

Weed Control in Brambles



Wayne Mitchem

Orchard and Vineyard Floor Management

Dept. of Horticultural Science



Photo courtesy of "Growing Blackberries in NC"

Weed Control is Important

- Weed control is important in establishing and maintaining a vigorous and highly productive blackberry planting. Hoeing, shallow disking and herbicides are recommended. Since blackberries produce shallow fleshy root systems, deep cultivation must be avoided.

- Bramble Fact Sheet, Univ. of Florida

Weed Competition in Spring Planted Raspberries

Trt.	1971		1972	
	Canes/plot	Avg. Ht.	Canes/plot	Avg. Ht.
WF	15	59	71	94
WF 5/28+	14	25*	56	91
WF 6/27+	11*	23*	37 *	74
Weedy	4*	32*	15*	79

H.M. Lawson and J.S. Wiseman. Weed Research, 1976, Vol. 16:155-162.

Weed Competition in Spring Planted Raspberries

Fruit Yield Data

Trt.	Kg/plot	g/cane	g/100 cm cane
WF	1.28	82	140
WF 5/28+	0.26*	20*	77*
WF 6/27+	0.22*	17*	60 [#]
Weedy	0.06*	15*	41 ^{\$}

H.M. Lawson and J.S. Wiseman. Weed Research, 1976, Vol. 16:155-162.

Bramble Ground Cover Management

- 4 ft weed-free band
- Row middles or drive alley
 - Established sod
 - Annual cover crop
 - Native vegetation



Photo: "Commercial Bramble Culture", Krewer et.al., UGA.

Weed-Free/Sod Strip Floor Mgt.

- Weed-free strip
 - Minimizes competition
- Vegetative Alley
 - Minimizes erosion
 - Wind
 - Water
 - Traffic Movement
 - Wet weather



Photo: "Commercial Bramble Culture", Krewer et.al., UGA.

Weed-free Strip – How?

- Mulch
 - Plastic (est. year)
 - Organic
 - Straw
 - Bark
 - Grass clippings



Photo: "Bramble Opportunities" Slide Set, Gina Fernandez



Photo: "Commercial Bramble Culture", Krewer et.al., UGA.

Weed-free Strip – How?

- Mulch Issues
 - Plastic (est. year)
 - Heat
 - Removal/interference with cane development
 - Drip irrigation
 - Organic
 - Costs
 - Labor intensive
 - Annual replacement
 - More suitable for small area?



Photo: "Bramble Opportunities" Slide Set, Gina Fernandez



Photo: "Commercial Bramble Culture", Krewer et.al., UGA.

Weed-free Strip – How?

- Herbicides
 - Injury (POST)
 - Hand removal may be necessary in some instances
 - Cost effective



Photo: "Commercial Bramble Culture", Krewer et.al., UGA.

PRE Herbicide Options in Newly Planted Brambles

- Devrinol 50 DF – 4 lb/A
 - Activation within 24 hrs is best
- Oryzalin or Surflan – 2 to 4 qt/A
 - Activation within 14 to 21 days
 - Controls annual grasses, pigweed, lambsquarters
 - DO NOT use on tissue culture plants during the first year.

PRE Herbicide Options in Newly Planted Brambles

- Simazine 4F or 90DG – 1 qt or 1.1 lb/A
 - Activation within 14 to 21 days
 - Controls ragweed, lambsquarters, pigweed, henbit, prickly lettuce, purslane, and annual grasses
 - DO NOT use on tissue culture plants the first year of planting
- Gallery 75 DF - .66 to 1.33 oz
 - Activation within 21 days
 - Controls a number of broadleaf weeds; MG suppression

PRE Herbicide Options

Established Brambles

- Solicam – 2.5 to 5 lb/A
 - Dormant application
 - Weak on pigweed and lambsquarter
 - Excellent on annual grasses, prickly sida, dogfennel, spurge
 - Suppresses yellow and purple nutsedge
 - Activation within 28 days; Brambles est. 12 mos.
- Oryzalin or Surflan – 2 to 4 qt/A
 - Activation within 14 to 21 days
- Simazine 4F or 90DG – 2-4 qt or 2.2-4.4 lb/A
 - Even at higher rates the addition of Surflan will be necessary for maximum residual annual grass control.
 - Split application

