

Weed Management for Dummies

(Debbie's Title, Not Mine)



W.E. Mitchem

Extension Associate

N.C. State, Univ. of GA, and Clemson Univ., Cooperatively

Dept. of Horticultural Science

N.C. State University

The Choice

- Conventional or Organic?
- Conventional
 - All EFFECTIVE pest control options are on the table!
 - This includes organic....if effective
 - Herbicides will be used



“Herbicide use, according to label directions, is the most effective, efficient, and economical means of controlling weeds in crops that is sustainable, safe to the applicator, the crop, and the environment.”

Site Prep and Preplant Weed Control

- Site Prep
 - Starts summer prior to planting
 - Try to eliminate perennial weeds
 - Yellow or purple nutsedge
 - Bermudagrass
 - Johnsongrass
 - Horsenettle
 - Dandelion
 - Plantain
 - Blackberry
 - Lay off rows
 - 5 to 6 wide weed-free strip
 - Establish ground cover
- At planting
 - 5 to 6 ft wide weed-free strip
 - Must be weed-free
 - Bare Ground
 - Tillage
 - Tillage followed by herbicides
 - Plastic Mulch



Weed Control in Newly Planted

- Bare Ground
 - Cultivate (small) – plants get 5 to 6" of new growth
 - Protect with wax coated carton
 - Herbicides
- Plastic Mulch
 - Control weeds around hole
 - Control weeds on each side of the bed
 - Herbicides options?????
 - Tears over time
 - Eventually has to be removed



Herbicide Program for Newly Planted

- Pre-plant bare ground
 - Tillage
 - Tillage fb non-selective POST herbicide
 - Glyphosate
 - Paraquat
- After transplanting
 - Cultivation (Until 4 to 6" new growth)
 - Cover with milk cartons
 - Oryzalin (IUCF) + Simazine (1/2 rate) – right after Cult.
- POST options (as needed)
 - Paraquat + NIS
 - Non-selective herbicide
 - Clethodim + COC
 - Grass weeds





Protecting Newly Planted Blackberry

- Use wax coated beverage cartons
 - Place over plant after transplanting
 - Use short stake beside plant to hold carton in place
 - Cut bamboo
- Herbicides must be directed
 - Injury can still occur
 - Spraying when windy
 - Incorrect nozzle height
 - Using high pressure



Four Herbicide Programs to Consider in Established Caneberry Plantings

- Program #1
 - Fall – Chateau or Simazine + Paraquat
 - Winter – Sinbar + Solida + Paraquat
 - Late Spring – Zeus Prime + Oryzalin + Paraquat
- Program #2
 - Fall – Chateau + Paraquat
 - Winter – Alion + Solida + Paraquat
 - Late Spring – Simazine + Oryzalin + Paraquat
- Program #3
 - Fall - Chateau or Simazine + Paraquat
 - Winter – Zeus Prime + Solida + Paraquat
 - Late Spring – Zeus Prime + Oryzalin + Paraquat
- Program #4
 - Fall – Simazine or Chateau + Paraquat
 - Winter – Solida + Oryzalin + Paraquat
 - Late Spring – Solida + Oryzalin + Paraquat



Always use NIS with Paraquat

But without Oryzalin

- Program #1
 - Fall – Zeus Prime or Alion + Paraquat
 - Winter – Sinbar + Rimsulfuron + Paraquat
 - Late Spring – Chateau + Paraquat
- Program #2
 - Fall – Zeus Prime or Simazine + Paraquat
 - Winter – Alion + Rimsulfuron + Paraquat
 - Late Spring – Chateau or Sinbar + Paraquat
- Program #3
 - Fall - Alion or Simazine or Zeus Prime + Paraquat
 - Winter – Callisto + Rimsulfuron + Paraquat
 - Late Spring – Chateau + Rimsulfuron + Paraquat



Always use NIS with Paraquat

Fall (Post Harvest)

- Late August thru October
 - Simazine @ 2 to 3 qt + Paraquat + NIS
 - Zeus Prime @ 10 to 12 fl. oz + Paraquat + NIS
 - Alion @ 3.5 to 5 fl. oz + Rim @ 4 oz + Paraquat + NIS
- Cleanup after primocane removal



February/Early March is Time to Start!

- Late Feb/Early March
 - Callisto 3 to 6 fl oz + Rim @ 4 oz + Paraquat + NIS
 - Sinbar @ 0.25 to 0.75 lb + Rim @ 4 oz + Paraquat + NIS
 - Alion 3.5 to 5 fl. oz + Rim @ 4 oz + Paraquat + NIS
- **This application is critical to getting started right!**
 - Horseweed
 - Prickly lettuce
 - Henbit



Near Primocane Emergence

- Late April/Early May
 - Chateau @ 6 oz + Rimsulfuron + Paraquat + NIS
 - Zeus Prime @ 10 to 12 fl. oz + Oryzalin @ 3 qt + Paraquat + NIS
 - Simazine @ 2 to 3 qt + Oryzalin @ 3 qt + Paraquat + NIS
 - Sinbar @ 1 to 1.5 lb + Rim @ 4 oz + Paraquat + NIS
- Control perennial grasses
 - Fusilade + COC
 - 12 to 24 fl. oz
 - 1 day PHI

Sinbar®
Agricultural Herbicide

 **Fusilade®DX**

 **ZEUS
PRIME** XC
HERBICIDE

Matrix® SG
HERBICIDE

CHATEAU
HERBICIDE

Take Control. Keep Control.™

Alion™

POST Herbicide Options

- Poast – 1.5 to 2.5 pt/A
 - COC @ 1 % v/v
 - 45 day PHI
- Fusilade – 12 to 24 oz/A
 - COC @ 1% v/v
 - 1 day PHI
- Select Max – 12 to 16 oz/A
 - NIS @ 0.25 % v/v
 - 7 day PHI

Poast[®]
herbicide

 **Fusilade[®]DX**



Sequential Applications will
be Necessary for Control of
Perennial Grass Weeds!!

Dealing with Woody Perennial Weeds

- No good solution
- Spot treat with glyphosate
 - Contact with canes will result in severe injury or crop death
 - 1.5 to 2% solution
- Physically remove



Likely Future POST Herbicide Registrations

- Embed (2,4-D Choline)
 - Broadleaf weeds
 - Horsenettle, pokeweed, Virginia creeper, horseweed, Carolina geranium
- Treevix (Saflufenacil)
 - Broadleaf weeds
 - Horseweed, prickly lettuce, morningglory, pigweed
- Glufosinate
 - Non-selective POST alternative to paraquat
 - Horseweed, winter annual rosette broadleaf weeds, perennial weeds.

