

Courgettes (*Cucurbita pepo*) belong to the cucumber family. Courgettes are small immature marrows. The French name for marrow is *Courge*, hence the name courgette or little marrow. In Italy they are known as *Zucchini*. Courgettes are native to America and as such are not completely hardy. Plants are monoecious i.e. the male and female flowers are separate but are borne on the same plant. Courgettes are normally raised under protection and planted out when the threat of frost has diminished. The first planting is in May under low polythene tunnels; if protection is not provided delay planting until June. To span the season from July to September two sowings and plantings are normally carried out.

**SOIL** Fertile, well drained, moisture retentive soils are suitable.

**ASPECT** Sheltered, warm site is preferable.

**FARMYARD MANURE** Courgettes respond well to a high level of organic matter in the soil. If available a dressing of 30-40 tonnes per acre of well-rotted farmyard manure should be ploughed in.

**FERTILISER** Apply the following amounts (kg/ha) according to soil analysis:

Soil Index	N	P	K
1	140	60	300
2	125	45	270
3	105	35	230
4	90	20	175

Up to 140 kg/ha of nitrogen is allowed. Apply P and K according to soil analysis results. There are no special requirements for boron so compounds like 18-6-12 or 10-10-20 would be suitable.

**LIME** Ideal pH: 6.5 – 6.8. Below 5.5 growth is increasingly restricted.

**VARIETIES:**  
Cora F1 (Clause)  
Tosca F1 (Clause)  
Ladoga F1 (Bejo)  
Tuscany F1 (Tozer)  
Sunstripe F1 (Tozer) Yellow variety

**PROPAGATION** The outdoor crop is propagated under glass or polythene, with the first sowing in mid-April and the second in early May. Sow the seed singly into large modules (e.g. 126's) or pots. During the growing on stage provide frost protection if necessary by covering with fleece. Frost damage can seriously stunt a crop. Be careful not to overwater the young plants as they don't like to be waterlogged.

**TRANSPLANTING** As courgettes will be damaged by sharp frosts, how early it will be safe to plant out depends on the area of the country that the crop is grown in. The dates mentioned refer to Co. Dublin.

For an early crop plant out in the third week of May and cover the crop with a low polythene tunnel using wire hoops and clear perforated polythene. Leave the crop a few days to establish after planting before covering. The polythene is removed after about a month to facilitate working with and harvesting the crop.

The second sowing is planted out in the first week of June and is left uncovered. The latest date for planting courgettes is around mid-June.

**SPACING** 1 x 1.4 m or about 7,000 per ha.

**WEED CONTROL** There is only one herbicide available, Gamit, which is an off-label recommendation. Alternatively plant through a sheet of black plastic or use a combination of a stale seed bed, inter-row cultivations and hand weeding. Weeds in the alleys will also have to be controlled either mechanically or by herbicides.

**IRRIGATION** Useful for establishment and during the harvesting period. Typical requirement would be 25 mm of irrigation at a soil moisture deficit of 25-40 mm. Use of black plastic will greatly reduce or eliminate the need for irrigation.

**FRUIT SET** Courgettes are pollinated by bees and bumblebees, particularly the latter. Even without pollination fruit-set can still happen through parthenocarpy but for maximum yield insect pollination is required. It would be advantageous to establish a wildflower margin around the field to attract pollinators.

It can take the plants a little while to settle into regular cropping. Early in the season you may notice that the flowers are initially all male but later on develop both types. What can also happen with the early flowers is that fruit set is poor and those that do set are distorted in shape. So remove the first 3-4 fruit formed and discard.

**PESTS** Not many pests to worry about with this crop. Slugs will graze on young plants and aphids very occasionally will attack. Bean seed fly may also cause damage to the new planted crop but only rarely.

*Slugs* This pest can attack newly transplanted crops with the worst damage close to headlands. Use SluXX (ferric phosphate) or any of the pellets based on metaldehyde.

**DISEASES** The main disease to attack this crop is powdery mildew.

*Botrytis* In damp muggy weather a grey mold attacks the flowers and can invade the developing fruit causing it to rot. Not usually worthwhile spraying.

*Cucumber Mosaic Virus*

Occasional disease of courgettes. It causes mottling of the leaves and distortion of the fruits leading to a reduction in yield. There is no cure for this disease but as it's mainly transmitted by aphids, controlling these pests may help to prevent its occurrence. Infected plants should be removed and destroyed. Despite its name this disease has a wide host range including many common weeds.

*Powdery Mildew*

Powdery mildew is very prevalent especially in warm dry summers. It mainly attacks in late summer and autumn causing early plant senescence and can impact on yields. Use either Amistar, Amistar Top or Signum in a preventative spray programme. An attack late in the season is not a problem and indeed can help a crop by reducing leaf cover to allow the crop to ripen off.

**HARVESTING**

Harvesting normally starts in early July and continues to the end of September. The earliest harvests come from crops grown under low polythene tunnels. Courgettes grow fastest in warm muggy conditions and can mature rapidly. Pick every 2/3 days. Care needs to be exercised when picking as the fruit are easily damaged. Protect your hands and arms when harvesting to prevent skin irritation from the leaves of the plant.

The market requires a courgette that is straight, dark green and approximately 15-24 cm long. There is only a small demand for yellow fruited types.

**YIELD**

Average yield is about 20/22 fruit per plant or 30 tonnes/ha.