

Cultural Details: **Onions from seed**

Introduction

There are many different types of onion, including bulbing, bunching and spring, all of which can be grown from seed. By carefully selecting varieties and sowing at the right time it is possible to have a supply of onions nearly all year round. Growing from seed is advantageous because the seed is cheaper than sets, the plants are less prone to bolting and there is a wide range of seed varieties available. However growing from seed is not as easy as from sets, there is a longer growing season and the crop is more susceptible to pests and disease, such as onion fly.

Bulbing onions

This type of onion is the main 'culinary' onion, can be used fresh or stored for later use. The majority of these onion varieties have yellow or brown skin with a creamy white flesh (e.g. Bristol), but some varieties have red skin and pink flesh, or white skin and white flesh. Some varieties have red skin and white flesh, with pink concentric rings when sliced (e.g. Red Baron). Most bulbs are round or globe shaped, but some varieties have an elongated shape (e.g. Long de Florence Simiane). The flavour and storage capabilities also vary from one variety to another. A 'Rijnsburger' type is characterised by a round shape and yellow-brown skins, while a Japanese bulbing variety (e.g. Senshyu) is particularly suited to a mid summer sowing for overwintering. For large sized, show bench competition growing, Kelsae is still as popular as ever.

When producing bulbing onions an open, fertile, well draining, non-acidic soil is essential, the drainage being particularly important for overwintered crops. Ground coverings, such as cloches, can be used to warm soil prior to sowing. It is possible to have an early crop by sowing into trays or modules indoors during late winter, at a temperature of 10-15°C. Keep the temperature below 12°C before hardening off and planting out in mid to late spring. The maincrop sowings should be made in early spring into warm, dry soil. Sow thinly into rows 25-30cm apart and then thin in stages. A maincrop sowing will provide fresh onions from mid-summer onwards, with storage onions being lifted in late summer. Japanese overwintering onions should be sown in August, so that they reach a height of 15-20cm by mid autumn, too tall and they may bolt in spring, too short and they may not survive. Do not sow maincrop or overwintering types late because they will not make up the lost time. Crop spacing dictates the final bulb size, for a good yield of medium sized onions space to 5cm, with 25cm between rows, and for larger bulbs space to 10cm in 25cm rows. Early thinnings are less critical for overwintering crops because the winter will claim some of the plants.

Store bulbs in a well ventilated area, with temperatures between 0-8°C, do not allow them to freeze.

Salad or Spring Onions

These onions, also known as scallions or bunching onions, are grown as much for their green leaves as for their small bulbs, and are used mainly in salads. Most varieties are selections from bulbing onions; in fact most bulbing onions will also produce only small bulbs if grown at a suitably high density, although the leaves may be less palatable than the established salad onion varieties. Japanese bunching onions (e.g. Savel or Summer Isle) are a derivative of Welsh onions, and although perennial are best grown as annuals. These varieties are more vigorous than other types of salad onions, and are also more tolerant of poor soil fertility and cold conditions. Pickling onions, also known as silverskins (e.g. Paris Silverskin) are bulb onions grown at a high density to provide small onions suitable for pickling.

Spring onions (e.g. White Lisbon or Gaurdsman) are sown from early spring to early summer are sown every 2-3 weeks to give a constant fresh supply throughout the summer and autumn. An overwintered crop can be sown in mid to late summer for harvesting in the spring. A hardy variety (e.g. White Lisbon or Winter Over) is required, as is a cloche in very cold areas. Japanese bunching onions can be sown under cover from early autumn to late winter before transplanting in the spring, and outdoors from mid spring to mid summer. Pickling onions are best direct sown in early to mid spring for harvesting late summer.

Similar soil conditions to those required for bulbing onions will provide the best results. Salad onions are best sown at a spacing of 1cm apart, Japanese bunching onions at a spacing of 2.5cm, while pickling onions are better at a spacing of 0.5cm. In all cases the rows should be 30cm apart, they can be closer but the risk of downy mildew is increased. Sowing depth should be approximately 2cm. Thinning is not necessary.

Common Pests and Diseases

The problems are generally the same for both bulbing and salad onions, and the normal measures such as rotation, air movement and cultivar resistance are all important. Other problems include:

Onion Fly: small maggots attack seedlings, controlled by stale seedbed, fine netting.

Mildew and rots, such as onion white rot: worse in wet conditions, poor draining soil.

Stem and bulb eelworm: swollen and distorted foliage, burn infected plants, rotation.

Smuts and rusts: fungal infections, remove and burn infected plants, rotation or spray.

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