Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel

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

September 3, 2010 No. 24

This Will Not Become A Habit ….. Repeat Kansas Insect Newsletter Copy

Every now and then when under a stack of various work items and wanting to present useful articles in our Kansas Insect Newsletter, one falls back on a previous subject that has relevancy during the current year. Based on a recently asked question, I am resubmitting a timely topic. So read on.

The Adage: Don't Rush To Judgement …… or, Don't Blame Kermes?

On a yearly basis some oak trees display dead branch tips (Figure 1).

Figure 1

Zeroing in on a dead branch tip (Figure 2)…….

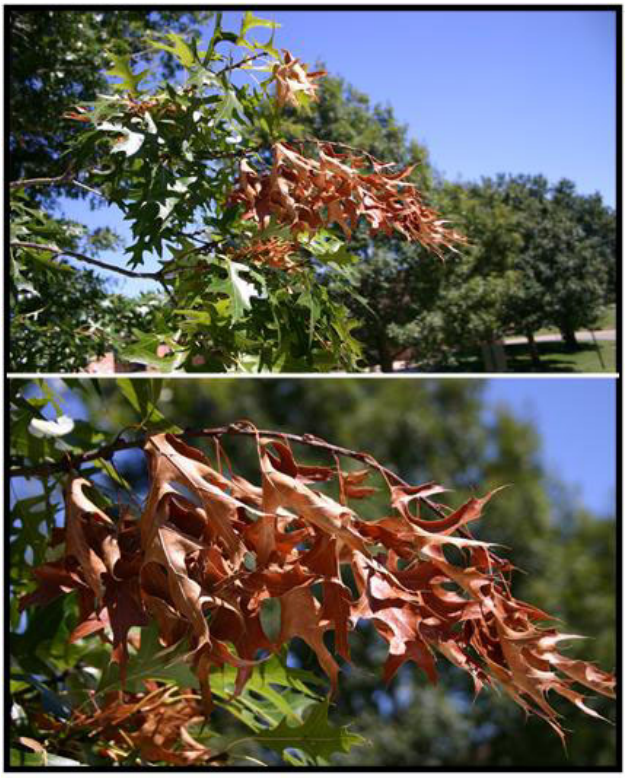

Figure 2

…… what might be noted is the presence of large Kermes scale (Figure 3).

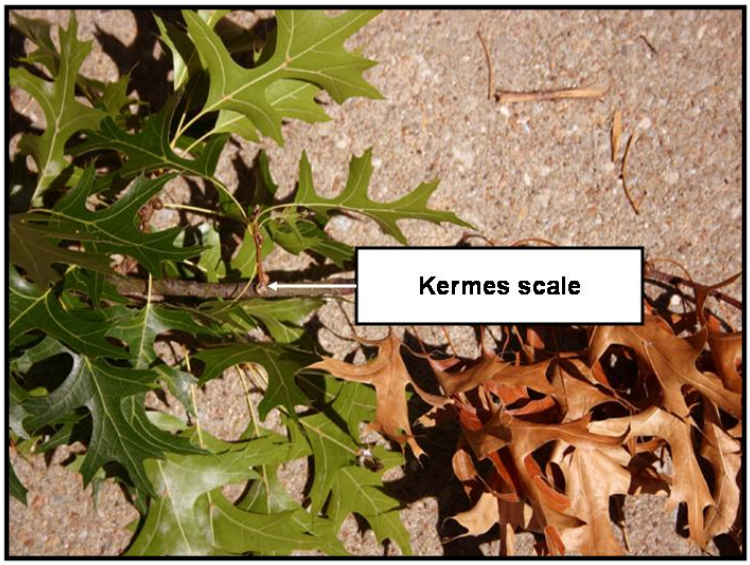

Figure 3

The **rush-to-judgement** would be that Kermes is the cause of the dieback. However upon closer examination, hidden by healthy foliage are more clusters of Kermes (Figure 4).

