

## Small-Scale Production of Sweet Potatoes

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Although the sweet potato is a subtropical plant, it can produce roots in Maritime soils.

In Nova Scotia, sandy and sandy loams in the Annapolis Valley are the most suitable for sweet potato production. Soils should be free of perennial weeds. Fields with a history of wireworm should be avoided.

Sweet potato is not a heavy feeder; however, soils should be limed and fertilized regularly. Triple 17 fertilizer can be applied before planting at the rate of 250 – 300 grams per 10 square meters (approximately 100 sq feet).

Do not over-fertilize as it may have a negative impact on yield and quality.

Sweet potato may be grown either on hills or beds. Rows need to be spaced 60 -90 cm apart with plants spaced 30-40 cm apart in the row. Black plastic mulch has shown to be beneficial in keeping soil moist, warm and weed-free.

Transplants (slips) should be planted in early June once the danger of frost has passed. Two-thirds of slips should be in the ground, one-third should be above soil level. Irrigation after transplanting helps slips to root. Hot and dry weather after transplanting will compromise plant survival and ultimately crop yielding potential.

Sweet potatoes are generally a drought tolerant crop; however, during prolonged periods of drought, irrigation is essential. If not irrigated, root development may be compromised and, on some varieties, lack of moisture may cause roots to crack.

In order to avoid chilling injury, sweet potatoes must be harvested before the first killing frost occurs. Extra care is needed during the harvests as roots are susceptible to mechanical injury. For fresh market, roots are hand harvested, cured and stored. In Nova Scotia, harvest starts in the middle of September and continues through October.

Curing is the process during which the sweetness in the sweet potato roots is being developed. Starches accumulated in the roots during the growing season will, in a high heat and high humidity environment, turn into sugars. The curing process lasts 5-10 days and the temperature is maintained at 25-28C with a relative humidity of 85-95 per cent. After curing, sweet potatoes can be stored for several months at 12-14C.

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