

PUMPKIN



Designed by:

Crop Manager Team

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Varieties

Pumpkins are warm season vegetables belonging to a genus “Cucurbita.” There are over 7 varieties of pumpkins grown in Uganda: sweetcream, Bala, Dulu, Onziga, Sunfish, sugarpie and Anderina.

Soil requirements

Pumpkins do well in loamy soils with a good drainage, and a high humus percentage. The soils should not be waterlogged as the plant can easily rot off.

Climatic conditions

Pumpkin requires a minimum temperature of 18degrees Celsius during early growth, but optimal temperatures are in the range of 24-27degrees Celsius. It can tolerate low temperatures and are adapted to a wide variety of rainfall conditions.

Fertilization

Fertilizer rates should be based on the results of a soil test and the nutrient requirements of the pumpkin crop.

Pumpkins respond well to ample dressings of organic manure, and artificial fertilizers may be applied at a rate of (272-363kg) per acre of a 5:10:10 NPK mixture.

Planting

It is best to plant your pumpkins on mounds, though even a plant surface can work.

Plant seeds 1 inch deep at a rate of 4 to 5 seeds per hill and 5 to 6 ft between hills.

After seedlings are well established thin each hill to leave at most 2 plants per hill.

Go ahead to space 4ft between hills and 8ft between rows.

Prune vines early in the season to discourage random growth and out of control patch.

Keep pumpkin plants free of weeds by hoeing and shallow cultivation. Irrigate your plantings if there happens to be extended dry periods.

Watch out for powdery mildew which causes a dusty white mould on the plant, cucumber beetles as these mainly attack seedlings and the vines at their tender age.

Weed control

Conduct weeding and raking of the soil at the time of fertilizer application. Earthing up is done during the rainy season. Hand or hoe weeding can be performed as well. Mulching is commonly used for pumpkin crops grown on raised beds. Use organic or plastic mulch depending on availability. Mulch can be laid down before or after transplanting or after sowing.

Diseases

Major pumpkin diseases include Powdery and Downy mildew, Mosaic virus, Plectosporium blight, Fusarium wilt, and Phytophthora blight.

Powdery Mildew



Symptoms

- Forms a white powder on the leaf.
- Pumpkins reduce in size and quality.
- Leaves wither, die.

Management

- Use resistance varieties.
- Remove over wintering plant debris.
- Can be controlled by spraying combination of Mancozeb and carbendazim 35 gm per 15 litres of water.

Downy Mildew



Symptoms

- Appears as yellow to white patches on the upper surface of older leaves.
- The undersides are covered with white to grayish cotton-like fungi.
- Leaves turn crisp and brown and later fall off.

Management

- Improve air circulation by pruning.
- Water in the mornings.
- Keep ground under infected plants clean to avoid spread of diseases.
- Remove and destroy infected plants.
- Choose resistant varieties.

Mosaic Virus



Symptoms

- Yellow, white or green stripes/ streaks/ spots on foliage.
- Wrinkled, curled or small leaves.
- Pronounced yellowing only of veins.
- Stunted growth and reduced yields.

Management

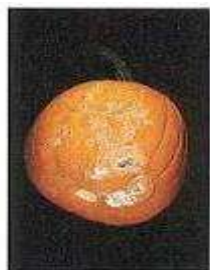
- Control the vectors by spraying dimethoate 35 ml in 15 litres of water.
- Uprooting and destruction of affected plants and collateral hosts should be done.
- Insecticide / fungicide application may not be very effective, disease resistant varieties can be used.



Symptoms

- Seedlings damp off.
- Mature plants show wilting during the day
- Under rainfall a white to pink fungal growth might appear.

Management



- Plant resistant varieties.
- Remove stricken growth from the garden and sterilize pruning clippers.
- High nitrogen fertilizers may increase susceptibility to the disease.
- Hand pull or treat weeds using weed flamer or a natural herbicide, many weeds host the disease.
- Apply mycostop biological fungicide.
- Remove plant if disease persists and treat soil before planting.



Symptoms

- Damping off and plant death.
- Dark-sunken(water soaked)appearance on the fruit.
- Lesions get larger over time, and by 3 days, white spores resembling powdered sugar may form on the fruit surface, followed by complete fruit rot.

Management

- Plant into well-drained, tiled fields.
- Use raised beds.
- Rotate crops.
- Remove diseased plants and adjacent healthy plants.
- Apply fungicides at planting and when fruits are at young growth stage.
- Power-wash equipment after it has been in infested fields.
- Do not dump diseased culls in production fields

Harvesting

It takes about 100-120 days for a given pumpkin variety to reach maturity.

Pumpkins are hand harvested at their maturity stage.

Multiple harvests are so common because individual fruits are pollinated at different times.

Harvest your pumpkin fruits whenever you see their deep solid color i.e. most color vary between orange and green, when the rind is also hard.