

Sunflower Growing Guide 2024



Area suitable for Sunflowers

No sunflower seed is commercially crushed in the UK. We import around 60,000 tonnes annually which is largely used in the bakery sector. There is also a strong bird food market and a growing cold crush sector. Most UK grown crop is destined for the bird seed market. It is estimated that a maximum of 1,500 tonnes of seed is produced in the UK.

Soil type

Sunflowers can be grown on almost any soil type; the optimum pH is 6 to 7.5. Soils with a low pH should be avoided. Sunflowers perform very well on potash rich clay soils and clay loam soils.

Cultivations

Autumn ploughing to allow a frost tilth to be produced, where compaction is suspected then the field should be sub-soiled. Power harrowing or cultivation's using tines will normally produce a good seedbed.

Fertiliser

Sunflowers have a low fertiliser requirement. Where soil indices are zero then 50:80:150 NPK should be applied to the seedbed. If soil indices are 2 then no P or K is needed. Sunflowers follow cereals in the rotation very well. If grown on land with high nitrogen residues then the plants tend to become very vegetative.

Sowing Date

Sunflowers should be drilled between the 15 April and the beginning of May. Sunflowers like to be drilled into a warm seedbed when soil temperatures at 5cm depth average 7 °C. The seed should be drilled into moisture to ensure rapid germination at 3-5cm depth. Sunflowers take 140 days to reach maturity and therefore the crops should be ready for harvest in the middle of September.

Plant Population

Sunflowers are drilled in the UK at 110,000 seeds per hectare to achieve a population of 100,000 plants/ha on 25-35cm row widths. This plant population is higher than that used on the continent because this ensures that the plants produce small heads which dry down quicker at harvest. Precision drills have shown improved plant spacings along the row and this ensures evenness of maturity at harvest.

Weed Control

If the field is sprayed off with Roundup before drilling then no weed control is often needed. Where the site has a history of high weed populations use a stale seedbed then Stomp (pendimethalin) 2l/ha should be applied pre-emergence to provide residual activity as the weeds germinate. Emerger (aclonifen) can also be used on an Extension of Use at growers risk to control broadleaved weeds pre-emergence, these can be tank mixed together. Post emergence grass weed control can be undertaken with Fusilade (fluazifop-P-butyl) 1l/ha or Centurion Max (clethodim) on an Extension of Use including black grass.

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Diseases

Sunflowers should not be grown on a closer than 1 in 4 years rotation to prevent the build-up of diseases in the soil. Seed is treated with a fungicide to protect the seed against damping off and seedling blight. At harvest the back of the seed head may become infected with grey mould *Botrytis cinerea* or head rot caused by *Sclerotinia*. Both diseases are favoured by mild, wet conditions and are soil borne, a rotation of 1 in 4 years or longer will help reduce the build-up of these diseases. Grey mould and head rots can affect the crop late in the season and, by growing a early maturing variety, harvest can be undertaken before these diseases become a problem.

Pests

During establishment the crop may need slug pelleting if conditions are damp and favourable for slug activity. Pigeons may become a problem, particularly if fields are surrounded by woodland. Once the crop has 2 cotyledons then it rarely needs any further protection.

Harvesting

Harvest occurs when seed moisture is at 15-20% dry matter normally in the middle of September, 7-10 days after the crop has been desiccated when the seed is at 30%. The combine should be adjusted according to the manufacturer's instructions, but typical settings are: **Drum speed 400-600 rpm, Concave - wide open, Sieve 10-12mm**

The tines on the combine reel should be removed or covered to prevent impaling the heads on the tines. The main objective during combining is to cut all the heads and leave as much stalk in the field as possible which can be disced in after combining. Yields are variable in the UK with an expectation of 2.5 t/ha.

Crop Drying

The seed can be successfully dried on cold air drying floors down to 15% moisture. Drying down to 9% for long term storage and marketing should be done using low volumes of heat, similar to OSR. The seed is surrounded by a lint layer that can be rubbed off in the drying process which, if taken into the unprotected intake of a continuous drier there is risk of fire. The drier should always be monitored whilst the seed is being dried. Once dried the heap should be left to stabilise for 7 days and then the moisture tested again and more drying undertaken if necessary.

Marketing

Seed is generally purchased on a contract subject to sample basis. In continental Europe crop values trades at a level around that of oilseed rape but this is for a well-developed commercial crushing market.

Black Sunflower
Max 9% Moisture
Max 2% Admix
Max 4% Broken Kernels
10-15mm Seed Size

Why not join the UK's first Sunflower Marketing Pool recently launched by United Oilseeds?

Speak to your Area Manager or contact head office on 01380 729200

