

#### **Farm Bill Meetings – Save the Dates**

**With signup for 2018 Farm Bill elections coming in early 2020 (enrollment ends March 15th), it's time to finalize a decision between the ARC and PLC programs. To help answer your questions about the options, a series of Farm Bill informational meetings are being finalized. Meetings will be held in Holton on January 14th, Seneca on the 15th, and Oskaloosa on the 16th. Times and locations are being confirmed. Look for more information in this column or check online at [www.meadowlark.k-state.edu](http://www.meadowlark.k-state.edu) under the Crops & Soils Link. Information will also be available after January 1 from your local FSA Office.**

#### ***A Time and Place for Dormant Oils***

**If you're like most homeowners, you get a little weary of trying to keep up with insect pests through the growing season. If that's the case for you, consider a dormant oil application.**

**Dormant oils are applied during winter to kill insect and mite pests overwintering as eggs or mature females. They can be applied now, potentially reducing costs associated with pesticide inputs applied later in the growing season. They have a wide range of activity against the life stages of mite and scale pests—even the eggs. They are often less harmful to beneficial insects and predatory mites that aren't present right now. Plus, they have relatively low toxicity to humans and other mammals. There are a few considerations, however.**

**First, they can cause plant injury. Applying in winter helps with that, but certain species and temperatures might be an issue. Some plants (arborvitae, Colorado blue spruce, redbud, and certain maples, for example) may be harmed by dormant oil sprays. Problems associated with this phytotoxicity are generally associated with higher rates or bad timing (apply in late November through February) so check labels before application). One label requirements is generally temperature. Never apply dormant oils when ambient air temperatures are going to drop below 40 degrees for at least 24 hours. Avoid application to stressed plants as well.**

**Second, they don't last season long. Dormant oil applications are primarily directed at killing overwintering life stages of certain mites and scales, before they become active in the spring and feed on plants. They are contact products, killing by suffocation or by direct disruption of cell membranes. Once residues dissipate, they will have minimal activity. Thorough coverage of all plant parts is important.**

**Third, they aren't effective on all insects. Two-spotted spider mites won't be controlled since the female overwinters in plant debris, mulch, etc... Spruce**

**spider mites will be controlled, however, as will euonymus scale, even though some other scales will not.**

**Bottom line: a dormant oil application may not cure all insect pressure, but they can do a lot to help. Along the way, you might reduce insecticide/miticide applications while preserving the natural enemies of mites and scales that may naturally regulate populations of these pests.**

***As a Season Draws to a Close – Merry Christmas***

**Most of my work happens in accordance with growing seasons. Weather the last few weeks have pretty well ended the 2019 growing season, providing a minute to take a break as we look ahead to 2020. For all of you who have provided so many opportunities for interaction during the past year – thank you! It is a great pleasure to work with you, and I look forward to doing so again in 2020. Enjoy a brief breather and a Merry Christmas and Happy New Year!**