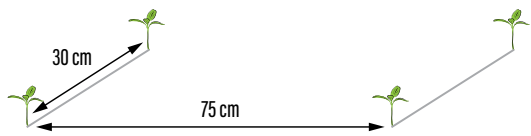


Sweet potato leaves and tubers

| Preferred climactic conditions | |
|--------------------------------|-----------------------------------|
| Air temperature | Between 25–30°C |
| Soil type | Well-drained sandy to sandy-loams |
| Climate conditions | Hot-dry |
| Sun/shade tolerance | Full sun |
| Drought tolerance | Medium |
| Flood tolerance | Low |

| Seed sowing and spacing | |
|------------------------------|---|
| Direct seeding | Plant stem cuttings that contain seven to ten nodes, or are 25–30 cm long, into soil ridges. Use the growing point (apical portion) of the stem for best results. Plant 1–3 stem cuttings per planting hole. Cuttings should be planted one to two days after harvest. Leaves will wilt, but stems should be kept moist by wrapping in a wet sack or placing stems in a bucket of water in between harvesting and planting. Tubers may be stored and replanted prior to the growing season to produce stem cuttings for planting. Only healthy stems and tubers should be used. |
| Seed depth | Bury 4–5 nodes, or two thirds of the cutting, in the soil. |
| Between-plant spacing: 30 cm |  |
| Row spacing: 75 cm | |

| Cultivation | |
|---------------------------------------|---|
| Irrigation needs: | Frequent watering is recommended until sweet potato cuttings are established. Once deep roots are developed, sweet potato is fairly drought tolerant and can survive long dry periods. A dry period is required when tubers are forming as too much moisture may result in rotting and cracking of the tubers. Sweet potato cannot stand water logging. |
| Fertilizer: | Start with a well-fertilized bed and ridges. If leaves appear yellow, apply a thin band of inorganic nitrogen fertilizer around the base of each plant or use a liquid foliar fertilizer. |
| Special cultivation practices: | Turn back the vines from time to time to prevent rooting at the nodes of the plant. This is to ensure a more even crop and fewer smaller tubers. |

| Harvesting | |
|-------------------------|---|
| When to harvest: | Sweet potato leaves and shoots are ready for harvest after 6–8 weeks . Tubers are ready to harvest when the majority of tubers have reached the desired size for consumption. This is typically between 3–3.5 months from the time of transplanting. Remove the soil around several randomly selected plants to observe tuber size. Sweet potatoes will continue to enlarge if left in the ground, but root diseases and insect damage typically increase with the amount of time roots remain in the soil. |
| How to harvest: | For leaves and shoots, harvest weekly as desired. For tubers, during the dry season, cut the sweet potato vines at the soil level 3–7 days prior to the intended harvest date. During the rainy season, the vines should be left intact until just prior to harvest. Vine removal helps to toughen the skin of the tubers and facilitates harvesting. After vine removal, the sweet potato tubers can be dug out using a hand hoe to loosen the soil and undercut the tubers. Care must be taken to avoid cutting or injury to the tubers. The tubers are lifted out of the ground, separated from the main stem, and temporarily left on top of the soil or put directly into a field container. The tubers should be handled gently to avoid skinning and bruising. Freshly dug sweet potatoes have a very thin and delicate skin that is easily removed. |



Young plant



Sweet potato leaf canopy



Harvested leaves



Sweet potato flower



Harvested crop



Harvested crop

Sweet potato pests

WEEVILS

Adult sweetpotato weevils feed on the epidermis of vines and leaves. Adults also feed on the external surfaces of storage roots, causing round feeding punctures. The developing larvae of the weevil tunnel in the vines and storage roots, causing significant damage.

CONTROL

- Dip new cuttings for planting in water and remove weevils.
- Hill up soil around the base of plants to fill in soil cracks and apply sufficient irrigation to prevent soil cracking.



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SWEET POTATO STEM BORER

Most eggs are laid individually along the underside of the leaves, along the leaf margins. Some are laid on the stem. The larva bores into the main stem shortly after hatching and sometimes penetrates the neck of the storage root. Larval feeding results in enlargement and lignification of the stems at the base of the plant and in the formation of hollow cavities filled with frass. Plants may wilt and die. Attack during the early stages of plant growth may inhibit the formation of storage roots.

CONTROL

- Use clean planting material.
- Hilling-up sweet potatoes can contain stem borer infestations because holes made by adults to exit the stems are covered with soil.

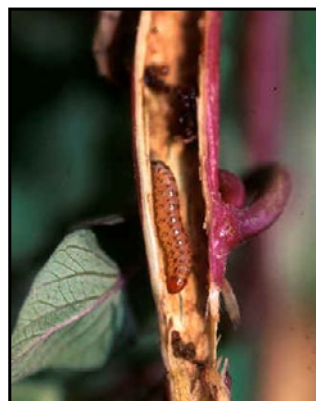
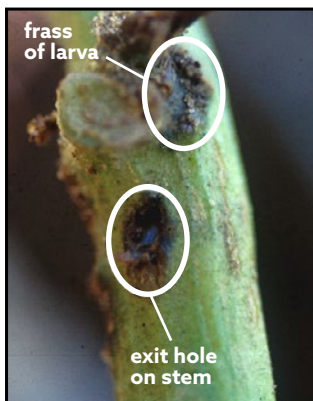


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BACTERIAL STEM AND ROOT ROT

Plants develop water-soaked brown to black lesions on stems and petioles. Branches wilt first, followed by the entire plant collapsing. On fleshy roots, rotting is often internal, but sometimes localized lesions with black margins can be observed.

CONTROL:

- Take cuttings for transplanting from above the soil line.
- Avoid wounding to reduce disease incidence.
- Use less-susceptible cultivars.

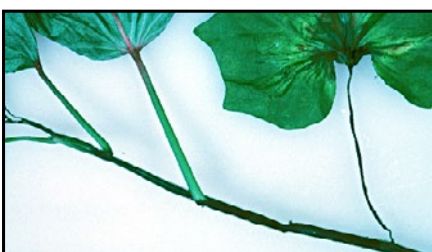


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