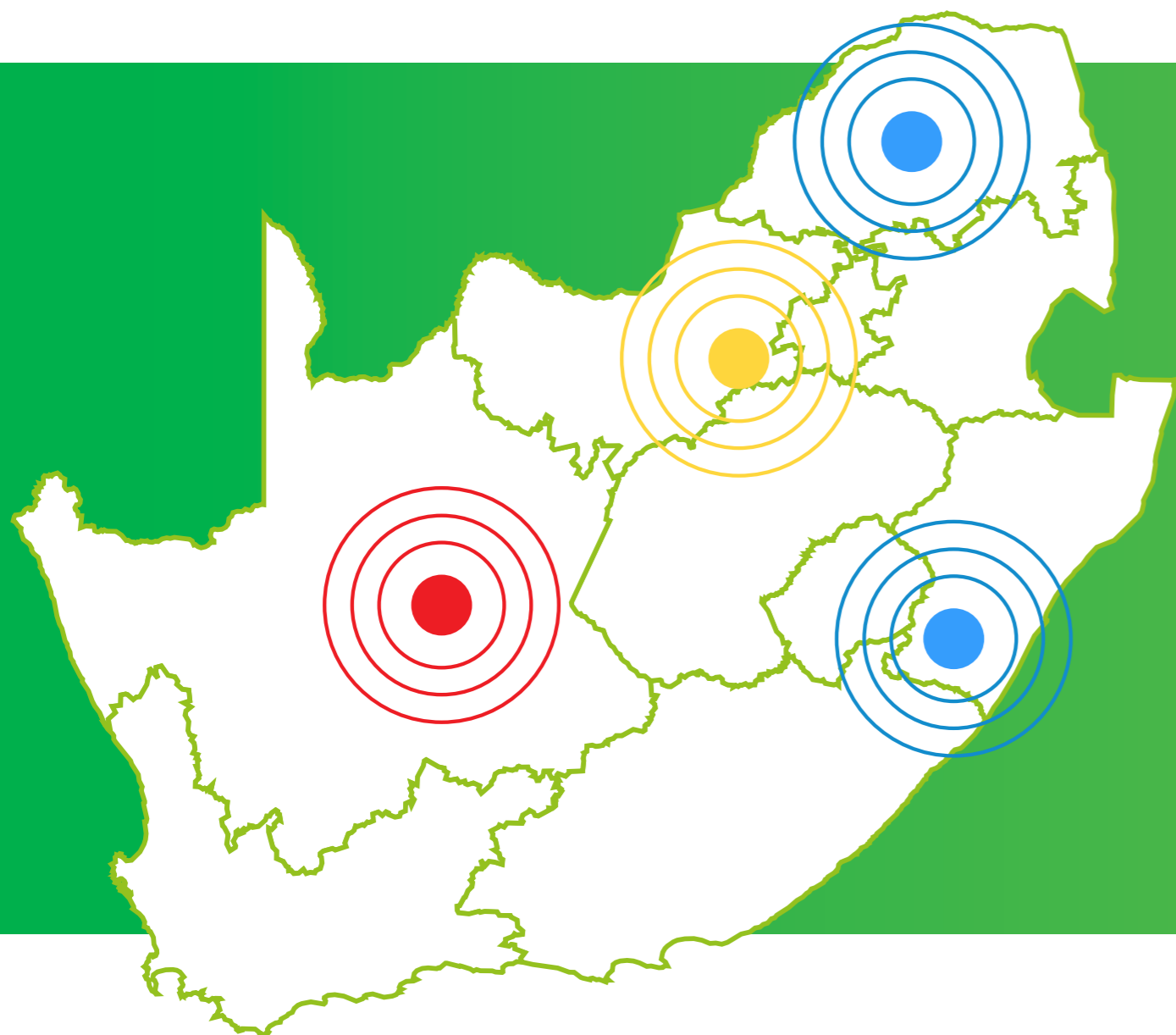


BE ON THE LOOKOUT FOR THE NEW TYPE OF PIGWEED

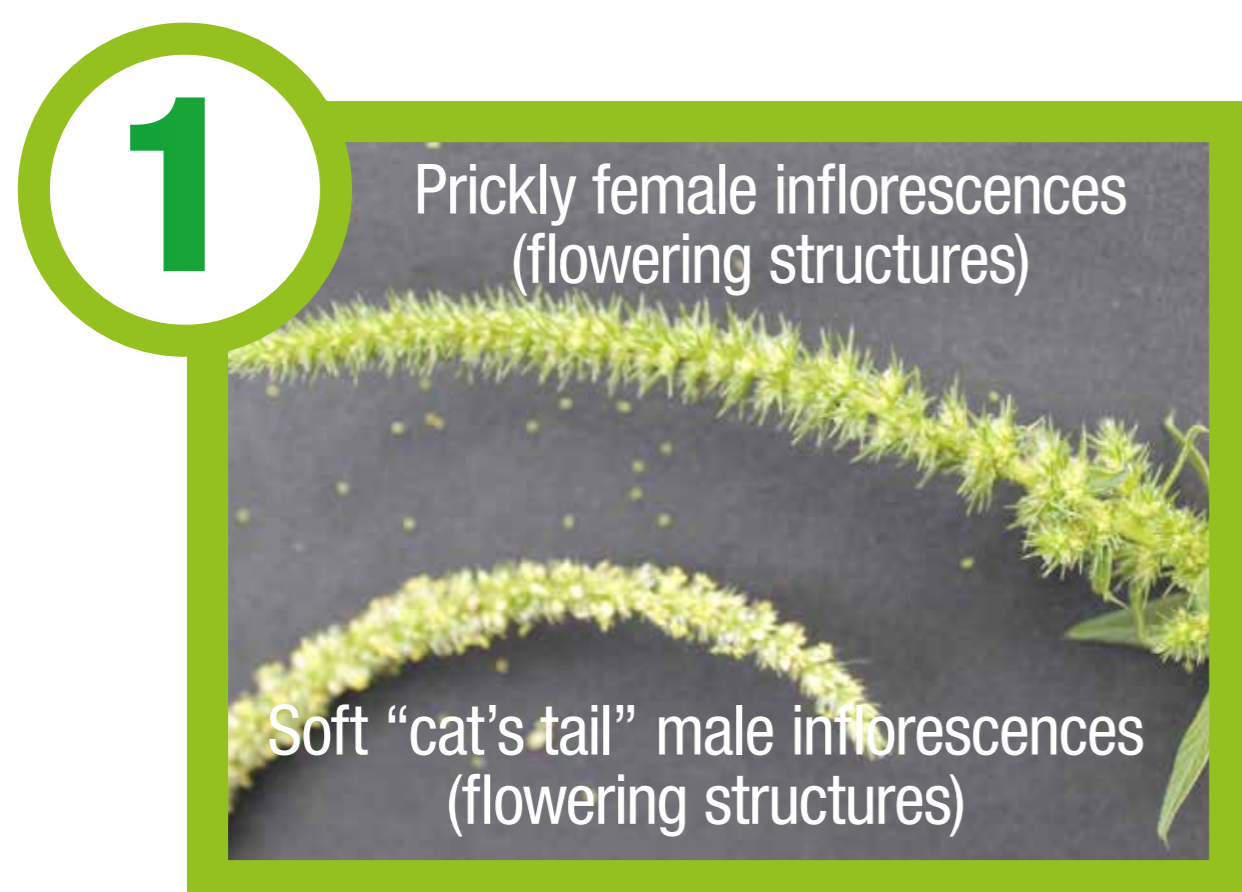
AMARANTHUS PALMERI



The weed was first found in South Africa in 2018 in the Douglas district in the Northern Cape. During 2020, it emerged in the Limpopo Valley close to Pafuri and Mapungubwe, and in Howick in KZN. The most recent occurrence was in Potchefstroom.

Risk of spreading, particularly through infected seed and implements, is extremely high.

CHARACTERISTICS



1

Prickly female inflorescences (flowering structures)

Soft "cat's tail" male inflorescences (flowering structures)

Dioecious, with separate male and female plants.
Photo by C. Reinhardt, Enterprises at University of Pretoria



2

Very long leaf stalk (petiole).



3

Leaf hair (trichome) on the indented leaf tip.



4

Mature plants with characteristically long rachises.



5

Spear-shaped leaf with indented tip.



