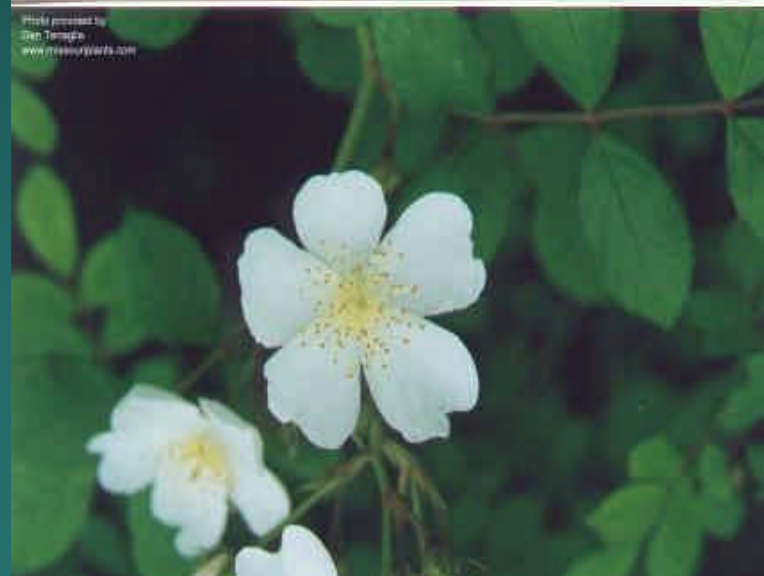


Herbicide Recommendations for Control of Multiflora Rose

Mark Loux
The Ohio State University

Multiflora Rose



Online Resources - multiflora rose control

- “Multiflora Rose Control”
 - OSU Extension Bulletin 857
- “Long-term Strategies to Control Multiflora Rose”
 - Univ. of Wisconsin
- “Multiflora Rose and its Control”
 - Iowa State Univ.
- “Control of Autumn Olive, Multiflora Rose, and Tartarian Honeysuckle”
 - West Virginia Univ./NRCS
- “Multiflora Rose Management in Grass Pastures”
 - Penn State Univ.
- “Multiflora Rose Control”
 - Purdue Univ.

Weed Management in Grass Pastures, Hayfields, and Other Farmstead Sites

J. D. Green, W. W. Witt, and J. R. Martin, Department of Plant and Soil Sciences

Table 2. Herbicides labeled for use on permanent grass pastures and approximate cost.

Herbicide	Rate	Estimated Cost/Acre*	Type of Weeds Controlled
Cimarron	0.1 to 0.4 oz/A	\$2.30 - \$9.20	Selected broadleaf weeds and certain woody plants. Temporary growth suppression of tall fescue or other pasture grasses may occur.
Cimarron MAX	Co-Pak	\$7.50 - \$15.00	Herbaceous broadleaf weeds. Temporary growth suppression of tall fescue or other pasture grasses may occur.
Crossbow	1 to 2 qt/A	\$15.00 - \$30.00	Woody brush and broadleaf weeds.
2,4-D Ester/Amine (3.8 lb ae/gal. formulations)	1 to 2 qt/A	\$3.75 - \$7.50	Herbaceous broadleaf weeds.
Dicamba (Banvel, Clarity, etc.)	0.5 to 2 pt/A	\$5.50 - \$22.00	Broadleaf weeds and woody brush.
ForeFront R&P	1.5 to 2.6 pt/A	\$10.50 - \$18.20	Herbaceous broadleaf weeds.
Milestone	3 to 7 fl. oz/A	\$8.25 - \$19.25	Herbaceous broadleaf weeds.
Overdrive	4 to 8 oz/A	\$12.50 - \$25.00	Herbaceous broadleaf weeds.
PastureGard	1.5 to 4 pt/A	\$10.50 - \$28.00	Woody brush and broadleaf weeds.
Redeem R&P	1.5 to 4 pt/A	\$20.60 - \$55.00	Herbaceous broadleaf weeds.
Weedmaster/Banvel + 2,4-D	2 to 4 pt/A	\$7.00 - \$14.00	Broadleaf weeds and woody brush.
MOWING		\$12.00 - \$18.00	Broadleaf weeds, weedy grasses, and small brush.

