Last year over 25 growers participated in Jackson County’s Fraser Fir IPM Series. Are you interested in learning more about our common Christmas tree pests? Do you struggle with identifying which insect is causing the various symptoms on your discolored needles? Do you desire to spray the cheapest but most effective pesticide for control? Would you like to learn more about when to treat “timing” and even if it’s necessary? These are just a few of the many questions and topics that we’ll cover at our monthly Insect IPM meetings.

Our 2nd annual Insect IPM Series will be conducted by Dr. Jill Sidebottom, NCSU IPM Conifer Specialist, Jeff Owen NCSU Christmas Tree Specialist and Christy Bredenkamp, NCSU Horticulture Agent (Swain & Jackson Counties). This series will meet the 1st Friday of each month from May through September from 1:00-3:30 p.m. in various fields throughout Jackson County. Those who sign-up will decide the location e.g., Little Canada, Big Ridge, Pine Creek and so on. Growers from neighboring counties are most welcome to participant.

Covered topics include:
- Balsam Woolly Adelgid
- Balsam Twig Aphids
- Grubs
- Spider Mites
- Hemlock Rust Mites
- Hemlock Elongate Scale
- Scouting & Pest Life Cycles
- Pesticide Choices
- If and when “timing” to treat and spray effectively
- Groundcover Management
- Shearing

Our 1st meeting will be held on Friday May 7th from 1:00-3:30 p.m. at Charles Fowlers Farm on Big Ridge Rd. If you have more questions or are interested in this program contact our office to register at phone # 828 586 4009.

Pesticide applicators will receive 2 credit hours in the “X” category.
Let’s Start a Jackson County Christmas Tree Association?

New Area Christmas Tree Association

Recently, a few growers have quietly asked me if we might form a local Christmas tree Association. My initial thoughts were .... do we have enough interested individuals? Historically, there existed the Smoky Mountain Nurserymen’s Association comprised of both Christmas tree and nursery growers. Later this entity transitioned with an emphasis on the nursery industry. As time passed by the Smoky Mountain Nurserymen’s Association disbanded by the time I became the Horticulture Agent for Jackson County.

Forming a local Christmas tree association has potential advantages that may benefit tree growers throughout the low country from Haywood County west. By networking together with identified and shared goals, we can birth creative marketing strategies such as a website, flyers, brochures, a grower directory plus so much more!

If forming and utilizing a local association is something you would like to be a part of then please considering attending our first meeting on Tuesday May 11th from 6:30-7:30 p.m. (or so) at the Cashiers library. Pizza and drinks will be provided. Growers from neighboring counties are most welcome! Some of the questions we will address are: what are our goals (both short term and long term) and how will we accomplish these goals?

For more information or to let me know you plan to attend, contact Christy at the Jackson Extension Center phone # 828 586 4009 or e-mail christine_bredenkamp@ncsu.edu

Spring Insecticides for Pest Control

By Jill Sidebottom - NCSU IPM Conifer Specialist

The weather so far this year has put many people behind already. Many growers treated last fall with insecticides and are hoping to get twig aphid control this spring from those fall sprays. In fact, in talking with county agents, we estimated that at least 4,000 acres of Fraser fir Christmas trees were treated in the fall and will hopefully skip a twig aphid treatment.

But what options do growers have that didn’t treat in the fall? I’ll try and list them all below. As I go through different materials, I’ll be using abbreviations for pests with BWA=balsam woolly adelgid, BTA=balsam twig aphid, SSM=spruce spider mite, HRM=hemlock rust mite, and EHS=elongate hemlock scale.

The first consideration is do you even need to treat for twig aphids? If you aren’t cutting out of the trees this year or next, you don’t need to control BTA. However you should walk through your trees to make sure mites aren’t a problem. A second consideration to think about is what have you used in the past for insect control. It’s important to rotate materials from different chemical families. In other words, products like Asana and Talstar are both synthetic pyrethroids and so have similar modes of action. Think about what you used in past years, and try to use other products this year. see next pg.
Here is a list of products, their rates, different mixes and what they will control.

1. **Horticultural oil.** Use a highly refined oil -- 92% unsulfonated residues or better -- at the full 2% solution -- that is 2 gallons in 100 gallons of water. When applied in March with a high pressure sprayer, it will control BTA and HRM very well, and will help reduce SSM, BWA, and even EHS. Be sure to get good agitation so the oil and water don’t separate. We’re going to be looking closer at Saf-T-Side oil which won’t separate in water to see how well that works.

