Controlling Wild Carrot

WILD CARROT, otherwise known as Queen Anne's lace, is a deep-rooted biennial. Wild carrot usually becomes a problem in continuous no-till production systems. Similar in appearance to cultivated carrots, leaves of wild carrot are finely divided and arranged in a rosette. Keeping with its name, when any part of the plant is crushed the characteristic odor of carrot is present. Seedlings of wild carrot may emerge as early as April and continue to emerge until mid-October if conditions are favorable. Since wild carrot is a biennial it overwinters as a rosette, starts to produce new leaves as early as March, and will bolt as early as June the following season. In order to survive the winter, wild carrot's root diameter must be at least 1/8 inch. After bolting, flowering may begin as early as late-June and continue through August. Flowering wild carrot plants may grow to 4 ft tall. The umbel or seedhead of wild carrot is made up of numerous individual white flowers. Cross-pollination by insects is the primary method of fertilizing wild carrot flowers, but some self-pollination can occur. One wild carrot umbel can produce as many as 1000 seeds. Seeds are light in weight and are primarily dispersed by wind. However, wild carrot seeds have hooked spines that easily attach to animal fur and clothing that lead to other methods of dispersal. Most seeds germinate within the first two years after dispersal, but they may persist in the soil for up to seven years.

CULTURAL CONTROL

- Including fall-planted cereals, like wheat, in the rotation will reduce wild carrot seed production because wheat harvest occurs when wild carrot plants are flowering but before seed is produced.

MECHANICAL CONTROL

- Tillage effectively and consistently controls wild carrot.
- Mowing wheat stubble, roadsides, and fence rows in late August will cut off wild carrot flowers and stop seed production.

CHEMICAL CONTROL*

Wild carrot may be controlled by herbicides at three stages of growth: seedling, over-wintered, and established plants. Over-wintered and established plants are generally more difficult to control. This coupled with the frequency of 2,4-D resistant wild carrot populations in Michigan limits the options for wild carrot control. Below are herbicides options for controlling wild carrot.

BURNDOWN *(Early Preplant)*[a]

Herbicide[b,c]	Rate	Effectiveness
glyphosate + AMS	0.75 lb a.e.	Fair-**Good**
SOYBEAN ONLY		
Canopy XL + 2,4-D + COC	3.5 oz + 1 pt	Fair

SOYBEANS

Herbicide[b,c]	Rate	Effectiveness
Classic + COC	0.67 oz	Fair-**Good**
Pursuit DG + NIS + N	1.4 oz	Poor-Fair
STS SOYBEAN ONLY		
Synchrony STS + COC + N	0.5 oz	Fair-**Good**

CORN

Herbicide[b,c]	Rate	Effectiveness
Atrazine + COC	2 lb a.i.	**Good-Excel.**
Beacon + COC + N	0.76 oz	**Good**
Northstar + NIS + N	5 oz	**Good**
Accent + COC +N	0.67 oz	Fair-**Good**
Permit + NIS	0.67 oz	Fair-**Good**

ROUNDUP READY CROPS

Herbicide[b,c]	Rate	Effectiveness
glyphosate + AMS	0.75 lb a.e.	Fair

TREATMENT BETWEEN CROPS *(FALL)*[d]

Herbicide[c]	Rate	Effectiveness
glyphosate + AMS	1.5 lb a.e.	**Good-Excel.**
glyphosate + AMS	0.75 lb a.e.	**Good**

* Research supported by the Michigan Soybean Promotion Committee.

[a] Control will be greater when application is made during the first warm period in the spring following green-up.

[b] Refer to herbicide label for maximum application heights and stages.

[c] NIS = non-ionic surfactant; COC = crop oil concentrate; N = 28% UAN or AMS (ammonium sulfate).

[d] Apply in late-September or early-October. Light frosts that do not injure wild carrot will not reduce the effectiveness of the herbicide treatments.

Project GREEEN