* The estimated cost (\$/A) does not represent the use of spray additives or the cost for application.

Table 3. Waiting interval following herbicide application before grazing livestock, harvesting for hay, or removing animals for slaughter.

Herbicide	Time Interval (days)				
	Grazing			Removal before Slaughter ²	Hay Harvest
	Lactating Dairy	Beef	Other Animals ¹		
Cimarron	0	0	0	0	0
Cimarron MAX	7	0	0	30	37
Crossbow 1 gal./A or less	Next growing season	0	0	3	14
2,4-D (various products) ³	7	0-7	0	3	30
Dicamba (Banvel/Clarity) up to 1 pt/A	7	0	0	30	37
up to 2 pt/A	21	0	0		51
up to 4 pt/A	40	0	0		70
ForeFront R&P ⁴	0	0	0	0	7
Milestone ⁴	0	0	0	0	0
Overdrive	0	0	0	0	0
PastureGard	Next growing season	0	0	3	14
Redeem R&P	Next growing season	0	0	30	14
Remedy ⁶ 2 qt/A or less	14	0	0	3	7 ⁵
Weedmaster or Banvel+2,4-D	7	0	0	30	37

¹ Other animals include horses, goats, and sheep.

² For the removal period indicated, animals for slaughter should be withdrawn from treated areas or consumption of hay harvested from treated areas.

³ Waiting period may vary with some 2,4-D formulations (consult label of specific product used).

⁴ Do not transfer grazing animals from areas treated to areas where sensitive broadleaf crops occur without first allowing three days of grazing on an untreated pasture OR do not spread manure, hay, or straw if animals have consumed hay or grazed forage from treated areas within the previous three days.

⁵ For lactating dairy animals, do not harvest for hay until the next growing season.

⁶ Consult label for additional restrictions for grazing or hay removal when Remedy is applied at > 2 qt/A.

Multiflora rose - application methods

- Foliar
- Dormant stem
- Basal bark
 - Complete coverage vs thin-line
- Soil
 - Broadcast (pellets)
 - Spot concentrate
- Cut stump

Factors in selection of application method

- Site
 - Pasture, ditchbank, noncrop, fencerow
- Topography
 - Sloping vs level
 - Accessible with equipment?
- Plant size, population density
- Cost
- Seasonal labor availability
- Risk of water contamination?

