CARROTS

ASTER LEAFHOPPER

The aster leafhopper can be a serious pest of carrots, potatoes and other vegetables. Feeding injury by the aster leafhopper is usually not the concern. It is the insect's ability to transmit Aster Yellows, a mycoplasma-induced disease. Aster Yellows can also affect wheat (symptoms resemble barley yellow dwarf).

The aster leafhopper is light green. The head is marked with black spots arranged in pairs (which accounts for the other common name of **Sixspotted leafhopper**). The aster leafhopper overwinters as an egg in the northern states. These eggs are hatching sometime in June. However, by late May and early June, adult leafhoppers are migrating into the region from areas to the south. In southern Minnesota and Wisconsin, the migrant adults are monitored for Aster Yellows infectivity levels. This information is useful for determining the population levels where growers need to control aster leafhopper to minimize infection and losses.

Thresholds:

Sampling for leafhopper adults is done with a sweep net. When monitoring a field, estimate the population based on the average number of leafhoppers per 100 sweeps. In Wisconsin, based on a 2.5% infectivity level, control of aster leafhopper in carrots is currently recommended when sweep net sampling finds 20 leafhoppers per 100 sweeps for susceptible carrot varieties, or 40 per 100 sweeps for resistant carrot varieties.

INSECTICIDE	DOSAGE IN LB AI/ACRE	PRODUCT PER ACRE	RESTRICTIONS ON USE
beta-cyfluthrin Baythroid XL *RUP*	0.0125 - 0.022	1.6 - 2.8 fl oz	PHI = 0 days. A total of 14.0 fl oz per acre may be made per season. Allow at least 7 days between applications. Due to potential injury to bee, do not apply to crops being grown for seed.
carbaryl Sevin	0.5 - 0.75	rate varies by formulation	PHI = 0 days.
esfenvalerate Asana XL *RUP*	0.03 - 0.05	5.8 - 9.6 fl oz	PHI = 7 days. Apply as needed for control, but do not exceed 0.5 lb ai/acre per season. For aerial application apply in a minimum of 5 gals water per acre.
imidacloprid Admire Pro		0.31 - 0.74 fl oz/ 1,000 feet of row 4.4 - 10.5 fl oz/A	PHI = 21 days. Apply in-furrow (rate per 1,000 row feet) or shanked-in. Or, apply in a narrow band (2 inches or less) directly below (1 to 2 inches) seed depth during planting.
imidacloprid Nuprid 2F	see label	10 - 24 fl oz or 0.7 - 1.7 fl oz / 1,000 row-feet	PHI = 21 days. Maximum amount allowed per season 24 fl oz/acre/season. Maximum number of applications per crop season = 1. Apply using one of the following methods: 1) Chemigation into root zone, 2) In-furrow spray 1 to 2 inches below seed depth during planting, or 3) In a narrow (2 inches or less) band directly (1-2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting. Not for use on crops grown for seed unless allowed by state-specific labeling. Tops or greens may be utilized fro food or feed.
imidacloprid Nuprid 1.6F	0.044	3.5 fl oz	PHI = 7 days. Minimum interval between applications = 7 days. Maximum amount allowed per season 15.5 fl oz/acre/season. May be applied through properly calibrated ground, aerial or chemigation application equipment. Not for use on crops grown for seed unless allowed by state-specific labeling.
malathion Malathion 57 EC		2.5 pts.	PHI = 7 days.
methomyl Lannate LV *RUP*	0.4 - 0.9	1.5 - 3 pts	PHI = 1 days. Do not make more than 10 applications per crop. Do not apply more than 6.3 lbs. ai/acre/crop.

RUP - Restricted use pesticide