
SPRA-COUPE


FOR AGRICULTURAL USE
Agroneem
Emulsifiable Concentrate
Plant Origin
Antifeedant
Insect Repellent
Growth Regulator
Agricultural Insecticide
KEEP OUT OF REACH OF CHILDREN
CAUTION
Net contents: 32 FL.OZ.
(1 Quart or 0.947 liter)
24 d
AZA-DIRECT
BIOLOGICAL INSECTICIDE
KEEP OUT OF REACH OF CHILDREN
CAUTION
READ ALL DIRECTIONS BEFORE USING THIS PRODUCT
Gowan

Don’t waste your $$$

Fulfill®

Insecticide

For control of certain aphids in cotton, hops, pecans, potatoes (and other tuberous and corm vegetables), tobacco, and vegetables

Active Ingredient:

Pymetrozine (CAS No. 123312-89-0) . . . . . 50.0% [1]

FIFRA

Section 24(c) Special Local Need Label

SUPPLEMENTAL LABELING FOR SPECIAL LOCAL NEED IN ARIZONA

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF ARIZONA

FULFILL®

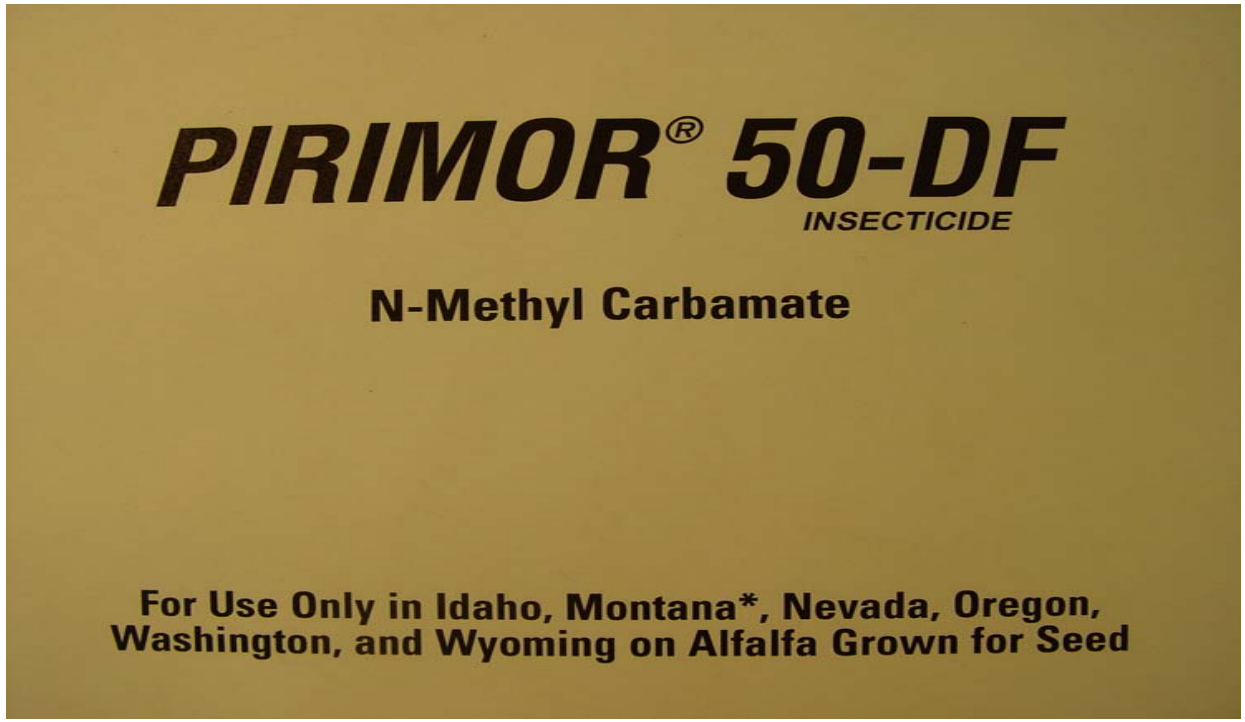
EPA Reg. No. 100-912
EPA SLN No. AZ-000004

