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PROVINCE OF KWAZULU-NATAL

CEDARA PLANT DISEASE CLINIC

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Introduction

The primary function of a plant disease clinic is diagnosis of biotic and abiotic diseases of agricultural crops. The plant disease clinic is often used to develop diagnostic techniques, describe new diseases and support field research projects. It can also provide a base for undertaking survey of crop problems and serve as a centre for disseminating information. Plant clinics are at the interface between extension services and the farming community and perform the major task of bringing technical assistance directly to the farmer.

Materials and Methods

The identification of the causal agent is of ultimate importance in diagnosis. Different procedures are used in the plant disease clinic for diagnosis, depending on the symptoms shown by the plant. The plant disease clinic performs identification of fungi, bacteria and nematodes and the diagnosis of viral and abiotic diseases are based on symptoms. Analysis of plant, soil and water material to confirm nutrient disorders is conducted by Analytical Services.

Results

For the 2012/2013 year, agronomic crops were found to be the largest component of samples submitted (110) followed by horticultural crops (80) and soil and water samples (60). This trend in crops changes every year depending on various factors. Water samples submitted have been showing a steady increase over the years. The occurrence of fungal pathogens was the highest, with root rots and damping – off pathogens contributing to a large portion of this. There has been an increase in bacterial diseases and insect damages as from previous years.

Conclusion

The high proportion of plants experiencing disease problems is probably due to the intensive nature of farming the plants. Poor management practices are also a contributing factor for the occurrence of diseases. Disease control recommendations are based on integrated pest management (IPM) practices as well as emphasis being placed on improved management techniques. There has been a marked increase in water samples over the years and results have indicated that the water quality is poor. Future research must focus on the cause of this and how to ameliorate it.