

Wheat Entomology Newsletter April 29th, 2024

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AGRICULTURAL BIOLOGY
COLORADO STATE UNIVERSITY



Colorado Wheat
Administrative Committee

Request For Crop Rotation Field Sites: CWRF-funded research project

As part of our CWRF-funded research, we are studying the impacts of crop rotations on sawfly infestations, and we need more field sites! If you are interested in participating, please contact Adam about your rotation history and our team will come to sample your fields.

Wheat Stem Sawfly Updates

Our latest visit to the field sites at New Raymer and Orchard, CO took place on 4-25-24. No adults have been found at our 8 survey locations so far. In both New Raymer and Orchard, the sawflies are undergoing pupation (**Figure 1**). They are developing adult features, such as legs, eyes, etc. Given this, we expect the sawflies to begin their adult emergence soon (early to mid-May).



Figure 1: WSS pupae collected from New Raymer, CO on 4-25-24.

Cutworm Reports

We have received widespread reports of cutworm activity across the state. Sightings extend from NE Colorado all the way down south to Walsh. We are observing both the army cutworm (*Euxoa auxiliaris*) and the pale western cutworm (*Agrotis orthogonia*). Infestation pressure has been variable but appears to be generally more intense in the northern half of the state. Sally Jones-

Diamond (CSU Crops Testing) reported fields meeting the treatment threshold in Logan, Phillips, and Adams counties.

Both species cause crop damage, with army cutworms feeding on above-ground foliage. Pale western cutworms will feed on the plant crowns, completely severing stems. Scouting for both species can be performed by sifting through soil and establishing a count of cutworms per row foot. Prior literature suggests a treatment threshold of 4-5 army cutworms per row foot, and 1-2 pale western cutworms per row foot. Insecticides are the primary means of control for both pests.

It's important to note that severed stems observed at this time of year are due to cutworms, not wheat stem sawflies. Sawfly lodging will not occur until the wheat matures closer to harvest.

More information on caterpillars in small grains can be found at:

<https://extension.colostate.edu/topic-areas/insects/caterpillars-in-small-grains-5-577/>.

Pyrethroid insecticides are effective against both army cutworm and pale western cutworm: (https://wiki.bugwood.org/HPIP:Small_Grains_Army_Cutworm). The EPA restored Chlorpyrifos use so it is available as well- <https://www.epa.gov/pesticide-worker-safety/epa-update-use-pesticide-chlorpyrifos-food>



**Figure 2 (left):
Cutworm-damaged
wheat.
Figure 2 (right):
Cutworm found residing
within the soil substrate.
Photos by Sally Jones-
Diamond.**

Brown Wheat Mite Reports

Ron Meyer (CSU Extension) and Sally Jones-Diamond have reported populations of brown wheat mites (*Petrobia latens*). Sightings occurred west of Burlington along the I-70 corridor. Further populations were discovered from Byers to Julesburg. Sally noticed a particularly bad field in Adams County. This pest thrives in dry conditions, and populations may increase in reduced instances of rainfall. We will continue to monitor this situation and report any developments. If treatment becomes necessary, dimethoate insecticides are the most effective of currently registered products. Note that chlorpyrifos products have been banned as of Feb. 2022.

For more information, visit: https://wiki.bugwood.org/HPIP:Brown_Wheat_Mite_SG

Wheat Diseases

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

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

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