 Bulletin 857

Multiflora Rose Control



OHIO
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Revised in 2005

Multiflora rose control

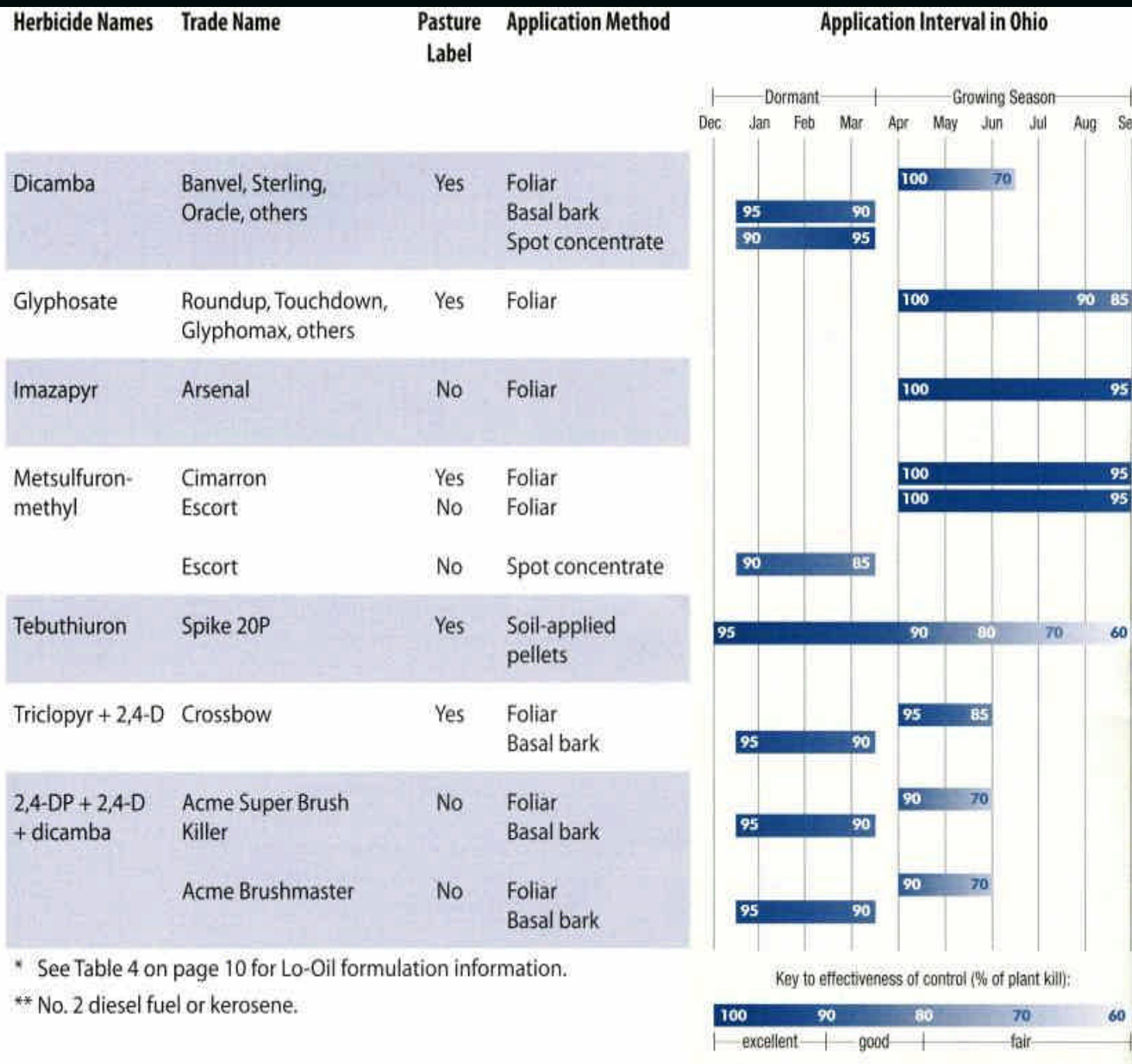
- Foliar spray – after full leafout
 - Glyphosate and metsulfuron most effective – May to September
 - Grazon P+D, Overdrive
 - Dicamba, Crossbow – apply in May
- Basal bark – winter
 - Crossbow, dicamba, SuperBrush Killer
 - Treat lower 18 to 24 inches of plant
 - Treat both sides
 - Apply late December to early April

Multiflora rose control

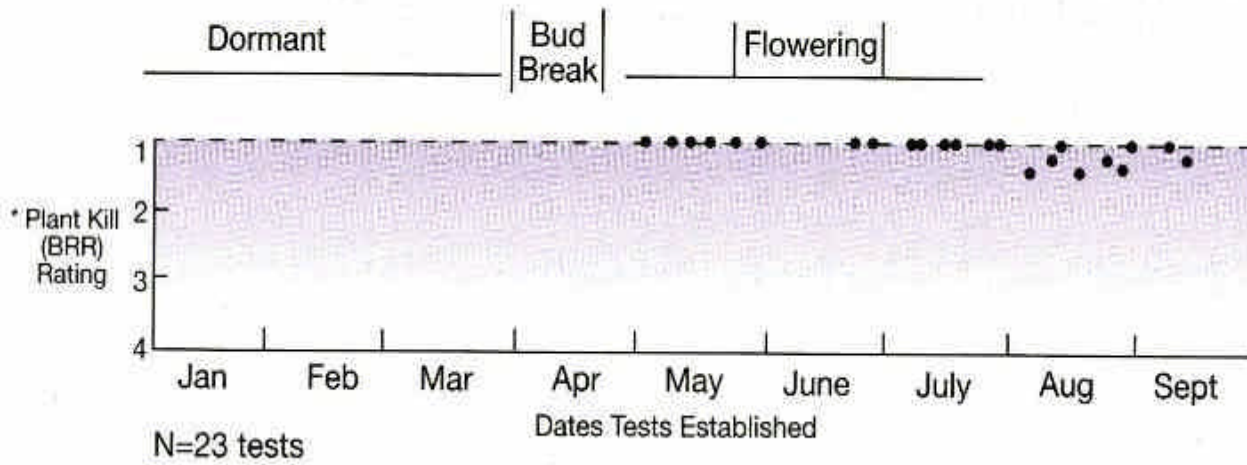
- Soil applications – spot concentrate
 - Dicamba, Escort
 - Spot applicator required - \$50?
 - Apply to soil within 6 to 8 inches of plant crown
 - Apply after soil temps below 40 and before spring leafout
- Soil applications - pellets
 - Spike 20P
 - Apply in winter
 - Will kill desirable vegetation

