

Sweet Potato

Varieties	
Beauregard	Early, light red skin, orange flesh, increasingly popular
Centennial	Soft-fleshed type, orange skin
Covington	Orange-fleshed, smooth-skinned, rose-colored, 5-10 days later than Beauregard. Resistant to Fusarium wilt, southern root-knot nematode, and moderately resistant to streptomyces soil rot.
Hernandez	Copper skin, deep orange flesh
Julian	Deep orange, good quality (same as Centennial)
Nugget	Firm-fleshed type, orange skin, orange flesh, good quality, excellent keeper
For Trial	
Carolina Ruby	Dark red skin, orange flesh

Plant Production

Select seed stock from high-yielding hills that are smooth, well-shaped, and free of diseases (scurf, internal cork, wilt, black rot) and insect injury. Where internal cork is present, obtain seed stock from suppliers who have cork-free stock. Store seed stock in new crates to avoid disease contamination. Seed potatoes should be at least 1.5 inches in diameter. One bushel of small- to medium-sized roots should produce 2,000 to 2,500 plants (slips) from three pullings.

Treating seed before planting with Mertect 340-F® will protect roots from infection by certain disease-causing organisms. Bed the seed stock in new, clean sand taken from upland banks or pits. Allow 10 to 12 square feet of bed area per bushel of seed. Maintain plant bed temperature at 75°F to 85°F.

Planting and Spacing

Transplanting machines are available for mechanically planting sweet potato slips. Common spacing is 1 foot apart in the row, with rows 3 to 4 feet apart, depending upon the cultivating and harvesting equipment used. 14,520 slips per acre are required at the 1 foot by 3 feet spacing, while 10,890 are needed at the 1 foot by 4 feet spacing. Transplant only strong, stocky slips. Yields can be increased up to 100 bushels per acre by using strong transplants.

Fertilizing

Lime: None usually necessary. Soil pH of 5.0 to 6.0 is satisfactory.

Preplant: N: 30 pounds per acre. P₂O₅: 0 to 75 pounds per acre. K₂O: 0 to 250 pounds per acre. Adjust according to soil type, previous management, and soil test results for your state. Set the slips with a starter solution at the rate of 1 cup (8 ounces) per plant.

Sidedress N: None usually necessary on finer textured soils. On irrigated sands, sidedress with 30 to 50 pounds N per acre approximately 3 to 4 weeks after transplanting.

Harvesting

Remove vines by cutting with a rotary mower. Dig only those potatoes that can be picked up immediately and not left out overnight. Temperatures below 50°F can chill potatoes and cause internal breakdown in storage. Potatoes will sunburn if left in direct sunlight for more than an hour. Field grading is important.

Prevent skinning and breaking. Use cotton gloves when placing potatoes in crates. Place well-shaped No. 1's with No. 2's, and cuts with culls.

Storing

When the storage house is filled, raise the temperature to 85°F. Keep it at this temperature for 6 to 8 days, with 85 percent to 90 percent humidity for proper curing. After curing, the temperature may be gradually dropped to 55°F. Hold this temperature until potatoes are marketed or used for producing slips.

Disease Control

Diseases Controlled	Treatment	Comments
Black Rot, Foot Rot, Fusarium Wilt, and Scurf	Plant disease-free seed and/or resistant varieties.	
	Follow 3-4 year crop rotations. Prevent bruising and maintain proper storage temperatures.	
	Botran 75W® at 1 lb. per 100 gal. of water, or Botran 5F® at 3/5 qt. per 7.5 gal. of water. Scurf only.	Dip seed sweet potatoes for 10-15 seconds in well-agitated suspension. Drain and plant promptly.
	Dip roots or sprouts in Mertect 340F® at 8 fl. oz. per 7.5 gal. water. Not for Fusarium wilt.	Dip roots and sprouts in Mertect® solution for 2 minutes, and plant immediately. Do not use treated roots for food or feed.
Storage Rots	Fumigate storage boxes.	Cure and store only healthy, blemish-free tubers.

