Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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March 23, 2024, No. 1

News Corner

Diagnostic Corner: Kansas Insect ID and Pest Solutions

NEWS CORNER

Surveying for Your Interests and Feedback

To kick off our first newsletter for 2024, we are adjusting our newsletter! Our extension team plans to put out at least one newsletter biweekly for the rest of 2024. During the more active months like May, June and July, we anticipate weekly updates as it is imperative that we deliver timely news updates which we will always put at the beginning of the newsletter under "News Corner".

We are implementing a new structure to our newsletter so we can include more extension topics that aren't as time sensitive as "News Corner". This includes a "Learning Corner" where you can learn about general entomological topics and "Diagnostic Corner" which cover diagnostics program announcements as well as general articles on identifying different groups of insects, individual insects and just be taxonomy themed overall.

With those changes in mind, we need the input from our readers! What article categories interest you? How can we improve our extension newsletter and webpages to be timely and relevant to you?
Fill out survey here: https://kstateentom.fillout.com/t/mPcWiMog1Cus

Brian McCornack - Mobile technologies and digital delivery

HOME

Kansas Insect Newsletter

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Early emergence of ticks and other pests with warming weather

This past winter was unseasonably warm for most of the continental U.S. and this trend has continued into the spring. Many of you may have noticed plants greening earlier than in past years. Ticks are also taking advantage of this warmer weather and breaking their overwintering sooner than what has historically occurred. Unlike us, arthropods including ticks and insects do not create their own heat and rely on ambient temperatures to warm themselves enough to be able to move and find a host. During the winter, the vast majority of tick species are not active and remain in a dormant state, protected by leaf litter and rocks. Overwintering is broken when temperatures warm and daylight hours increase. In warmer seasons, ticks can be seen crawling along the ground surface on the lookout for a host (Figure1), a process known as questing. Tick drags and trappings conducted earlier in March found multiple species of ticks already out and active.

Figure 1: Adult male (left) and female (right) lone star tick in leaf litter. Female tick began climbing the blade of grass exhibiting host-seeking questing behavior.

People should be taking anti tick-precautions such as wearing long pants and using tick repellants while outdoors in grassy wilderness areas. Check for ticks after being outside and promptly remove any you find. Prompt removal of ticks reduces the risk of tick-borne pathogen transmission or the development of allergic reactions. After locating a tick, simply use a pair of tweezers or your thumb and index finger to grab the tick as close to the skin surface as possible. With steady slow pressure, pull away from the skin. If possible, keep the tick in a plastic bag for two weeks to allow for identification and pathogen testing if need be. If you develop flu-like symptoms within two weeks of being bitten, contact your doctor and inform them of the situation.

Our furry friends are also not safe from ticks and the pathogens they transmit. Only use products registered and safe for use in animals. Always remember that pyrethroid based products, safe for use in dogs, are toxic to cats and should never be used! Recently there has been a surge in 'natural' products for use in dogs and cats, most noticeably those containing garlic (Figure 2). Be aware of false labeling claims such as 'veterinarian developed' or 'veterinarian approved'. Garlic is considered to be toxic to both dogs and horses and should not be used for ectoparasite control. There is also no evidence that garlic is an effective acaricide or insecticide. Also be on

Figure 2: Garlic based tick and flea products available online. Many tick and flea control products labeled 'natural' are not safe or effective.

the lookout for other products which have no proven efficacy such as ultrasonic tick protectors which can be commonly found at local stores (Figure 3). Not only are they costly but are also ineffective. Talk to your veterinarian for the best choice of tick control for your pets and livestock.

Figure 3: Ineffective ultrasonic tick deterrents can be found for sale both online and in store for dog and human use.

Warming weather also brings out flies and mosquitoes. Mosquitoes transmit a number of viruses and other disease containing disease agents like heartworm. Although unable to infect humans, infection in both cats and dogs is fairly common in Kansas. Monthly prophylaxis treatment of dogs and outdoor cats is essential. No treatment exists for heartworm infestations once established in cats and although treatment for dogs exists, it is both costly and not always effective. Viruses transmitted by mosquitoes are particularly damaging to horses so make sure you schedule your annual vaccinations soon! Cattle producers and horse owners should be on the lookout for stable flies earlier than usual. With warming temperatures, hay bales are the primary breeding location for stable flies and should be kept as dry as possible with as little mess (Figure 4). Stable flies are often found on the legs of cattle and horses with their heads pointing upwards towards the sky (Figure 5).

Figure 5: Stable flies on the legs of cattle and horses. Head upwards orientation and larger size is an easy way to distinguish between horn and stable flies

Figure 4: Stable flies breed in decaying plant matter mixed with animal waste. Large hay bales are common for both horse and cattle feeding. Keeping hay bales clean and dry will reduce suitability as a breeding habitat and fly numbers. Top image shows a hay bale posing minimal stably fly breeding habitat risk while bottom image shows a prime stable fly breeding habitat.

