

**NORTHEASTERN WEED SCIENCE SOCIETY
2012 COLLEGIATE WEED SCIENCE CONTEST
WEED IDENTIFICATION LIST**

Spore-producing plants

Equisetaceae

1 *Equisetum arvense*

Horsetail Family

field horsetail

Monocots

Cyperaceae

2 *Cyperus esculentus*

Sedge Family

yellow nutsedge

Poaceae (Gramineae)

3 *Digitaria ischaemum*

4 *Digitaria sanguinalis*

5 *Echinochloa crus-galli*

6 *Eleusine indica*

7 *Elymus repens*

8 *Microstegium vimineum*

9 *Muhlenbergia frondosa*

10 *Panicum capillare*

11 *Panicum dichotomiflorum*

12 *Panicum miliaceum*

13 *Phragmites australis*

14 *Poa annua*

15 *Setaria faberi*

16 *Setaria pumila*

17 *Setaria viridis*

18 *Sorghum bicolor*

19 *Sorghum halepense*

Grass Family

smooth crabgrass

large crabgrass

barnyardgrass

goosegrass

quackgrass

Mary's-grass

wirestem muhly

witchgrass

fall panicum

wild-proso millet

common reed

annual bluegrass

giant foxtail

yellow foxtail

green foxtail

shattercane

johnsongrass

Dicots

Amaranthaceae

20 *Amaranthus powellii*

21 *Amaranthus retroflexus*

Amaranth (Pigweed) Family

Powell amaranth

redroot pigweed

Apiaceae (Umbelliferae)

22 *Daucus carota*

23 *Pastinaca sativa*

Parsley Family

wild carrot

wild parsnip

Apocynaceae

24 *Apocynum cannabinum*

Dogbane Family

hemp dogbane

Asclepiadaceae

- 25 *Asclepias syriaca*
- 26 *Cynanchum rossicum*

Asteraceae (Composite)

- 27 *Achillea millefolium*
- 28 *Ambrosia artemisiifolia*
- 29 *Ambrosia trifida*
- 30 *Anthemis cotula*
- 31 *Arctium minus*
- 32 *Artemisia vulgaris*
- 33 *Centaurea stoebe*
- 34 *Cirsium arvense*
- 35 *Cirsium vulgare*
- 36 *Conyza canadensis*
- 37 *Galinsoga quadriradiata*
- 38 *Senecio vulgaris*
- 39 *Solidago canadensis*
- 40 *Sonchus arvensis*
- 41 *Sonchus asper*
- 42 *Taraxacum officinale*
- 43 *Xanthium strumarium*

Brassicaceae (Cruciferae)

- 44 *Alliaria petiolata*
- 45 *Barbarea vulgaris*
- 46 *Capsella bursa-pastoris*
- 47 *Lepidium virginicum*
- 48 *Raphanus raphanistrum*
- 49 *Sinapis arvensis*
- 50 *Thlaspi arvense*

Caprifoliaceae

- 51 *Lonicera tatarica*

Caryophyllaceae

- 52 *Cerastium fontanum* ssp. *vulgare*
- 53 *Silene latifolia*
- 54 *Stellaria media*

Chenopodiaceae

- 55 *Chenopodium album*

Milkweed Family

- common milkweed
- European swallowwort

Aster Family

- common yarrow
- common ragweed
- giant ragweed
- mayweed chamomile
- common burdock
- mugwort
- spotted knapweed
- Canada thistle
- bull thistle
- horseweed
- hairy galinsoga
- common groundsel
- Canada goldenrod
- perennial sowthistle
- spiny sowthistle
- dandelion
- common cocklebur

Mustard Family

- garlic mustard
- yellow rocket
- shepherd's-purse
- Virginia pepperweed
- wild radish
- wild mustard
- field pennycress

Honeysuckle Family

- Tatarian honeysuckle

Pink Family

- mouseear chickweed
- white campion
- common chickweed

Goosefoot Family

- common lambsquarters

Convolvulaceae

- 56 *Calystegia sepium*
- 57 *Convolvulus arvensis*
- 58 *Ipomoea hederacea*
- 59 *Ipomoea lacunosa*
- 60 *Ipomoea purpurea*

Cucurbitaceae

- 61 *Echinocystis lobata*
- 62 *Sicyos angulatus*

Dipsacaceae

- 63 *Dipsacus fullonum*

Euphorbiaceae

- 64 *Chamaesyce humistrata*

Fabaceae (Leguminosae)