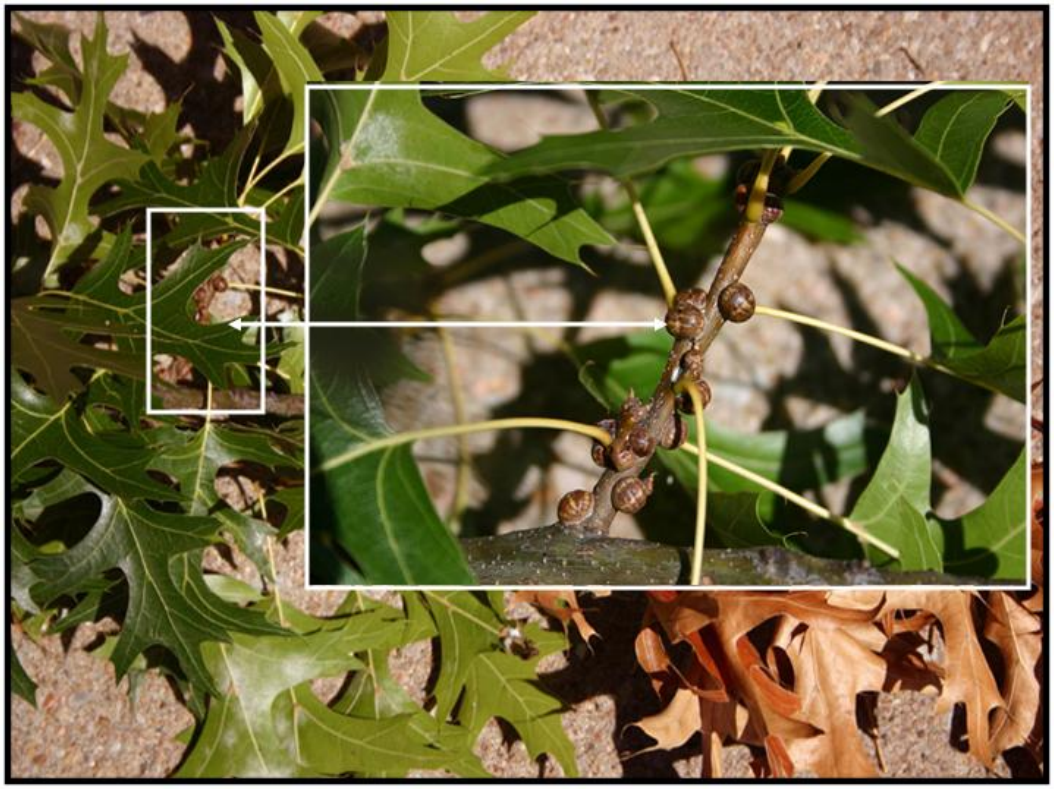

Figure 4

How, then, could Kermes be the cause of the dieback? After making a closer examination of the dead branch tip, it becomes evident that there is a "break point" between the dead tip and the remaining healthy branch, possibly suggesting an *Agrilus* spp. borer (in this instance oak twig girdler?) (Figure 5).

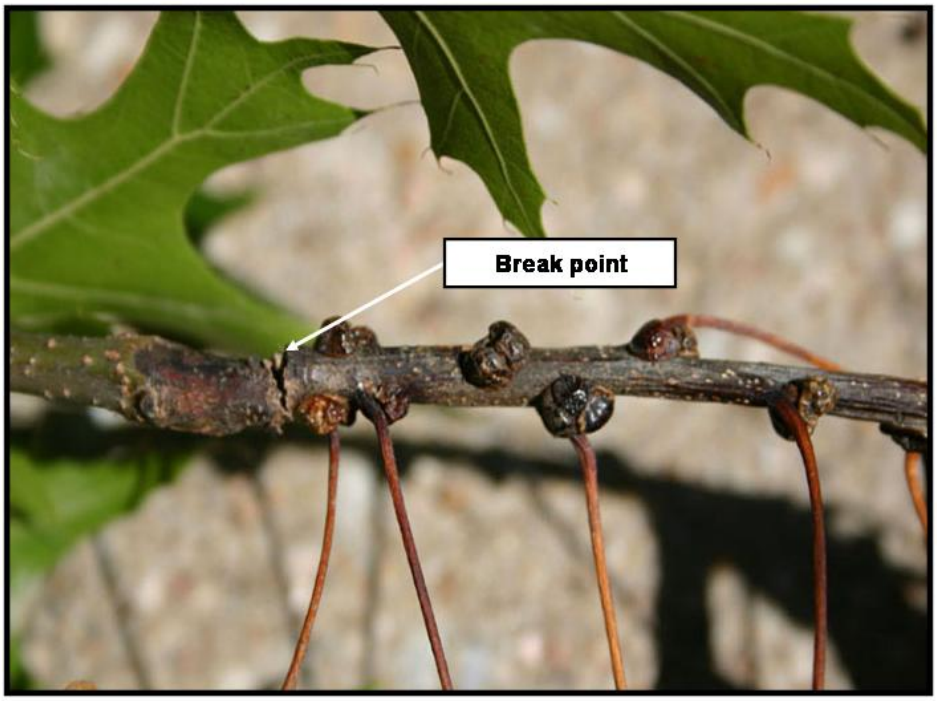

Figure 5

But also noteworthy is a definitive line of demarcation between green healthy portion of the branch and the darkened/dead portion of the twig (Figure 6).

