

CONTROL OF RUSSIAN WHEAT APHID WITH PLANTING TIME INSECTICIDE AND FERTILIZER COMBINATIONS  
USDA ARS EXPERIMENT STATION, AKRON, CO, 1988-89

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INSECTICIDE, RATE/1000 ROW FEET	FERTILIZER TYPE*	RWA PER POT AT ONE WEEK*
DI-SYSTON 15G, 1.7 FL OZ	-	0.0 B
FURADAN 4F, 0.375 FL OZ	L	0.5 B
DI-SYSTON 8E, 0.25 FL OZ	L	0.6 B
DI-SYSTON 8E, 0.25 FL OZ	-	1.0 B
THIMET 20G 1.2 OZ	L	1.3 B
DI-SYSTON 15G, 1.7 OZ	L	1.7 B
THIMET 20G, 1.2 OZ	-	3.1 B
DI-SYSTON 8E, 0.25 FL OZ	D	3.5 B
FURADAN 4F, 0.375 FL OZ	D	17.7 A
UNTREATED	-	33.6 A
UNTREATED	D	36.1 A
UNTREATED	L	37.6 A

\* L = Liquid fertilizer (5 gal/acre of 10-34-0); D = Dry fertilizer (10 lbs N/acre from 33-0-0 and 34 lbs P<sub>2</sub>O<sub>5</sub>/acre from 0-46-0)

\*\* Means followed by the same letter are not statistically different (p = 0.05).

CONTROL OF RUSSIAN WHEAT APHID WITH PLANTING TIME INSECTICIDE AND FERTILIZER COMBINATIONS, US ARS EXPERIMENT STATION, AKRON, CO, 1988-89: Treatments were applied with a precision research planter equipped with Gandy boxes for granule applications and a microtube injector (Agri Inject, Yuma, CO) for liquid fertilizer and insecticide applications. Dry fertilizers were broadcast by hand. Plots were 6 ft by 50 ft and were arranged in four replicates of a randomized complete block design. Treatments were evaluated by taking plants from the field, potting them, and infesting them with Russian wheat aphid in the greenhouse. This was done five times from October, 1988 through April 1989. The table gives the average number of aphids found in each treatment one week after infestation.

Most treatments performed very well. The activity of Furadan 4F, but none of the other products, was extended by the addition of liquid fertilizer. There is no statistical difference among the means for the first eight treatments, or among the last four treatments.

Pests:	Russian wheat aphid, <u>Diuraphis noxia</u> (Mordvilko)
Crop:	Winter wheat, <u>Triticum aestivum</u> , 'Carson'
Planting date:	5 Sept 1988
Plant Population:	500,000 plants/acre
Soil Type:	Platner clay loam
Herbicide:	NA
Insecticide History:	No previous insecticide
Field History:	Fallow previous year