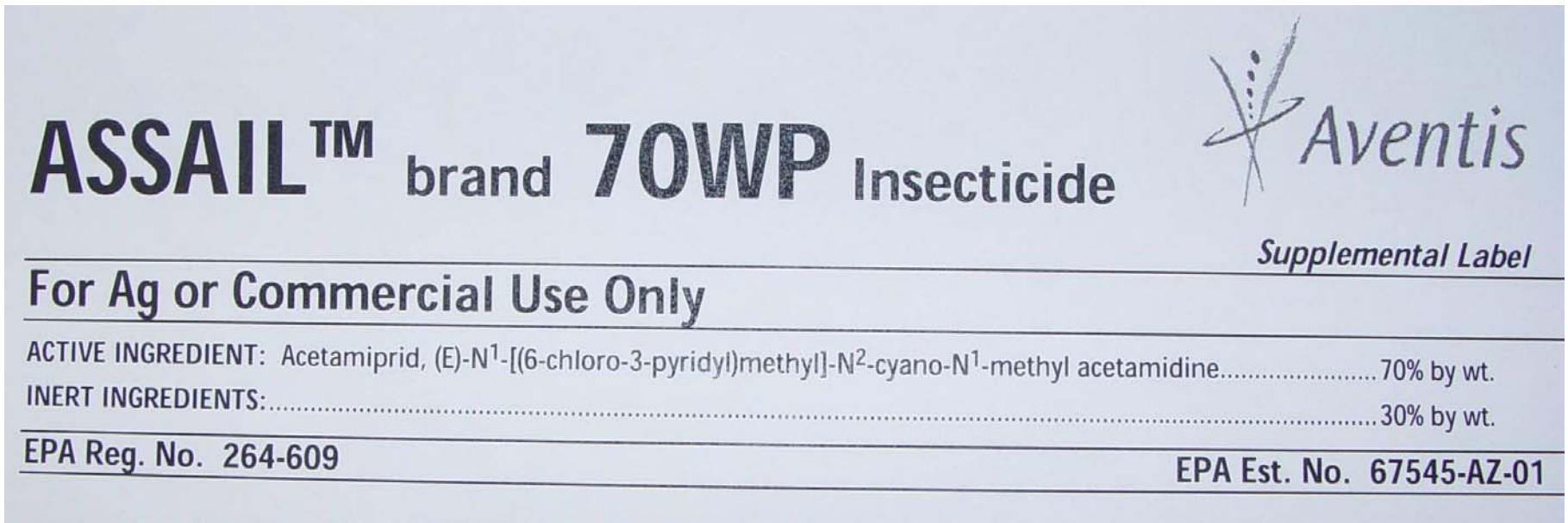
For control of certain aphids on root vegetables, cole crops, and leafy vegetables grown for seed

Active Ingredient:	
Pymetrozine: 1,2,4-Triazin-3(2*H*)-one,4,5-dihydro-6-methyl-4-[(3-pyridinyl methylene)amino]	50.0%
Other Ingredients:	50.0%
Total:	100.0%

