

## Itch Mite Update: Extension Will Warn When “Mite Showers” May Happen

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Lincolnites who suffered with itch mite bites last fall will be glad to know University of Nebraska entomologists are monitoring this situation and will be providing updates to the public about this situation throughout the summer.

Last September, a microscopic itch mite, associated with insect galls on pin oak leaves, was linked to extremely itchy, red welts affecting thousands of individuals in Lincoln. This mite was subsequently identified as *Pyemotes herfsi* — a mite native to Europe.

The itch mite outbreak started around Labor Day, but continued well beyond the fall frost, even into early December. Early on, people were exposed to mites dropping from oak leaves. Later in the fall, people were attacked after raking leaves and mowing lawns, especially handling oak leaves or grasses harboring the mites.

This spring, a few people who have handled leaves or grass clippings have complained about bites on their torso.

Because so little is known about their biology, UNL entomologists are

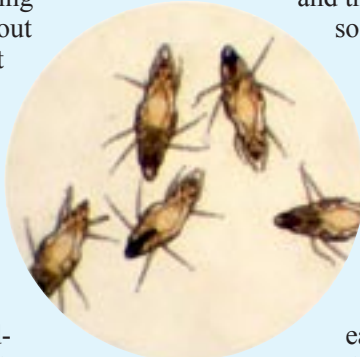
collaborating with Kansas State entomologists to study these little-known mites. Entomologists need to know basic biological information, such as, how these mites winter, their full range of host insects, how they transfer to the trees and invade the galls and what conditions resulted in the insect galls and the itch mites to become so abundant, as in 2004.

This spring, batches of galled oak leaves were collected and dissected. A few live overwintered female itch mites were found in a small percentage of these galls. The females were mature and each capable of producing up to 250 young male and female mites.

On April 17, UNL extension entomologist Jim Kalisch collected oak gall midges (i.e., tiny flies) emerging from the soil at two locations in Lincoln. These midges have laid eggs on small pin oak leaves, and small galls are already forming. **However, no *Pyemotes* mites have been found within the new crop of midge galls.**

So, what should people do?

- According to UNL Extension Entomologist Dave Keith, right now you should go ahead and enjoy the outdoors. If you have oak trees in your yard, observe leaves of pin, red and black oaks for developing leaf edge galls (see photos above).
- If you live in areas where mites were a



Highly magnified view of itch mites (*Pyemotes herfsi*)



(Above) Pin oak leaf infested with leaf edge galls. Galls are caused as leaf tissue reacts to hormones secreted by oak gall maggots. (Right) Magnified view of mature maggots inside leaf edge gall.



Photos by Jim Kalisch, UNL Department of Entomology

problem, don't handle lawn clippings or leaves. Take a shower immediately after handling vegetation. Children playing on the grass may also be at risk for mite bites.

- Keep tuned to “Backyard Farmer” on NETV and watch newspapers for “mite shower” warnings. Updates will also be posted in THE NEBLINE and on the Lancaster County Extension Web site: <http://lanaster.unl.edu/>

Dave does not recommend tree re-

moval or spraying of oak trees to prevent midge galls or spraying lawns for mites. There are many other types of biting critters that can cause red, itching welts. These include mosquitoes (active already), chiggers (coming soon), fleas, black flies (found near moving streams) and spiders.

Source: Dave Keith, University of Nebraska Department of Entomology

## Spider Bites? Look for Yellow Sac Spiders

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During a warm spell in early April, we started seeing yellow sac spiders in our house. Sac spiders are common outdoors, but often invade structures during warm weather. If there are small insects available for food, sac spiders can become established indoors. Because these spiders can cause nasty bites, it was time to take action.

We saw the first yellow sac spider at the junction of the wall and ceiling in the dining room. After doing a little inspecting, I found a second spider attached his silken tube to the fancy molding above a doorway. These are typical locations to find sac spiders — high in upper corners of rooms, ceilings, behind pictures, on window molding, blinds or curtains.

During the day, sac spiders hide in these silken tubes they construct each day.

At night, these spiders crawl out of their silken tubes and are often found on walls and ceilings. If disturbed, they will drop to the floor and seek cover.

### Sac Spider Identification

Sac spiders belong to the genus *Cheiracanthium* and the family *Clubionidae*. They are



During the day, sac spiders hide in silken tubes, often in corners.

quite small and easy to overlook — about 1/4 - 3/8 inch long — with no conspicuous markings. The front legs are longer than the other three pairs.

Yellow sac spiders aren't yellow, but quite pale — pale greenish, tan or straw colored. Sac spiders typically have darker fangs and a faint dark stripe running lengthwise down the abdomen (see photo). There are some other sac spider species that are darker in color.

### Nasty Bites

The biggest reason to control sac spiders inside is they probably cause more bites than any other type of spider. Experts believe their bites are often mis-diagnosed as brown recluse spider bites.

The venom of sac spiders contains a cytotoxin — which means it kills cells — similar to

the venom of a brown recluse. Unlike brown recluse bites which can take several months to heal, most sac spider bites heal much more quickly — in two or three weeks — although the reaction can vary from individual to individual.

Typical symptoms of a sac spider bite include a stinging sensation followed by redness and mild swelling. In a few cases, the bite may blister and break, leaving a sore that can take several weeks to heal. Sometimes the person will feel mildly ill, but typically no medical intervention is necessary.

### Control Methods

To easily and safely control yellow sac spiders, squish them while they are inside their sac with a tissue or use a vacuum cleaner. Either way works well.

Liquid sprays can be applied to the outside perimeter of the home, but control is often not as effective as people would like.

### Preventing Sac Spiders From Coming Indoors

Most efforts should be spent to seal cracks and crevices where spiders can gain entry to the house. Other actions include:

- Install tight-fitting screens on windows and doors; also install weatherstripping and

door sweeps

- Equip vents in soffits, foundations and roof gables with tight-fitting screens
- Reduce outdoor lighting
- Install yellow or sodium vapor light bulbs outdoors — less attractive to insects
- Remove wood piles, rock piles, heavy vegetation, leaves and other debris near the foundation that provide hiding places for sac spiders
- Eliminate household pests that serve as food for spiders
- Trim branches of trees and shrubs so they do not touch the house

## Spider Bites or Skin Infection?

Correct diagnosis is important!

Spiders hardly ever cause multiple bites and also rarely leave a significant skin lesion. According to Rick Vetter, University of California-Riverside medical entomologist, boils and skin lesions produced by the bacterial infection *Staphylococcus aureus* are frequently misdiagnosed as spider bites. These staph infections are highly contagious, spreading rapidly to others. People who live in dense group situations, like nursing homes, correctional facilities and sports camps are particularly at risk of contracting this contagious skin infection. Even though no spider is ever observed biting anyone, it can appear that a spider population is running rampant and biting everyone in sight.

People who have a skin infection — not spider bites — are wasting time and money by treating for spiders because these treatments will not cure the bacterial infection. In addition to staph infections, there are a number of other skin disorders that can be mis-diagnosed as spider bites. Before jumping to a conclusion, consult a physician to rule out a skin infection.

Source: *Pest Control Technology*, April 2005