



NOTICE: It is unlawful to use any pesticide for other than the registered use. **READ AND FOLLOW THE LABEL.** User assumes all responsibilities for use inconsistent with the label on the product container. Persons using a “Restricted Use” pesticide must be certified in conformity with standards set forth by state and federal regulations.

WARNING: Pesticides are poisonous. Read and follow all directions and safety precautions on labels. Handle carefully and store in original labeled containers out of reach of children, pets and livestock. Dispose empty container at once, in a safe manner and place. Do not contaminate forage, streams and ponds. Trade names are used for identification. All pesticides listed in this bulletin are registered and cleared for suggested uses according to Federal registration and State laws and regulations in effect at the time of publication - Nov. 16, 2008

The application rates suggested in this section are based on average conditions for fine sandy loam soils (coarse) with over 3% organic matter. Fields with medium or fine-textured soils may require higher herbicide rates. The rates listed are for a specific weed problem when applied alone. Lower rates can be used when tank mixtures are needed. Refer to the product for appropriate tank mix partners and rates. Some products listed may not be registered in all of the New England States. Only use products registered in your State. Some products may have more formulations than listed in this guide. Choose the formulation that best fits your weed control program. Do not exceed the labeled rates for a given soil type, since crop injury may occur.

In an effort to help producers manage herbicide resistance, the Weed Science Society of America has grouped herbicides by their site of action. In order to prevent herbicide-resistant biotypes from developing, we recommend that producers rotate herbicides with different sites of action (i.e. from different groups) each year, and that any tank mixes or sequential applications use products with different sites of action. See table at the end of this publication for a list of herbicide sites of action

Weed Pressure	Product	Rate/acre	Timing*	Comments and Cautions
Preemergence annual grasses	DUAL II MAGNUM	1.33 pts.	PPI, PRE	GROUP 15. Apply before weeds emerge at time of planting. Use of premixes that contain atrazine (Bicep II Magnum, Bullet, or Guardsman Max, Cinch ATZ) offer control of both annual grasses and broadleaves.
	OUTLOOK	14-18 fl. oz	PPI, PRE	
	MICRO-TECH	2 - 2.25 qts.	PPI, PRE	
	CALLISTO	6.0 fl oz.	PRE	GROUP 27. Controls crabgrass up to seedling stage. Use of premixes that contain atrazine and S-metolachlor (Lumax, Lexar) offer control of both annual grasses and broadleaves.
	PROWL H2O, PROWL 3.3EC or PENDIMAX 3.3	3 - 3.6 pts.	PRE, EPOST	GROUP 3. May be applied preemergence to early postemergence up to 4-leaf stage of corn, with weeds no more than 1 inch tall. Corn must be planted at least 1.5 inches deep to avoid injury. Do not incorporate. May not effectively control giant foxtail.

Weed Pressure	Product	Rate/acre	Timing*	Comments and Cautions
Preemergence common lambsquarters, redroot pigweed, wild mustard, and other annual broadleaf species	AATREX 4L or ATRAZINE 4L	2-4 pts.	PRE	GROUP 5. Apply before weeds emerge at time of planting. If using atrazine in a planned two-pass program, limit total atrazine application to 4 pints or 2.2 lb. (2.0 lb. a.i.) per acre for the growing season. On highly erodible soils (as defined by NRCS), limit total atrazine application to 3.2 pints or 1.8 lb. (1.6 lb. a.i.) per acre per growing season.
	CALLISTO	6.0 fl oz.	PRE	GROUP 27. If using alone, the addition of atrazine at 0.25-0.50 lb. a.i. will enhance activity.
Velvetleaf and Triazine-resistant weeds	PYTHON WDG	0.8 - 0.89 oz.	PPI, PRE	GROUP 2. May cause crop injury under cold wet conditions particularly on sandy-gravelly soils. Avoid using on soils with less than 1.5% organic matter. Corn should be planted at least 1.5 inches deep and when the soil temperatures are above 50 degrees F. Consult herbicide label regarding insecticide combinations.
	PROWL 3.3EC or PENDIMAX 3.3	3.0-3.6 pts.	PRE	GROUP 3. May be applied preemergence to early postemergence up to the 4-leaf stage of corn, and weeds are no more than 1 inch tall. Corn must be planted at least 1.5 inches deep to avoid injury. Do not incorporate.
	CALLISTO	6.0 fl oz.	PRE	GROUP 27. Apply before weeds emerge at time of planting.
Escaped or Postemergence annual grass	ACCENT	0.67oz.	POST	GROUP 2. Apply when barnyardgrass, fall panicum, and foxtails are no more than 2-4 inches tall (1-5 leaves) prior to tillering. Will control crabgrass when applied at weed emergence, (1-4 leaves) prior to tillering. Crabgrass control will decrease as the plant matures. Include either crop oil concentrate (COC) at 1.0gal./100 gal. of finished spray or a nonionic surfactant (NIS) (1.0 qt/100 gal). Apply when the corn is 4-24 inches in height; use drop nozzles if corn is too tall. Consult label regarding herbicide or insecticide interactions.
	STEADFAST	0.75 oz.	POST	
	ROUNDUP WEATHERMAX	22 fl. oz.	POST	GROUP 9. Apply to glyphosate-resistant ('Roundup Ready') corn hybrids only .
	TOUCHDOWN TOTAL	24 fl. oz.	POST	
	LIBERTY	34 fl. oz.	POST	GROUP 10. Apply to glufosinate-resistant ('Liberty Link') corn only . Include spray grade ammonium sulfate (AMS) at 17lb per 100 gal spray.

