

**Notes from the
Thousand Cankers of Black Walnut National Conference
November 3-4, 2009 - St. Louis, Missouri
Doubletree Hotel—St. Louis at Westport**

This is based on notes taken by Julia Thompson and David Johnson (both of the Missouri Department of Agriculture) and typed by J. Thompson (CAUTION: This is not a transcript, but notes. Remarks are often paraphrased and may have been accidentally omitted or misunderstood by the note-takers. It has not been compared with the event recording to check for accuracy.)

Wednesday, November 4, 2009

Key to some abbreviations used:

WTB = walnut twig beetle = *Pityophthorus juglandis*

TCD = thousand cankers disease

Gm = *Geosmithia 'morbida'* ('*morbida*' is proposed species name of this newly discovered species)

BW = black walnut = *Juglans nigra*

Panel Discussion- Moderated by Manfred Mielke, (U.S. Forest Service) - Thousand Cankers Disease of Black Walnut -Where do we go from here on Science, Regulation, Education, and Monitoring?

Introduction:

Survey, detection, monitoring are some of the critical things we need to talk about

For disease to occur you have to have host, pathogen, environment

Host is not native in the affected area

No native forest pest from the East or the West has ever become epidemic in the other area

Exotic pest have previously overcome the E/W barrier

If there is a pest in the native forest that occurs on different hosts in the East and West than it is an exotic

Believes there is a native pest equilibrium

Summary of some major points from our speakers

1. no unique diagnostic symptoms
2. beetle and fungus always associated
3. no significant damage to *J. major*
4. not a twig beetle on *J. nigra*
5. jumping hosts
- 6 Need multiple sustained attacks
7. WTB is an "über" vector with OCD
8. WTB has a full complement of enemies in CA
9. Complex is highly integrated into native stands in CA
10. Don't tell me there's not enough money or people
11. In Utah all trees between 20 and 50 years are dead
12. Attacked at > 8 years
13. potential for spread here is high
- 14 approach rate is low to moderate
- 15 lots of areas of uncertainty
- 16 wood pallets and packing material important in movement of pests
- 17 quarantine is not a silver bullet

- 18 in Oregon *nigra* cross
- 19 slow disease progression
- 20 canker is in phloem
- 21 in Oregon dieback occurs in winter
- 22 "cut hard"
- 23 always plan for the worst case
- 24 need to prepare this response plan soon
- 25 lots of uncertainties

Moderator: Mielke

Panel: Seybold, Tisserat, Cranshaw, Frye, Moltzan, Pfister, Wamsley, Campbell

Cranshaw: look for symptoms in July; samples may be limited to cut trees

Tisserat: behind the curve because symptoms may not show for 3-5 years after infestation

SJ Peters says we have ready made network in growers

_____ hullers ought to be good network

Mielke: need to collect the sample

_____ send samples to NPDN clinic for diagnosis, addresses for each state are on the web site

Moltzan: need 2" diameter pieces

Seybold: survey in IA and NE

_____ Saw mills if you can source lumber

Cranshaw: Need a key to similar beetles

Jerry Van Sambeek: treatment needs to be done before it leaves the source, not at the mill.

Cranshaw: spray not effective; probably would need to be heat treated

Harlan Palm: Isn't fumigation good for international shipment?

_____ : fumigation used for powder post beetle treatment

_____ : need heat and fumigation

Seybold: not sure how well these xylem beetle treatments would work for bark beetles

Van Sambeek: Stumps pretty much debarked; bole, probably not practical, veneer cooked to soften fibers

Would heating twice affect the quality?

Pfister: treatments are not usually 100% effective so usually layer treatments for multiple safeguards

Van Sambeek: Solarization?

Cranshaw explained solarization: tarping and heating in the sun; after a time no more beetles emerge

_____ : when logs dry they no longer support beetles. Time may be a suitable safeguard

Paul _____ : Random survey not accurate; probably need cut from each tree

John Ouellette: sampling is after the horse is out the door

Bob Atcheson (sp?) (Ag. Dept. KS) walnut in western KS have been GPS'ed

_____ (NE Forest Service): most logs are not milled in KS or NE. What should they be doing?

Mielke: Is walnut in the Sandhills?

_____ (NE Forest Service): doesn't know for sure, but knows it is in the Platte River corridor

_____ : research on traps and beetle

Seybold: yes, working on attractant, hope to know something by the end of next year

Cranshaw: can come up with a protocol for the mills, but thinks it likely to show up in cities, so city

foresters thinks we must do something now and not wait for surveys

Wamsley: looking at treatments

Tisserat: thinks disease needs to be delineated, thinks game may be up when we find it in the East

Pfister: states already doing exotic bark beetle surveys; states have a pretty good idea of their wood products and their vulnerability

Seybold: traps already sometimes catch WTB in CA

Steve Veldt: random drug tests so need something similar for walnut

Julie Van Meter: not regulated in NE so no license fees

Seybold: always about the money

Moltzan: fewer people to ID the problem; fewer taxonomists

Campbell: money follows programs and constituency demands

Frye: industry is regulated by standards; there are timber buying licenses in some states; veneer mills need green wood fairly freshly cut

_____: winter, spring, and late fall are when veneer logs shipped

Jim McKenna: Survey issues and wood product issues: Containment

Can we randomly cut trees in NE, KS to survey?

