

# UGA Weed Control Programs for Sweet Potato in 2019

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Crop rotation, tillage, and a sound herbicide program are all critical components for long-term success. This circular focuses on developing sound herbicide programs while minimizing crop injury for transplant sweet potato production systems. A new indemnified 3<sup>rd</sup> party label for Dual Magnum has greatly improved weed control options; growers must have these labels in hand at time of application. It is hopeful that Reflex will also obtain an indemnified 3<sup>rd</sup> party label for sweet potato in 2019, contact your local Extension agent for the latest details. It is critical for growers to understand that their specific production practices may alter weed and crop responses; thus, *growers must evaluate these programs on limited acres until gaining experience.*



## Step 1.

Fields must be free of weeds when planting. **Tillage, Roundup, and Gramoxone** are all effective tools. For fields with a flush of difficult to control weeds prior to planting, apply Roundup (max rate for nutsedge) and then follow with Gramoxone 5-7 days after the Roundup and at least one day prior to planting.

## Step 2.

**Valor SX 51 WDG** (up to 2.5 oz/A) would improve weed control in nearly every Georgia field. It should be applied 2 to 5 days prior to transplanting to the pre-formed row. **DO NOT** incorporate and minimize movement of soil during transplanting. **DO NOT** apply after transplanting. Label notes to not use greenhouse grown transplants and to test small area for new cultivars.

## Step 3.

**Command 3 ME** (up to 1.5 pt/A) should be applied POST-transplant within 5 days of transplanting for preemergence control of annual grasses and a few broadleaf weeds. Roots must be below surface where spray will occur. Great crop tolerance should be observed; however, one must review the label regarding buffers and rotational restrictions with Command.

## Step 4.

**Dual Magnum** can be used POST as long as the applicator obtains the indemnified 3<sup>rd</sup> party label prior to application (see back on steps to obtain label). Research has shown stunting from Dual Magnum if applied too closely to planting; thus experimenting with applications 2 to 3 weeks after transplanting is suggested. Rates should range from 8-12 oz/A. Sequential applications can be made as long as the total use rate does not exceed 1.33 pt/A and applications are not made within 40 days of harvest.

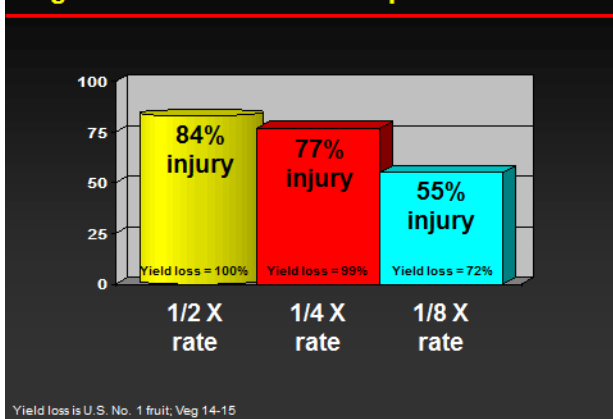
## Step 5.

**Select or Poast** can be applied to control small annual grasses up until 30 days of harvest.

## Critical Thinking Points!

1. Avoid fields infested with heavy nutsedge populations as no effective herbicide is available to control the weed in-crop. Thus, plowing is the only option after planting. Prior to planting, Roundup followed by Gramoxone preplant and/or tillage are the best options.
2. Devrinol is labeled for sweet potato production fields and is effective on a few small seeded broadleaf and grass weeds. Research has not noted a benefit when adding Devrinol to the program above.
3. Command poses serious carryover risks and has buffers, check labels closely before use.
4. Be aware of potential carryover from previously used herbicides, especially Cadre (Figure 1).
5. **DO NOT APPLY DUAL MAGNUM BEFORE PLANTING OR AT PLANTING.**
6. Plowing can be very effective but if one does plow make sure to follow with a residual herbicide.
7. Use conservative herbicide rates on sandy soils with low organic matter and/or with intense irrigation.
8. Successful weed management depends on residual herbicides that are ideally activated by rainfall or irrigation within two days of application.
9. Always follow herbicide label restrictions; read labels for potential injury or carryover concerns.

**Figure 1. Sweet Potato Response To Cadre**



**Figure 2. Dual Magnum Indemnified Labels**

1. <https://www.syngenta-us.com/labels/indemnified-label-login>
2. Login (user name, password)
3. Select state
4. Select product (Dual Mag)
5. Select crop of interest
6. Waiver of liability (must approve to get label)
7. Print label



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