2. **Asana.** Can be used anytime from February through bud break to control BTA (5 oz/100 gallons) and BWA (10 oz/100 gallons). Add a miticide if mites are present. Will also knockdown EHS. However, there is also a potential to create problems with HRM and SSM when using Asana -- even the following spring. If BWA control can wait until fall, rust mite problems can be avoided when using this product.

3. **Dimethoate.** Use at full rate of 24 oz/acre. From last week of March through bud break will control BTA and knockdown EHS, HRM and SSM.

4. **Dimethoate + Savey** -- BTA plus SSM control (the Savey controls the mite eggs). Also **Apollo** can be used in this manner. Still will only knockdown EHS and HRM.

5. **Di-Syston 15 G** -- There might be some folks who are still using this. It will control BTA and SSM and possibly a brief knockdown HRM. Be sure to apply when there is no wind and scout after treatment to make sure it worked.

6. **Talstar.** Use at full rate of 40 oz/acre. Will give BTA and BWA control from February through bud break. Should also give control of SSM. (Though Talstar doesn't have any activity against mite eggs, it should last long enough to kill the mites that hatch from the eggs). Doesn't control HRM or EHS well.

7. **Talstar + Dimethoate** -- BTA, BWA, SSM and knockdown of HRM and EHS.

8. **Thionex.** Use at full rate of 2/3rds of a quart (about 21 ounces) for BWA control. Wait until mid April through bud break to get BTA control as well. (It just seems that BTA control is more reliable with Thionex if you wait until all the aphids have hatched out). Add a miticide if mites are present. Has no activity against EHS.

9. **Thionex + Dimethoate** -- BTA, BWA control and EHS, SSM and HRM knockdown. Some folks have been using this mix without scouting first, thinking that it will control about every pest. But control of mites and scales will only be fair.

10. **Envidor.** Use at 18 oz/acre for HRM and 25 oz/acre for SSM control. Therefore, if you add Envidor to any of these products listed above, you will also control these mites. Will it keep the mites from developing later in the year or next year? Probably not. I would prefer seeing people keep on scouting and apply when needed -- not as a preventative.

11. **Dimethoate + Asana** -- Use dimethoate at rate of 16 oz/100 gallons and Asana at the highest rate of 10 oz/100 gallons. Will control BTA, BWA, EHS and knockdown SSM and HRM. Wait as close to bud break as possible to get the most out of EHS control. This mix would give better control of EHS in summer.

12. **Dimethoate + Prev-Am** Use Prev-Am at 0.4% solution (50 oz/100 gallons). Will control BTA, EHS and knockdown of SSM and HRM. Prev-Am has burned trees at higher rates, so be careful, but this mix sure smells better than straight dimethoate!

13. **Lorsban** -- will control BTA and knockdown SSM and HRM (?). Will also control BWA in March -- but not once woolies start laying eggs. Will control EHS??? We’re still looking at this, but it did a great job last October. We’ve seen some issues with Lorsban burning foliage, so be careful.

So, what would I use if I had everything -- BWA, BTA, SSM, HRM, and EHS? I would probably either use Asana + Dimethoate and continue scouting for the mites to see if they rebound, treating with Envidor if they do, or go ahead and use Asana + Dimethoate + Envidor (which would be rather pricey). Or, I might wait to control my BWA and EHS in the summer with Dimethoate + Asana, and just use dimethoate in the spring -- and scout for mites later on. If you wait until August or September, you should pick up BTA control for the following year. Or I might use oil in March every year to control all these pests.
Below is a quick scouting schedule designed for scouting trees within a 2-4 years of harvest for the months of April through July.

**April 1st - 15th:**
Pre-bud break scouting assessment to determine if HRM, SSM and BWA are present. If they are, the Balsam Twig Aphid treatment may need to be changed to a material that will control these additional pests also. Determine the population and height of winter annuals and perennials. Determine the need for and timing of the first chemical mowing of the season.

**May 1st:**
If trees were treated for BTA, scout to determine if the BTA was controlled 4-5 days after treatment. Also look again for HRM whether it was treated for or not. Assess the height of established groundcover and Fraser fir growth rate to determine if a chemical mowing treatment is needed.

**June – July:**
Begin thorough SSM surveys at 30 to 60 day intervals based on tree size and value. Monitor the effects of any chemical mowing treatment and determine the timing of another. Watch for late emerging annuals such as pigweed, barnyard and foxtail grasses. Consider these in the timing of the next application.

Sincerely,

Christy Bredenkamp, Extension Agent
Agriculture-Horticulture