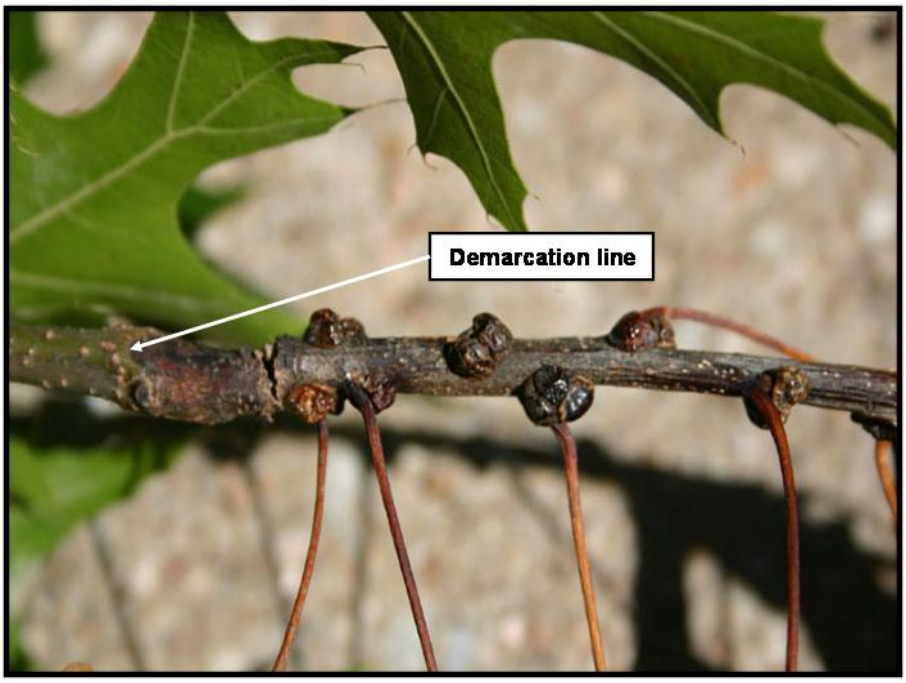

Figure 6

Further exoneration of Kermes (as the cause of the branch tip dieback) is the condition of those on the dead branch terminal (wrinkled and starved/dead) versus the healthy Kermes thriving on the live portion of the branch (Figure 7).