Weed Pressure	Product	Rate/acre	Timing*	Comments and Cautions
Escaped or Postemergence annual broadleaves	2,4-D AMINE	0.5 - 1.0 pt.	POST	GROUP 4. May only be applied on corn 4-8 inches high. Use directed spray with drop nozzles if height exceeds 10 inches.
	BANVEL	0.5 - 1.0 pt.	POST	GROUP 4. Apply when weeds are less than 3 inches tall. May use the higher rate until corn is 5 inches. Use the 0.5 pt. rate until corn is 36 inches tall. Use NIS at 1 to 2 quarts per 100 gallons of spray solution. Do not use COC
	CLARITY	0.5 - 1.0 pt.	POST	GROUPS 27 & 5. Applications must include COC at 1.0gal./100 gal. of finished spray. For best results, apply before weeds reach 5 inches in height.
	CALLISTO + ATRAZINE 4L	3.0 fl oz. 0.5 pt	POST	GROUPS 27 & 5. Applications must include COC at 1.0gal./100 gal. of finished spray. For best results, apply before weeds reach 5 inches in height.
	BASIS	0.33 oz.	POST	GROUP 2. Basis will control annual smartweeds, common lambsquarters, redroot pigweed, velvetleaf, and wild mustard at 1-3 inches in height. Beacon or Spirit will control of a number of broadleaf weeds when weeds are 1-4 inches at the time of application, and will control common ragweed at 2-9 inches in height. Permit , at the 2/3 oz. rate, will control redroot pigweed at 1-3 inches, common ragweed and velvetleaf at 1-9 inches. Higher rates are required for more mature weeds. Can be applied to corn from spike through the canopy stage, typically before the crop is 20 to 30 inches tall. Use NIS at 1 to 2 quarts per 100 gallons or COC at 1 gallon per 100 gallons of finished spray. Combinations of reduced rates of Beacon , Exceed , or Permit with either Banvel , or Clarity will increase the spectrum and size of weeds controlled with these products.
	BASIS GOLD*	14 oz.	POST	* Basis Gold is a mix of Group 2 & 5 herbicides
	BEACON	0.76 oz.	POST	** Hornet, Northstar, and Yukon are mixes of Group 2 & 4 herbicides
	HORNET**	4.0 oz.	POST	
	NORTHSTAR**	5.0 oz.	POST	
	PERMIT	0.67 oz.	POST	
	SPIRIT	1.0 oz.	POST	
	YUKON**	4-8 oz.	POST	
	ROUNDUP WEATHERMAX	22 fl. oz	POST	GROUP 9. Apply to glyphosate-resistant ('Roundup Ready') corn hybrids only .
	TOUCHDOWN TOTAL	24 fl. oz.	POST	
LIBERTY	32 fl. oz.	POST	GROUP 10. Apply to glufosinate-resistant ('Liberty Link') corn only . Include spray grade ammonium sulfate (AMS) at 17lb per 100 gal spray.	

