



538 Scotts Creek Road, Suite 205  
Sylva, N.C. 28779  
828-586-4009  
<http://jackson.ces.ncsu.edu/>



# Christmas Tree Newsletter

February - April 2017

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### Annual Jackson County Winter Christmas Tree Seminar Thursday March 9th from 4:00-6:30pm Cashiers Recreation Center

NCSU Extension's Annual Winter Christmas Tree Seminar for Jackson County will be held on Thursday March 9th from 4:00-6:30 p.m. or so. The meeting will take place at the Cashiers Recreation Center located on 355 Frank Allen Road, Cashiers, NC 28717. For more details on topics and speakers see enclosed insert. To register for this event contact Christy at 828 586 4009 or e-mail [clbreden@ncsu.edu](mailto:clbreden@ncsu.edu) **Pizza, Salad & Beverage will be served free!**

### Next Jackson County Christmas Tree Association Meeting - Tues. March 7th

The members of the Jackson County Christmas Tree Association (JCCTA) would like to invite you to their next gathering set for Tuesday March 7th at 7:00 p.m. at the Cashiers Fire Dept.



Your local Association has been working hard: attending shows, festivals & fairs this year with booths exhibiting the Assoc. with a logo, banners, brochures; listing members as choose & cut and or wholesale farms, a website, facebook and pictures of farms showcased via a slideshow and a display board. Join us as we work together to promote the Christmas tree industry in our region. Search for us on Facebook and visit online at <http://jacksoncountytrees.com>

### Membership deadline for this year is March 31st 2017!

See enclosed insert for member application and or for more information contact Christy Bredenkamp at 828 586 4009 or e-mail at [clbreden@ncsu.edu](mailto:clbreden@ncsu.edu)

**The North Carolina Christmas Tree Association** is now taking new membership applications. To learn more go to: <http://www.ncchristmastrees.com>



## March the Pros & Cons as a Pest Treatment Window

March is the time for twig aphids to start hatching. What other pests are active depends a lot on the weather. During warm springs, mites and adelgids will become active. In cooler years, they won't. If you like oil, March is the best time of year to treat for virtually all pests!

**RBM** — Mites in buds.

**EHS** — All stages present though still few males and crawlers. There will be more crawler activity if the weather is warm.

**BWA** — Nymphs may start to molt to the adult. Eggs are typically still not present.

**BTA** — Eggs are starting to hatch by the second week in March if the weather is warm or by the end of March in years with cold weather.

**Cinara aphids** — Cinara aphids may be very active.

**SSM** — If the weather is warm, SSM eggs may start to hatch, though typically there is not much activity from spider mites until April.

**HRM** — Eggs present. In some years mites active. Numbers continue to increase.

**Predators** - Predators may be becoming more active if the weather is warm.



### Advantages to March applications

March is a good time of year to treat for pests if the weather cooperates. Typically there are still many nights with temperatures below freezing, so be sure to protect sprayers. Typically in March, the BWA is either in the nymphal stage or just starting to molt to the adult and so products like oil, Lorsban and Provado still work. Because predators are still not very active, pesticides still have fewer impacts on the natural predators of mites and scales.

### Disadvantages to March applications

Besides issues with freezing temperatures and sprayers, there are other problems that cold weather presents with pest control. One problem with treating this time of year is that mite control will be variable. The HRM is often active during winter months, and therefore may be readily controlled, but if temperatures dramatically decrease after application, control may be reduced. The SSM is less likely to be active than the HRM. Products like Talstar may or may not last long enough on the foliage to kill spider mites once they hatch. Miticides which kill the eggs such as Envidor probably won't work as the eggs are not active enough for the chemical to be effective. Therefore if SSM eggs are present and mites will be a problem, it would be better to wait until later in the spring to treat. March is still too early to control RBM and control of EHS is still poor.

