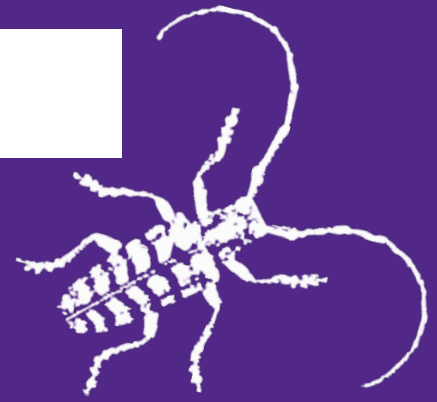


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Oak Leaf Itch Mite
Insect Diagnostic Laboratory Report

Oak Leaf Itch Mite

We are still receiving many inquiries regarding the oak leaf itch mite (*Pyemotes herfsi*) and what can be done to avoid getting bitten. This is the first time in Kansas that the oak leaf itch mite has been a problem in successive years (2015 and 2016), which is likely associated with the mild winters we have experienced. Below is information associated with the oak leaf itch mite:

1. The oak leaf itch mite may have originated from Europe based on documentation from 1936.
2. There have been four major infestations of the oak leaf itch mite in Kansas: 2004, 2009, 2015, and 2016.
3. The oak leaf itch mite is associated with the oak marginal leaf fold gall (Figure 1), which is produced by a midge gall-maker (*Macrodiplosis erubescens*).
4. Mated females of the oak leaf itch mite prey on midge larvae.
5. Females enter galls through openings and inject a potent neurotoxin that paralyzes midge larvae.
6. A single female can produce between 200 and 300 eggs. Females deposit eggs into a



Figure 1: Oak Marginal Leaf Fold Gall

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pouch or ovisac that forms at the tips of the abdomen (Figure 2). Millions of individuals can be produced within a short period of time.

7. In seven days, immatures develop into adults (7 day life cycle). As a result, the oak leaf itch mite has one of the highest rates of population increase.

8. Oak leaf itch mites can be dispersed via wind for hundreds of miles.

9. Cooler temperatures and moist conditions may result in increased populations.

10. Oak leaf itch mites emerge from the galls and fall from oak trees (primarily pin oak) from late July through fall. As many as 370,000 mites per day can fall from oak trees (yikes!).

11. The mites bite anyone under oak trees with bite marks appearing 10 to 16 hours after exposure.

12. In order to avoid bites, refrain from any activity under pin oak trees. Bites typically occur in the upper body region where clothing is loose; such as the neck, shoulder, and chest because the mites drop from the canopy of infested trees. The scratching, in response to the bites, may result in secondary bacterial infections.

13. People are susceptible to oak leaf itch mite bites when: 1) raking leaves, 2) sitting under infested oak trees, and/or 3) handling pets (dogs or cats) that have been around pin oak trees.

14. Thorough bathing after exposure to infested oak trees, and washing clothing daily will reduce the number of bites.

15. Oak leaf itch mite overwinters in protected areas or within leaves/leaf litter on the ground.

16. Repellents such as DEET (N,N-diethyl-meta-toluamide) are not effective in preventing bites associated with the oak leaf itch mite.

17. Wearing a Tyvek® suit (Figure 3) is one of the best ways to avoid getting bitten by oak leaf itch mites.

18. We do not recommend burning any pin oak trees.

For more information regarding oak leaf itch mites contact the Department of Entomology at Kansas State University (Manhattan, KS).



Figure 2: Oak Leaf Itch Mite Female Ovisac



Figure 3: Tyvek Suit To Avoid Bites From Oak Leaf Itch Mite.

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Raymond Cloyd

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<http://entomology.k-state.edu/extension/diagnostician/recent-samples.html>

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