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Timely Topics

The beginning of the tree planting season is coming up in about six weeks or so and now is a good time to start thinking about what new trees to put in the landscape. Too off people don’t think about what to plant until they arrive at the garden center and considering the tree should be there for perhaps a century or
more a little more thought ought to go into the selection. At South Dakota State University we were looking at planting some new species to help decrease our dependence on green ash and Colorado blue spruce, two of the most common trees on the campus. One tree we selected for planting this spring is the Korean fir (*Abies koreana*). This is almost an unknown tree for the Northern Plains but the ones I have seen seem to be performing well in our soils and climate. The tree has soft, bright green needles with two white bands on the underside. The form is pyramidal but becomes a little more rounded with age. While it’s a good tree to considering in the southeastern part of the South Dakota and southern Minnesota it is not easy to find at the local garden centers. Here is a picture of an old (about 60 years old) Korean fir growing in the Hodgson Arboretum in Waseca, Minnesota that I took last weekend.

Kurt Allen, a forest entomologist with the USDA Forest Service, mentioned he had seen a great example of winter desiccation injury on some ponderosa pines in the northern Black Hills so we drove up to look at them on Monday. The trees were along the north side of a parking lot but the trees in the adjacent meadow were expressing similar symptoms, reddish brown foliage through the crown (but not the branches that just emerged from the snow). Winter desiccation injury is the result of the tree suffering from drought during the previous autumn or the inability to replace water transpiring from the foliage during warm late winter days when the soils are still frozen. The injury often results in the loss of many of these needles but since the buds survive new growth occurs in the spring. The loss of the older foliage, however, leaves the tree in a weakened and stressed condition and these trees may still decline this summer, particularly if we have a dry spring.
We also noticed that many of the pines currently infested with mountain pine beetle are beginning to go through their foliage color change sooner than normal. Trees that were infested by mountain pine beetle during the previous late summer usually have the foliage turn yellow the following late spring or summer before turning red, then gray and falling. This year the color change is coming quicker perhaps due to the dry summer and autumn much of the Black Hills experienced last year. We also cut into a number of these infested trees and all we found were fat and happy mountain pine beetle larvae – they came through the cold winter just fine.

**E-samples**

I received this picture from Bob, a natural resource specialist up in the northwestern part of the state. He noticed this witches' broom in a pine and wondered if it could be due to elytroderma needle cast. This needle cast is occasionally seen on ponderosa pines in the western part of the state. The disease causes the loss of the second and third year foliage in the spring (normal needle drop occurs in autumn). The infected foliage will turn red in the spring before falling. The infected trees may also have compact and globose witches' brooms in the crown (as seen in the picture). This disease is usually not a tree killer, but the loss of foliage can weaken the tree.

**Samples received**

**Clay County**

This Scotch pine turned yellow. **What might be the problem?**

It may be nothing. Many Scotch pine have their needles turn yellow during the winter. This has long been a frustrating fact to Christmas tree growers who have to spray their Scotch pines with colorant to have green trees for the holidays. The sample that came in was otherwise healthy, the needles were succulent as well as the twig, and the only problem was the off-color needles. Unless there are other problems associated with the tree I suspect the foliage will turn green again this spring.

**Kingsbury County**

Please identify the problem with this spruce tree.

The foliage was discolored and the tree appears to be suffering from winterburn. Now that the days are warming, yet the ground is still frozen, we will see more of this problem on our pines and spruces.