

Dry Beans XIII-10

Aphids

Gary L. Hein & Frank B. Peairs



Aphid.

Identification (and life cycle/seasonal history)

Bean Aphid (*Aphis fabae*) The bean aphid is found in both winged and wingless forms on the undersides of leaves and on stems of the bean plant. The aphids are blue-black in color and overwinter in the egg stage on *Euonymus* plants. They move to summer hosts (including beans) after spending a generation on its overwintering host through the spring.

Soybean Aphid (*Aphis glycines*): The soybean aphid has recently been introduced into the U.S. and has spread rapidly throughout the midwestern states. Currently it has not spread further west than the eastern half of Nebraska, Kansas or South Dakota. This aphid can be found on dry beans, but it is not capable of completing its life cycle on dry beans. Therefore, it is unlikely to become a serious direct pest of dry beans. However, it has been shown to be capable of transmitting some viruses to soybeans so the possibility does exist that it may be able to transmit viruses to dry beans as well. Currently, this insect is not a concern in the High Plains region, but the status of this insect in the region should be followed over the next several years as its spread continues.

Plant Response and Damage

The bean aphid is a known vector of bean common and yellow mosaic viruses. Severe infestations can cause wilting and discoloration, but naturally occurring biological controls normally prevent this.

Management Approaches

The bean aphid is not considered a serious pest and control is not considered necessary.

Product List for Aphids

Insecticide	Product	Preharvest Interval , remarks
-------------	---------	-------------------------------

Asana XL ^{RI}	5.8-9.6 oz./A	PHI 21 days; REI 12 hrs. Pea Aphids only.
Di_Syston 15% ^R , 8 ^R	15%:6.0 oz./1000 ft 8:0.9-1.9 oz./1000 ft	PHI 60; REI 72 hrs.
Dimethoate ¹ multiple formulations	See label for rates	PHI see label; REI 48 hrs.
imidacloprid (multiple products)	See label for rates.	PHI 21 days; REI 12 hrs.
Lannate WSP ^R , LV ^R	WSP:0.5-1.0 lbs./A LV:1.5-3.0 pts./A	PHI 14 days; REI 48 hrs.
Mustang MAX ^{RI}	3.2-4 oz/A	PHI 21 days; REI 12 hrs.
Orthene/Acephate multiple formulations	See label for rates	PHI 14 days; REI 24 hrs.
Penncap_M ^R	2.0 pts./A	PHI 15 days; REI 5 days.
Temik 15G ^R	5.0-7.0 lbs./A	Apply at planting. Potential for groundwater contamination. See label for environmental precautions and restrictions. PHI 90 days; REI 48 hrs.
Thimet 20G ^R	20G: 4.5-7.0 oz/1000 row ft	Apply at planting; drill to side of seed, not in contact with seed; PHI 60 days; REI 72 hrs.
Phaser 3EC	1.33 qts/A	PHI 3 days; REI 24 hrs.
Lambda- cyhalothrin ^{R1} (Warrior, generics)	2.56-3.84 oz/A	PHI 21 days; REI 24 hrs.

Seed Treatment

Cruiser 5FS	1.28 fl oz/100 lb seed	See treatment directions and precautions on label.
Gaucho 480	2-4 fl oz/100 lb seed	See treatment directions and precautions on label.

^RRestricted use pesticide ¹Labeled for chemigation

The information herein is supplied with the understanding that no discrimination is intended and that listing of commercial products, necessary to this guide, implies no endorsement by the authors or the Extension Services of Nebraska, Colorado, Wyoming or Montana. Criticism of products or equipment not listed in neither implied nor intended. Due to constantly changing labels, laws and regulations, the Extension Services can assume no liability for the suggested use of chemicals contained herein. Pesticides must be applied legally complying with all label directions and precautions on the pesticide container and any supplemental labeling and rules of state and federal pesticide regulatory agencies. State rules and regulations and special pesticide use allowances may vary from state to state: contact you State Department of Agriculture for the rules, regulations and allowances applicable in your state and locality.

Categories: Dry Beans, Aphids

Date: 04/24/2006