Anthracnose in Tomatoes and Peppers

It seems that the last few years have been difficult getting crops in the fields in a timely manner, and in most cases we can talk about re-planting at least once on a part of the acres. In addition to issues with getting crops in the ground it seems we have had a stretch of years dealing with disease issues in tomatoes, and other garden crops. The following was in the VegNet, a newsletter that addresses vegetable issues. This was written by OSU Extension Specialist, Dr. Sally Miller.

Hot rainy weather and fields with a history of anthracnose mean high risk for this disease in peppers and tomatoes. Anthracnose, caused by species of the plant pathogenic fungus *Colletotrichum*, causes no obvious leaf lesions on tomato foliage and only occasionally on pepper foliage under high disease pressure. However, pepper and tomato fruits are very susceptible to the disease. The fungus can be introduced on seeds, and survives over the winter in temperate climates associated with crop debris. Fruits are infected when green; pepper fruits develop large lesions with salmon-colored spores when green or ripe, but tomato fruits do not develop the typical sunken lesions until they begin to ripen. Spores of the fungus are moved about by splashing rain, so rainstorms can promote disease spread throughout a field. Mechanically harvested processing tomatoes are particularly prone to anthracnose problems since fruits ripen at different rates, but are harvested all at once. Management practices include thorough scouting, sanitation/removal of diseased fruits, and fungicide applications. There are some differences in susceptibility of pepper and tomato varieties to anthracnose, but none are highly resistant.

It is time now to start protecting plants from anthracnose – fungicides must be applied as soon as fruits begin to set, and continued on a weekly schedule as fruits develop. Fungicides labeled for use against anthracnose in fruiting vegetables (eggplant, pepper, tomato) are listed in the Midwest Vegetable Production Guide for Commercial Growers. Several studies have shown the best results with Aprovia Top, Quadris, Quadris Top, Cabrio or Priaxor alternated with chlorothalonil or mancozeb. Some
labels may recommend a spreader-sticker; be sure to read and follow label instructions.

**Understanding Your Mineral Tag**

When it comes to feeding mineral, there are a number of choices from any company that you purchase your mineral from. The mineral needs to be available to livestock at all times. It is not the end of the world if your mineral runs out, but it should be checked often so the amount of time it is out is minimal. This is especially true for salt, but may be even more of an issue if you are supplying the livestock fly control and/or antibiotics for issues like anaplasmosis.

The following appeared in the Beef Blog recently. It comes from University of Missouri Extension Livestock Specialist, Eldon Cole.

What does the feed tag tell you? Trace mineral levels on the tag expressed as parts per million (ppm) will run as follows: copper, 1000-1500; zinc, 3000-3500; selenium, 12-15; manganese, 2000-3000.

A free-choice, all-purpose beef cow mineral usually will have from 10 to 30% or more plain salt. Calcium will run around 12 to 15% and phosphorus will be 5 to 12%. Magnesium will run around 1%.

"An exception is during the winter or grass tetany season. At that time, a 10 percentage magnesium level is advised if you have tetany-prone cows and suspect forage conditions," says Cole.

Mineral levels more than that needed by the cow may not improve performance and likely will increase cost. The cost of minerals will be higher if used as a carrier for one or more additives such as ionophores or those used for parasite control.

"Mineral supplementation is not a cut and dried or one-size-fits-all matter. Know your animal's requirements and the makeup of the forage or other feed you are providing. Then make sure you keep the mineral/salt out for them free choice.

**Dates to Remember**

- **July 27**  
  Hops Pre-Harvest Field Night at OSU South Centers at 5:30 p.m. Must call and pre-register at 800 297-2072.

- **Aug. 15**  
  Southwest Corn Growers Field Day in Fayette County at the County Farm.

- **Sept. 14**  
  Fertilizer Certification opportunity at North Adams High School starting at 5:30 p.m. in the Round Room. Call to pre-register at least one week prior at the Adams Co. OSU Extension office, 937-544-2339 and ask for Barbie.