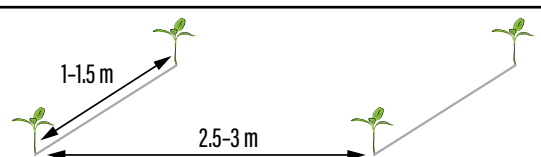


Pumpkin leaves and fruit

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

Seed sowing and spacing	
Direct seeding	Place pointed tip of seed downward in soil. Plant two to three seeds per mound. Thin to one healthy seedling when plants have 4-5 leaves.
Transplanting	Sow one seed per 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. Plants should be transplanted on one side of the bed.
Seed depth	1.5-3 cm
Between-plant spacing: 1-1.5 m	
Row spacing: 2.5-3 m	

Cultivation

Irrigation needs: Although pumpkins are mildly drought tolerant, insufficient water will reduce yield. Gently irrigate after sowing or transplanting to reduce seed displacement and then water daily. Once pumpkins have started to flower they become very sensitive to soil moisture deficit. Adequate irrigation at this time will reduce flower drop and increase yield. It is also critical to have sufficient moisture when pumpkin fruits are growing. Any water stress during fruit sizing can lead to the development of blossom-end rot and a reduction in fruit size and 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.

Special cultivation practices: Between weeks three to seven after planting, plant growth will be very fast and vines should be trained to grow in the direction desired by the gardener. Training should be done at least twice a week. Start training vines as early as possible, otherwise they become too woody and can be easily damaged if we try to move them at this point. When vine growth is more than what is desired by the gardener, lateral vines can be pruned, especially if they are entangled with neighboring plants. Prune away misshapen fruit (usually fruit with pollination problems or pest damage) and old or sick leaves if they are in danger of damaging other fruits or the whole plant. Young shoots that are non-fruit bearing or trimmed can be harvested for consumption.

Harvesting

When to harvest: Pumpkins should be ready for harvest between **90-100 days** after sowing, when the skin has toughened and the fruit has lost its shine. Young non-fruit bearing shoots can be harvested, as well.

How to harvest: Cut pumpkin stems 5 cm from the base of the fruit with a sharp knife. Leave harvested pumpkins in a dry, shaded place for 5-10 days to cure them.



Healthy seedlings ready for transplanting



Young plants in containers



Plants trained to one side of the bed



Immature green fruit



Mature fruit, ready for harvesting



Harvested fruit curing

Pumpkin pests

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.



WHITEFLY

Nymphs and adults feed on plant sap and colonize undersides of the leaves. The damage reduces plant vigor. Whitefly can also transmit yellow mosaic virus infection.

CONTROL

- Grow seedlings under insect-proof (50-64 mesh) net houses.
- Control whitefly population using plant barriers (maize, sorghum or pearl millet) and yellow or blue sticky traps.



SPOTTED BEETLES

Grubs and adults scrape the chlorophyll from the epidermis, which results in a ladder-like window on leaves, flowers and fruits. Heavy infestations can completely destroy young plants.

CONTROL

- Manually collect eggs, grubs and adults and destroy.
- Release predators, such as spined soldier bugs, to control grubs.



STRIPED CUCUMBER BEETLE

The larvae and adults feed on several species of cucurbits including cucumber, melon, courgette, and pumpkin; and also other crops such as eggplants, potato, and tomato. Beetles transmit leaf curl virus and bacterial wilt diseases that can cause wilting and death of infected plants.

CONTROL:

- Intercrop a legume or white radish with pumpkin to drive the beetles away. The seeds of radish can be sowed in the same furrow with pumpkin.
- Add a thick straw layer between plants to prevent adults from moving from one plant to another.



Photo credit: [Line](#)

THRIPS

Thrips attack a wide range of crops. Thrips mostly feed on foliage, but sometimes suck sap from fruits as well. Infested leaves have silvery feeding scars on the lower leaf surface, especially along the mid-rib and veins, where thrips have sucked the sap. If infestation is severe, leaves turn yellow or brown, and infested fruit is scarred and deformed.

CONTROL:

- Grow pumpkin seedlings in insect-proof (50-64 mesh) net houses, or plastic houses to avoid early infestation.
- Use blue sticky traps to monitor thrips and determine when other pest management is required.
- Use mulch and reflective material to reduce thrips incidence.



Photo credit: [Utah State University](#)



Photo credit