



HG/TT: Ag Ext. 99:19

HOW TO GROW PUMPKIN

INTRODUCTION

Pumpkin, (*Cucurbita moschata*), belongs to the family Cucurbitaceae. Related crops are watermelon, cucumber, cantaloupe, caraille and other gourds.

Pumpkin is a good source of vitamins A, B and C and minerals.

It is a very versatile vegetable and can be steamed, boiled or baked. The waste can also be fed to livestock.

VARIETIES

The varieties readily cross-pollinate so that it is difficult to clearly distinguish them in practice. Some common varieties grown locally are: Sweet Mama, Jamaican, Local Large, Iron Cap, Jack O'Lantern and Crapaud Back. Hybrids are also available in the agro shops.

SEEDLING PRODUCTION

Seeds used for planting should be selected from pumpkins that are well formed, with a thick flesh and smooth skin and weigh about 10 kg (20–25 lb). See the factsheet entitled: "Selecting Seeds for the Home Garden for more information.

To prepare the seeds for sowing, remove the seeds from the pulp. Wash and sun-dry for 3 - 4 days. Dry in a shaded area for another 3 - 4 days.

Seeds germinate in 3 – 5 days and are ready for transplanting in 10 -14 days.

Harden the seedlings by allowing gradual exposure to full sunlight over 3 - 4 days before planting in the garden. Alternatively, seeds may be directly sown in the soil.



A healthy seedling

SOIL PREPARATION

Pumpkin can be cultivated on almost any fertile, well-drained soil. In a home garden, it is necessary to remove all weeds and make circular mounds about 1 m (3 ft) across and 30 cm (1 ft) high. Without this mound, the root system would not develop properly, resulting in a poor crop.

These mounds should be placed about 3.0 m (10 ft) apart (measured from the top of the mound) if more than one mound is planted.

Add 1/2 bucket of well-rotted manure and about 100 g (1/4 lb) of agricultural lime to each mound and mix evenly in the soil.

PLANTING

If direct seeding, sow 5 seeds per mound, at a depth of 5 -7cm. Thin out and leave 3 -4 healthy seedlings about 1-2 weeks after germination.

If using seedlings, plant 3 healthy seedlings at the centre of each mound.

If needed, apply a soil fungicide as a drench in the planting hole to prevent attack by fungi and an insecticide to prevent attack by soil insects such as cutworms and mole crickets.

Ensure the plants get sufficient and uniform watering. Keep the plants free from all weeds in the first 5 weeks and thereafter, no further weed control is necessary.



Mound showing fertilizer application

FERTILIZER APPLICATION

- Apply 25g (5 tsp) of a high phosphate NPK fertilizer (e.g. 12:24:12) to each mound within 1 week after transplanting.

If direct seeding was done make this application 1 week after seedlings emerge. Apply the fertilizer at the middle of the mound around the plants.

Do not place the fertilizer too close to the plant.

- About 5 weeks after transplanting, apply 25g (5 tsp) of Calcium Nitrate mixed with 25g 12: 12: 17 + 2 distributed over the entire mound.
- About 9 weeks after transplanting, apply 75 g (5 tbsp) of 12: 12: 17 + 2 per mound. This last application may not be necessary if the crop looks quite healthy.

All of the above blends can be applied using the “wet-salting” method. “Wet-salting” is recommended during lengthy dry conditions.





Dissolve 100 g (3.5 oz) of fertilizer in a 4.5 L of water (1gal). Apply 250 ml (1 cup) of this mixture to each mound in the root area. Irrigate the plants immediately after “wet-salting” to avoid fertilizer damage.

PEST AND DISEASES

Integrated Pest Management (IPM) is the best approach to controlling pests and diseases in a home garden.

In this method, pesticides are not heavily relied upon and cultural as well as biological methods are used.

For further information on IPM see the factsheet titled “Integrated Pest Management for Home Gardeners” .

PEST/DISEASE	SYMPTOMS	CONTROL
<p style="text-align: center;">Thrips</p>  <p>Scarring of fruit caused by thrips</p>	<ul style="list-style-type: none"> • Discoloration, scarring, silvery, bronzing and deformation and dropping of leaves, flowers and fruits. 	<ul style="list-style-type: none"> • Adjust the time of planting to the wetter periods of the year if possible • Ensure adequate weed control • Use overhead irrigation if available • Mulch • Practice crop rotation • Use appropriate insecticides
<p style="text-align: center;">Cucumber Worm</p> 	<ul style="list-style-type: none"> • Holes on fruit • Insect droppings deposited outside holes 	<ul style="list-style-type: none"> • Use an insecticide that is safe to apply on fruits
<p style="text-align: center;">Gummy Stem Blight</p> 	<ul style="list-style-type: none"> • V- shaped yellowing and browning at the leaf margins. • A gummy substance exudes from lesions or cracks in the stems and fruits. 	<ul style="list-style-type: none"> • Seed treatment with fungicide • Adequate drainage • Avoid acid soils by adding limestone as mentioned • Use of an appropriate fungicide
<p style="text-align: center;">Cercospora Leaf Spot (<i>Cercospora spp</i>)</p> 	<ul style="list-style-type: none"> • Reddish brown / yellow spots are seen on the leaves. • The centre of the spot may fall out leaving holes in the leaves • These spots merge and cause leaf drop 	<ul style="list-style-type: none"> • Avoid waterlogged soil condition by having adequate drainage • Avoid acid soils by adding limestone as mentioned • Use of an appropriate fungicide

HARVESTING

Pumpkin matures in about 3½ months and usually yields about 5 – 7 good sized fruits or 45 kg (100 lb) per mound. You can tell that your crop is mature when:

- The overall colour of the peel (rind) changes from shiny green to pale yellow.
- The colour of the rind that is in contact with the soil darkens.
- The stem and tendril close to the fruit begin to dry.
- A distinct abscission layer appears between the stem and the fruit.
- The blossom end (opposite the stem) of the fruit is fully expanded.

- There is an absence of latex flow when a small incision is made at the stem end of the fruit. If you are using this method, make this incision small enough so that the rind can heal

Make a sharp clean cut when harvesting. Cut as close as possible to the fruit and ensure that the stem does not break off from the fruit. Fruits without stems will not store very well.

Pumpkin can be stored at room temperature and at a relative humidity of 65–70% for 6 weeks or longer.

For further information on pumpkin production, see the booklet titled, “Pumpkin Production, A Producer’s Manual”, a publication of the Extension, Training and Information Services Division

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