Seed With Non-Legume Forage To Battle Sclerotinia

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Some alfalfa stands seeded in late summer, 2011, are showing damage from Sclerotinia crown and stem rot. This fungus is distinct from the Sclerotinia white mold disease that attacks many crops including tobacco. The Sclerotinia fungus that attacks alfalfa becomes active in mid- to late autumn, and young alfalfa seedings are often highly susceptible to the disease. The stand losses it can cause vary from minor to very severe (Figure 9).

Figure 9. Complete stand loss from a severe outbreak of Sclerotinia crown and stem rot of alfalfa.

If the disease is present and currently active, you may find white, filamentous fungal growth coming from crowns of dying/dead plants during humid weather. If this is the case, reseeding a forage legume is very risky. Even if you can't find the filamentous growth, if you noticed that some of the plants were wilting and dying in the past couple of weeks, it is risky to reseed a forage legume at this time, because, the fungus will resume activity and attack the seedlings when weather permits.

If the stand is basically already 98-100 percent dead and dried up, with no white, filamentous fungal growth, producers sometimes successfully establish alfalfa by reseeding in the spring.

One may choose to wait to reseed a forage legume until May 15, after which weather is typically too warm for Sclerotinia. However, there is an increasing risk of drought damage to seedings made that late. Usually the best approach for fields where the disease still may resume activity is to seed with a non-legume forage crop. For seeding made before April 15-20, cool-season grasses are an option; seedlings past May 1 should be sown to summer annuals.

Complete resistance to Sclerotinia is not available in any commercial alfalfa varieties, but partial resistance can reduce stand loss caused by this disease. If considering a late-summer seeding on affected farms, it is important to use a variety that has been shown to exhibit partial resistance under field conditions in Kentucky. This is important because some of the worst disease pressure from Sclerotinia crown and stem rot in the nation is in Kentucky. Variety evaluations conducted in other states are useful, but if a variety hasn't been tested for resistance under Kentucky, it hasn't been adequately tested for use in Kentucky.

The variety Phoenix has been shown to have a significant level of Sclerotinia resistance under Kentucky conditions, so that is certainly one to consider for late-summer plantings. Cimarron SR is also a good choice from the standpoint of Sclerotinia. Be aware that these varieties can still suffer stand loss from the disease, but they will suffer considerably less stand loss than the many susceptible varieties on the market. Certain alfalfa varieties marketed as having some resistance to Sclerotinia haven't held up well under Kentucky conditions.

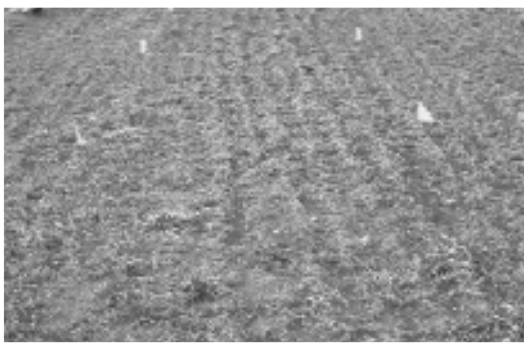

Figure 9. Complete stand loss from a severe outbreak of Sclerotinia crown and stem rot of alfalfa.

More information on risk factors that favor Sclerotinia on alfalfa are available at http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-AG-F-2.pdf. Δ

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