

Danville Co-op Agronomy Newsletter, August 2009

Healthy seedling emergence and uniform stands are essential to maximizing the yield of all crops. The use of high quality, disease-free seed is the first step to producing good stands. Using seed treatments is a good additional measure for ensuring a successful crop.

The importance of using high quality seed continues to increase as production methods change (e.g., early planting, narrow rows and no-till/reduced tillage planting systems). Seedlings from high quality seed are more likely to emerge rapidly, tolerate adverse weather conditions and resist disease.

The selective use of seed treatments will protect seeds or seedlings from early-season disease and insect pest affecting crop emergence and growth.

Seed treatments containing fungicides are available to protect seed and seedlings from many seed – or soil – borne pathogens. Seed treatments are most beneficial for seeds infected prior to planting or when cool, wet soil conditions exist at planting which results in delayed germination. Likewise, seed treatments containing insecticides can protect seed and seedlings from certain insect pests found in the soil, such as white grubs, wireworms, aphids and Hessian fly.

It is important to note, however, that seed treatments should not be used to fully compensate for the selection of poor seed lots. Seed treatments will not increase poor germination due to excessive mechanical damage, poor storage conditions, genetic differences in variety, or other damage. The effect of a seed treatment on plant stands will depend upon seed quality as well as field conditions at planting.

No single seed treatment will control all diseases or insects that may attack seeds and seedlings. Protection is also short lived, generally only lasting as long as it takes for the crop to emerge. Before selecting a seed treatment it is essential for the grower to consider potential problems associated with the seed and the history of problems associated with each field. Each planting situation is different requiring consideration of seed quality, planting rate, tillage/seed bed prep, soil moisture/temperature, time of planting and the likelihood of rapid emergence.

Your Co-op can answer any questions you may have concerning this subject, and have an experienced crew in both cleaning seed and applying seed treatments. Please let us help you with your seed selection, cleaning and treatment needs. We value your business.