Expires 12/31/2004

Both compounds are *Bee-safe*





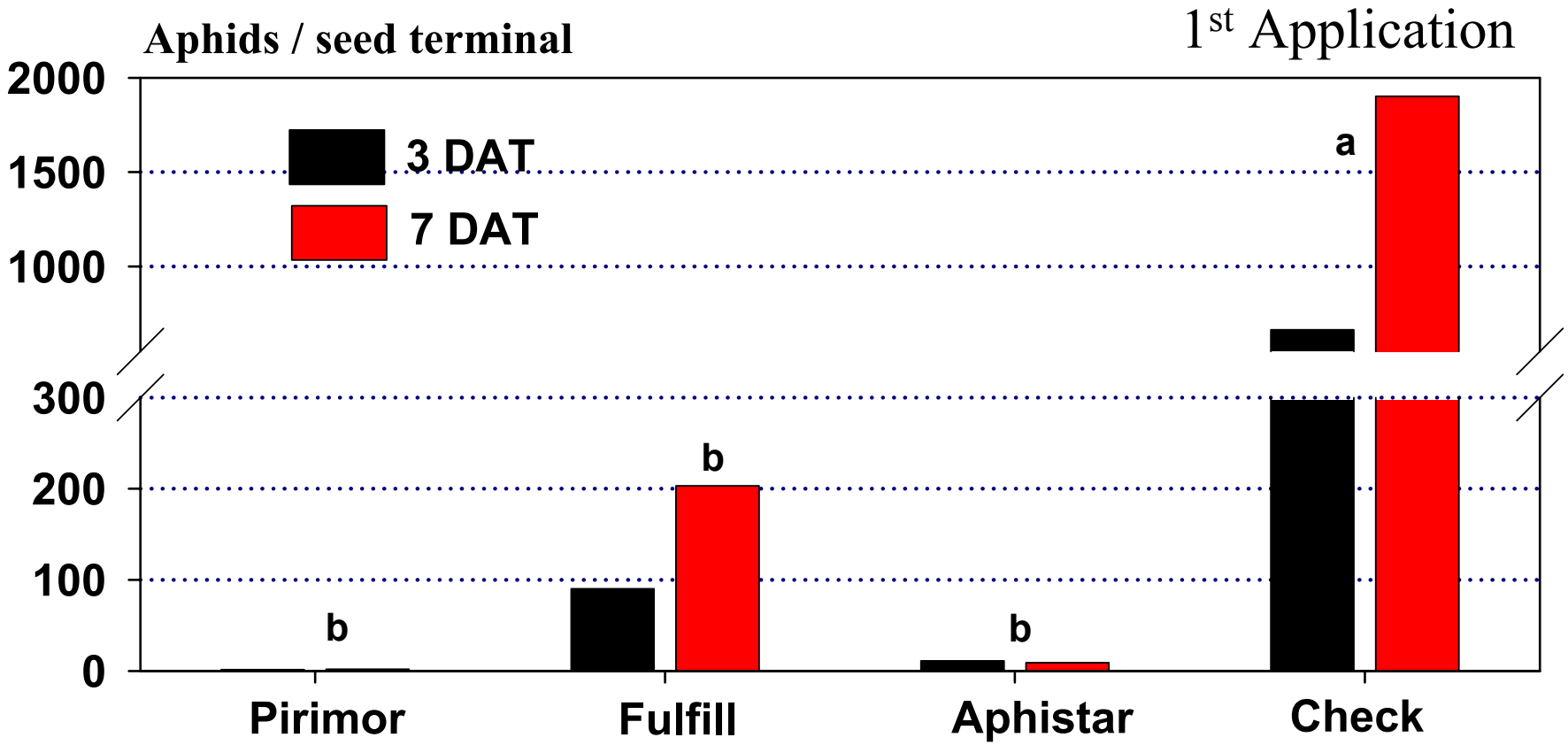
Pirimor 50DF

Assail 70WP

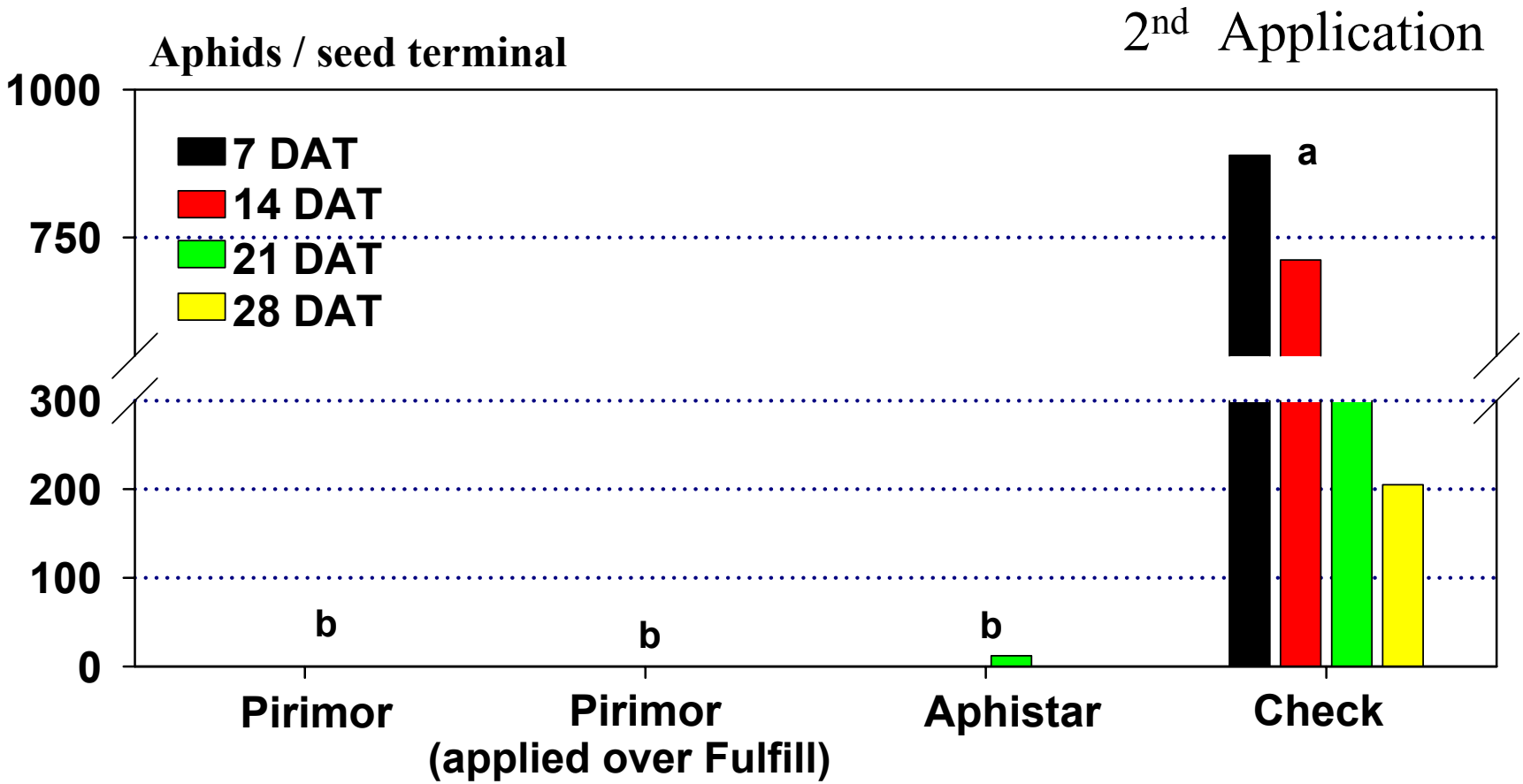
Actara WG

Fulfill WG

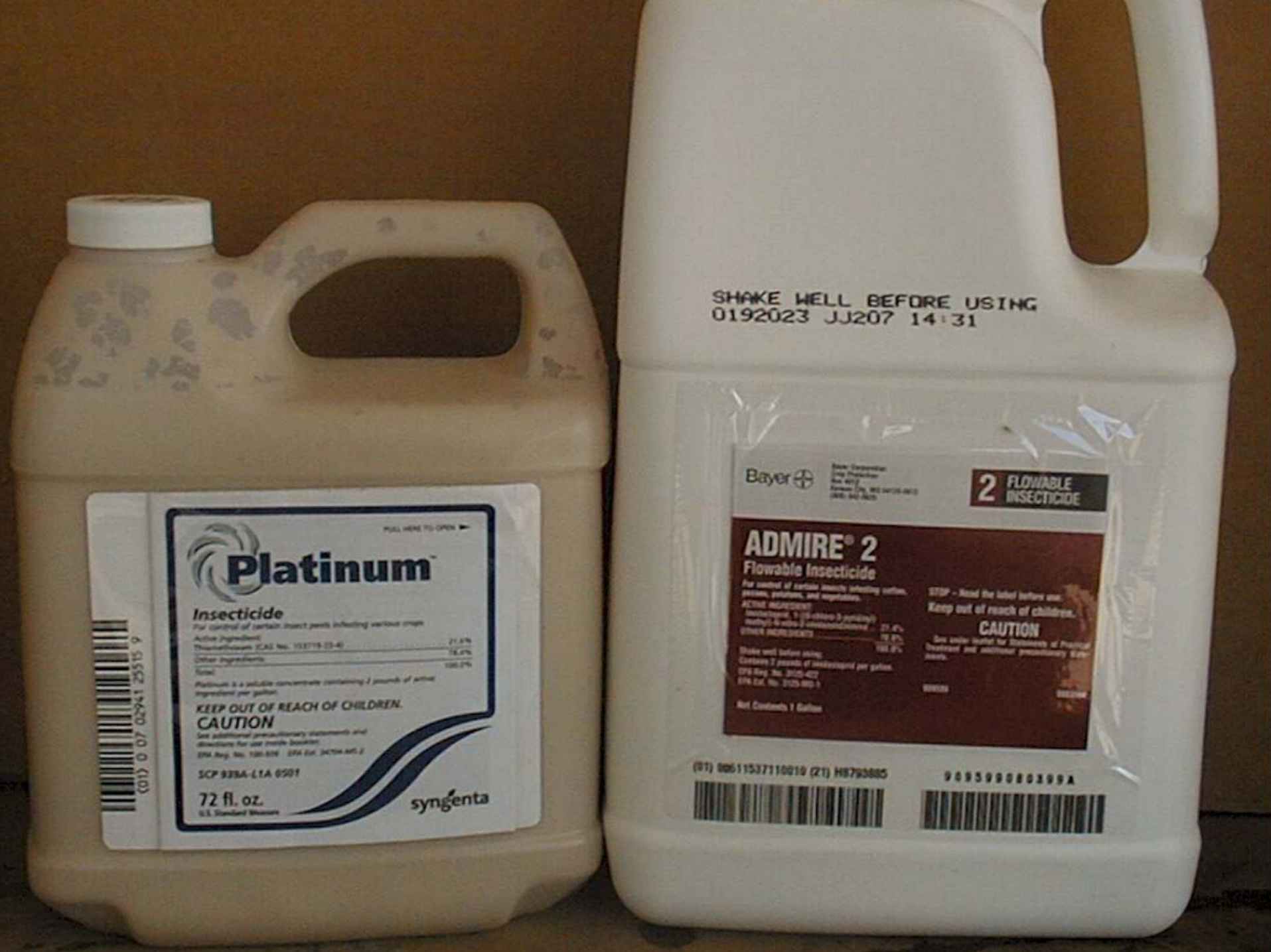
Cauliflower Seed Crop, Spring 2001



Cauliflower Seed Crop, Spring 2001




Pirimor
Check


Platinum
Insecticide
KEEP OUT OF REACH OF CHILDREN.
CAUTION
72 fl. oz.
syngenta
SHAKE WELL BEFORE USING
0192023 JJ207 14:31
Bayer
2 FLOWABLE INSECTICIDE
ADMIRE® 2
Flowable Insecticide
CAUTION

False Chinch Bug

NYSIUS ERICAE, THE FALSE CHINCH BUG

By F. B. Milliken,
Scientific Assistant, Truck Crop Insect Investigations, Bureau of Entomology, United States Department of Agriculture

INTRODUCTION

The false chinch bug, *Nysius ericae* Schilling (*angustatus* Uhler), has been recognized for many years as a serious pest, especially in the semi-arid regions of the United States, where it causes great damage to sugar beets and cruciferous garden crops, settling upon them suddenly in enormous numbers and sucking so much sap from them that the plants wilt beyond recovery in one or two days.

When the writer was first stationed at Garden City, Kansas, in March, 1913, he could get no information regarding the life history and habits of the insect on which to base control measures. Work was therefore begun to determine these points, and the following account is prepared from data collected during that and the three following years.[1] The closest field study of the insect was made during 1913 and 1914, and the rearing work was done during 1914 and 1916.

