

Wheat Entomology Newsletter April 18, 2022

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Introduction

Hello, this is our second year conducting the Wheat Entomology Newsletter, led by Dr. Punya Nachappa, entomologist and Associate Professor in the Department of Agricultural Biology (www.nachappalab.com) and Dr. Erika Peirce, a Postdoctoral Fellow working with Dr. Nachappa. If you suspect you have insects/mites, please don't hesitate to reach out to us. We are also on Twitter @NachappaPunya and @TravelngBugGirl

The Wheat Crop

As you know the exceptionally dry fall and winter has resulted in poor germination of wheat across the state (Fig 1; Photo credit: Dr. Esten Mason). We are especially concerned about our research sites in Orchard, New Raymer and Akron, but we intend to continue with our projects while praying for rain!



Figure 1: Wheat fields with poor germination. Photo from Esten Mason.

Brown Wheat Mites

Ron Meyer reports brown wheat mite populations near Burlington, CO early in the year. However, snow received in February and March may have controlled populations, for now. Continued hot and dry conditions may create problems in the Southeast.

The economic threshold for this pest is not well defined, but during an outbreak spraying with insecticide is the only option. Previous research has shown that dimethoate insecticides are the most effective of currently registered products. Products containing chlorpyrifos should be

considered if Russian wheat aphids are also present (see https://wiki.bugwood.org/HPIPMBrown_Wheat_Mite_SG).

Wheat Stem Sawfly

The survey of wheat stem sawfly emergence will continue for the 11th consecutive year (Fig. 2). We will start our survey on Apr 25th, but it's likely that sawfly emergence will be delayed due to extremely dry conditions. We will inform you about the on-going survey in this newsletter.

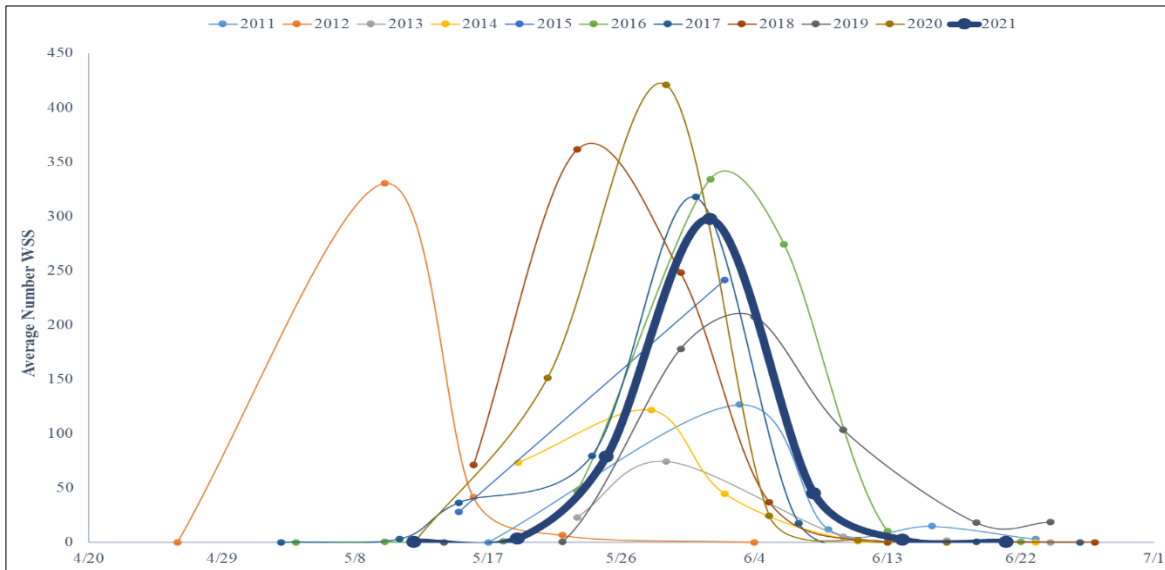


Figure 2. Average number of adult wheat stem sawfly collected per 100 sweeps from 2012-2021 at Orchard and New Raymer CO wheat fields. Data is averaged over collection sites and 2021 data line is bold. Figure from D. Cockrell.

Russian Wheat Aphid

Melissa Schreiner reports high populations of Russian wheat aphid in the Tri-River Area, Western Colorado. Currently no reports of Russian wheat aphid in Northeast Colorado.

The dry winter and spring will likely increase the infestations this year. Scout your fields regularly for the white or purple chlorotic streaking that the aphids cause. More information on Russian wheat aphid can be found at <https://extension.colostate.edu/topic-areas/insects/aphids-in-small-grains-5-568/>.

Wheat curl mites

Currently no reports of wheat curl mites in Colorado.

There are no effective miticides for wheat curl mites so growers cannot be lax with volunteer wheat control, which is the most effective management practice for the and the viruses it vectors.

Wheat Diseases

For wheat disease updates by Dr. Robyn Roberts, please see:

<https://coloradowheat.org/category/news-events/wheat-pest-and-disease-update/>

Acknowledgements

We would like to acknowledge the tireless work of the CSU researchers and extension agents for reporting pest problems throughout the state, including Kevin Larson, Brett Pettinger, Ron Meyer, Wilma Trujillo, Todd Ballard, Sally Jones-Diamond, Dennis Kaan, Mel Schreiner, and Michaela Mattes. As well Dr. Frank Peairs for continuing to provide insight on pest problems during his retirement.