



The silky hakea gummosis fungus, *Colletotrichum acutatum* J.H. Simmonds, causes a serious disease of silky hakea in parts of South Africa. It can be deliberately used to kill trees, reducing the density of stands and, therefore, the amount of seed that germinates after fires. The gummosis fungus only attacks silky hakea. Use the gummosis fungus as follows.

- Wound-treat the stems of silky hakea trees (stems of ≥ 2 cm diameter, approximately an adult's finger width or more), using a suspension of the gummosis fungus spores in water – see below for more details;
- the wound-treatment needs to be made at the base of tree stems, no higher than 10 cm above soil level;
- monitor disease spread and re-introduce the fungus in areas when necessary, for instance after fires or hot dry summers.

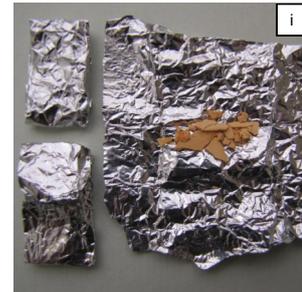
METHOD OF USING GUMMOSIS FUNGUS

- Suspend the contents of each spore packet (i) in one litre of water in a hand-held sprayer (obtainable from garden centers, hardware stores or supermarkets).
- If possible, suspend the dry spores in water just before use. Only suspend the amount that is going to be used within 4 hours (a morning or afternoon's work). Do not store in suspension overnight or longer before using.
- Do not leave the spore suspension in direct sunlight, if the water heats up ($\geq 30^{\circ}\text{C}$) the fungus will be killed.
- Wound-treat the base of stems (≥ 2 cm diameter), as close to the ground as possible (ii), using a hand-held jabbing device (see below for design), then spray the spore suspension over the wound (iii).
- One litre of fungal spore suspension is more or less enough to wound-inoculate one hectare of silky hakea trees (dependent on tree size).
- In dense stands in high rainfall areas, walk in a zigzag pattern to treat trees throughout the stand. The gummosis fungus will spread to untreated neighbouring plants.
- In drier areas it is better to inoculate every second, or each tree, if possible.

MAKING A SIMPLE JABBING DEVICE

You will need a wooden broom handle (or similar wooden pole); 6+ nails (approximately 2×30 mm); a hammer; and wire cutter. Hammer the nails into the flat end of the broom handle in a circular pattern, but remove each nail head with the wire cutter before hammering in the next nail. Ensure the nail tips are all an even height above the broom handle. Cut the handle to a convenient length (iv).

ORDERING INFORMATION: All orders for the gummosis fungus must be placed a month in advance and directed to Ms Gwen Samuels, E-mail: SamuelsG@arc.agric.za
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environmental affairs

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