- 65 *Medicago lupulina*
- 66 *Trifolium repens*

Haloragaceae

- 67 *Myriophyllum spicatum*

Hydrocharitaceae

- 68 *Hydrilla verticillata*

Labiatae (Lamiaceae)

- 69 *Glechoma hederacea*
- 70 *Lamium amplexicaule*
- 71 *Lamium purpureum*

Lythraceae

- 72 *Lythrum salicaria*

Malvaceae

- 73 *Abutilon theophrasti*
- 74 *Hibiscus trionum*
- 75 *Malva neglecta*
- 76 *Sida spinosa*

Oxialidaceae

Morningglory Family

- hedge bindweed
- field bindweed
- ivyleaf morningglory
- pitted morningglory
- tall morningglory

Gourd Family

- wild cucumber
- burcucumber

Teasel Family

- common teasel

Spurge Family

- prostrate spurge

Pea (Bean) Family

- black medic
- white clover

Watermilfoil Family

- Eurasian watermilfoil

Frog's-bit Family

- hydrilla

Mint Family

- ground ivy
- henbit
- purple deadnettle

Loosetrife Family

- purple loosestrife

Mallow Family

- velvetleaf
- Venice mallow
- common mallow
- prickly sida

Woodsorrel Family

77 *Oxalis stricta*

yellow woodsorrel

Phytolaccaceae

Pokeweed Family

78 *Phytolacca americana*

common pokeweed

Plantaginaceae

Plantain Family

79 *Plantago lanceolata*

buckhorn plantain

80 *Plantago major*

broadleaf plantain

Polygonaceae

Buckwheat Family

81 *Polygonum aviculare*

prostrate knotweed

82 *Polygonum convolvulus*

wild buckwheat

83 *Polygonum cuspidatum*

Japanese knotweed

84 *Polygonum persicaria*

lady's thumb

85 *Rumex acetosella*

red sorrel

86 *Rumex crispus*

curly dock

87 *Rumex obtusifolius*

broadleaf dock

Portulacaceae

Purslane Family

88 *Portulaca oleracea*

common purslane

Rosaceae

Rose Family

89 *Rosa multiflora*

multiflora rose

Rhamnaceae

Buckthorn Family

90 *Rhamnus cathartica*

European buckthorn

Rubiaceae

Madder Family

91 *Galium aparine*

catchweed bedstraw

92 *Galium mollugo*

smooth bedstraw

Scrophulariaceae

Figwort Family

93 *Linaria vulgaris*

yellow toadflax

94 *Veronica arvensis*

corn speedwell

95 *Veronica peregrina*

purslane speedwell

Solanaceae

Nightshade Family

96 *Datura stramonium*

jimsonweed

97 *Physalis longifolia* var. *subglabrata*

smooth groundcherry

98 *Solanum carolinense*

horsenettle

99 *Solanum physalifolium*

hairy nightshade

100 *Solanum ptychanthum*

eastern black nightshade

2012 Unknown Herbicide CROP-WEED list

List of Crops (planted from seed unless otherwise noted)

- 1 Alfalfa
- 2 Canola
- 3 Corn, field
- 4 Pumpkins
- 5 Peas and/or snap beans
- 6 Soybean
- 7 Sunflower
- 8 Wheat
- 9 Grain sorghum
- 10 Potato or tomato

List of Weeds

- 1 Barnyardgrass
- 2 Crabgrass, large
- 3 Foxtail, giant
- 4 Foxtail, yellow (optional)
- 5 Pigweed (*Amaranthus*) species
- 6 Lambsquarters, common
- 7 Velvetleaf
- 8 Morningglory (*Ipomoea*) spp.
- 9 Nutsedge, yellow