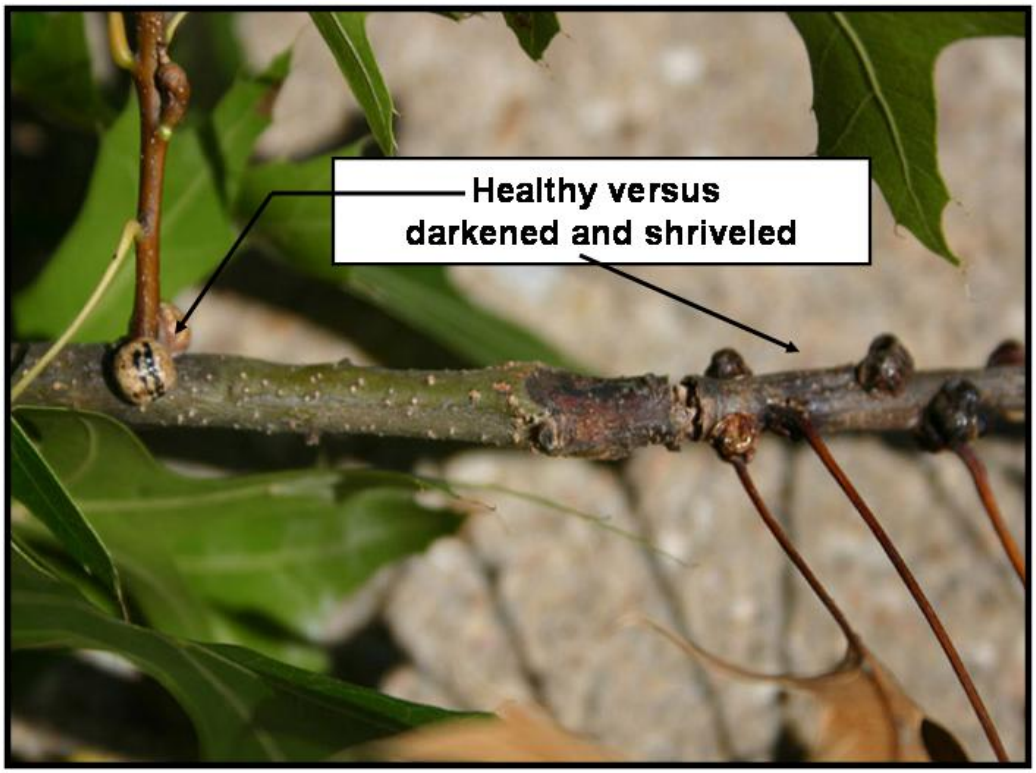

Figure 7

So if Kermes "are innocent", what is cause of the observed dieback? As seen in Figure 7, the darkened cankerous area adjacent to the green healthy area is most likely indicative of *Botryosphaeria* spp. canker. Airborne fungal spores gain entrance into their host via wounds, growth cracks and natural openings. The fungus invades cambial tissues. The resultant twig and branch girdling ensues. Little can be done to prevent this situation. But the positive message is that other than the aesthetically objectionable appearance of trees with browned branch terminals, the overall health of established hosts appears unaltered as illustrated in Figure 8.

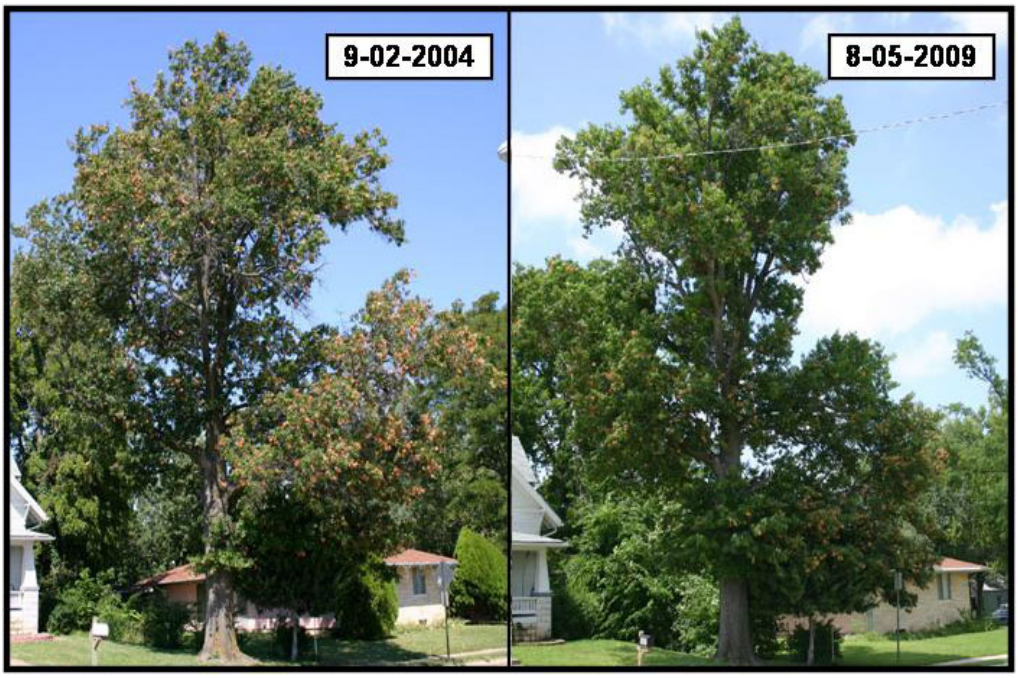

Figure 8

Bob Bauernfeind

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from August 27th to September 2nd.

August 27 2010 – Trego County – Soft scales on Austree
August 27 2010 – Kingman County – Fishing spider in home
August 30 2010 – Riley County – Beetle pupae on sumac
August 30 2010 – Wilson County – Long horned beetle *Astyleiopus* sp. on maple
August 31 2010 – Leavenworth County – Running crab spider (Philodromidae) around home
August 31 2010 – Wabaunsee County – Dingy cutworms on turf
September 2 2010 – Ray County, MO – Indianmeal moth larvae in home
September 2 2010 – Shawnee County – Bat bug in home
September 2 2010 – Riley County – Comb footed spider, *Steatoda* sp. in home
September 2 2010 – Bourbon County – Pine needle scale on pine
September 2 2010 – Jackson County – Possible insect feeding on clematis

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

Sincerely,

Robert J. Bauernfeind
Extension Specialist
Horticultural Entomology
phone: 785/532-4752
e-mail: rbauernf@ksu.edu

Holly Davis
Insect Diagnostician
Phone: (785) 532-4739
e-mail: holly3@ksu.edu