DESCRIPTION

THE ADULT

The female is about 4 mm. long by 1.5 mm. wide. The greatest width is through the posterior edge of the prothorax and base of the wings. From this point the body tapers rapidly forward with a slight curve. The eyes project prominently on the sides at the posterior margin of the head, and the antennæ arise between the eyes and the base of the beak. The abdomen is elongate, its sides almost parallel and its apex rounded. It is entirely covered by clear membranous wings which project a little at the anal extremity. The ovipositor arises on the ventral surface of the tip of the abdomen, and is carried folded in a groove below the posterior abdominal segments, the basal portion extending forward and the distal backward just beneath.

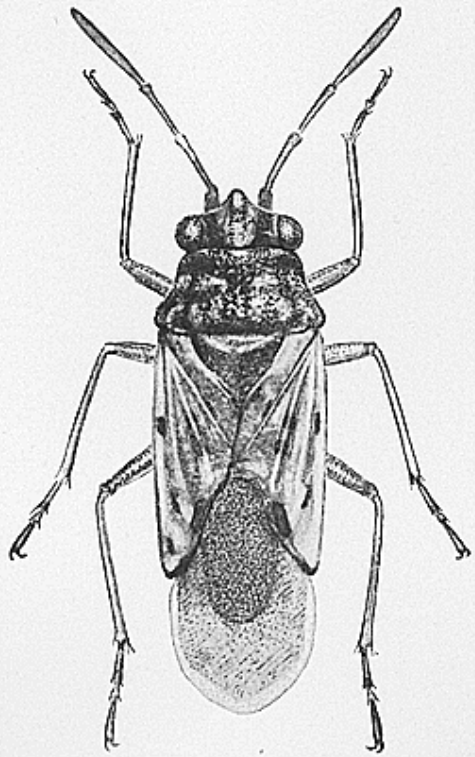
The males are perceptibly smaller than the females, or about half the length and half the width of a grain of wheat. Their form is similar to that of the female, excepting the tip of the abdomen, which is more pointed and without the groove on the venter.

The newly matured adult is dull whitish, but in a short time this changes to dirty gray with dark or black spots. Old adults (Pl. 60) are nearly black, except the ventral portions of the posterior abdominal segments of the female, which are gray or light brown. The wings remain transparent. The antennæ are uniform brownish, the legs and tarsi light brown with black spots, and the claws black.

[1] During the summers of 1914, 1915, and 1916 the writer was assisted by Mr. F. M. Wadley. Besides rendering assistance on the entire project, he alone collected the data for the topics, "Rate of oviposition at various hours of the day" and "Seasonal variation in oviposition."

Nysius ericae

PLATE 60




Big-eyed Bug


FCB

1 generation can be completed in <u>29 days</u>

LENGTH OF LIFE CYCLE

At Garden City, during 1914, the average temperature being 79.78° F., the different stages from deposition of the egg to death of the resulting individual were determined as follows:

	Days.	
Egg stage	4	
Nymphal stage	20. 35	
Maturity to mating	3	
Mating to oviposition	1	
Beginning oviposition to death	12	
Total		40. 35

False chinch bugs breed on weeds.

Weeds that serve as host plants for these insects include:

wild mustards and radish
shepherds purse,
london rocket
spurge.

FCB: usually heaviest in areas of the field where there had been significant amounts of mustard.

False Chinch Bug Suspected of Damaging Citrus Fruit

The ability of false chinch bugs to damage young citrus, pistachio and other fruit trees is fairly well documented.

Their feeding can cause young trees to wilt and die.

Colorado Canola Seed Production - 2000

"This year's outbreak was favored by :

1) The growth of mustards and other weeds in spring combined with the cool wet weather = large numbers of false chinch bugs survived and thrived.

2) For much of the season they remained in rangeland and along roadsides.

3) The drying weather of midsummer has caused many of them to migrate.

Cultural Control:

Weed management is especially critical.

Chemical Control:

These insects are very difficult to manage.

“They are inherently quite resistant to most insecticides. “

Insecticides containing **diazinon**, **permethrin, or chlorpyrifos**, should be able to provide some control.

Capture® (5 oz) applied post-bloom, pre-harvest provided good FCB control