

**From:** Rose Kachadoorian rkachadoorian@oda.state.or.us  
**Subject:** Chlorpyrifos: Best OSU Person: Hazelnut-Pacific flatheaded borer  
**Date:** April 9, 2020 at 8:35 AM  
**To:** Stephanie A Page spage@oda.state.or.us

RK

Begin forwarded message:

**From:** "Wiman, Nik" <[Nik.Wiman@oregonstate.edu](mailto:Nik.Wiman@oregonstate.edu)>  
**Subject:** Re: Best OSU Person: Hazelnut-Pacific flatheaded borer  
**Date:** March 30, 2020 at 3:56:02 PM PDT  
**To:** Rose Kachadoorian <[rkachadoorian@oda.state.or.us](mailto:rkachadoorian@oda.state.or.us)>  
**Cc:** "Miller, Betsey" <[Betsey.Miller@oregonstate.edu](mailto:Betsey.Miller@oregonstate.edu)>, "Murray, Katie" <[Katie.Murray@oregonstate.edu](mailto:Katie.Murray@oregonstate.edu)>, "Walton, Vaughn" <[Vaughn.Walton@oregonstate.edu](mailto:Vaughn.Walton@oregonstate.edu)>

Hi Rose,

I hope most are using hand applicator/gun to target trunks as we have recommended, but more likely they use airblast and there again I hope with sensor/electronic eye. Nobody likes spraying the air in between immature trees with airblast. I think this one reason the chemigation/drench applications are more popular. They can use their weed spray rigs for drench and drip systems to chemigate. Also keep in mind a lot of the hazelnut growers don't have licenses to apply RUPs like Lorsban.

Nik

On Mar 30, 2020, at 9:43 AM, Rose Kachadoorian <[rkachadoorian@oda.state.or.us](mailto:rkachadoorian@oda.state.or.us)> wrote:

Thank you for the comprehensive response. It was very helpful.

One question: when treatments are made with residue materials such as chlorpyrifos, what type of application equipment is used.

Thank you again.  
Rose

On Mar 26, 2020, at 5:56 PM, Wiman, Nik <[Nik.Wiman@oregonstate.edu](mailto:Nik.Wiman@oregonstate.edu)> wrote:

Hi Rose,

Treatments with residue materials such as chlorpyrifos would begin in late May/early June, which is when the borer flight period begins. The idea is to protect the trunks with residue that either kills the ovipositing female, or her eggs and larvae. Systemic materials are applied earlier to get uptake into the wood. The theory there is the larvae ingest the material as they begin to penetrate the trunk.

I initially supported the SLN we got for Lorsban Advanced for PFB because we had nothing labeled at the time, crop loss was severe, and Dow/Corteva was very responsive to the need.

I agree with Vaughn that chlorpyrifos gets little use in the hazelnut industry. However, one use for chlorpyrifos that may not be on your radar is for omnivorous leaf-tier. Some south Valley consultants feel it is the only thing that works on them. I do not agree, but we don't have data to counter that narrative. OLT is a problem for non-bearing trees, usually only the first leaf. The terminal growth gets damaged, which sets back orchard growth substantially. I can see how managing them is a little tougher than leafrollers, they have a stage that gets into the stem and labeled materials for OLT are limited.

For PFB, most growers are using imidacloprid for aphids through drench or chemigation and getting PFB control. Last year we succeeded in getting a 24(c) label for Belay (clothianadin) for PFB and it works great. Also we have some exciting data showing diamides may be a good alternative should we lose the group 4 materials. Right now diamides are too expensive to compete with neonicotinoids.

I concur with Vaughn that growers are worried about losing the "big guns" given the threat of invasive pests.

I would like to support additional labels for PFB. I cannot get Bayer interested in supporting an SLN for Admire Pro against PFB, which is the one we really need. But, I am thinking now of approaching some of the generic makers of imidacloprid.

Yes applications for PFB are typically for non-bearing but more and more the issue is turning up in older trees.

Hope this helps,  
Nik

Nik G Wiman, Assistant Professor  
& Orchard Specialist, Oregon State  
University, North Willamette Research  
& Extension Center, 15210 Miley Rd  
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503-678-1264 X 67825 (rings to cell)

[hazelnuts listserv](#) [tree fruits listserv](#)

<[index.jpg](#)>

<[rsz\\_1rsz\\_osu\\_extension\\_logo.png](#)>

<http://oregonstate.edu/dept/NWREC/orchard-crops>

<http://blogs.oregonstate.edu/wimanlab/>

<http://agsci.oregonstate.edu/bmsb>

On Mar 26, 2020, at 5:23 PM, Walton, Vaughn <[Vaughn.Walton@oregonstate.edu](mailto:Vaughn.Walton@oregonstate.edu)> wrote:

Hi Rose

Nik Wiman is the expert on Flatheaded borer research. His work was very detailed showing the most effective insecticides.

