

Pumpkin Weed Management

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Introduction

The 2008-2009 version of the New England Vegetable Management Guide is available and all vegetable growers should have a copy of this publication. There are no new label changes in cucurbits since the last issue. A brief summary of the “newer” registered herbicides is provided below. All of the information that will be presented in this talk can be found in the Vegetable Management Guide. I expect that copies will be available for sale at the Conference and copies are available from all 6 New England Extension services. Members of the New England Vegetable & berry Growers will receive this publication as part of their membership.

Some of the “newer” label changes from the past few years:

Pumpkin, squash, and gourds (preplant incorporated/preemergence)

clomazone (Command 3ME): 10 to 32 oz/A (REI 12h, Group 13). Do not exceed 20 ounces in summer squash. NOT LABELED FOR USE IN PUMPKINS. Apply after seeding or prior to transplanting. May also be applied to the soil surface between rows of plastic mulch. Will control many broadleaf weeds including common lambsquarters, velvetleaf, and jimsonweed. Combining with Curbit will also control pigweed species. Some temporary crop injury (partial whitening of leaf or stem tissue) may be visible after crop emergence or after transplanting. Complete recovery will occur from minor early injury without affecting yield or earliness. See label for replanting restrictions. Basically, Command ME has replaced Command EC. The ME stands for microencapsulation. What this means is that Command is in a sort of time release capsule. The advantage is that the ME formulation can be surface applied, does not need to be incorporated, and does not have the same volatility issues as the EC formulation. Unfortunately, it still can only be applied by special permit in NH and it is no longer registered for use in pumpkins.

Strategy (ethalfluralin + clomazone): Strategy is a premix of Curbit (ethalfluralin) and Command ME (clomazone). It is intended for preemergence control of annual grasses and many broadleaf weeds in cucumber, melon, pumpkin, summer squash, winter squash, and watermelon. Broadleaf weeds controlled include, common lambsquarters, pigweed, common purslane, velvetleaf, common ragweed, and Pennsylvania smartweed. This product may be applied to the soil surface after direct seeding on bare ground. It may also be banded between plastic for both direct-seeded and transplanted crops. The formulation of Command contained in this product is the ME (microencapsulated) formulation which does not need to be incorporated. There are many precautions on the label including some replant precautions. For squash and pumpkin, this product will be the treatment of choice since it controls so many weed species. In cucumber and melon, however, Curbit tank-mixed with Alanap (naptalam) may still be a good option since most of the same weeds are controlled but the carryover concerns with clomazone are not present.

Sandea 75WSG (halosulfuron): The new label covers cucurbits, tomatoes, fruiting vegetables, asparagus, dry beans, and snap & lima beans. Sandea provides preemergence and postemergence control of many weeds. Most weeds are controlled by either a preemergence or postemergence application; however, common lambsquarters is controlled best by a preemergence application while yellow nutsedge is controlled best by a postemergence application. Postemergence applications require the use of a non-ionic surfactant at a rate of 1 quart per 100 gallons spray mix. Heavy rains following preemergence applications can lead to severe crop injury. There is the potential for crop stunting and a slight maturity delay with the use of Sandea over the top of the crop. Growers should limit their use of Sandea initially to gain experience. Use the correct amount of product per acre. The most common use rate will be ½ ounce per acre. If the directions are not followed, the potential for severe crop injury does exist. A brief summary of use directions follows and can be found in the New England Vegetable Management Guide. Consult the label for complete directions. Consider using Sandea only if current management strategies are not working or as a supplement to existing management strategies to control certain problem weeds. This herbicide may carryover to the following year and can cause severe injury in crucifers, greens, spinach, beets, carrots, onions, and other crops. See the label for details.

Pumpkins and Winter Squash: Apply postemergence when the seeded crop has 2 to 5 true leaves. Crop injury and some delay may result. Can also be used preemergence after seeding; however excess rainfall or irrigation may cause unacceptable crop stunting. Can also be used between plastic mulch with direct-seeded or transplanted winter squash and pumpkins. Perhaps the best fit for this product in winter squash and pumpkins is for postemergence control after preemergence use of another product (Curbit, Strategy, Prefar, or Command). Sandea will provide postemergence control of yellow nutsedge, redroot pigweed, velvetleaf, common ragweed, and many other broadleaf weeds

No-till Pumpkin Production

Many growers have tried growing pumpkins with no tillage. This generally requires the use of the cover crops that must be killed, use of a preemergence herbicide, and potential use of a postemergence herbicide. Both the Strategy and Sandea registrations have made no-tillage more successful in recent years since cultivation is not an option. Overall, current herbicide options for no-till are the same as for bare ground systems.