**For a list of materials and their effects on pests in March go to page 3.**

## Worker Protection Standards Revisions - Effective January 2nd 2017

- Workers must be trained every year before entering a field if treated in the past 30 days. Records kept of training for 2 years and give a copy of record to worker.
- Employer must display application info and SDS sheets at central notification area within 24 hours of end application and before workers enter field. Display for 30 days after REI expires.
- Post warning sign if REI is longer than 48 hours, otherwise option for posting or oral notification unless labels calls for both.
- Handler and early entry workers must be 18 years old.
- Application exclusion zone (AEZ) - no entry into treated area or the AEZ which is an area up to 100 ft around the equipment during a pesticide application on the farm. Size of AEZ depends on the type of application e.g., backpack sprayer, tractor sprayer, mist blower.
- Employers must provide Fit testing and training annually for handlers that wear respirators.
- Decontamination supplies - provide 1 gal. for each worker & 3 gals. for each handler/early worker.
- Eye Wash for handlers - provide a system capable of delivering .4 gal/min for 15 min., or 6 gals. of water able to flow gently for about 15 min at a mix load site. 1 Pint of water must be available to each handler applying pesticides if eye protection is required.
- Emergency Assistance - provide prompt transportation, SDS sheets, product info, EPS reg. number & circumstances of incident.
- Designated Representative - A Worker or Handler may designate a representative in writing, who may act on their part to request and obtain a copy of the pesticide application and hazard info for the period of their employment on a farm.

## Table of Materials That Can Be Used in March

Materials That Can Be Used in March							
Pesticides	RBM	EHS	BWA	BTA*	Cinara**	SSM	HRM
<b>Bifenthrin products (Talstar, Sniper)</b>	None	None	Excellent	Excellent	Excellent	Variable. Mites may not be active enough for control.	None
<b>Asana</b>	None	May be some suppression but not long lasting control.	Excellent	Excellent	Excellent if aphids are active.	None	None
<b>Horticultural oil</b>	None	May be some suppression but not long lasting control.	Excellent if coverage adequate.	Excellent as long as eggs haven't hatched. Control declines as aphid matures.	Good if aphids are active.	Good	Excellent
<b>Dimethoate</b>	None	May be some suppression but not long lasting control	May give control if eggs are not present.	Excellent	Good if aphids are active.	Little as mites are not active.	Excellent control of active mites but eggs not controlled. Population may rebound.
<b>Lorsban</b>	None	None	Excellent as long as eggs are not present.	Excellent	Good if aphids are active.	Little as mites are not active.	Poor
<b>Provado</b>	None	None	Excellent as long as eggs are not present.	Good	Good if aphids are active.	None	None
<b>Safari</b>	None	Is probably too early to get good control.	Excellent	None	Good if aphids are active.	None	None

\*BTA control is for that spring. Control will not carry over to the following year.

\*\*Cinara aphid control is for that spring. If trees will be cut in the fall, trees will have to be retreated that time.

# Elongate Hemlock Scale - Issues

- \* *Fiorinia externa* - First found in NC on Momi fir at Biltmore Estate in 1992. In 2000, 0.6% of growers had damage which increased in 2006 to 2.3% and in 2013 to 53%.
- \* **So why is EHS a problem?** It's primarily a regulatory issue. EHS isn't native to the U.S. First found in Long Island (1908). Later in 1958, it was discovered in Connecticut, Pennsylvania, Ohio & New Jersey & recently found in Maryland. Currently, EHS is found in the eastern US as far west as Ohio and as far south as Georgia, and also in Nevada. It's only a problem in hemlocks, firs, Douglas fir & spruces, but the literature reports it on many more species (report from the 1970s that it gets on white pine).
- \* FL, CA, LA – all have sent back trees because of scale.
- \* An estimated 20% of our crop is shipped to FL.
- \* In 2016, 270 trucks shipped trees to FL, 5 were stopped, 4 were allowed to enter & 1 was sent back to N.C.
- \* EHS is difficult to control because the eggs are inside the female are completely protected. She is encased both above and below with only a small opening for a feeding tube. **Crawlers are found every month of the year**, though peaks in spring and late summer and this past year in the fall (Oct), thus no target time for control!
- \* It's important to reduce/eliminate scale populations in the fields especially if shipping trees to FL, LA and Ca! When trees are young scout & if observed treat for scale. If you need to fix a bad problem (try not to get to this point!) then cull worst trees, & know you will need to spray a couple of times e.g., before bud break with cheaper products & a foliar spray with Sniper + Dimethoate (best control for late spring early summer). When cleaning up trees for harvest, make sure taggers know what scale looks like! Clear your field...don't leave a lot of trees.
- \* Consider strategies so you don't send scale to problem markets (Florida, California, Louisiana & other countries).

Sincerely,

**Christy Bredenkamp, Extension Agent  
Agriculture-Horticulture**



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**NC STATE UNIVERSITY**

**Jackson County Center  
538 Scotts Creek Road, Suite 205  
Sylva, NC 28779**