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New Russian Wheat Aphid Biotype Appears to be Widespread in Western Kansas

Samples of Russian wheat aphid from Hays, Garden City and Colby have all tested positive as 'biotype 2' this spring. This new biotype is identified based on its ability to damage formerly resistant wheat varieties such as Halt and Stanton. These results would indicate that this new biotype of RWA is now widely distributed across western Kansas. In comparison to the original strain, this aphid can develop and reproduce faster under warm conditions and causes damage symptoms on wheat to develop more rapidly.



Fig 1. RWA Damage Fig 2. Russian Wheat Aphids Fig 3. RWA Side-view

The good news is, we have not yet seen any economically significant infestations, although some degree of vigilance is still warranted on the part of wheat farmers especially in western Kansas. In many fields where damage is evident, live aphids are largely absent, a good sign that biological control is functioning well to

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prevent the development of outbreak aphid populations. When scouting, look first for the damage symptoms (Fig. 1) that include leaf rolling, bleaching and streaking, and prostrate tillers. If damage is noted, check to see if live aphids (Fig. 2 and 3) are still present on damaged plants by unrolling leaves. In most cases, various life stages of lady beetles will also be observed, the most important natural enemies of RWA in our region. Given that most wheat is heading at this time, we are probably past the treatment window for this year except possibly in some late maturing fields in Northwest Kansas.

More information on RWA can be found at the following links:

Russian Wheat Aphid Pub Number: MF2666 http://www.oznet.ksu.edu/library/entml2/samplers/mf2666.asp

Wheat Insect Management 2006 http://www.oznet.ksu.edu/library/ENTML2/MF745.PDF

Russian Wheat Aphid Treatment Threshold http://www.oznet.ksu.edu/library/entml1/RWAThres.pdf

Common Aphids on Wheat in Western Kansas http://www.oznet.ksu.edu/library/entml1/Commonap.pdf

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Get Bins Ready for Wheat Harvest

It is time to get the grain bins cleaned and treated in preparation for wheat harvest. Ideally structural sprays are designed to be used four to six weeks before the grain enters storage. Time is needed to allow insects to come into contact with the insecticide and die before filling the bin with new grain. *After cleaning the structure thoroughly*, walls, roof, and floor should be sprayed according to label instructions. Over the past few years there have been many changes in products that are labeled to treat grain and grain storage areas. Some of the newer products include: Tempo Ultra (empty structural sprays only), Diacon II, and Storcide II. Make sure that the products you purchase are labeled for the intended use. To help make decisions on products that are available to treat grain bins refer the publication Stored Grain Insects, Part III: Structural sprays, pest strips, protectants and surface sprays. This publication is available on the web at: <u>http://www.oznet.ksu.edu/library/entml2/MF917.PDF</u> additional information can be found at: <u>http://www.oznet.ksu.edu/entomlogy/extension/InsectID/Stored%20Grain.html</u>.

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Sincerely,

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