



KALRO/NAVCDP Factsheet No. 047 /2024

# Integrated Management of Flower Blight/ Ray blight Disease in Pyrethrum

## Flower blight/ray blight

Flower blight (also known as Ray blight) is a destructive disease in pyrethrum. It is caused by several fungi, including *Sclerotinia sclerotiorum*, *Phoma* spp., *Alternaria* spp., and *Botrytis cinerea*. The disease attacks the ray florets of the flower stopping it from graduating from one stage to the other. It is severe in cold and misty weather conditions.

## Symptoms (how the disease manifests)

- Necrotic lesions start on leaf margins, then expand and cover the whole leaf resulting in defoliation and stunted growth of the plant.
- Leaf lesions spread to the petiole and flower stalk, resulting in flower stalk girdling.
- Yellowing and deformation of leaves also appear.
- The most distinct symptom is the 'shepherd's crook' appearance of flower buds, which is caused by infection and necrosis of one side of the upper flower stalk (2 - 3 cm below the flower bud), resulting in drooping of the flower bud.



Infected flower stems showing 'Shepherd's crook' symptom

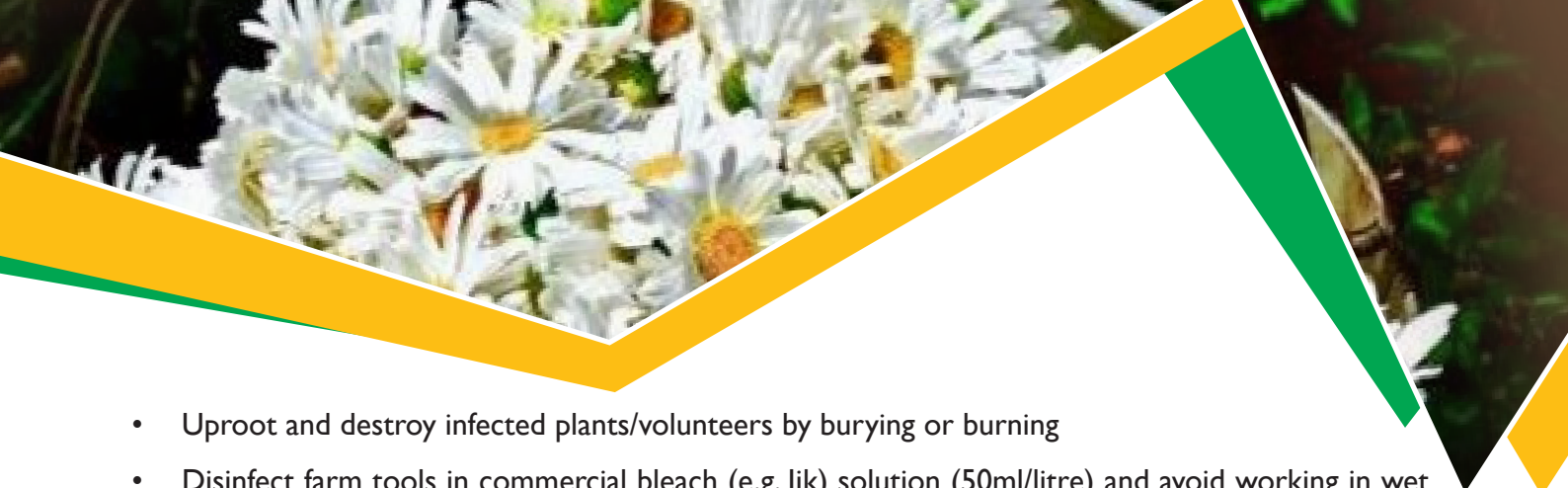
## Management:

### Cultural practices

- Plant certified seedlings or splits,
- Practise crop rotation with non-legume crops for 3-4 seasons



Flower affected by Flower blight/ray blight

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- Uproot and destroy infected plants/volunteers by burying or burning
  - Disinfect farm tools in commercial bleach (e.g. Jik) solution (50ml/litre) and avoid working in wet fields.

### **Chemical control**

Spray with carbendazim-based products such as Rodazim SC, Bendazim, Sherrif, and Propamocarb hydrochloride products such as Previcur N according to the manufacturers' recommendations.



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