

Cucurbit Weed Update

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As many of you know, we don't have a whole lot of post-emergent herbicides at our disposal for cucurbits, and those that we do have are more grass herbicides than broadleaf materials. However, halosulfuron (Sanda or Profine), which is also one of our main broadleaf pre-emergent, is labeled and can be quite effective if used properly. If you used either Sandea or Profine pre-emergent even with another pre-emergent, we again would expect to see a few weeds such as Common Lambquarters and Ragweed start to breakthrough our pre-emergent herbicide barrier. Effective as this material may be, it has a fairly short residual of about 4 weeks, especially when used at the recommended rate (0.5 ounces per acre) for pumpkins and squash. So what to do if broadleaves are your main concern: first, if you used Sandea or Profine post plant/pre-emergent at 0.5 oz. per acre, you can still come back in with another 0.5 oz per acre as a post emergent application. Even if you didn't use any Sandea pre, do not use more than 0.5 ozs per acre as this will increase the level of injury. This is very effective on young, small actively growing weeds like velvetleaf, yellow nutsedge and ragweed, but not effective on already growing lambsquarter. If lambsquarters is not a problem and the other weeds such as ragweed and pigweed are, you can broadcast right over the top of the plants and weeds as long as your pumpkins/squash have a minimum of 2—5 true leaves and there cannot be any female flowers visible. If there is a lot of lambsquarter visible, you may want to consider cultivating first followed by a post emergent application of Sandea/Profine. You will also need to add a non-ionic surfactant (NIS) to the tank at a rate of 1 to 2 quarts per 100 gallons of spray solution. I will also forewarn you now; do not be surprised if after the application you notice the growing points on your pumpkins and squash turning slightly yellow and not really growing to fast—this is somewhat typical of post emergent halosulfuron applications and plants normally grow out of it within 3-5 days.

For post-emergent grass control we have several materials which include Poast 1.5EC (sethoxdim) and Select Max or Section 2 EC (Table 1). Select Max and Section contain the same active ingredient, clethodim, but are used at different rates. Which one you choose will depend on what grasses you have. If perennial grass like quackgrass is your main problem then I would recommend using Select Max or Section (they also work very well on annual grasses). If your grass species are mostly annual, you can use Poast. Any of these herbicides need to be applied to actively growing grasses – grasses that are under drought or heat stress will result in reduced control. I find that applying these materials a couple days after a rain really improves control. And last but not least, don't expect to see results in two or three days! These grass herbicides take 7—10 days for you to really notice anything dying back. Do not apply to recently cultivated grasses or cultivate a minimum of 10 days after an application. And, the smaller the grass, the better control you will achieve.

Table 1: Grass herbicides labeled for use in cucurbits.				
Product	Labeled crops	Weeds controlled	Rate	Comments
Select Max	All cucurbits	Annual grass Perennial grasses	9-16 ounces per acre 12-16 ounces per acre	Adjuvants: Non-ionic Surfactant (NIS) at 0.25% v/v in the finished spray volume (2 pints per 100 gallons of water). Do not apply more than 16 fluid ounces per application. Do not apply more than 64 fluid ounces per year. Use a minimum of 10 gallons of water per acre with a maximum of 40 gallons per acre. Minimum spray pressure of 30 PSI with a maximum of 60 PSI. Do not use flood nozzels. Do not tank mix with broadleaf herbicides or apply a post-emergence broadleaf herbicide within one day following application of or reduced grass control may result.
Section 2EC	All cucurbits	Annual grass Perennial grass	6 ounces per acre 8 ounces per acre	Adjuvants: Crop oil concentrate (COC) at 1% v/v in the finished spray volume (1 gallon per 100 gallons of water). Use a minimum of 10 gallons of water per acre with a maximum of 40 gallons per acre. Minimum spray pressure of 30 PSI with a maximum of 60 PSI. Do not use flood nozzles. Do not use more than 8 fluid ounces per application to cucurbits. Do not apply more than 32 fluid ounces per acre per year. Do not tank mix with broadleaf herbicides or apply a post-emergence broadleaf herbicide within one day following application of or reduced grass control may result.
Poast 1.5EC	All cucurbits	Annual grasses perennial grass suppression	1.5 pints per acre	Adjuvants: Crop oil Concentrate (COC) at 2 pints per acre. Use a minimum of 10 gallons of water per acre with a maximum of 20 gallons per acre. Minimum spray pressure of 40 PSI with a maximum of 60 PSI. Do not use flood nozzles. Do not use more than 3.0 pints per acre per season. Although the label does not specify, I would not tank mix with broadleaf herbicides due to increase injury potential or apply a post-emergence broadleaf herbicide within one day following application of or reduced grass control may result.