Multiflora rose control with herbicides

- Dormant stem application
 - Late-winter or early spring
- Cut stump applications
 - Picloram - Tordon RTU, Remedy RTU, Pathfinder
 - Picloram + 2,4-D - Pathway, Tordon 101

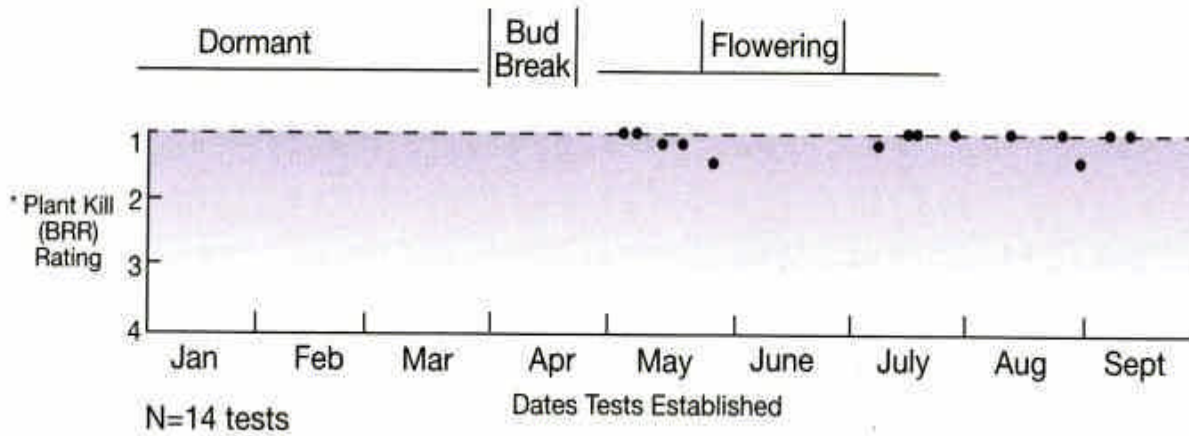


Glyphosate Foliar @ 1% Sol. (1982-94)

