



Becoming a Better Plant Disease Detective

Halting the progression of a disease early should be the goal for all. This is certainly true for humans as well as our crops. Anticipating problematic disease development would be the implementation of a control strategy prior to disease symptom or sign expression. Sporadic disease developments involving certain pathogens, which are unpredictable in nature, require the utmost vigilance. Following frequent examination of a crop you discover an apparent change in vigor, yet, conditions have prevailed for excellent growth. A hidden pathogen should be amongst the lists of suspects. Your determination should now be to head off this decline before a yield loss is inevitable. It is time to put on the detective hat, and watch that field with the eye of an eagle. But watching won't be enough; you will have to develop every possible abiotic and pathogenic scenario in your mind to prepare for the impending diagnosis. I have discovered that many individuals derive great satisfaction from successfully diagnosing and halting the progression of a disease. Therefore, I wish to share a summary of the steps involved in "*Presumptive Diagnosis*":

- a. Record all field observations, and sample the full range of symptoms. Review field history and management, and sketch the disease progression and pattern.
- b. Record disease symptoms and signs. Continue to keep the samples moist for further disease manifestation. Make microscopic and macroscopic examinations.
- c. Postulate the type of disease and possible class of agents involved.
- d. Consult literature specific to the crop and its known diseases.
- e. Further observation for confirmation.

For more information concerning disease diagnosis give me a call. We are all constantly striving to become better plant disease detectives.

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