

Managing Weeds in Wheat

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New wheat herbicides

Huskie (Bayer)

- Bromoxynil + pyrasulfotole (HPPD inhibitor)
- Controls small winter/summer annual broadleaf weeds
 - Up to 4 to 6 leaf, or 4-inch diameter
 - OSU guide - rated 8 or 9 on most broadleaf weeds
- Fall or spring, 1-leaf to flag leaf emergence
- Can be applied in 28%
- Allow 4 months before planting soybean

New wheat herbicides

Orion (Syngenta)

- MCPA + florasulam (ALS inhibitor)
- Controls small broadleaf weeds
 - OSU guide - rated 9 on mustards, chickweed, lambsquarters, shepherdspurse, pennycress, smartweed, common ragweed
 - seedling stage weeds
- 3-leaf to joint stage
- Apply in 28% N ?? (label does not specify)
- Allow 4 months before planting soybean

New wheat herbicides

Finesse (DuPont)

- Chlorsulfuron (Glean) + metsulfuron (Ally)
- PRE or POST to wheat
- Apply in fall after 1-leaf stage:
 - Most effective control of annual bluegrass
 - Reduces risk of crop rotation problems
- Fall application
 - Controls annual bluegrass, winter annual broadleaf weeds
- Can be applied in 28%
- Finesse is a long-residual herbicide
 - Allow 6 months before planting STS soybean
 - Allow 18 months before corn, non-STS soybean

Generics gone wild - wheat herbicides

Tribenuron-methyl

- Express TotalSol 50% WDG
 - 1/4 - 1/2 oz
- Nuance 75% WDG
 - 1/6 - 1/3 oz

Tribenuron-methyl + thifensulfuron premix

- Harmony Extra TotalSol 50% WDG
 - 0.45 - 0.9 oz
- Nimble, TNT Broadleaf 75% WDG
 - 0.3 - 0.6 oz

Wheat herbicides - winter annual grass control
Apply in late fall for most effective control

	Annual bluegrass	Annual ryegrass	Cheat	Downy brome
Axial/Axial XL		Y		
Finesse	Y			
Maverick			Y	Y
Olympus			Y	Y
Osprey	Y	Y		

(PRE glyphosate app often controls these grasses also)

Weed Management Issues in Wheat

- Establishment
 - Preplant herbicide use in no-till
- Fall/early spring weed competition
 - Winter annuals, dandelion
- Spring/summer weeds
 - Ragweeds, lambsquarters
- Problem weeds
 - Canada thistle, wild garlic, dandelion
- Herbicide injury
 - Timing, applying in fertilizer
- Harvest aids

Winter weeds interfere with wheat growth in fall and spring

- Common chickweed
- Red (purple) deadnettle
- Henbit
- Mustards
- Shepherd's-purse
- Field pennycress
- Maretail (horseweed)
- Dandelion

Strategies for Winter Annuals

- Sparse populations can be controlled in spring
- Denser populations may require late fall herbicide treatment to reduce interference with wheat growth
- Products labeled for fall application
 - Harmony Extra, generics – after 2-leaf stage
 - dicamba – 2 to 4 oz with other products
 - metribuzin – after 2-leaf stage, only on tolerant varieties
 - Express, generics - after 2-leaf stage
 - Peak - after emergence
 - Huskie - after 1-leaf stage

2003 OSU Fall Applied Herbicide Trial

Herbicide		Yield
Harmony Extra	0.6 oz	64
Harmony Extra	0.3 oz	68
2,4-D Ester	1 pt	52
Dicamba	4 oz	66
Weedmaster	1 pt	64
Curtail	2 pt	62
Stinger	1/3 pt	68
Harmony Extra	0.3 oz	65
+ metribuzin	2 oz	
Harmony Extra	0.3 oz	65
+ Stinger	3 oz	
Untreated		62

Dandelion control in wheat 2007-08 - Darke County

	% control	
Applied November	4/23	5/13
Express 0.33 oz/dicamba 4 oz	99	97
Brash 1.33 pts	78	63
WideMatch 1.3 pts	88	75
WideMatch/Express	99	96
Applied April 9		
Express 0.33 oz/2,4-D 1 pt	47	65
Curtail 2.67 pts	23	45
Curtail/Express	50	63
WideMatch/Express/2,4-D	60	75

Canada thistle control

- Most herbicides suppress thistle to some extent
 - Suppression plus uniform wheat stand may be adequate
- Herbicide effectiveness
 - Stinger, Curtail > Express > 2,4-D, dicamba, Harmony Extra
 - Cannot plant double crop soybeans after Stinger, Curtail
- Stinger - 1/3 pt/A from 4-inch to prebud stage
- Curtail - 2 to 2 2/3 pt/A after emergence up to prebud stage
- Express – 1/3 oz/A on 4 to 8 inch thistle plants

Applying herbicides in fertilizer (topdress)

- Most labels allow application in fertilizer
 - Specific directions may be vague
- Harmony Extra, Express
 - Applying in fertilizer increases risk of injury
 - Higher risk in cold, saturated soils
 - Adjust surfactant use when applying in fertilizer
 - Application in mix of water/fertilizer can reduce risk, but may have to make a second fertilizer application

2002/2003 OSU Wheat Study

		Yield (bu/A)					
		carrier		after joint		after boot	
				2002	2003	2002	2003
2,4-D amine	water			61	66	54	64
	28%			66	63	47	67
Harmony Extra	water			62	66	62	62
	28%			65	70	44	54
Har Xtra + 2,4-D	water			61	68	54	60
	28%			68	66	40	52
Bromoxynil	water			60	68	62	64
	28%			65	68	45	61

LSD (0.05)

2002 = 8 2003 = 9

Harvest Aid Treatments

- Glyphosate
 - Apply after hard dough stage
 - Grain moisture less than 30%
 - At least 7 days before harvest
 - Do not use on wheat grown for seed
- 2,4-D ester or amine
 - Apply after hard dough stage
 - Crop injury can occur
- 2,4-D + dicamba premix (WeedMaster, Brash)
 - Apply after hard dough stage and green color has disappeared from nodes
 - At least 7 days before harvest

Resources for more information

OSU Weed Control Guide – Bulletin 789

C.O.R.N. newsletter

corn.osu.edu

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