PK 1 questions

Discipline “Molecular and biochemical markers of plants resistance to disease ”

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1. Objectives of Plant Pathology
2. Disease & Disorder of plants
3. Plant Pathogens
4. Classification of plants diseases
5. What is a Disease
6. How Pathogens affect Plants?
7. Biochemical markers as a useful tool to identify the plants resistance to pahogen
8. How Pathogens affect Plants?
9. Methods of extraction and determination of phenols as biochemical markers related to disease resistance
10. Gene for Gene Concept
11. Genetic and physiological evidences elicitor-receptor models
12. What is a Elicitors of pathogens
13. Recognition of pathogen
14. The perception of pathogen”s signals
15. Steps of signal transduction
16. Cyclic adenosine monophosphate (cAMP)
17. Mitogen-activated protein kinases (MAPKs)
18. Secondary messengers in plants to transmit the primary elicitation signal of pathogen and/or host.
19. Ethylene as the secondary messengers in plants of transmition of signal pathogens
20. Methyl Jasmonic and Jasmonic Acid as the Secondary Messengers in plants of transmition of dignal pathogens
21. The quality of resistance gene in the host
22. The protein for protein hypothesis of gene for gene Concept
23. The practical use of gene to gene relationships
24. Biochemical relationship in resistant and susceptible cultivars
25. Sugars act as precursor for synthesis of: phenolics,
26. Sugars act as precursor phytoalexins,
27. Sugars act as precursor lignin
28. Sugars act as precursor cellulose.
29. Role of lignification in plant defense
30. The examples of enzymes used as Biochemical markers
31. Enzymes involved in plants defence agaist disease
32. Pathogenesis Related (PR) Proteins
33. Measument of disease
34. Various kind of molecular markers used for identification of plants disease resistance
35. Efficiency of a seedling phenotyping strategy
36. Molecular markers for identification of plants adult resistance
37. Use of AFLP molecular markers for identification of plants disease resistance
38. Microsatellites as molecular markers for evaluation of plants disease resistance
39. Detection of Single Nucleotide Polymorphisms and use for disease screening
40. Genes expression studies for identification of plants disease resistance