

Onion Growing Guide

Allium cepa



Onions are a very old vegetable, they have been used for thousands of years the Egyptians worshiped the onion believing that it was a symbol of eternal life. They are a good source of fibre and contain a powerful antioxidant.

UK Market

The main UK markets for onions are for fresh and processing.

Soil Types

Onions are a shallow rooting crop and therefore either silts with moisture retentive qualities of free draining soils with irrigation are preferred. Freedom from stone and soil clods is beneficial at harvest.

Growing

Onions can either be produced from seed or from onion sets. The earliest onions can be produced by drilling onion seed in August to be overwintered, for cropping in June and July. The overwintered crop must be of a suitable variety, it is normally drilled at a rate of 250,000-290,000 per acre (618,000 – 717,000 per hectare).

Onion seed can be drilled from February to March at a rate of 200,000-250,000 per acre (618,000 – 495,000 per hectare) for harvest from late August to September.

| Onion Seed Germination Guide (°C) | Soil Temperature | | |
|-----------------------------------|------------------|----|----|
| | 10 | 20 | 30 |
| Optimum Range | | | |

Post-harvest Treatment

Bulbs produced from overwintered onion seed and those produced from sets are not generally used for long term storage. Production from spring sown crops can be stored until May/June the following year if a suitable variety is used. Ambient storage can be suitable for use until January/February, after that cold storage and a controlled atmosphere can be used to extend the storage period.

Fertiliser usage

Source: The Fertiliser Manual (RB209), 8th edition (2011).

| Nutrient | Soil index | | | | | | |
|--|------------|-----|--------------------|----|----|----------------|----------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | kg/ha | | | | | | |
| Nitrogen(N) – all soil types | | | | | | | |
| Bulb onions ^a | 160 | 130 | 110 | 90 | 60 | 0 ^b | 0 ^b |
| Phosphate (P ₂ O ₅) | 200 | 150 | 100 | 50 | * | * | 0 |
| Potash (K ₂ O) | 270 | 225 | 175 (2-) 125M (2+) | 35 | 0 | 0 | 0 |
| Magnesium (as MgO) | 150 | 100 | 0 | 0 | 0 | 0 | 0 |

a. The recommendations assume overall application. A starter fertiliser containing nitrogen and phosphate may be beneficial.

b. A small amount of nitrogen may be needed if soil nitrogen levels are low in the 0-30 cm of soil

* At P Index 4 and 5, phosphate up to 60 kg P₂O₅/ha fertiliser as starter fertiliser may be justified

At SNS Index 0 on light sands where spring soil mineral nitrogen levels are 40 kg N/ha or less a further 15 kg N/ha can be supplied.

Apply no more than 100 kg N/ha to the seedbed. The remainder should be applied when the crop is fully established for the spring crop and the following spring for the autumn sown crop.

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Varieties available from Elsoms Seeds

Overwintering Bulb varieties

Element F1

A very early Japanese overwintering hybrid. It produces good quality onions for the fresh market with a globe uniform shape and good bolting tolerance,

Bridger F1

A few days later than Element, Bridger has good bolting resistance, a nice shape and improved skin.

Spring sown varieties

Hybound F1

A new early Rijnsburger which produces attractive brown bulbs. Hybound is early maturing and suitable for long term storage.

Hylander F1

Hylander has a high resistance to downy mildew. It produces good yields of round bulbs which have good storage potential.

Red Tide F1

Maturing approximately one week earlier than Redspark, Red Tide has similar storage potential. A strong rooting system helps Red Tide produce good yields of round, attractive bulbs.

| | Earliness | Yield | Skin Quality in May | Sprouting in May | Firmness | % Dry Matter | Relative Storage Potential | | |
|-----------------------------|-----------|-------|---------------------|------------------|----------|--------------|----------------------------|-----|-----------|
| | | | | | | | Short | Mid | Long term |
| Spring sown - Yellow | | | | | | | | | |
| Hybing F1 | 8.1 | 107 | 7 | 6 | 7 | 11.1 | | | |
| Hybound F1 | 8 | 99 | 9 | 9 | 8 | 11 | | | |
| Hyfort F1 | 7.5 | 101 | 7 | 8 | 8 | 11.2 | | | |
| Hypark F1 | 7.1 | 104 | 9 | 8 | 8 | 11.5 | | | |
| Hytech F1 | 7 | 105 | 9 | 8 | 8 | 11.3 | | | |
| Hybelle F1 | 6.7 | 107 | 7 | 8 | 8 | 11.7 | | | |
| Hylander F1 | 6.5 | 100 | 8 | 7 | 7 | 11 | | | |
| Armstrong F1 | 6.2 | 100 | 8 | 8 | 8 | 11.5 | | | |
| Spring sown - Red | | | | | | | | | |
| Red Tide F1 | 7.5 | 99 | 5 | 7 | 7 | 13.2 | | | |
| Redspark F1 | 6.5 | 100 | 6 | 7 | 6 | 13 | | | |
| Red Baron | 6.3 | 101 | 5 | 7 | 6 | 13.3 | | | |

Further information

For further information on the different varieties, seed treatments, pests and disease please contact your regional vegetable seed specialist or see the Elsoms Seeds catalogue.

Links

Elsoms Seeds website and catalogue:
<http://www.elsoms.com/>

The Fertiliser Manual (RB209)
<http://www.defra.gov.uk/publications/files/rb209-fertiliser-manual-110412.pdf>

Assured produce crop specific protocols:
<http://www.assuredproduce.co.uk/ap/scheme/standards.aspx>

The information provided in this sheet is intended for general guidance only and is correct to the best of our knowledge. Please be aware that variations in the growing environment and climatic conditions can render this information inaccurate. For more specific advice about fertiliser use please contact a FACTS certified advisor.
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