Weed Pressure	Product	Rate/acre	Timing*	Comments and Cautions
Hedge bindweed, Horsenettle, and Canada thistle	2,4-D AMINE	0.5 - 1 pt.	POST	GROUP 4. May only be applied on corn 4-8 inches high. Use directed spray with drop nozzles if height exceeds 10 inches.
	BANVEL	0.5 - 1 pt.	POST	GROUP 4. Apply when weeds are less than 3 inches tall. May use the higher rate until corn is 5 inches. Use the 0.5 pt. rate until corn is 36 inches tall. Use NIS at 1 to 2 quarts per 100 gallons of spray solution. Do not use COC
	CLARITY	0.5 - 1 pt.	POST	
	BEACON	0.76 oz.	POST	GROUP 2. Suppression and/or partial control only. Combine with either Banvel, Clarity, or 2,4-D Amine to increase the spectrum and size of weeds controlled.
Burdock, Wild cucumber	ACCENT + ATRAZINE 4L	2/3 oz. 1-2 pts.	POST	GROUPS 2 & 5. Accent, Beacon, and Exceed combinations should be applied when corn is 4-24 inches in height or with drop nozzles if corn is too tall. Applications should include either COC at 1 gallon per 100 gallons or NIS at 1 qt/100 gal finished spray. Consult herbicide label regarding herbicide or insecticide combinations.
	BEACON + ATRAZINE 4L	0.76 oz. 1-2 pts.	POST	
	SPIRIT	1.0 oz.	POST	
	SPIRIT+ ATRAZINE 4L	1.0 oz 1-2 pts.	POST	GROUPS 2 & 4. Use drop nozzles if corn height exceeds 20 inches. Consult herbicide label regarding herbicide or insecticide combinations.
	NORTHSTAR	5 oz.	POST	
	CALLISTO + ATRAZINE 4L	3.0 fl oz. 0.5 pt.	POST	
Yellow Nutsedge	BASAGRAN	1.5 - 2 pts.	POST	GROUP 6. Apply when nutsedge is 6-8 inches tall. Add COC at 2 pt/A. A second application of Basagran may be made 7-10 days later if needed.
	LADDOK S-12	2 1/3 pts.	POST	GROUPS 5 & 6. Apply when nutsedge is 1-4 inches tall. Add COC at 2 pt/A
	PERMIT	2/3 - 1 oz.	POST	GROUP 2. Apply when nutsedge is 4-12 inches tall. Can be applied to corn from spike through the canopy stage, typically before the crop is 20 to 30 inches tall. Use NISat 1 to 2 quarts per 100 gallons of spray solution or COC at 1 gallon per 100 gallons of finished spray.

Weed Pressure	Product	Rate/acre	Timing*	Comments and Cautions
Quackgrass	ACCENT	2/3 oz.	POST	GROUP 2. Apply when quackgrass is 4-10 inches tall. Applications should include either COC applied at 1 gallon per 100 gallons or NIS at 1 qt/100 gal finished spray. Consult herbicide label regarding herbicide or insecticide interactions.
	BEACON	0.76 oz.	POST	
	ROUNDUP WEATHERMAX	16-22 fl oz.	POST	GROUP 9. Apply in-season on glyphosate-tolerant corn only . May be applied in the fall after harvest or in the spring before planting to actively growing foliage 8-12 inches in height. Do not till between harvest and fall applications, or in the fall or spring prior to spring application. Allow 3 or more days after application before tillage.
	TOUCHDOWN TOTAL	1 - 2qts.	POST	
Wirestem muhly	ROUNDUP WEATHERMAX	22 fl oz.	POST	GROUP 9. Apply to glyphosate-tolerant ('Roundup Ready') corn hybrids only . Apply an appropriate residual herbicide or combination PRE at 50 percent of the labeled rate to suppress annual weeds. Make POST applications when wirestem muhly is 8 inches tall and corn is no more than 30 inches tall.
	TOUCHDOWN TOTAL	1.0 qt.	POST	
Jimsonweed or Smartweed	ATRAZINE 4L	2.0 - 3.0 pts.	PRE, POST	GROUP 5. Postemergence applications should include COC at 2 pts/acre. Read all use restrictions and safety precautions.
Shattercane, seedling and rhizome Johnsongrass	ACCENT	2/3 oz.	POST	GROUP 2. Apply when shattercane and seedling Johnsongrass are 4-12 inches or rhizome Johnsongrass is 8-18 inches tall. Applications should include either COC at 1 gallon per 100 gallons of spray solution or NIS at 1 qt/100 gal finished spray. Consult herbicide label regarding herbicide or insecticide interactions.
	BEACON	0.76 oz.	POST	
	STEADFAST	0.75 oz.	POST	

*Timing: **PPI** - pre-plant incorporated; **PRE** - preemergence; **EPOST** - early postemergence; **POST** - postemergence

WSSA Group	Site of Action	WSSA Group	Site of Action
2	ALS Inhibition. Blocks action of acetolactate synthase (ALS) enzyme, preventing amino acid synthesis in plants	9	EPSP synthase Inhibition. Inhibits action of EPSP synthase enzyme that allows plants to synthesize certain amino acids
3	Microtubule assembly Inhibition. Disrupts plant cell division and inhibits root formation	10	Glutamine synthetase Inhibition. Blocks glutamine synthetase enzyme, which incorporates ammonium into amino acids
4	Synthetic auxins. Mimic plant growth hormones	15	Long-chain fatty acid inhibition. Inhibits shoot development in emerging seedlings
5	Photosynthesis Inhibition at photosystem II site A	27	4-HPPD Inhibition. Blocks the action of 4-hydroxyphenyl pyruvate dioxygenase, which is involved in synthesizing carotenoid pigments
6	Photosynthesis Inhibition at photosystem II site B		