NUTRIENTS, RESISTANCE BARRIERS AND PLANT DISEASE EPIDEMICS

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The relationship among pathogen, host and environment improve the plant disease epidemics. In the environment variables, the soil fertility provide the nutrients to constitute import ant resistance barriers in cultivated plants. The problem is to know what is the ideal dose and the balance among them to express the horizontal resistance. The wax layer and the cell wall can be the first barriers found by pathogens in the host. But, It is obvious, without water and nutrients, most of the genes of any host do not express. Then, we will not have these barriers. Among the relationships, Ca and K can be important in plant diseases. Your nutritional balance can affect the wall cell and the plasmatic membrane, besides the flow of Ca and K between infected cells and close to the lesion of necrotrophic fungi. High doses of N causes the disordered growth of the tissues and the excessive production of carbo hydrates, energy for the pathogens. In addition, of these examples, the effect of the other macro and micronutrients in several metabolic process is reported. Capable of influencing epidemiological variables such as latent period and disease progress rate. But, not exist a pattern for the effect of nutrients for all pathosystems.