



ORGANIC WINTER SQUASH – GROWING AND SEED SAVING INFO

Cucurbita spp.

PLANTING INFO: Days to maturity are from direct seeding, subtract 2 weeks if transplanting. *Seed depth:* 1/2-1"; *Direct seeding:* 2-3 seeds/18-36", thin to one plant per spacing; *Plant spacing:* for bush varieties 18-24", for vining 24-36"; *Row spacing:* for bush, semi-bush and short vine types is 6', for vigorous vining types use 9'. Plants can also be planted in hills of 3-5 plants in rows 3-5' apart (bush types provide less weed suppression so are typically planted closer than vining types) for easier tractor cultivation.

CULTURAL INFO: Winter squashes are warm-season annuals requiring 90-120 frost free days to reach maturity. Due to their long growing season, winter squash is usually transplanted in northern climates, but can also be direct seeded once danger of frost has passed and soil temperatures reach 70°F. Start transplants indoors 3-4 weeks before last risk of frost. Optimal soil temperature for germination is 85-95°F. Black plastic mulch can be used to increase soil temperature for earlier planting. Harvest when fruits are full size and have a deep rich color and hard rinds that can't be easily dented with a finger nail. Winter squash fruits can withstand a few very light frosts in fall, but should be harvested before hard frost. Changing color of the "ground spot" from yellow to cream, gold or orange is another general indicator of ripeness. To harvest, cut stem at least 2" from the fruit: a short or broken stem can lead to rot. Cure after harvest by keeping in a warm, dry location for a few days then store at 50-55°F with 55-75% relative humidity and good air circulation. Delicata and acorn squash do not need curing, but will not store as long as other varieties.

DISEASE & PESTS: Along with all cucurbits, winter squashes are susceptible to powdery mildew, bacterial wilt, black rot, and striped cucumber beetles. See *Summer Squash*, *Pumpkin* and *Cucumber* sections for symptoms and controls of pests and diseases of the cucurbit family not detailed here. Squash bug (*Anasa tristis*) adults and nymphs feed on leaves, stems and fruit. Leaves will appear blackened and wilted. Squash bugs enjoy sheltered areas, so avoid mulch and uncomposted crop residue. Boards left overnight near infested areas will attract adult squash bugs that can be destroyed the following morning. The squash vine borer (*Melittia cucurbitae*) is a wasp-like moth that lays dull red eggs on squash vines. Larvae emerge and bore into the stem of the plant, which subsequently shows signs of wilting. Larvae overwinter in the soil at the site of the previous season's planting, so crop rotation, removal of crop debris, and use of floating row cover can be effective in preventing infestations.

SEED SPECS: *Acorn and Butternut*- 280-375 seeds/oz (312 avg), 4,500-6,000 seeds/lb (5,000 avg); *Buttercup and Spaghetti*- 135-200 seeds/oz (155 avg), 2,200-3,200 seeds/lb (2,500 avg); *Hubbard*- 90-125 seeds/oz (105 avg), 1,500-2,000 seeds/lb (1,700 avg); *Delicata/Dumpling*- 425-590 seeds/oz (470 avg), 6,800-9,500 (7,500 avg). M=1,000



SEEDING RATES: *Acorn and Butternut*- 7,500 seeds/acre (1.5 lbs.), using 2 seeds/30", 6' row spacing; *Buttercup and Spaghetti*- 7,500 seeds/acre (3 lbs.), using 2 seeds/30", 6' row spacing; *Hubbard*- 7,500 seeds/acre (4.4 lbs.), using 2 seeds/30", 6' row spacing; *Delicata/Dumpling*- 7,500 seeds/acre (1 lb.), using 2 seeds/30", 6' row spacing.

SEED SAVING INSTRUCTIONS: Insect pollinated. Take caution unless you are hand pollinating, as many winter squash varieties are the same species as many summer squash and pumpkins. Different varieties of the same species need to be isolated by 1/4 mile to prevent cross-pollination. Barriers such as tree lines, woods or buildings existing between the fields can reduce this distance. Treat winter squashes the same as usually done for winter storage. After all squashes have reached this stage, harvest and let them sit for a period of after-ripening for 3-6 weeks or up to several months. Remove the seeds, rinse in water and dry. Use of a 1/2" and 1/4" screen can help with cleaning. Squash seed remains viable for 6 years under cool and dry storage conditions.