

**A LITTLE BIT COUNTRY
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Weeds Dominate Wet Acres

Based on reports of growers, I estimate that approximately 70 percent of crop acres in Williams County were not planted this spring due to excessively wet conditions. Many of these prevent plant acres remain too wet for farm vehicle travel meaning weeds have been taking advantage of the good growing conditions.

Many of the weeds are either biennial or winter annual plants that have progressed from rosette to bolt and flowering with seed-set to follow closely. Experience growers know that once biennial/winter-annual plants bolt they become much more difficult to control even with herbicides that normally provide adequate control. These plants have entered the final phase of their life cycle with seed-set left to complete. They usually have a large plant mass and foliage which also takes more herbicide to desiccate than a young plant a few inches tall and with a few leaves.

With a realistic expectation of what herbicides can and cannot do at this advanced stage, it may be productive to realize that plant death may not occur but the weed seeds can be destroyed by applying translocating herbicides.

Herbicides such as Glyphosate, Pursuit, Raptor, 2,4-D, dicamba are all phloem mobile and move toward areas of high metabolic activity. In other words, they move to where seeds are forming and can disrupt normal seed development. According to Rich Zollinger, NDSU Extension Weed Specialist, this is why the North Dakota Weed Control Guide cautions the use of glyphosate as a preharvest application on various crops as the glyphosate may reduce germination.

Leaf Miners on Elm Trees

Several tree leaf specimens have been received which have large areas of tan/brown spots. When held to light, the affected area is nearly transparent. The leaves rattle when shaken. Other telephone inquiries indicate the symptom is widespread. The problem seems to be restricted to elm trees.

The culprit is called a sawfly leaf miner which eats the green tissue between two layers of epidermis. The sawfly leaf miner larvae confine their feeding to the area between leaf's lateral veins. Several miners may coalesce to form large blotches on the leaf. The miner first appears as tiny white spots.

The adult insect is a small black sawfly, about 3mm long. It lays eggs in the leaf tissue through slits the insect cuts with a saw-like ovipositor in the leaf's upper epidermis. The eggs hatch in about one week producing larvae which penetrate the leaf tissue and begins feeding on the green inner tissue. After a brief feeding period, the larvae drops to the ground, buries itself into the soil and spends the balance of summer, fall and winter in the pupae state. In early spring it emerges as an adult and proceeds to begin another life cycle. One generation per year can be expected.

I have not experienced this to be a yearly problem. Control of the insect will be difficult because we first most know the adult sawfly is present and there are few insecticides which will be effective against the protected larvae.

As a preventative measure, I have suggested using a systemic insecticide such as imidacloprid. However, it will take about 60 days for a tree to transmit the insecticide from its roots through its vascular system.

Many of the affected leaves will remain attached to the tree. Others will drop to the ground. Joe Zeleznik, NDSU Extension Forester, tell me a tree can safely lose 25 percent of its foliage. When possible, he encourages practices such as supplemental water and fertilizer to reduce environmental stress.