John Ouellette: truck weigh stations—police can read license plates so should be able to catch “Uncle Vinnie”

_____: this is an emergency; we must take drastic action

Frye: who pays for the fumigation, buyer or seller? You have to tell us what we have to do. It must be uniform

Break

Jay Pscheidt: Lots of pressure on KS and NE but it may be a fallacy that this is our front line. Survey to see if already in East

Seybold: did a visual survey of tristate area and did not see symptoms

_____: missing OK and TX where there is overlap

Sarah Phipps: use an emergency quarantine until we know more

Cranshaw: Need state inspections of Juglans so can be certified to move east.

Pfister: federal rules are preemptive; no state can do anything inconsistent with federal rule.

Feds only regulate interstate movement unless state institutes quarantine consistent with federal rule that regulates to county level

Federal rule takes time

Emergency rule—but this has been around 10 years or so, so doesn't fit rules for emergency

Brian Hammonds: If there is no market without a phytosanitary certificate then there will be phytosanitary certificates. Risk of inaction worse than risk of over reaction. May need to take out walnut to make line in KS, NE, OK

Wamsley: interstate movement can be addressed by feds or states.

State response: National Plant Board communicates among NPB members; website; Central Plant Board will have teleconference in next couple of weeks.

Treatments: standards, debarking, fumigation (Phosphine?) doable, heat treatments

Emergency quarantine in MO requires:

Economic assessment

10 days with sec. of state

expires after 180 days

Pfister: need, desire for quarantine; need to have states to agree that federal umbrella needed to get fed quarantine

Kathryn Kromroy: Federal rule wouldn't be in place for a while so states don't need to worry about preemption?

Pfister: state quarantine after going into effect then 6 mo. or yr. federal quarantine comes on line. In absence of fed. quarantine states can be very restrictive

Seybold: Does inspection occur at both source and receiving state?

Wamsley: mostly occurs at source but can ask for a notice of shipment so inspection could also take place on receiving end

Kathy Alexander: would like to have state quarantines so could mention in her contacts with owners

Mike Brown: clarifies that although a fed emergency quarantine is unlikely the likelihood of a quarantine is good. Phytosanitary certificate is a response to regulation so industry won't request unless it is a requirement

Brian Hammond: private industry can require whatever they want

Seybold: How does it impact international markets?

Frye: If there is a quarantine then china will slap something on the US not just on the West

Mike Brown: China already requires fumigation

Pfister: visual would not suffice; probably require heat treatments or 3 or 4 other possibilities

Tisserat: uneasy with visual inspection because damage varies from tree to tree.

Cranshaw: thinks if people well trained then_____; thinks underground movement is source of the problem

Mielke: “Uncle Vinnie” is a renegade

Campbell: Why do we have any regulation since we know that there are always scofflaws? We do it to limit most of them, educate, etc.

Julie Van Meter: Inspection can confirm treatment but not a visual inspection

Frye: industry must slice veneer out there or cut lumber out there; you solve the problem by keeping bug from coming east

_____: I would not give up on “Uncle Vinnie” with enough publicity. Need publicity campaign

Susan Ehlenbeck: Who will pay for publicity campaign? There is a general bad feeling about the government, so may not cooperate anyway.

Kathryn Kromroy: certifies firewood

_____: What can I take to the woodworkers?

Cranshaw: he and Ned put out a press release to various woodworkers magazines, but no one picked it up. Official quarantine will make them pay attention.

Moltzan: How fast can document get done? Website. Lobby.

Campbell: SOD and laurel wilt web pages so Forest service could link to others

_____: question about genetics of *Geosmithia*

Tisserat: We want answers, too. Is it a native fungus? Genetics are a high priority. Pheromone of highest priority

Seybold: Laundry list of research

If we have attractant then find efficacy of traps, use attractant to test pesticides and behavioral chemicals, conduct mark and capture studies to see how far and fast they fly, do life cycle studies (temperature and freeze tolerance), how long is the life cycle, how many per year, test hosts under controlled conditions, compatibility studies and comparison studies with eastern insects

Cranshaw: thinks how to successfully treat logs has to be high on list

Van Sambeek: Won't insect go right back in after heat treatment?

Seybold: Have to do studies!

_____: Wood can be reinfested after treatment. ISPM 15 is being modified.

Campbell: currently heat treatment to internal temperature of 56 C for 30 min, but doesn't kill EAB; remaining bark areas must be smaller than a credit card

Frye:

Tim ____: search for resistant gene top priority in Utah

Harlan Palm: Still think we need to remove host in front of the line

John Ouellette: Stakeholder here is private landowner. We can lobby gov.

Harlan Palm: we need compensation fund.

Cranshaw: Not sure TCD is actually spreading. It is going to be a hard sell to cut trees if it is not spreading.

Jay Pscheidt: Contact hazel nut council who have experience doing this

Van Sambeek: Look at OK and TX. This is the place where we have overlap

Cranshaw: with movement of wood a truck load is the front.

Seybold: can't ignore any steps including “line in the sand”