



Desert locust ground control using vehicle-mounted ULV equipment



Principles of ULV application

Ultra Low Volume (ULV) spraying uses small amounts of concentrated insecticide. In locust control, about 0.5 -1.0 litre/hectare is applied. The insecticide is not mixed with water or solvents. It is oil-based to prevent evaporation and is usually applied ready to spray.

Droplets of spray are carried by the wind and the spraying must be done cross-wind. In full coverage treatments, the insecticide is sprayed as overlapping swaths onto the control target so that a uniform deposit is achieved and the locusts receive enough insecticide.

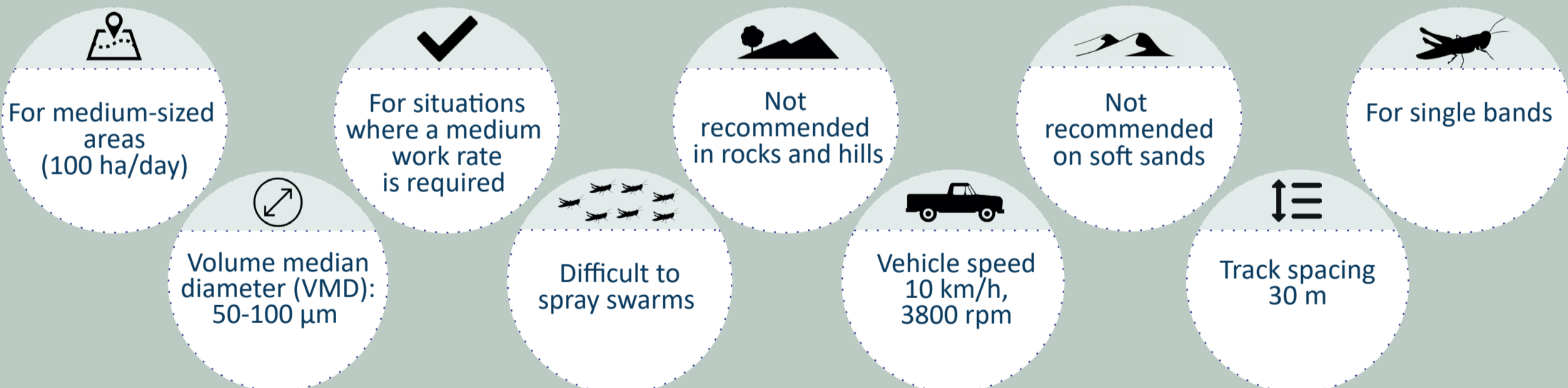
REMEMBER

- 1 Do not spray during the hottest part of the day (11:00-16:00 hr) when convection may occur and carry the spray up into the sky instead of down onto the locusts
- 2 Do not spray at low wind speeds less than 1 m/s
- 3 Do not spray at high wind speeds more than 10 m/s

ULV ground spray system

A good ULV sprayer uses rotary atomizer (spinning discs or rotating cages) to produce droplets in small size range (40-200 µm). If droplets are too large or too small, control will be poor and insecticide wasted. For ground control, ULV sprayers can be carried by an operator (portable) or mounted on 4x4 vehicle (vehicle-mounted sprayers).

Vehicle-mounted sprayer (ULVamast)



Cleaning, storing and disposal

- Always wear protective clothing while handling insecticides.
- Spray equipment should always be clean and ready to use.
- Chemical must never be left in the sprayer. Always flush out the sprayer with water or a solvent for chemical used.
- Keep insecticide in original container in a cool locked store to reduce deterioration caused by high temperature.
- Clean empty insecticide containers three times inside and out with solvent. Properly dispose empty containers.