



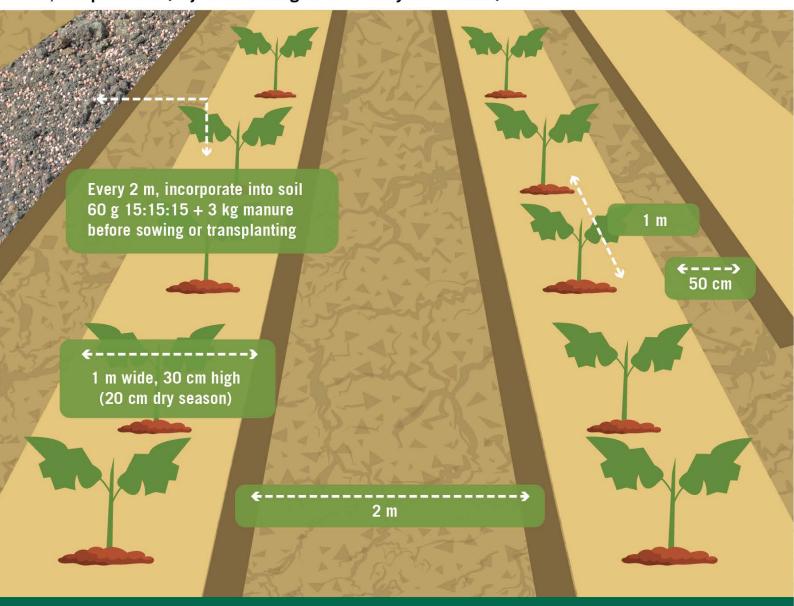
# Crop Guide SNAKE GOURD

#### Land Preparation

- » Narrow paths help with irrigation and drainage
- » Organic or plastic mulch may be installed to conserve soil moisture and minimize weed growth
- » Install trellis before transplanting
- » 4,400 plants/ha (adjust according to the variety and season)



**ENGLISH** 



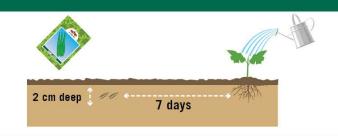
## Seedling Production



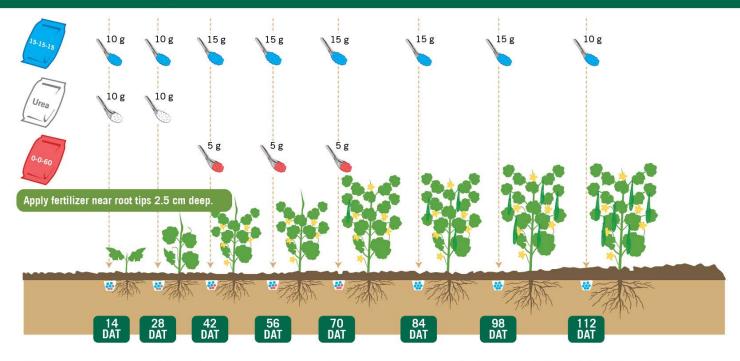
#### Direct Sowing



» Plant 2 seeds per space and then thin to one plant when 10 cm tall



## Fertilizer Application



Recommended amount based on crop optimum nutrient requirement and plant population of 4,400 per hectare.

Adjust application according to season, soil conditions and plant growth status.

#### Integrated Pest Management



- » Use sticky traps to monitor and mass trap insect pests
- » Use sweet trap, basil extract trap or pheromone trap for fruit fly





To prevent infection from spreading, sick plants, old crops and weeds must be removed and destroyed.



Crop rotation prevents build up of insect pests and diseases and restores soil fertility.

## Integrated Pest Management and Safe Use of Pesticides

- » Alternate MoA groups to prevent resistance
- » Always read pesticide label and intended use (registered crop and pest)

## Kinds of Insects













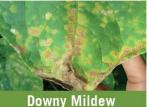
| Active Ingredient           | MoA | Action        | Aphid | Whitefly | Caterpillar | Leafminer | Beetle | Fruit Fly |
|-----------------------------|-----|---------------|-------|----------|-------------|-----------|--------|-----------|
| Lambda-cyhalothrin          | 3A  | SC            | -     | ~        | ~           | -         | ~      |           |
| Dinotefuran                 | 4A  | S             | ~     | ~        |             | /         |        | -         |
| Spinosad                    | 5   | S             |       |          | -           | /         |        | -         |
| Spinetoram                  | 5   | SC            |       |          | -           | -         |        | -         |
| Abamectin                   | 6   | SC (slight S) |       |          | /           | /         |        |           |
| Thiocyclam oxalate          | 14  | SC            | /     |          |             | /         |        |           |
| Chlorantraniliprole         | 28  | S             |       |          | /           |           |        |           |
| Flubendiamide               | 28  | S             |       |          | /           |           |        | -         |
| Bacillus thuringiensis      | 11A | C             |       |          | ~           |           |        |           |
| Azadirachtin (neem extract) | UN  | unknown       | -     |          |             |           |        | -         |

Mode of Action (MoA) based from IRAC; SC (Stomach + Contact); S (Systemic)

# Kinds of Diseases









|                         |      |        |  | - 11 1:           |                | 4 5          |  |
|-------------------------|------|--------|--|-------------------|----------------|--------------|--|
| Active Ingredient       | MoA  | Action | Remarks  | Gummy Stem Blight | Powdery Mildew | Downy Mildew | Virus  |
| Copper-based Fungicides | M 01 | P      |  | ~                 | ~              | ~            | Manage<br>insect<br>vectors<br>like<br>aphids<br>and<br>whiteflies |
| Chlorothalonil          | M 05 | P      |  | ~                 | -              | -            |  |
| Mancozeb                | M 03 | P      |  | ~                 | ~              | ~            |  |
| Azoxystrobin            | 11   | P+C    | Maximum 4 times<br>per crop cycle                        | ~                 | ~              | /            |  |
| Propamocarb             | 28   | P + C  |  |                   |                | -            |  |
| Cymoxanil               | 27   | C      | Tank mixed with preventive (Chlorothalonil or Mancozeb)  |                   |                | ~            |  |
| Metalaxyl               | 4    | P + C  | High risk of resistance<br>(only use 2 times per season) |                   |                | ~            |  |
| Bacillus subtilis       | BM02 | P      |  |                   | ~              | -            |  |
|                         |      |        |  |                   |                |              |  |

Mode of Action (MoA) based from FRAC; P = preventive (only effective when disease symptoms have not appeared yet), C = curative









Wear protective gear

Good weather

Good nozzle

Wash after spraying