Weed Control

Weeds Controlled ¹	Treatment ²	Comments
Annuals and Perennials (emerged) — crop not present or protected from spray RR	Glyphosate products at 0.75-3.75 lbs. acid equivalent (ae) per acre. Use formulations of 3 lbs. ae/gal. (4 lbs. isopropylamine salt/gal.) at 1-5 qts. per acre, or formulations containing 4.5 lbs. ae/gal. (5 lbs. potassium salt/gal.) at 0.66-3.3 qts. per acre.	Broadcast before planting, or apply between crop rows with wipers or hooded or shielded sprayers. Use low rate for annuals and higher rates for perennials. See label for suggested application volume and adjuvants. 14-day PHI.
Broadleaves and Grasses (not emerged)	Command 3ME® at 1.3-4 pts. per acre.	Use low rate on coarse soils. Apply before planting, or apply up to 1.5 pts. per acre after transplanting and before weeds emerge. 95-day PHI for rates up to 3.3 pts. per acre. 125-day PHI for rates more than 3.3 pts. per acre.
Broadleaves (not emerged)	Valor SX® at 2 oz. per acre.	Apply 2-5 days before transplanting. Do not use on greenhouse grown transplants, or on transplants harvested more than 2 days before transplanting. Do not use on varieties other than 'Beauregard' unless you have tested for phytotoxicity under your conditions. Do not exceed 2.5 oz. per acre per growing season.
Grasses (not emerged)	Dacthal W-75® at 6-14 lbs. per acre, or Dacthal Flowable® at 6-14 pts. per acre.	Apply at transplanting or layby. May be applied over the top of transplants.
Broadleaves (emerged)	Aim EC® at 0.5-2 fl. oz. per acre.	Apply with hooded sprayers as a directed application between crop rows. Use COC or nonionic surfactant. Weeds must be actively growing and less than 4 inches tall. Do not allow spray to contact crop. Do not exceed 6.1 fl. oz. per acre per season.
Grasses (emerged)	Fusilade DX 2E® at 10-12 fl. oz. per acre.	Use 1-2 pts. of COC or 0.5-1 pt. of nonionic surfactant per 25 gallons of spray solution. Apply to actively growing grass. Do not exceed 48 fl. oz. per acre per season. 55-day PHI.
	Poast 1.5E® at 1-1.5 pts. per acre	Use 1 qt. of COC per acre. Spray on actively growing grass. Do not exceed 5 pts. per acre per year. 30-day PHI.
	Select Max® at 12-32 fl. oz. per acre, or Select 2EC® at 6-16 fl. oz. per acre.	Use 1 qt. of COC per 25 gallons of spray solution (1% v/v). Spray on actively growing grass. Wait at least 14 days between applications. Do not exceed 64 fl. oz. of Select Max®, or 32 fl. oz. of Select 2EC® per acre per season. 30-day PHI.

¹For specific weeds controlled by each herbicide, check Table 21 on page 39.

²Rates given are for overall coverage. For band treatment, reduce amounts according to the portion of acre treated.

RR This is a reduced-risk pesticide. See pages 23-24 for details.

Insect Control

Insects Controlled	Treatment	Comments
Aphids	RR Actara® at 3 oz. per acre.	Do not exceed 6 oz. per acre per season. 14-day PHI.
	Admire PRO® at 4.4-10.5 fl. oz. per acre.	Do not exceed 0.38 lb. a.i. or 1 application per acre per season. 125-day PHI.
	RR Assail 30SG® at 1.0-1.7 oz. per acre.	7 day PHI.
	RR Fulfill® at 2.75-5.50 oz. per acre.	14-day PHI.
	RR Movento® at 4-5 fl. oz. per acre.	7-day PHI.
	RR Platinum® at 5-8 fl. oz. per acre.	Apply at planting.
Colorado Potato Beetles	RR Actara® at 1.5-3 oz. per acre.	Do not exceed 6 oz. per acre per season. 14-day PHI.
	RR Assail 30SG® at 0.6-1.7 oz. per acre.	7-day PHI.
	Baythroid® at 1.6-2.8 fl. oz. per acre.	Do not exceed 16.8 fl. oz. per acre per season. 0-day PHI. RUP.
	RR Radiant SC® at 4.5-8 fl. oz. per acre.	Do not exceed 32 fl. oz. per acre per season. 7-day PHI.
	Rimon 0.83EC® at 9-12 fl. oz. per acre.	Do not exceed 24 fl. oz. or 2 applications per acre per season.
	Warrior II® at 1.28-1.92 fl. oz. per acre.	Do not exceed 7.68 fl. oz. per acre per season. 7-day PHI. RUP.
Potato Leafhoppers	RR Actara® at 1.5-3 oz. per acre.	Do not exceed 6 oz. per acre per season. Control may require 2 applications at a 7-10 day interval. 14-day PHI.
	Admire PRO® at 4.4-10.5 fl. oz. per acre.	Do not exceed 0.38 lb. a.i. or 1 application per acre per season. 125-day PHI.
	RR Assail 30SG® at 0.6-1.7 oz. per acre.	7-day PHI.
	Baythroid® at 0.8-1.6 fl. oz. per acre.	Do not exceed 16.8 fl oz. per acre per season. 0-day PHI. RUP.
	Mustang MAX® at 1.76-4 fl. oz. per acre.	1-day PHI.
	RR Platinum® at 5-8 fl. oz. per acre.	Apply at planting.
	Warrior II® at 1.28-1.92 fl. oz. per acre.	Do not exceed 7.68 fl. oz. per acre per season. 7-day PHI. RUP.
Wireworms, Flea Beetle Larvae	Baythroid® at 1.6-2.8 fl. oz. per acre. Flea beetles only.	Do not exceed 16.8 fl. oz. per acre per season. 0-day PHI. RUP.
	Brigade 2EC® at 9.0-19.2 fl. oz. per acre at planting.	21-day PHI.
	Lorsban 15G® at 13.5 lbs. per acre.	Evenly distribute granules over treated area. After application incorporate to a depth of 4-6 inches by rotary hoe or disc cultivator. Do not exceed 1 application per season. 125-day PHI.
	Lorsban 4E® at 4 pts. per acre, or Lorsban 75WG® at 2.67 lbs. per acre.	Apply to soil surface as a preplant broadcast spray. Incorporate immediately after application to a depth of 4-6 inches. Plant sweet potatoes no more than 14 days after treatment. Do not exceed 1 application per season. 125-day PHI.
	RR Platinum® at 5-8 fl. oz. per acre. Seed treatment only.	Apply at planting.

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