Weed Control in Cucurbit Crops

Dr. Peter J. Dittmar

Sandea in cucurbit crops
Sandea use in watermelon

- Bareground, direct seeded
  - ½ to ¾ oz.
  - After planting prior to emergence
- Bareground, transplanted
  - Plant no sooner than 7 days after application
- Plasticulture, direct seeded or transplanted
  - Under the plastic, 7 days prior to planting
- Row middles
  - ½ to 1 oz./A

Sandea in cantaloupe and cucumber

- Bareground, Seeded
  - PRE, after planting before soil cracking
  - POST, after 3 to 5 leaf stage before female flowers
- Bareground, Transplanted
  - PRE, plant no sooner than 7 days after application
  - POST, same stage of growth as above
- Plasticulture, Seeded and transplanted
  - PRE, plant no sooner than 7 days after application
  - Post, same stage of growth, but more injury may occur because of run-off
Sandea use in watermelon

• Two problems that occur most often
  – Application after vines have started to grow into row middles
  – Incorrect calculations

Spray treatments
Effect of Sandea placement in watermelon injury.

Stem splitting

Nontreated  Sprayed
Shortened internodes

Effect of Sandea placement in watermelon.

![Nontreated vs Sprayed](image)

![Bar chart showing yield](chart)

Yield (lb/A)

- Over the top
- 25% crown
- 25% tip
- Nontreated
Calculating herbicides

Proper calculations for bed top application

• 10 Acre field, 8 ft. between row spacing and 3 ft. bed top
  – Bed top divided by row spacing
    • 3 ft. top / 8 ft. spacing = 37.5%
  – Percent of field sprayed x total number of acres
    • 37.5% of 10 acres = 3.75 acres
  – Acres treated x Herbicide rate
    • 3.75 A x 0.5 oz. = 1.9 oz. of Sandea

• Another method:
Proper calculations for bed top application

• 10 Acre field, 8 ft. between row spacing and 3 ft. bed top
  − Bed top x linear row ft.
    • 3 ft. bed top x 55,000 linear ft. = 16,500 ft² (3.79 A)
  − Treated acres x Herbicide Rate
    • 3.79 A x 0.5 oz. = 1.9 oz. of Sandea

Proper calculation

• Another method
  − Gallons of water x Application Rate
    • 50 gal. water x 20 gal./A = 2.5 A
  − Number of acres sprayed x Herbicide Rate
    • 2.5 A x 0.5 oz./A = 1.25 oz. of Sandea
Rye in the row middles

Rye planted in the row middles
Paraquat injury follow rye burndown

Burndown strips
Weed control in rye

• Sandea, 0.5 oz./A  
  – Over the top of the rye
• Aim, up to 2 fl. oz./A  
  – Provides broadleaf weed control may burn the tips of the rye  
  – This active ingredient is registered for use in turf
• Prowl H2O, 2.1 pt./A  
  – After rye emergence  
  – Possible off label application

Reflex and Dual Magnum in the row middles
Reflex and Dual Magnum in Watermelon

• Indemnified label through Syngenta’s Farm Assist website
• Labeled use will be the same as Georgia

Questions.

Dr. Peter Dittmar
pdittmar@ufl.edu
352-273-4771