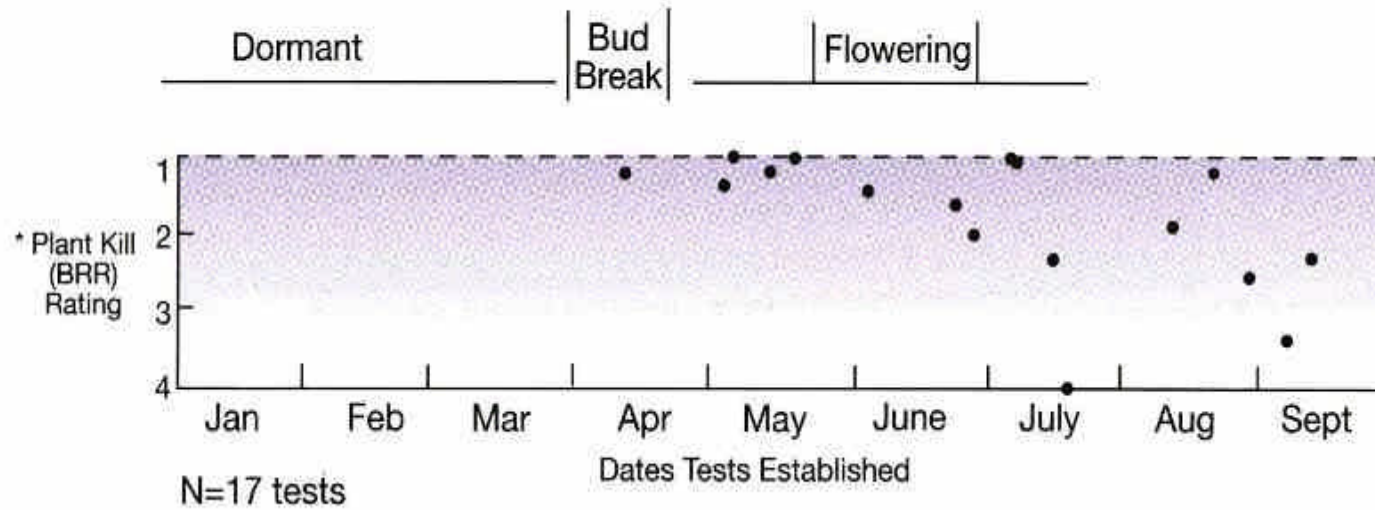


Metsulfuron Methyl (Cimarron/Escort) Foliar

60% DF@ 1.0 oz/100 gal
water + .25% v/v Surf.
(1983-94)



Dicamba Foliar @ 1% Sol. (1979-94)



Triclopyr + 2,4-D (Crossbow) Foliar @ 1.5% Sol. (1981-94)

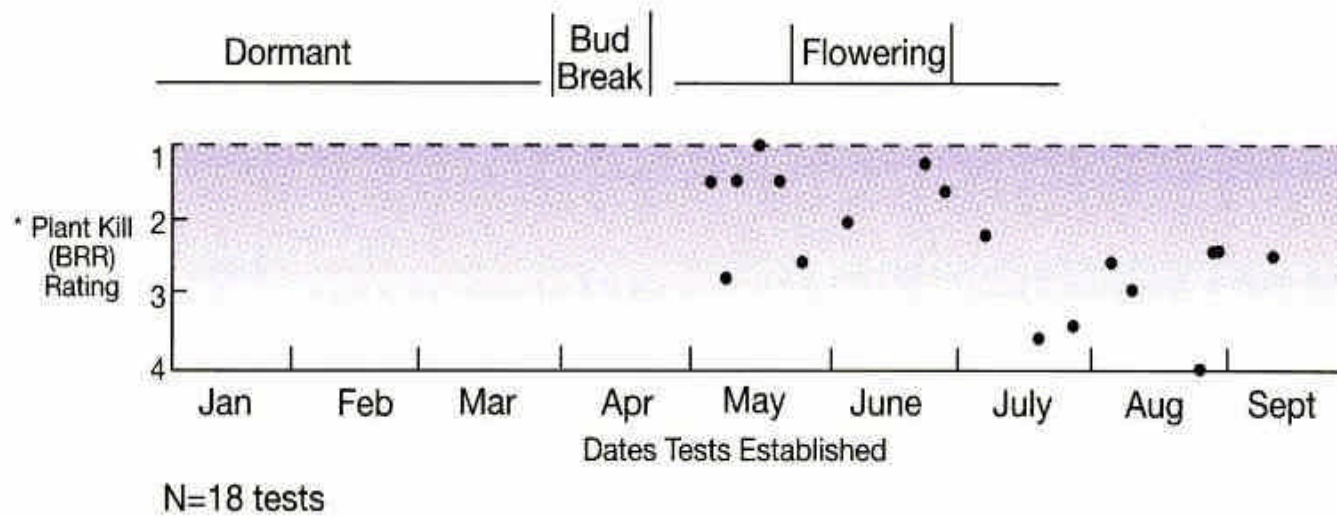


Table 3. Herbicides for Dormant Basal Bark Application Using No. 2 Diesel Fuel or Kerosene Carrier.

Product	Use rate (%)	Pasture label	Product needed for 1 gallon solution		Mean plant kill (BRR 1-4) ¹	Number of trials
			Ounces	Milliliters		
Acme SBK	5	No	6.4	189	1.4	12
Dicamba	6.6	Yes	8.4	250	1.4 (Lo-Oil)	17
Brushmaster	5	No	6.4	189	1.2	6
Crossbow	4	Yes	5.1	151	1.4	8

¹BRR (basal resprout rating) scale: 1 = none, 2 = slight, 3 = moderate, and 4 = extensive basal regrowth 8 to 15 months after application.

Table 4. Mixing Various Quantities of Dicamba Lo-Oil Basal Bark Solution.

