Over the past few weeks, I’ve received a lot of questions regarding Juniper and Leyland Cypress issues in the landscape. Many homeowners are perplexed and wonder what’s wrong with their hedge or plantings as they attempt to describe a wide array of symptoms. These include yellow and or brown discoloration of branch tips and interior foliage, along with occasional dieback of entire branches, the entire tree, hedge or landscape planting.

In observing these unsightly symptoms, one may wonder what’s the cause? For junipers the most likely disease agents are *Phomopsis juniperovora* or *Kabatina Tip Blight*. These two culprits will cause the last several inches of the twigs to turn brown and die. For Leyland cypress, problems may arise from one of following foliar diseases: *Kabatina Tip Blight*, *Botryosphaeria Canker*, *Sericidium Canker* or *Cercospora Leaf Blight*. If these are not enough, additionally there are 2 root rot diseases and 8 insect pests known to be problematic with Leyland Cypress.

So why now? There are several reasons why these symptoms are showing up this year. Stressful environmental conditions created by a wet summer last year followed by a cold winter this year increase the likelihood for roots and or foliage infection. Branches or whole sides of a tree may display a dead zone when exposed to extreme cold temperatures with high winds. Hedges and landscape plantings that have poor drainage or where water “sits” for extended periods of time have an increased chance of infection by the root rot disease *Phytophthora cinnamomi*. Monoculture plantings of Junipers or Leyland Cypress’ provide a “picnic area” for diseases and insects allowing them to develop and spread rapidly in a short amount of time. In addition when a full sun plant that grows 100’ tall and a least 20’ wide is planted 4’ apart in a hedge planting, the combination of shaded foliage and reduced air circulation creates prime conditions for disease and foliage death.

When symptoms first appear, it’s important to determine if you have an insect or disease issue. If the pest is diagnosed as a disease, then the best treatment is to prune out symptomatic branches during a dry period to prevent further spread. Avoid shearing or heavy pruning during wet periods and in the spring and fall months. A fungicide spray may be necessary for some of the foliar diseases. Additionally, consider using a diversity of plants to create variety, and provide adequate spacing of future plantings to ensure good circulation.
In the past few years, high tunnels have been attracting a lot of attention in the farming and tailgate market industry throughout Western North Carolina. For good reason, high tunnels or hoop houses provide multiple benefits for home gardeners and commercial growers of vegetables, cut flowers, fruits, berries and greens.

So why is there such an interest high tunnels? As our global population increases from 7 billion to an estimated 9.2 billion by 2050, varying scientists, politicians and agriculture experts are reporting the need to increase food production 50% by 2030 and 100% by 2050. With this in mind, high tunnels are an important tool in the agriculture toolbox that will extend the growing season, increase yields and provide and an additional source of income in the agriculture sector.

What are high tunnels? In essence, high tunnels are hoop-shaped frames covered with clear plastic that is built high enough to walk in or drive a tractor through. Traditional high tunnels are without electricity with crops grown in the ground and watered by drip irrigation. High tunnels create a controlled protected environment that is used to grow a wide variety of fruits and vegetables early in the spring and late into the fall. Compared to greenhouses, high tunnels are relatively inexpensive, ranging in price from $1.50 to $4.50 per square foot. Benefits of high tunnels include:

- Crops tend to have improved quality and are larger than those grown in the field.
- High tunnels help increase yield by decreasing insect and disease problems.
- Crops grown in high tunnels enter the market early when prices are high and help to capture loyal customers for the entire season.
- High tunnels allow certain produce (e.g., greens) to be grown throughout the winter, providing a continuous supply to markets throughout the year.

Nationwide, crops grown in high tunnels include tomatoes, cut flowers, lettuce and greens, carrots, peppers, cucurbits, raspberries, strawberries and blueberries. Although high tunnels provide a measure of protection from low temperatures, there are tipping points. On average, high tunnels enable the growing season to start in the spring 3 weeks earlier for warm season vegetables, and lengthen the fall season by 4 weeks. For more information on how to aim high with high tunnels contact your local Extension Center or NRCS Agent.

**High Tunnel Assistance**

USDA’s Natural Resources Conservation Service (NRCS) has a seasonal high tunnel initiative (ECIP) that provides financial and technical assistance to agricultural producers. Persons interested in participating should contact their local NRCS Agent Kayla Hudson at 828 586 5465 or e-mail Kayla.Hudson@nc.usda.gov or for more information go to NRCS website at: http://www.nrcs.usda.gov/wps/portal/nrcs/detail/nc/programs/?cid=nrcs142p2_046680
Lawns

- Recent wet weather may induce brown patch fungus disease to start developing in many lawns. The best steps to reduce the spread of the disease are to avoid mowing when the grass is wet, and do not irrigate. If the weather gets dry and the grass goes dormant, the disease will stop developing.
- The best time for reseeding cool season lawns (fescue and bluegrass) is mid August through September. If the weather is very hot and the soil is very dry then wait till the temperature begins to cool.
- July is a good time to control grubs for mole problems with imidacloprid.

Vegetables

- Frequent rain showers invite fungus diseases like early blight and late blight on tomatoes and mildews on squash and cucumbers. The most commonly used garden product is chlorothalonil (Bravo, Daconil, etc.). Apply fungicides every 1 to 2 weeks to maintain healthy plants. Organic gardeners may want to try Serenade (Bacillus subtillis). Copper or sulfur sprays are less effective, but offer some help.
- Insect populations can be high, late in the season. Check regularly for cabbage worms and squash vine borers. Regular applications of B.t. (Bacillus thuringiensis) will prevent the caterpillars from devouring everything in the cabbage family.
- Do not let basil plants flower as it will change the flavor of the leaves. You can keep pinching out flowers, but the best approach is to “harvest” as soon as flowers start to form. Cut the stems back hard, right above a set of leaves low down on the branch. The stems will quickly resprout.
- Consider planting late crops of squash, bush beans or cucumbers.

Fruits

- Early summer rain has produced perfect conditions for lots of black rot to develop on grapes, as well as brown rot on peaches and nectarines. At this point, if you have not been applying fungicide sprays on a regular basis, you probably already have problems. Products containing Captan are most effective.
- For best flavor, leave peaches on the tree until the background color changes from green to yellow.
- Prune blackberries and raspberries after harvest.

Ornamentals

- Finish pruning shrubs and trees before the end of the July.
- Avoid applying nitrogen until next spring.
- Don’t forget to water newly planted trees and shrubs, weekly if needed.
- Deadhead butterfly bush, purple coneflowers, phlox, roses and other perennials to encourage continued flowering.
- Remove weeds before they go to seed.
Sincerely,
Christy Bredenkamp, Extension Agent
Agriculture-Horticulture