6

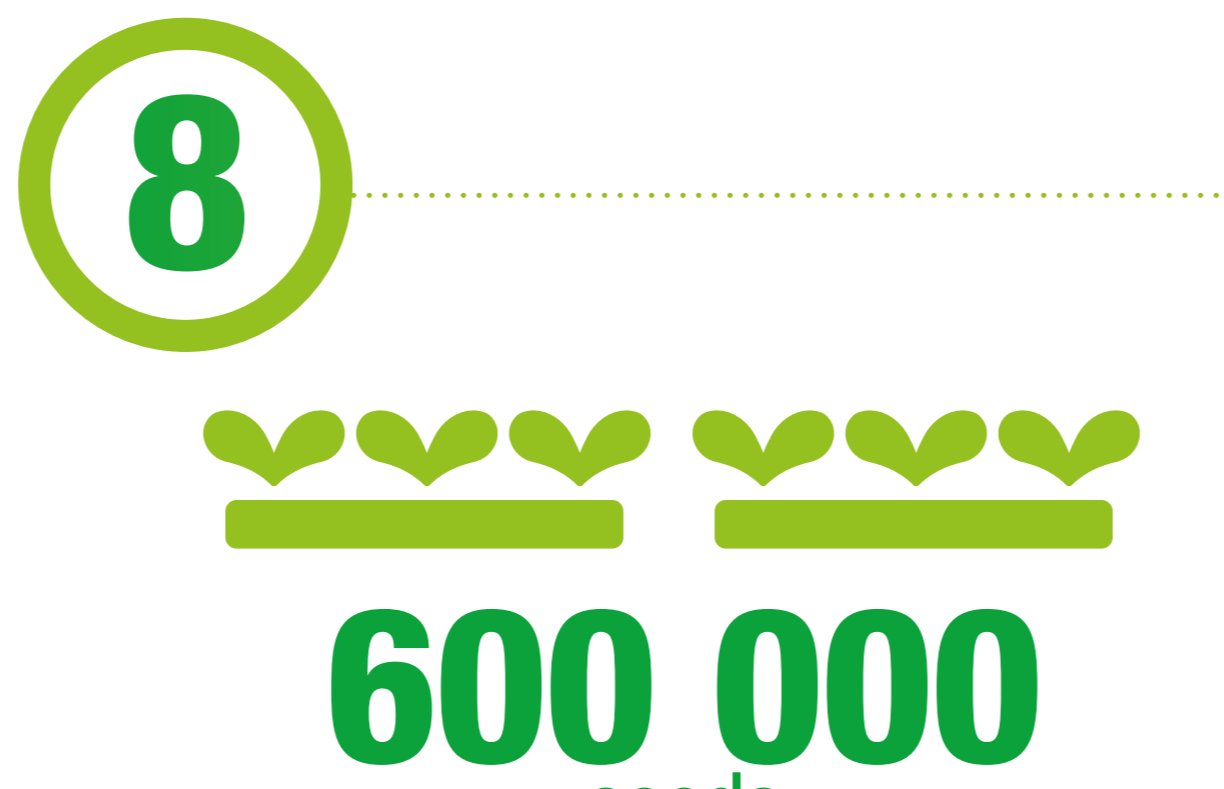
A whitish, V-shaped watermark (chevron) is sometimes visible on the leaf blade.



7

6 cm

Aggressive growth rate of up to 6cm per day.



8

600 000
seeds

Under optimal conditions, a single female plant can produce as many as 600 000 seeds.



9

Leaf petiole is longer than the leaf blade.

RESISTANCE

- Palmer amaranth has confirmed resistance against more herbicide modes of action than any other weed.
- Should it invade areas where broadleaf crops such as soybean, dry bean, peanuts, potatoes and sunflower are grown, it may no longer be possible to successfully produce these crops.
- **The weed is also difficult to control in maize fields and can quickly build up resistance, especially to glyphosate.**

CONTROL

- Producers must, at all cost, prevent plants from shedding seed and seeds from germinating.
- Follow an integrated control programme. Deep cultivation is recommended for fields already infested, followed by a comprehensive pre- and post-emergence spray programme.
- **Pre-emergence control is critically important for residual action.**
- Use a tank mixture that includes more than one active ingredient (DUAL GOLD[®], METAGAN[®] Gold, CALLISTO[®], CAMIX[®], CAMIX[®] Plus, GARDOMIL[®] Gold, SORGOMIL[®] Gold, PRIMAGRAM GOLD[®] and LUMAX[®]).
- Follow up with a post-emergence application to ensure control throughout the season.
- Use the highest possible mesotrione dose indicated on the label.
- 2,4-D, dicamba or MCPA should be used in tank mixtures where possible.
- Burndown with GRAMOXONE[®] should be done before planting and in non-crop areas.
- Control ALL *Amaranthus* spp. in and around fields to prevent cross pollination with *A. palmeri*.
- Sanitation of all implements, equipment, clothes and shoes is of cardinal importance. ALL implements used in an infected field must be cleaned in one central spot. The run-off must be captured and, once the water has evaporated, the debris must be burned.
- Large plants must be removed from the fields and burned to prevent regrowth from the stalks.
- Comprehensive control and eradication methods are discussed in *Plan for eradication of the Palmer amaranth (Amaranthus palmeri) in the Republic of South Africa*, available on the CropLife SA website (www.croplife.co.za).



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This document does not replace the product label. Refer to the label for full details.
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