

SWEDE

The swede (*Brassica napobrassica* or *Brassica napus* var *napobrassica*) is a hardy vegetable well suited to the cool, damp conditions frequently encountered in Wales. Swedes require relatively little attention and can be kept in the ground over the winter.

SITE

Swedes require a well drained, but moist soil. They will grow on a wide range of soils, but will do best on a well structured loamy soil. Incorporation of well rotted organic matter will help with both soil structure and moisture retention.

Although swedes grow well in slightly acid soils, acidity increases the risk of clubroot infection. Therefore, the pH needs to be kept above pH6.5. However a fine balance needs to be struck to avoid overliming and thus locking up micronutrients.

Swedes are part of the Brassica group. Crop rotation is critically important for this group and swedes should not be grown on a site where another Brassica has been grown within five years.

VARIETIES

Swedes are categorised by the colour of the skin at the top of the storage root. Purple tops are the most common, but bronze and green tops are also available. Colour should be chosen to suit your site and your market.

There is a range of swede varieties available, some of which (e.g. Ruby, Marian) have been shown to have some resistance to common infections, particularly downy mildew. There are differences, sometimes only very subtle ones, in the taste, texture, appearance and time to maturity of the various varieties, so again choice should be made to suit your site and your market.

PLANTING

Maincrop swedes are usually direct drilled through June to early July so that the crop develops as the cooler autumn weather arrives. Sowing spacings will govern the size of the final crop: closer spacings yielding smaller roots. It is these smaller roots (c.15cm in diameter) which are currently most popular with consumers. To achieve this, sow graded seed at 10cm within the row and 50cm between rows. If the crop is to be mechanically harvested it should be planted on a bed system. This is not necessary for a crop which will be harvested by hand.

NUTRITION

Swedes do not require high fertiliser inputs. The roots produced are of better and more consistent quality when the crop grows at a steady, moderate rate, rather than quickly. Table 1 shows Defra fertiliser recommendations for maincrop swedes. Fertiliser should be applied pre-drilling.

Swedes are very susceptible to boron deficiency, which manifests in the root as brown hearts and waterlogging. In severe cases the skins will become rough and bumpy. Boron availability decreases significantly above pH7, so care needs to be taken with liming and a specific soil analysis may be worthwhile.

Table 1 – Fertiliser recommendations for maincrop swedes from RB209

	SNS, P, K or Mg Index						
	0	1	2	3	4	5	6
	kg/ha						
Nitrogen	150	100	50	0	0	0	0
Phosphate (P ₂ O ₅)	200	150	100	50	0	0	0
Potash (K ₂ O)	300	250	200(2-) 150(2+)	60	0	0	0
Magnesium (MgO)	150	100	0	0	0	0	0

Source: Defra – Fertiliser recommendations for agricultural and horticultural crops (RB209)

MANAGEMENT

Weed control is a major challenge in all brassicas. Standard advice is always to avoid excessively weedy sites. Where this is not possible, a high level of manual weed control may be required, particularly where stubborn weeds of the Cruciferae family are present. There are products licensed for control of other common weeds – check the Pesticides Safety Directorate website – www.pesticides.gov.uk.

PESTS AND DISEASES

Swedes, like other brassicas, are susceptible to a wide range of pests and diseases. Of particular importance are:

Powdery mildew (*Erysiphe cruciferarum*) – varieties with some degree of resistance area available. Fungicides are available.

Cabbage root fly (*Delia radicum*) is a major pest of swedes. There are no insecticides currently approved for control of this pest in swedes. Some growers try to control the problem by using crop covers, e.g. wondermesh. The problem with this is that overwintering larvae may be trapped inside the cover. Anecdotal evidence suggests the benefits of using a cover tend to outweigh the risks.

Flea beetle (*Phyllotreta* spp.) can devastate a crop at emergence. Pesticides are available.

HARVEST

Harvesting begins when swedes are around 15cm in diameter. Harvesting can be manual or mechanical: manual harvesting is the most common for smaller scale units and ensures highest quality produce. The disadvantage is that it is costly.

STORAGE

Swedes lose moisture quite quickly once picked, but keep well when in the ground. If specialist storage facilities are not available, it is preferable to pick the crop to order, rather than to try and store it. Swedes will keep for around

INDICATIVE MARGINS FOR ONE HECTARE OF SWEDE PRODUCTION

	Item	Quantity	£/Unit	£ Total
Outputs				
Crop Sales	tonne	25	200	5,000
			Total Outputs	5,000
Costs				
Casual Labour	Drilling	12hrs	6.00	72
	Harvesting	100hrs	6.00	600
Contract Labour	Spraying	1	89.00	89
	Fertilising	1	25.00	25
	Cultivating	1	70.00	70
Fertiliser Costs	Fertiliser	1	80.00	80
Other Costs	Packaging	5000	0.25	1250
Seed Costs	Seeds	1	40.00	40
Spray Costs	Pesti-/Herbicides	1	200.00	200
			Total Costs	2,426
Gross Margin				£2,574



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