Version 2021

EAST-WEST SEED FOUNDATION

KNOWLEDGE TRANSFER

SEEDLING PRODUCTION
Technical guide

• Seedling containers

ENGLISH

Leaf pots made with rolled banana or mango leaf

Seed trays or plastic bags

• Substrate for seed trays or leaf pot

Sieve the soil

1-2 parts soil from “clean” area

1 part well rotted manure

1 part well burnt rice husk or sand

After mixing, dampen with water

Squeeze soil to test it is moist but not wet

Sterilization

- **Stir continuously for 10 minutes**
- **Do not allow to dry**
- **Steam produced reduces pathogens**
- **Avoid heating when dry, as chemical changes can occur**

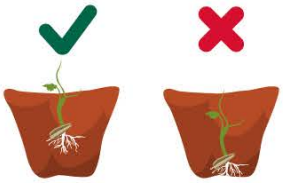
Solarization

OR

Place the substrate in the bag in full sun for 4 hours minimum.

• Sowing and seedling raising

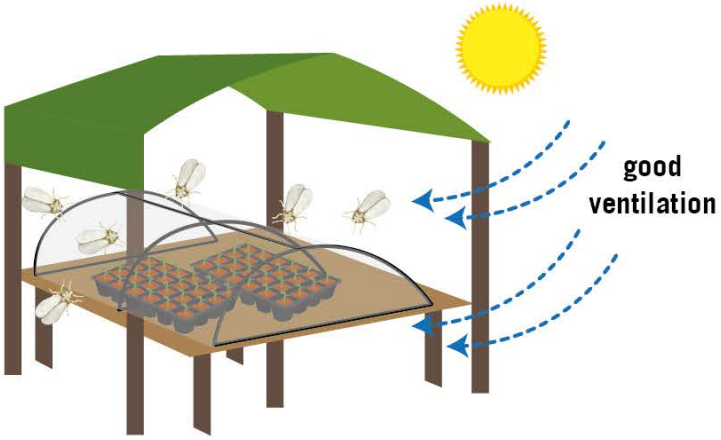
Fill up seed trays or leaf pots with the substrate and sow.



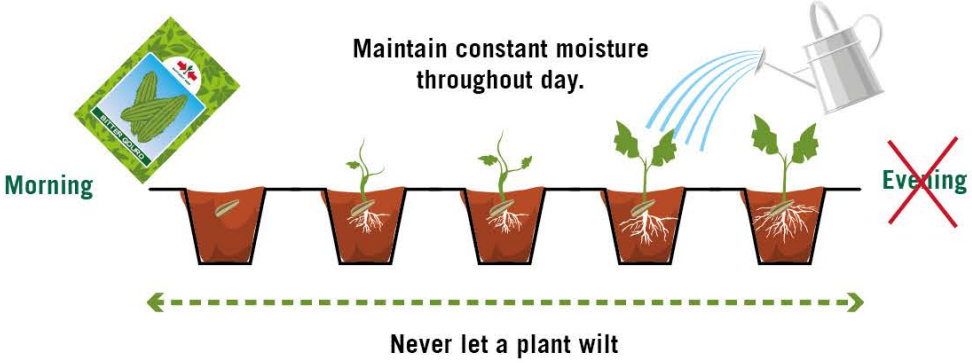
Sowing depth = size of 2 seeds

Use one seed per hole

If using good quality seeds, sowing can be done directly.
NO SOAKING. With cold weather, pre-germination could help



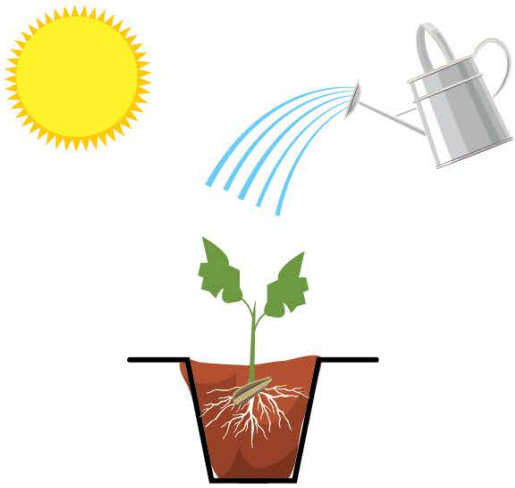
Cover the trays with fine netting to prevent sucking insects and risk of virus



Dissolve 10-15 g calcium nitrate,
15-15-15, or 18-46-0 in 10 liters
of water and drench seedling tray.
Use as needed 10 days after emergence.

Rinse the leaves with water after drenching

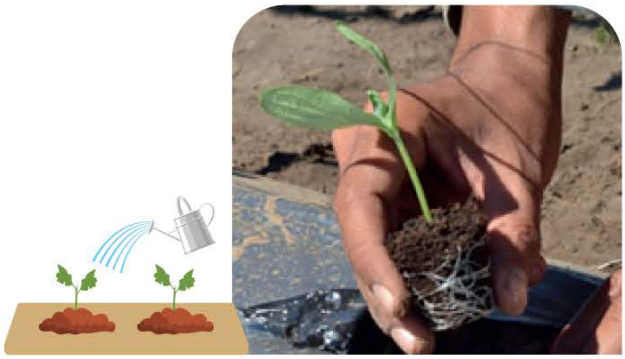
• Hardening and Transplanting



Harden 2-3 days before transplanting
Less water, more sun.

Easy to transport to the field

Water lightly in morning so plug is not wet or sticky during tranplanting in late afternoon



Avoid planting too deep or too shallow and water immediately after transplant

Strong healthy seedlings with a well developed root system

Benefits of improved seedling production

» High quality, uniform seedlings for rapid field establishment
» Easy to handle
» No soil born disease
» Trays can be re-used after proper washing and storage
» Protected nursery prevents - sun stress, rain damage, insects virus transmission