

ZZ650

Cultural Details: Pumpkins

Introduction

Pumpkins are members of the Cucurbita family, one which also includes cucumbers, marrows, squash and courgettes. They are of trailing habit and produce up to 5 fruits per plant depending on the variety. Cultivation of pumpkins is relatively straightforward although they are very severely affected by the weather and yields can be drastically reduced by a poor summer.

Soil conditions

Pumpkins are moderately tolerant of acid soil and can be grown with a soil pH down to 5.5, although they will do far better if the pH level is 6.8 – 6.0. Therefore where possible on acid soil liming is recommended. Apply 100% of the recommended phosphorus and potassium fertilizer preplant. Apply 60 to 80% of the recommended nitrogen fertilizer preplant. (The remaining nitrogen can be sidedressed before plant tips are pinched out or applied through a trickle irrigation system.) For improved yield and quality, lay drip tape and plastic mulch for weed control, irrigation and feeding. Pumpkins are susceptible to magnesium deficiency. Recommended fertilizer rates are N= 25kg-38kg per acre P= 25kg-50kg per acre K= 25kg-77kg per acre.

Temperatures for sowing and production

Pumpkins require a minimum soil temperature of 15.6 °C (60°F) in order to germinate the seed. The optimum is 32.2 °C (90°F). Germination takes anything from 4 to 14 days depending on the soil temperature. Pumpkins plants require a temperature of 18.3-23.9 °C (65-75 °F) in order to grow on to full maturity.

Planting and spacing etc

In the U.K. May is the best planting time to ensure adequate soil temperature and enough growing season in order to mature successfully. Plant spacing is from 90-150cm (36-60in) between plants in rows and 180-240cm(72-96in) between rows. Plants per acre therefore are between 1089 and 2420. Pumpkins are suitable for direct drilling and two seeds per station is recommended, thinning to one plant after germination. Transplanting of pumpkins is also viable. After 3-5 fruits are formed the growing tips may be pinched out to promote fruit development

Harvesting and Storage

Where possible ripen plants on the vine and if possible cut the fruits from the vine when mature and allow them to cure in the field, this method will increase maximum storage potential. Curing can be carried out in adverse weather conditions by placing fruits under glass or exposing to heat (optimum 25°C) for approx 10 to 14 days. Storage of Pumpkins is best at 10 °C and a relative humidity of 75%. Storage periods vary according to varieties. Mature pumpkins will stand a light frost but where possible this should be avoided as a strong frost will ruin the crop.

Pests and Diseases

Slugs are the major pest for pumpkins especially when seedlings are developing. They can cause a high loss rate, so precautions to control these are recommended. Field mice can also attack the fruits and gnaw away large chunks which render the fruits unsaleable.

Powdery mildew is the most common disease to affect Pumpkins and a regime of regular spraying from August is recommended to avoid problems. Consult your chemical supplier for more details on spraying. Powdery mildew in the plants may well cause a reduced storage potential in the fruits.

Information provided for guidance only, as cultural practices and climatic circumstances vary.