

# Sweet Potato

## All Weeds

The critical period for weed control in sweet potato is between 2-6 weeks after transplanting. Maintaining the crop weed-free during this period of time allows the vines to close canopy and compete better with weeds later in the season.

Herbicide choices are limited, especially for postemergence control of broadleaf weeds. For this reason, it is important to include pre-emergence herbicides and mechanical control in the weed management plan.

For specific weeds controlled by each herbicide, check the Relative Effectiveness of Herbicides for Vegetable Crops table.

Rates provided in the recommendations below are given for overall coverage. For a banded treatment, reduce amounts according to the portion of acre treated.

## Non-Pesticide

### Non-Pesticide Options

A stale seedbed can be prepared prior to transplanting with flame weeding or very shallow cultivation to control emerged weeds, instead of herbicides.

The more quickly vines cover the soil surface, the better they will suppress late-emerging weeds. In-row plant spacing can be decreased to close canopy more quickly. However, this practice can delay storage root bulking later in the growing season.

Sweet potatoes can benefit from the soil warming properties of plastic mulch in addition to the in-row weed control it provides. Materials include landscape cloth/fabric, plastic, and biodegradable plastic. Straw mulch can delay growth by suppressing soil temperatures.



Weeds between rows and along the edges of beds can be controlled with a combination of cultivation, mowing, or hand-hoeing/pulling. Weeds along the edge of the mulches can be a particular challenge to avoid ripping the mulch. Some fresh market plantings are often small enough to accommodate some hand hoeing or pulling. For larger plantings it may make more sense to mechanically cultivate with tow-able tools between plastic rows or between bare-soil rows. In bare-soil production, rolling cultivators on wide tool-bars offer effective high-speed cultivation between rows and can also hill before row closure from vines.

## Pesticide

**Aim EC | carfentrazone** |   0.5-2 fl. oz. per acre.

Apply as a burndown application prior to transplanting or apply with a hooded sprayer as a directed application between crop rows. Add COC (1% v/v) or NIS (0.25% v/v). Weeds must be actively growing and less than 4 in. tall. Do not allow spray to contact crop. Do not exceed 11.6 fl. oz. per acre per season.

REI: 12-hour. PHI: 7-day. HRAC 14 .

**Chateau SW | flumioxazin** |   2-3 oz. per acre of SW formulations, or 2-3 fl. oz. per acre of EZ formulations.

Apply to prepared planting beds prior to 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. Provides suppression of many grass weeds.

REI: 12-hour. HRAC 14 .

**clethodim products | clethodim** |  

Use 2EC formulations at 6-16 fl. oz. per acre with COC (1% v/v). Do not exceed 32 fl. oz. per acre per season.

Use Select Max at 9-32 fl. oz. per acre with COC (1% v/v) or NIS (0.25% v/v). Do not exceed 64 fl. oz. per acre per season.




Use low rates for annual grasses and high rates for perennial grasses. Spray on actively growing grass. Wait at least 14 days between applications.

REI: 24-hour. PHI: 30-day. HRAC 01 .

**Command 3ME | clomazone** |    1.4-4.0 pt. per acre.

Use a lower rate on coarse textured soils. Apply in a single application immediately after transplanting and before weeds emerge. When used alone, may not adequately control pigweed species and does not control carpetweed.

REI: 12-hour. PHI: 95-day for rates up to 33 pt per acre, 125-day for rates over 33 pt per acre. HRAC 13 .

**Devrinol DF-XT | napropamide** |    2-4 lbs. per acre.

Apply immediately after transplanting. If rain does not occur within 24 hours, incorporate shallowly or irrigate with 0.5 inch of water.

REI: 24-hour. HRAC NC .

**Dual Magnum | s-metolachlor** |    1.0-1.3 pts. per acre.




*Special 24c label only.* Apply after transplanting but before weeds emerge. Do not incorporate into soil. Close transplant trenches before application. Dual Magnum applied shortly after transplanting and followed by moderate to heavy rainfall or irrigation can result in reduced yields and misshapen storage roots. Crop safety is improved by 10-14 days after transplanting when Dual Magnum can be used as a layby application prior to canopy closure.

REI: 24-hour. PHI: 60-day. HRAC 15 .

**Fusilade DX | fluazifop-P** |   10-12 fl. oz. per acre.

Add COC (1% v/v) or NIS (0.25% v/v). Apply to actively growing grass. Do not exceed 4 applications or 48 fl. oz. per acre per season.

REI: 12-hour. PHI: 14-day. HRAC 01 .

**glyphosate products | glyphosate** |    0.375-3.75 lbs. acid equivalent (ae) per acre.

Divide lb. acid equivalent (ae) per acre target rate by lb. ae per gal and then multiply by 4. For example, for RoundUp ULTRA at the high rate, (3.75 lb ae per acre / 3 lb ae per gal) \* 4 = 5 qt. per acre of actual product. 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.

REI: 4-hour to 12-hour. PHI: 14-day for foliar applications directed between rows, 7-day for wiper applications. HRAC 9 .

**Optogen | bicyclopyrone** |     2.6-3.5 fl. oz. per acre.

Apply to prepared planting beds prior to transplanting or apply to row middles after transplanting. When applied to row middles, use a hooded or shielded sprayer to minimize crop injury. When weeds are present, add COC (1% v/v) or NIS (0.25% v/v). Use 3.5 fl. oz. per acre on medium and fine-textured soil and 2.6 fl. oz. per acre on coarse-textured soil.

Do not make more than 1 application per crop per year. Do not apply more than 3.5 fl. oz. per acre per year. Do not apply to sweet potatoes grown on sand or loamy sand with <1% organic matter. Do not apply to greenhouse-grown transplants.

REI: 24-hour. PHI: 60-day. HRAC 27 .

**paraquat products | paraquat** |    1-2 pt. of 2 lb. per gal. formulation.

Use 1-2 pt. per acre of 2SL formulation or 0.7-1.3 pt. per acre of 3SL formulation. Add COC (1% v/v) or NIS (0.25% v/v) and apply to emerged weeds less than 6" tall prior to transplanting. Certified applicators must successfully complete an EPA-approved training program before mixing, loading, and/or applying paraquat.

REI: 12 to 24-hour. HRAC 22 . RUP.

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