

Growing chickpeas

Cicer arietum

The plant

Chickpeas are a new crop to the UK although they have been cultivated for centuries in Asia and the Mediterranean.

They are small leaved annual legumes, growing about knee-high, with great drought resistance and freedom from most pests. Plants are not fully hardy although capable of withstanding light frost.

With attractive grey-green foliage and the capacity to fix nitrogen, chickpeas show great promise in the warmer and drier parts of the country for a long season of production, with low demands for water or nutrients and little effort needed to grow them.

Although in hotter climates they are grown for the familiar dried pea-like seeds, in our damper climate they are best harvested green as a luxury crop, like petit pois, with a taste somewhere in between fresh raw French beans and garden peas.

Varieties and plant material

At present there are no cultivars recommended for cropping in the UK, so yields are relatively low but with more research this should improve. There is a variety grown in Italy, 'Principe de Florence' which is white seeded. Traditionally there are two types, the dark skinned (kabuli or kala chana) which is said to be hardier and the white skinned, (desai or white chana), which is the most common chickpea, prized for superior flavour. When the peas are eaten immature there is no difference between the skin colour, as both types are green when young.

Some chickpeas have white flowers; others may be purple or bluish. In some cultivars the leaflets have become fused to produce a few large leaves rather than the typical finely divided ones, and the amount of malic acid produced by the leaves is reduced in certain strains.

Many people growing chickpeas plant seeds sold for sprouting, as these will be fresh enough to germinate readily; they are also unlikely to have been treated with pesticides. Chickpeas, like other legumes, have a symbiotic relationship with microbes on their roots, which enable them to fix nitrogen. The rhizobium responsible is not the same one that is present on peas and beans, and may not be present in all soils. To overcome this problem, you can either continue to grow chickpeas close together for several seasons when the rhizobium often appears spontaneously, or alternatively, to avoid a build-up of root diseases, make a single application of chickpea rhizobium extract (available from Legume Fix, tel 01 159 663679) to inoculate the soil with the correct bacteria. Once the bacteria have been introduced normal four-year rotational cropping will be sufficient to keep them alive in the soil.



Planting and site

Chickpeas need a well-drained soil with full sun. The ideal is a relatively poor soil, as high levels of nutrients encourage lush growth, prone to developing mildews and related diseases. Avoid heavy clays or shady sites. Unlike many crops chickpeas don't need a very fine seedbed and appear to germinate more readily on roughly cultivated soil.

Sow chickpeas as you would for dwarf French beans, at a spacing of 7-13cm (3-5in) between plants and 20-25cm (8-10in) between rows. If growing in a bed allow 15cm/6in between plants in all directions. Depending on site, chickpeas can be sown direct from late March to early April and if required successional throughout the season until mid June.



Chickpea seeds

Germination is rapid in warm weather, but in cold wet soils seeds and young plants are prone to damping off.

If birds or rodents eating the seed are a problem, start chickpeas off in modules, but they resent transplanting and do better if sown where they are to grow.

Once seedlings are established they need little aftercare except occasional weeding. Flowers usually appear within 2 months of sowing, and pods will set shortly afterwards.

Pests, weeds and diseases

Chickpeas produce fine reddish dew on their leaves in hot weather, which contains malic acid – this can irritate to



Foot rot on chickpea

sensitive skins so wear gloves when harvesting. Because of this exudate, many pests do not bother chickpeas, although mice and birds still find the pods very attractive.

Plants will need weeding for the first few weeks until a full canopy has been achieved, when they will suppress weeds very well, forming a dense cover: once this has formed only perennial weeds are likely to penetrate the crop.

Prolonged heavy rain and cold weather is also damaging, encouraging foot rots and mould growth. Chickpeas are like other legumes, prone to Fusarium and similar foot rots, particularly in wet cold soils, so include chickpeas in normal legume rotations. Infected plants should not be composted but destroyed or sent to landfill.

Blind pods sometimes form in wet weather; when insects are less likely to fly to pollinate the flowers.

Harvesting and storage

Chickpeas are best harvested as soon as the pods have peas inside are large enough to eat: it's rarely worth trying to ripen pods due to problems with mice, which love eating the seeds.

Each pod can contain between one and three peas. Harvesting will continue for several months after planting, and is only ended by hard frosts.

Take care when harvesting, not only because of the malic acid given off by the plants but also the spiky pod ends, which can be unpleasantly painful if they slip beneath a fingernail. Green chickpeas require minimal cooking, and like all fresh vegetables, best eaten as soon after picking as possible. If you are lucky enough to have a glut of chickpeas, they can be frozen after a brief blanching time or turned into a deliciously fresh tasting green hummus.

This leaflet is produced as part of the Sowing New Seeds Project. This is funded by Big Lottery's Local Food Fund and has produced a resource of information on growing advice, experiences and seeds to promote growing of exotic produce in the UK.

For further information visit www.sowingnewseeds.org.uk
or email sowingnewseeds@gardenorganic.org.uk

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