# **FARM AFRICA**

# THE DESERT LOCUST

## (SCHISTOCERCA GREGARIA FORSKAL)

The Desert Locust (Schistocerca gregaria Forskål) is a species of short-horned grasshoppers that belongs to the family Acrididae and order Orthoptera. Locusts differ from grasshoppers in their ability to change from a solitary living form into social, highly mobile adult swarms and hopper bands as their numbers and densities increase. Periods of low and intermediate numbers and densities (recessions, outbreaks and upsurges) alternate with very high numbers and densities (plagues).



- Desert Locusts live from 3 months to 6 months or sometimes up to 10 months. Apart from accidental death, the life span depends on how long they take to become sexually mature.
- The quicker they mature, the shorter the total length of life. They reproduce from two to five generations a year depending on the duration of the rainy seasons.
- Ideally, a female lays eggs into moist sandy soil of between 5 to 15 cm depth to limit water loss.

### THREAT POSED TO FOOD SECURITY

- Desert Locusts damage a wide variety of wild and cultivated crops and consume about their own weight of fresh vegetation each day.
- Half a million locusts each weighing 2 grams can collectively eat about one tonne of vegetation each day. This amount is believed to be enough to feed about 2,500 people.



#### 1. Mechanical

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#### • Early warning

Surveillance and reporting sightings of the locusts to the relevant authorities is the most effective control measure.

#### Noise

Noise increases the randomness of a swarm helping break it apart. A small swarm is easier to control than a big swarm which could cover several hundred kilometers. Local communities can bang on metallic containers, scream, automobile hooting and iron sheets to create atmospheric disturbance that disrupt locusts.

#### Smoke

Burning of tires and bonfires scares the locust swarms from an area. This may present a problem for the neighbors but when the communities work together, this can divert a swarm.

#### Digging trenches

The immobile nymphs are buried in deep trenches hence suffocating them.

#### 3. Integrated Pest Management (IPM)

• Building up of the natural enemies populations in areas prone to locust invasions can keep the populations in check. Natural predators of the desert locusts include predatory wasps and flies, parasitoid wasps, predatory beetle larvae, birds and reptiles.

#### 2. Chemical

 Band spraying of the immobile young hoppers

The farmers spray on the immobile hoppers (nymph stage) before they develop wings.

#### LIFECYCLE OF THE DESERT LOCUST



Adult female