Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

Department of Entomology 123 West Waters Hall K-State Research and Extension Manhattan, Kansas 66506 785-532-5891 http://blogs.k-state.edu/kansasbugs/ http://www.entomology.ksu.edu/extension

April 16, 2021 No 4

Alfalfa Pests Stable flies emerging as spring temperatures rise Dr. Cassandra Olds – Department of Entomology Personnel Bug Joke of the Week

Alfalfa Pests (pea aphids, alfalfa weevil pupa)

Alfalfa weevils have been actively feeding and developing quite rapidly throughout south central and north central Kansas during the last 7-10 days. However, infestation levels have not increased very much. The most significantly infested fields monitored during this period reached the 55% level, i.e. just over 1 larva/2 stems. Most fields were between 25-35% infested, with about 75% of the larvae at least in the late 1st- 3rd instar stage. Some fields have been sprayed and it seemed to provide good knockdown (see fig. 1 of dead larvae). All fields not treated had prepupae and pupae (see fig. 2). Alfalfa weevil larval sampling/monitoring should continue for at least another 10-14 days.

Pea aphid populations have decreased significantly in the last 7-10 days in the untreated fields.



Figure 1: Dead Larvae (photo by Cody Wyckoff)

Figure 2: Alfalfa Weevil Pupa (Photo by Cody Wyckoff)

Jeff Whitworth

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Stable flies emerging as spring temperatures rise

Stable flies (Stomoxys calcitrans) are starting to emerge with the start of spring; you might even have seen a few around already! Stable flies are distinguishable by four black stripes on the thorax, black checkered spots on the abdomen and large, protruding mouthpart (Figure 1).

These flies are a common pest feeding primarily on cattle and horses but can also target other livestock species, pets (especially dogs) and humans. Both male and female adult flies are obligate blood feeders and their painful bite and feeding causes significant annoyance and blood loss. Stable flies can negatively affect cattle average daily weight gain, milk production and feeding efficiency. Each fly feeds once or twice a day for between two and five minutes each time. Stable flies are routinely found on the legs or underside of large animals such as horses and cattle, on dogs and small ruminants however, they are generally found around the head area. When not feeding,



adult flies can be found resting on building surfaces or vegetation.

Sustainable stable fly control is best achieved through an integrated approach. In her lifetime, a single adult female can lay between 500 and 1000 eggs. Limiting resources available for egg laying and larvae

development, especially in the spring and summer months is essential. Stable fly larvae develop in decaying plant matter, particularly those contaminated with animal waste. Hay bales are a great breeding site for stable flies (Figure 2), elevating hay and straw off the ground when feeding animals prevents manure and urine contamination. Periodically clear feed storage and animal feeding areas of spilled hay, straw and feed. Large bales for herd feeding are especially able to promote fly populations, be sure to inspect and clean these areas regularly. Separate animal watering from



feeding areas and protect stored feeds from weather and water runoff. For areas where straw bedding is used, frequently replace the bedding, spreading decomposing waste in thin layers, which allows waste to dry faster and be less attractive to female stable flies. Composting manure increases heat and dries out material making the environment inhospitable for developing fly larvae. If you have to store manure waste

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in piles, attempt to keep as little fibrous plant material/feed as possible in the pile. Insect growth regulators fed to animals as feed-throughs inhibit stable fly development during the pupal stage reducing adult fly numbers and are a great addition to an integrated pest management program. Adult stable flies can be controlled through insecticide application with both pyrethroid and organophosphate products being effective although resistance to both is increasing. For more information on specific products to use, search the VetPestX website for specific product information (https://www.veterinaryentomology.org/vetpestx).

Cassandra Olds

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Dr. Cassandra Olds – Dept of Entomology Extension Personnel

Dr. Cassandra Olds has extension responsibilities in vector-pathogenhost interactions, specifically how these can be managed to reduce the negative impact of arthropod pests and their associated pathogens on animal health and wellbeing. Successful transmission of vector-borne pathogens is dependent on complex interactions between vector, pathogen and host. We research various aspects of tick vector competence to better understand endemic stability and immune responses of cattle to vector-borne pathogens. In addition, we also conduct studies investigating the role of filth flies in the spread of anti-microbial resistance.



Cassandra Olds

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Bug Joke of the Week

Q: What's green and jumps a mile per minute? A: A grasshopper with the hiccups!

Sharon Schroll

Sincerely,

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KANSAS STATE UNIVERSITY Department of Entomology

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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