

CUCURBITS

(CUCUMBER, MELONS, PUMPKIN, SQUASH, ZUCCHINI)

Varieties

Cucumber

Slicing: Dasher II, Turbo, Marketmore 76, Daytona, Stonewall.

Pickling: Pioneer, Calypso, Jackson Supreme, Sassy.

Muskmelon

Athena, Aphrodite, Fastbreak.

Pumpkin

Halloween (Orange): Howden, Spirit, Howden Biggie, Magic Lantern, Sorcerer, Magician, Gladiator.

White: Lumina, Cotton Candy, Spartan.

Red: Rouge Vif d'Etampes (trial).

Miniature: Jack-Be-Little*, Sweetie Pie, Baby Boo (white), Wee-B-Little, Lil'Pumpkemon (striped), Apprentice, Mystic Plus.

*Not edible.

Hard Shell: Cannonball, Ironman, Lil'Ironsides.

Squash

Summer: Zucchini

Medium green - Ambassador, Zucchini Elite.

Dark green - Raven, Noche, Blackjack.

Yellow - Goldrush, Golden Dawn III, Golden Delight.

Winter: Butternut, Buttercup, Hubbards (Blue, Golden and Green), Table Ace (Acorn), Taybelle (Acorn), Royal Ace (Acorn), Spaghetti squash.

Miniature (Baby) Squash (harvested immature): Sunny Delight, Peter Pan, Sunburst.

Watermelon

Sugar Baby, Yellow Baby, Sweet Favourite.

See your seed dealer for the most recent variety recommendations.

Seed Treatment

Buy seed treated with **Thiram** or captan seed protectants.

Soil Temperatures

The minimum soil temperature required for germination of these crops is 16°C with the optimum range between 21 and 35°C.

Planting

Slicing-cucumbers and zucchini are often started in plug trays in greenhouses 3 to 4 weeks before transplanting outdoors. Approximately 2.25 kg of seed will provide enough transplants to plant 1 ha (0.9 kg/acre). Do not transplant until all danger of frost has passed unless row covers are used.

For direct-seeding of cucumbers, 4.5 to 5.5 kg/ha (1.8 to 2.2 kg/acre) of seed are required if seeding is to be done in the field without the use of a precision seeder.

Pickling cucumber varieties are usually direct-seeded, but transplants may be used where earliness is important. Seed at a depth of 1.5 to 2.5 cm depending on soil moisture, and use 2.25 to 2.75 kg/ha (0.9 to 1.1 kg/acre) of seed.

Muskmelons and watermelons are usually started in greenhouses 5 weeks prior to the date for transplanting.

Pumpkins and squash are usually direct-seeded when all danger of frost has passed.

Growing cucurbits using plasticulture provides many benefits. See "Plasticulture", Chapter 5.

FINAL SPACING	Between Rows	Within Row
Slicing cucumbers	1.2 to 1.8 m	30 cm
Pickling cucumbers	1.2 to 1.5 m	20 cm
Muskmelons	1.5 to 1.8 m	90 cm
Watermelons	1.8 to 2.4 m	120 cm
Pumpkins	1.8 to 2.4 m	90 cm
Squash	1.8 to 2.4 m	90 cm

Fertilizer

A soil test is necessary to determine lime, phosphate and potash requirements. See Chapter 3 for recommendations based on soil test results.

The optimum pH range is 5.8–7.0.

Prior to planting, broadcast and disc in 70 kg/ha (28 kg/acre) nitrogen and all of the required potash and phosphate. Alternatively, all of the phosphate

and up to 100 kg/ha (40 kg/acre) in total of nitrogen plus potash may be banded at planting with the balance broadcast before planting.

Just before vines begin to spread, side-dress with 40 kg/ ha (16 kg/acre) of nitrogen or if mulching and trickle irrigation are used, nutrients should be delivered by fertigation. See “Fertigation”, Chapter 5.

Pollination

Vine crops bear both male and female flowers. Only the female flowers set fruit. Bees transfer pollen from male flowers to female flowers, making fruit set possible. In small plantings there are often enough native bees to ensure adequate pollination.

In larger plantings, it is often necessary to introduce one honey bee colony per hectare at bloom. See Bee Poisoning warning Chapter 6.

Weed Control

A black plastic or wavelength selective mulch provides excellent weed control and other benefits. See “Plastic Mulches”, Chapter 5.

Broadleaf weed control with herbicides is very difficult in vine crops. Growers should consider using the stale seedbed technique Chapter 5 to provide control of the first flush of weeds. The herbicides listed in Table 7.21 are also registered, but have a very limited broadleaf weed spectrum.