Spray solution dicamba (4 lb/gal)				Surfactant ¹		Kerosene or No. 2 Diesel			Water		
English or Metric				English or Metric		English or Metric			English or Metric		
(gal)	(oz)	(pt/qt)	(ml)	(oz)	(ml)	(oz)	(qt)	(ml)	(oz)	(qt/gal)	(ml)
1	8	= 0.5 pt	= 237	0.5	= 15	20	= 0.6	= 592	100	= 3.12 qt	= 2960
2	16	= 1 pt	= 474	1	= 30	40	= 1.2	= 1183	200	= 6.25 qt	= 5920
5	40	= 1.2 qt	= 1184	2.5	= 74	100	= 3.12	= 2960	500	= 3.9 gal	= 14800
10	80	= 2.5 qt	= 2368	5	= 148	200	= 6.25	= 5920	1000	= 7.8 gal	= 29600

¹Acutrol emulsifier or nonionic surfactant.

Table 6. Multiflora Rose Control in Ohio Winter Field Trials of Dormant Spot-Applied Herbicides.

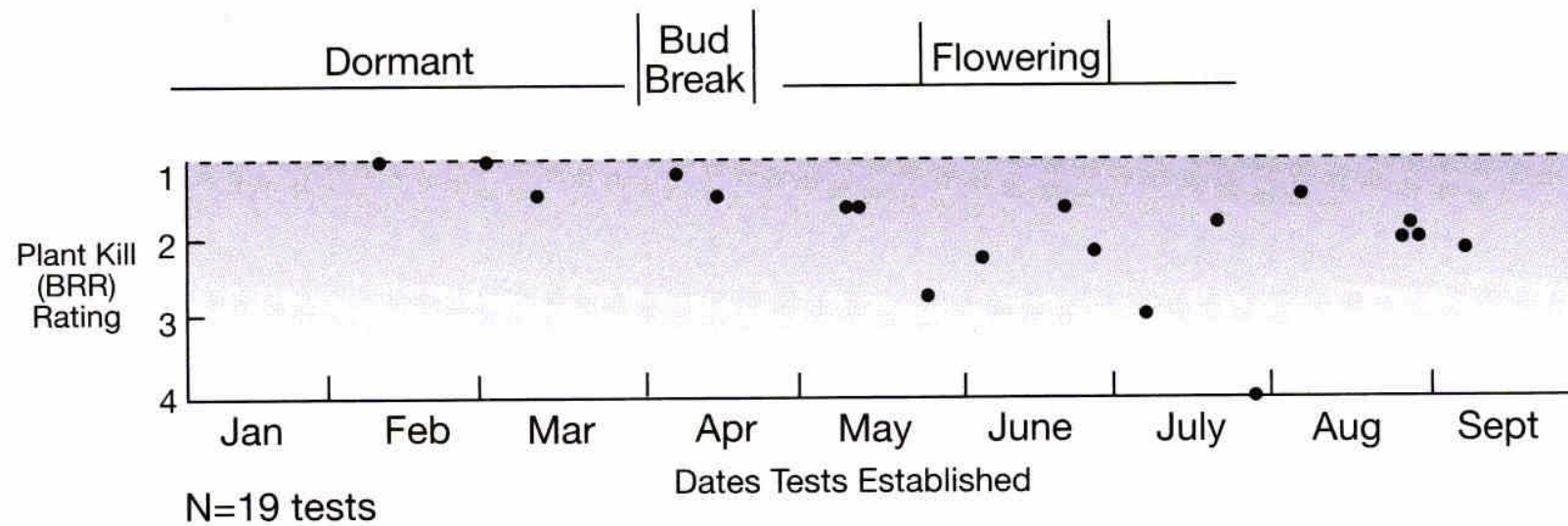
Number % of Trials With	Product of Trials	Mean BRR Rating¹	Complete Plant Kill
Dicamba	16	1.5	56%
Escort	10	1.2	60%

¹BRR (basal resprout rating) where: 1 = none, 2 = slight, 3 = moderate, and 4 = extensive basal regrowth 8 to 15 months after application.

Table 5. Dicamba Spot Concentrate Application Rates.