Cassandra Olds – Veterinary and Medical Entomology

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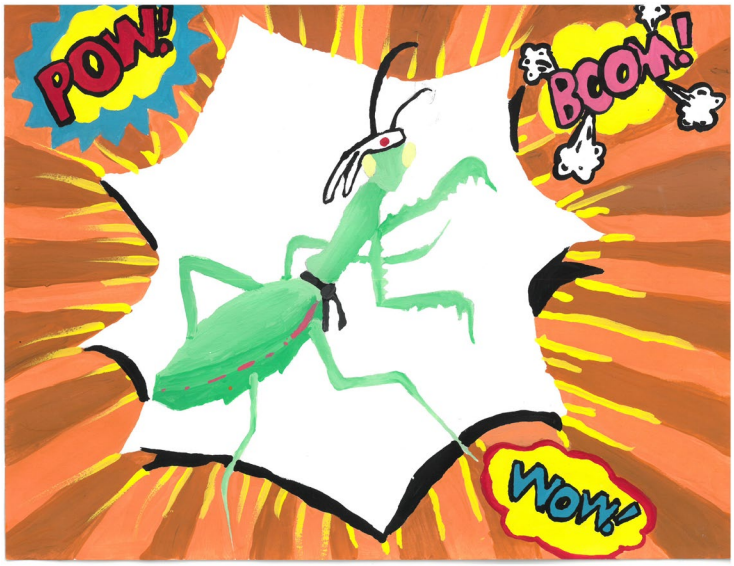
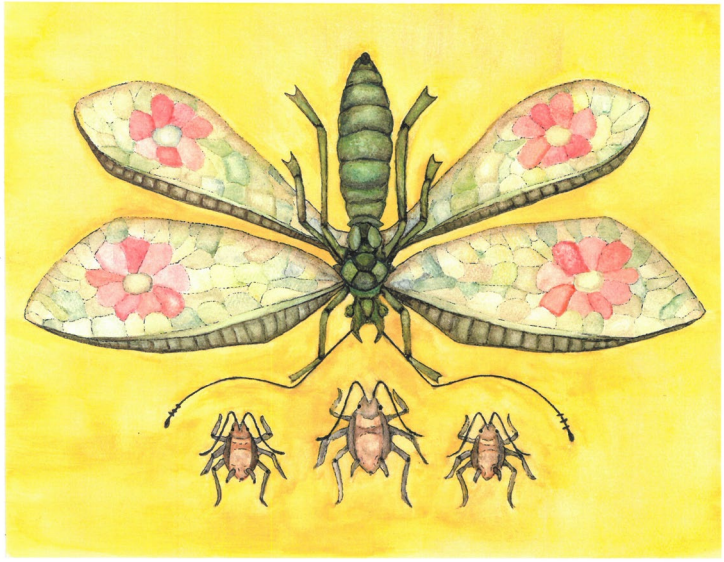
Insect Art Contest





The Kansas State KSRE Pesticide Safety and Integrated Pest Management Program would like to announce the 2024 Insect Art Contest! This year's theme is "Incognito: Insects in Disguise." The goal is to explore how and why insects camouflage, then get creative and submit a work of art featuring an insect that can camouflage or imitate. Participants of all ages are welcome. There are five age categories in which 1st – 3rd place will be awarded:

1. Kindergarten – 2nd grade
2. 3rd grade – 5th grade
3. 6th grade – 8th grade
4. Highschool
5. Adult

Artwork can illustrate a real life insect or be 3-D (sculpture, stained glass, or other media). All entries must be postmarked by April 15 to Frannie Miller, Pesticide Safety and IPM Program, 600 West Woodside, McPherson, KS 67460.

Visit https://www.ksre.k-state.edu/pesticides-ipm/index.html for details and full rules.

Frannie Miller – Pesticide Safety and IPM Coordinator

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Diagnostics Corner: Kansas Insect ID and Pest Solutions

Insect Diagnostics 2024 Season Open

Members of the public seeking assistance identifying an insect can access the Insect Diagnostics ID Request Form online. After providing observation information such as location and date of the sighting, followed by answering a set of questions intended to help with the identification process, one can then upload up to 3 photos and submit the form. The inquiry is then forwarded on to one of the entomology extension specialists. Within a few days, usually less than two, the identity of the insect along with appropriate life history information and/or control measures is then sent to the client by email or phone. The online submission process takes only a few minutes and can be accessed with desktop computers and mobile devices. If you need insect identification assistance, submit a request at https://entomology.k-state.edu/extension/diagnostician/.

Anthony Zukoff—Southwest Research and Extension Center – Garden City, KS

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Need an insect identified? Visit the Insect Diagnostics Program Website

Visit entomology.ksu.edu/extension to explore our extension resources.

What do you think about our newsletter? Send us your feedback here!

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