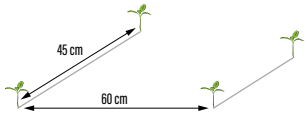
HOME GARDENING GUIDE

Okra

Preferred climactic conditions	
Air temperature	Between 25–30°C
Soil type	Well-drained sandy and clay loams, but can adapt to most soil types
Climate conditions	Hot-wet
Sun/shade tolerance	Full sun
Drought tolerance	Medium
Flood tolerance	Low

Seed sowing and spacing	
Direct seeding	Soak seeds in water for 24 hours. Plant 2–3 seeds per planting hole. Thin to one healthy seedling when plants have 4–5 leaves.
Transplanting	Soak seeds in water for 24 hours. Sow one seed per container. Healthy seedlings can be transferred four to six weeks after sowing or when they have 4–5 leaves. One week before transplanting, harden off seedlings by gradually increasing exposure to full sunlight.
Seed depth	1 cm
Between-plant spacing: 45 cm	
Row spacing: 60 cm	

Cultivation

Irrigation needs: Although okra is mildly drought tolerant, insufficient water will reduce yield. Gently irrigate after sowing or transplanting to reduce seed displacement and then water daily. Once okra have started to flower they become very sensitive to soil moisture deficit. Adequate irrigation at this time will reduce flower drop and increase yield.

Fertilizer: Start with a well-fertilized bed. If leaves appear yellow, apply half a bottle cap of inorganic nitrogen fertilizer around the base of each plant or use a liquid foliar fertilizer.

Harvesting

When to harvest: Harvest young pods when they reach 6–8 cm in length, roughly **70–80 days** after planting and when pods are 6–8 days old. Mature pods are too fibrous to consume if harvested late.

How to harvest: When harvesting, leave about 1 cm of stem attached to the pod for ease of handling. Okra are harvested when immature, therefore the seed pod's skin is very sensitive to physical damage. Harvest every 2–3 days to minimize pods becoming over mature. Okra should not be harvested in the rain or when excessively wet because pods are prone to deterioration.

Okra seedlings

Flowering okra plants

Full plant

Okra pods ready for harvest

ADDITIONAL CROP GROWING GUIDES: toolbox.avrdc.org/crop-growing-guides

Home Garden Toolbox
World Vegetable Center

Okra pests and diseases

APHIDS

Nymphs and adults feed on plant sap and mainly settle on tender shoots and lower leaf surfaces. Aphids secrete honeydew on which sooty mold can grow, which in turn blocks the amount of sunlight needed for the leaves to photosynthesize and thus slows plant growth. Severe infestation causes stunting and leaf curling.

CONTROL

- Remove infested plants and release predators (e.g. ladybird beetle, hover flies, lacewings) to control aphids.




BOLLWORM

Bollworms mainly attack terminal shoots initially and then move to flower buds and fruits as they appear. This can result in flower buds dropping. Damage can be visible in young crops (3 weeks old). If damage is severe, top leaves will wilt and the plant will droop. Larvae also attack mature pods to feed on the seeds and leave their frass in tunnels within pods.

CONTROL

- Inspect plants regularly and hand pick and destroy any eggs and caterpillars found.
- Preserve natural enemies such as parasitic wasps and predators such as ants, lacewings, and ladybugs.




CUTWORM

Young caterpillars feed on leaves and later on stems. Mature caterpillars can eat an entire seedling. They encircle and cut-off young seedlings at ground level during the night, dragging them into a tunnel within the soil to feed on them during the day.

CONTROL

- Delay transplanting slightly until stems are too wide for cutworms to encircle and cut.
- Hand pick caterpillars at night or very early morning before they return to the soil at the beginning of an infestation.
- Plough the field to expose caterpillars to predators and dry them out in the sun.

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LEAF MINER

Female flies deposit their eggs within the leaf tissue so that the larvae or cylindrical maggots (soft body and no legs) feed inside the leaf tissue and cause irregular mines as they feed. Most larva cut an opening at the end of the mine and move to the soil for pupation. If several mines are formed in the same leaf, photosynthesis is reduced and the yield may be affected. If severe infestation occurred, the whole plant can die.

CONTROL:

- Remove and destroy individual affected leaves.
- Yellow sticky traps may reduce the density of leaf miners and traps can also be used to monitor populations.




EARLY BLIGHT

Leaf spots of early blight are circular, brown, and can reach 12 mm in diameter. Early blight spots have circular ridged bands within them that merge to form a concentric ring pattern that distinguishes it from late blight. Spots appear first on older leaves before progressing upwards on the plant. On young seedlings, a collar rot may develop that girdles the stem at the base of the plant.

CONTROL

- Practice crop rotation for two seasons. Tomato, potato, and eggplants are all hosts of early blight and should not be planted in or near fields known to be infected.
- It is very difficult to control early blight once it is established. Focus on preventing early blight from spreading further by using clean seed, rotating fields with crops like maize and legumes that are not hosts, adding lots of organic matter to soil, and cleaning all tools and shoes when leaving infected fields.

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