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No.	Herbicide	Familiar Trade Names	Herbicide Family	Mode of Action	Site of Action Group		Application Timing
					WSSA	HRAC	
1	Clethodim	Select Max	cyclohexanedione	Fatty acid synthesis inhibitor	1	A	POST
2	Chlorimuron	Classic	sulfonylurea	ALS inhibitor	2	B	POST
3	Halosulfuron	Permit/Sandea	sulfonylurea	ALS inhibitor	2	B	POST
4	Nicosulfuron	Accent	sulfonylurea	ALS inhibitor	2	B	POST
5	Thifensulfuron	Harmony	sulfonylurea	ALS inhibitor	2	B	POST
6	Imazethapyr	Pursuit	imidazolinone	ALS inhibitor	2	B	POST
7	Dithiopyr	Dimension	pyridazine	Seedling root/shoot inhibitor	3	K1	PRE
8	Pendimethalin	Prowl H ₂ O	dinitroaniline	Seedling root/shoot inhibitor	3	K1	PRE
9	s-Metolachlor	Dual II Magnum	chloroacetamide	Seedling shoot inhibitor	15	K3	PRE
10	2,4-D	Various	phenoxy	Plant growth regulator	4	O	POST
11	Dicamba	Clarity	benzoic acid	Plant growth regulator	4	O	POST
12	Atrazine	Aatrex	triazine	Photosystem II inhibitor	5	C1	PRE
13	Metribuzin	Sencor	triazine	Photosystem II inhibitor	5	C1	PRE
14	Bentazon	Basagran	benzothiadiazole	Photosystem II inhibitor	6	C3	POST
15	Bromoxynil	Buctril	nitrile	Photosystem II inhibitor	6	C3	POST
16	Glyphosate	Roundup PowerMax	amino acid analog	Amino acid synthesis	9	G	POST
17	Glufosinate	Liberty 280 SL	amino acid analog	Nitrogen metabolism disrupter	10	H	POST
18	Clomazone	Command	isoxazolidinone	Pigment inhibitor	13	F3	PRE
19	Flumioxazin	Valor SX	phenylphthalimide	PPO inhibitor	14	E	PRE
20	Fomesafen	Reflex	diphenyl ether	PPO inhibitor	14	E	POST
21	Saflufenacil	Sharpen	pyrimidinedione	PPO inhibitor	14	E	PRE
22	Paraquat	Gramoxone SL	bipyridylium	Cell membrane disrupter	22	D	POST
23	Isoxaflutole	Balance Flexx	isoxazole	HPPD inhibitor	27	Z	PRE
24	Mesotrione	Callisto	triketone	HPPD inhibitor	27	Z	POST
25	Topramezone	Impact	triketone	HPPD inhibitor	27	Z	POST

No.	Herbicide	Familiar Trade Names	Application Timing	Formulation	Use Rate	
					Per Acre	Per Hectare
1	Clethodim	Select Max	POST	1 EC	1 pt	1.17 L
2	Chlorimuron	Classic	POST	25 WG	0.5 oz	35 g
3	Halosulfuron	Permit/Sandea	POST	75 WG	0.67 oz	46.9 g
4	Nicosulfuron	Accent	POST	75 DF	0.67 oz	47 mL
5	Thifensulfuron	Harmony	POST	50 SG	0.5 oz	35 mL
6	Imazethapyr	Pursuit	POST	2 AS	4 fl oz	292 mL
7	Dithiopyr	Dimension	PRE	2 EW	2 qt	4.68 L
8	Pendimethalin	Prowl H ₂ O	PRE	3.8 SC	3 pt	3.51 L
9	s-Metolachlor	Dual II Magnum	PRE	7.64 E	1.33 pt	1.56 L
10	2,4-D	Various	POST	4 lb/gal amine	1 pt	1.17 L
11	Dicamba	Clarity	POST	4 S	0.5 pt	0.58 L
12	Atrazine	Aatrex	PRE	4 L	1 qt	2.34 L
13	Metribuzin	Sencor	PRE	75 DF	0.5 lb	0.56 kg
14	Bentazon	Basagran	POST	4 L	1 qt	2.34 L
15	Bromoxynil	Buctril	POST	2 EC	1.5 pt	1.75 L
16	Glyphosate	Roundup PowerMax	POST	4.5 lb ae/gal	22 fl oz	1.61 L
17	Glufosinate	Liberty 280 SL	POST	2.34 SL	22 fl oz	1.61 L
18	Clomazone	Command	PRE	3 ME	1 pt	1.17 L
19	Flumioxazin	Valor SX	PRE	51 WDG	3 oz	210.2 g
20	Fomesafen	Reflex	POST	2 LC	1 pt	1.17 L
21	Saflufenacil	Sharpen	PRE	2.85 SC	2.5 fl oz	183 mL
22	Paraquat	Gramoxone SL	POST	2 L	1 qt	2.34 L
23	Isoxaflutole	Balance Flexx	PRE	2 SC	3fl oz	219 mL
24	Mesotrione	Callisto	POST	4 SC	3 fl oz	219 mL
25	Topramezone	Impact	POST	2.8 SC	0.75 fl oz	55 mL

NOTE: Application rates are in amount of product per acre/hectare; appropriate adjuvants will be added to POST applications.