PRE Herbicide Options

Established Brambles

- Sinbar – 0.5 to 2 lb/A
 - Established plantings of 1 year or more
 - Apply in spring prior to fruit set
 - Do not apply within 70 days of harvest
 - Do not use on sandy soils with less than 1% OM
 - Activation within 14 days
 - Controls horseweed, pigweed, lambsquarters, annual morningglory, ragweed, Florida pusley, annual grasses
- Casoron 4G – 100 lb/A
 - Soil surface application may be applied in January
 - May be applied up until May 1 if incorporated immediately
 - Established plantings (1+ year)
 - Controls ragweed, dandelion, dogfennel, horseweed

POST Herbicide Options in Brambles

- Gramoxone Max 1.5 to 2.7 pt/A
 - NIS @ 0.25 % v/v
 - Contact with new canes will cause injury
 - May tank mix with PRE herbicides
- Glyphosate – 11 to 32 oz/A or 1 to 3 pt/A
 - DO NOT ALLOW CONTACT WITH GREEN CANES, BARK OR FOLIAGE
 - Apply as a directed shielded spray

Perennial Weed Control with Glyphosate

Weed Species	% v/v	Timing
Bahiagrass	2	Early Head
Blackberry	1-1.5	Late summer through early Dec.
Smilax	3	5 fully expanded leaves in spring
Nutsedge (y/p)	2-3	Flowering; use half rate and sequential applic. 3-4" tall plants.
Poison ivy/oak	2	Two weeks either side of full bloom (early summer)
Virginia Creeper	1.5-2	Late summer prior leaf color change

POST Herbicide Options in Brambles

- 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
 - Nonbearing use only
- Select – 6 to 8 oz/A
 - NIS @ 0.25 % v/v
 - Nonbearing use only

Bermudagrass Control

- Poast @ 1.5 pt/A fb 1.0 pt/A
 - Apply when 4” new growth appear
 - Second application when regrowth occurs
- Fusilade @ 1.5 fb 1.0 pt/A
 - Application parameters same as above

Include COC at 1% v/v (1 gal. Per 100 gal of spray solution)



Is Cultivation an Option?

- 1st Year after Planting
 - Shallow cultivation
 - Care must be taken to prevent breakage of emerging primocanes
- Established Plantings
 - Cultivation promotes unwanted suckering
 - SHALLOW disking drive alley is acceptable

Crop Age	Fall	Winter	Spring	Summer
Newly Planted	Glyphosate (preplant)		Oryzalin (Once soil settles after transplanting)	Oryzalin + Paraquat (May or June); Fusilade, Poast, or Select (as needed). Shallow cultivation may be used as well.
	Glyphosate (preplant)		Simazine (half rate) + Oryzalin	Paraquat, Basagran, Fusilade, Poast, or Select (as needed). Shallow cultivation may be used as well.
	Glyphosate (preplant)		Devrinol (Once soil settles after transplanting)	Paraquat, Basagran, or Fusilade, Poast, or Select (as needed). Shallow cultivation may be used as well.
	Glyphosate (preplant)		Gallery + Oryzalin	Paraquat, Basagran, Fusilade, Poast, or Select (as needed). Shallow cultivation may be used as well.

Crop Age	Fall	Winter	Spring	Summer
Blackberry and Raspberry Established 1 or more years	Simazine + Paraquat		Sinbar	Paraquat (as needed); Fusilade, Poast, or Select (as needed)
		Simazine + Solicam or Oryzalin + Paraquat		Paraquat (as needed); Fusilade, Poast, or Select (as needed)
	Simazine + Paraquat		Simazine + Oryzalin or Solicam	Paraquat (as needed); Fusilade, Poast, or Select (as needed)
	Paraquat	Casoron		Paraquat (as needed); Fusilade, Poast, or Select (as needed)

Contact Info

Wayne Mitchem

704-472-0770 (mobile)

704-276-1584 (office/fax)

Wayne_Mitchem@ncsu.edu