Plant Canopy Diameter	Dicamba (4 lb/gal) Needed
	English or Metric
5 feet	1/4 oz = 7.4 ml
10 feet	1 oz = 30 ml
15 feet	2 1/2 oz = 74 ml

Tibuthiuron (Spike 20P) Pelleted @ 1/4 oz./22 sq. ft. to Soil, (1984-94)



Purdue University - 1992 - Foliar treatments

Herbicide (rate)	% control - 1 year
Crossbow (1.5% v/v)	95
Dicamba (1.5% v/v)	99
Glyphosate (1% v/v)	100
Metsulfuron (1 oz/100 gal)	100
SuperBrushKiller (1.2% v/v)	96
2,4-D LV ester (3% v/v)	96

Purdue University - 1992

% control - 1 year

Basal bark (in kerosene)

Crossbow (4% v/v)	100
Garlon (4% v/v)	100
SuperbrushKiller (5% v/v)	95

Soil treatment

dicamba (spot conc - 1 oz/shrub)	98
Spike (0.25 oz/22 sq ft)	95

Cut Stump

Tordon RTU	100
Weedone 170	94

Annual maintenance

- Need follow-up to even most effective treatments
 - Control regrowth of treated plants
 - Reinfestation by seedlings
- Pulling plants or mowing the year after application will improve control
 - Facilitates grass establishment
 - Seedlings evident

Univ of Wisconsin - 1987-1991

Herbicide (rate)	% control - end of summer		
	1 yr	3 yr	5 yr
Soil			
Dicamba	88	83	75
Spike	99	100	94
Soil fb foliar			
Dicamba fb dicamba/2,4-D	85	100	100
Spike soil fb dicamba/2,4-D	100	100	90

Univ of Wisconsin - 1987-1991

Herbicide (rate)	% control - end of summer		
	1 yr	3 yr	5 yr
Foliar			
Dicamba/2,4-D	95	100	88
Crossbow	88	100	97
Glyphosate	82	99	90
Foliar fb soil			
dicamba/2,4-D fb dicamba	96	95	95
dicamba/2,4-D fb Spike	95	96	98
Crossbow fb dicamba	90	77	90
Crossbow fb Spike	92	94	95

Univ of Wisconsin - 1987-1991

Herbicide (rate)

% plants remaining

1 yr 3 yr 5 yr

Soil

Dicamba

74 114 26

Spike

6 3 3

Soil fb foliar

Dicamba fb dicamba/2,4-D

35 1 9

Spike soil fb dicamba/2,4-D

9 6 6

Univ of Wisconsin - 1987-1991

Herbicide (rate)	% plants remaining		
	1 yr	3 yr	5 yr
Foliar			
Dicamba/2,4-D	53	31	0
Crossbow	48	5	7
Glyphosate	42	8	3
Foliar fb soil			
dicamba/2,4-D fb dicamba	36	9	12
dicamba/2,4-D fb Spike	77	0	4
Crossbow fb dicamba	171	77	5
Crossbow fb Spike	77	0	4

Univ of Wisconsin - 1987-1991

Herbicide (rate)

Cost (\$/A)

1 yr 3 yr 5 yr Total

Soil

Dicamba

14 7 7 54

Spike

10 1 1 13

Soil fb foliar

Dicamba fb dicamba/2,4-D

14 0.20 0 15

Spike soil fb dicamba/2,4-D

10 0.1 0.2 10

Univ of Wisconsin - 1987-1991

Herbicide (rate)	Cost (\$/A)			
	1 yr	3 yr	5 yr	Total
Foliar				
Dicamba/2,4-D	2	1	0.50	5
Crossbow	4	1	1	8
Glyphosate	4	0.60	0.30	7
Foliar fb soil				
dicamba/2,4-D fb dicamba	2	4	1	14
dicamba/2,4-D fb Spike	2	2	1	12
Crossbow fb dicamba	4	16	8	62
Crossbow fb Spike	4	2	0.5	23

Univ of Wisconsin - conclusions

- Cost based on plants spaced every 10 feet
- Foliar applications most economical
 - 5-yr total - \$6 to 8/A
- Soil treatment
 - Dicamba - 5-yr total - \$36
 - Spike - 5-yr total - \$15
- To eradicate, annual treatments for three years
 - Followed by alternate year treatments until seed bank depleted

