Controlling Hemp Dogbane

HEMP DOGBANE is a perennial weed that reproduces by seed, by crown buds, or by over-wintering rootstocks. Similar in appearance to common milkweed, hemp dogbane plants grow to be 3 to 5 ft tall, and all plant parts when broken exude a white milky sap. However, hemp dogbane leaves are smaller, lighter-green in color, and generally are more pointed than common milkweed. Additionally, the stem branches near the top of the plant, giving hemp dogbane a 'bushy' appearance. Flowers of hemp dogbane each produce two seed pods that are slender, sickle-shaped, and produce 80 to 200 seeds per pod.

Seeds of hemp dogbane are dispersed by wind and are not persistent (less than 6 months survival in the soil). Seeds have very little dormancy and more than 75% of the seeds germinate the year they are produced. True seedlings are susceptible to soil disturbance from cultivation before becoming perennial, which happens within 5 to 6 weeks after emergence. Plants do not flower the year they start from seed.

Rootstock of hemp dogbane is persistent and can grow to a depth of 6 ft in the soil and spread up to 10 ft in length in one season. Because of this reproductive characteristic, hemp dogbane is often found in patches. In two seasons one hemp dogbane plant can invade an area nearly 40 ft in diameter if not adequately controlled.

CULTURAL CONTROL
Including a forage or small grain in the rotation can help manage hemp dogbane.
- Repeated mowing suppresses hemp dogbane in forages.
- Small grains are competitive with hemp dogbane, and provide an opportunity for mechanical and chemical control after harvest.

MECHANICAL CONTROL
- Tillage will control true seedlings within 6 weeks after emergence.
- Tillage of established patches may spread and chop up rootstock; breaking apical dominance that leads to emergence of more shoots.
- Herbicide treatments are generally more effective if the soil is undisturbed.

CHEMICAL CONTROL
Herbicides are more effective for control of hemp dogbane on larger plants. Hemp dogbane is most susceptible to herbicides between the late bud and flower stages. However, most herbicides have maximum crop height or stage restrictions for application; refer to the herbicide label for these restrictions.

SOYBEANS
- There are no effective herbicides for control of hemp dogbane in conventional soybeans.

CORN*

Herbicide[a,b]	Rate	Effectiveness
Starane	2/3 pt	**Good-Excel.**
Beacon + 2,4-D + NIS	0.38 oz + 1 pt	**Good**
Accent + Clarity + NIS	0.67 oz + 0.5 pt	Fair-**Good**
Beacon + Clarity + NIS + N	0.38 oz + 0.5 pt	Fair-**Good**
Northstar + NIS + N	5 oz	Fair-**Good**
Status + NIS + N	5 oz	Fair-**Good**
Clarity + 2,4-D amine	0.25 pt + 0.5 pt	Poor-Fair
2,4-D amine	1 pt	Poor-Fair
Clarity	0.5 pt	Poor

ROUNDUP READY CROPS

Herbicide[a,b]	Rate	Effectiveness
glyphosate + AMS	1.13 lb a.e.	**Good-Excel.**
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glyphosate + AMS *(if needed)*	1.13 lb a.e.	

TREATMENT BETWEEN CROPS (WHEAT STUBBLE)[c]

Herbicide[b]	Rate	Effectiveness
glyphosate + AMS	3 lb a.e.	**Excellent**
Clarity	1 qt	**Good**
Clarity + 2,4-D	0.5 pt + 1 pt	Fair-**Good**

* Research supported by the Corn Marketing Program of Michigan.
[a] Refer to herbicide label for maximum application heights and stages.
[b] NIS = non-ionic surfactant; N = 28% UAN or AMS (ammonium sulfate).
[c] Apply when hemp dogbane is late bud to flower stage.

Project GREEEN