Betsey Miller and I have mostly been working on Filbertworm and aphids in the past. To the best of my knowledge growers have not used this compound often in the last 14 years that I have worked on Hazelnut IPM. This is however a very important compound that could help growers survive crisis situations, such as when new pests arrive. We are very worried, among others, about Spotted Lantern Fly and BMSB is becoming an increasingly problematic insect.

For these reasons, I believe that our growers and industry would be severely hampered in dealing with possible future crises, as seems to be happening with increasing frequency.

I hope this information helps.

Vaughn

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**From:** Rose Kachadoorian <[rkachadoorian@oda.state.or.us](mailto:rkachadoorian@oda.state.or.us)>

**Sent:** Thursday, March 26, 2020 4:58 PM

**To:** Wiman, Nik <[Nik.Wiman@oregonstate.edu](mailto:Nik.Wiman@oregonstate.edu)>; Walton, Vaughn <[Vaughn.Walton@oregonstate.edu](mailto:Vaughn.Walton@oregonstate.edu)>; Miller, Betsey <[Betsey.Miller@oregonstate.edu](mailto:Betsey.Miller@oregonstate.edu)>

**Cc:** Murray, Katie <[Katie.Murray@oregonstate.edu](mailto:Katie.Murray@oregonstate.edu)>

**Subject:** Best OSU Person: Hazelnut-Pacific flatheaded borer

I hope that you are all healthy, and doing relatively well.

As you know, there is a chlorpyrifos workgroup that has been meeting. There are some proposals to ban chlorpyrifos use, and/or possibly limited certain types of applications. As with everything in life, there is a diversity of thought and opinion.

I need some assistance, and I am hoping that you are able to help.

I have four questions:

- (1) when would someone would typically treat for Pacific flatheaded borer or other borer of importance,
- (2) what type of application equipment is used,
- (3) are the trees typically non-bearing.
- (4) what are some of the alternatives under review.

Thank you

Rose Kachadoorian  
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Begin forwarded message:

**From:** Katie Murray <[murramar@oregonstate.edu](mailto:murramar@oregonstate.edu)>  
**Subject:** Re: Best OSU Person: Hazelnut-Pacific flatheaded borer  
**Date:** March 19, 2020 at 11:49:42 AM PDT  
**To:** Rose Kachadoorian <[rkachadoorian@oda.state.or.us](mailto:rkachadoorian@oda.state.or.us)>

Hello Rose,

I would recommend contacting Vaughn Walton, Nik Wiman, or Betsy Miller at OSU for these specific questions. Email addresses below.

Hope you are staying well!

Warmly,  
Katie

[vaughn.walton@oregonstate.edu](mailto:vaughn.walton@oregonstate.edu)  
[nik.wiman@oregonstate.edu](mailto:nik.wiman@oregonstate.edu)  
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On Mar 18, 2020, at 1:59 PM, Rose Kachadoorian <[rkachadoorian@oda.state.or.us](mailto:rkachadoorian@oda.state.or.us)> wrote:

Hi Katie,

I hope that you are doing well, considering the global situation.

I was just on a call for "FDA Coronavirus Disease 2019 (COVID-19) Briefing for Foods Stakeholders". The call will be posted online, [https://www.fda.gov/food/workshops-meetings-webinars-food-and-dietary-supplements/fda-briefing-foods-stakeholders-coronavirus-disease-2019-covid-19-03182020-03182020?utm\\_campaign=FSMA\\_COVIDcall\\_03172020&utm\\_medium=email&utm\\_source=Eloqua](https://www.fda.gov/food/workshops-meetings-webinars-food-and-dietary-supplements/fda-briefing-foods-stakeholders-coronavirus-disease-2019-covid-19-03182020-03182020?utm_campaign=FSMA_COVIDcall_03172020&utm_medium=email&utm_source=Eloqua)

I real reason that I am writing to you because your name is on the document that can found at, <https://catalog.extension.oregonstate.edu/em9223/html>

I am trying to determine who I can talk to about: (1) when someone would typically treat for Pacific flatheaded borer, (2) what application equipment is used, and (3) are the trees typically non-bearing.

Thank you

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