

# **FERTILIZERS RECOMMENDATION SYSTEM FOR DIESASE PREDICTION**

## **WHAT DOES THE PROBLEM AFFECT?**

Plant diseases can infect all types of plant tissue including leaves, shoots, stems, crowns, roots, tubers, fruit, seeds, and vascular tissues.

## **WHAT IS THE IMPACT OF THE ISSUES?**

Plant diseases can have a significant economic impact, causing a reduction in income for crop producers and distributors and higher consumer prices.

## **WHAT WOULD HAPPEN IF WE DIDN'T SOLVE THE PROBLEM?**

Plants need nitrogen and phosphorous to grow. If you didn't fertilize the soil with manure or artificial fertilizers, the soil will eventually become exhausted and crops would struggle to grow.

## **WHEN DOES THE ISSUE OCCUR?**

In our case When a pathogen that is already present or which invades successfully to plant host tissues and cells results in plant disease.

## **WHERE IS THE ISSUE OCCURING?**

Direct detection of diseases includes molecular and serological methods that could be used for high-throughput analysis when large numbers of samples need to be analyzed. In these methods, the disease causing pathogens such as bacteria, fungi and viruses are directly detected to provide accurate identification of the disease/pathogen. On the other hand, indirect methods identify the plant diseases through various parameters such as morphological change, temperature change, transpiration rate change and volatile organic compounds released by infected plants.

## **WHY IS IT IMPORTANT THAT WE FIX THE PROBLEM?**

It is important to fix the problem because Plant diseases Reduce the amount of food available to humans by ultimately interfering with crop yields.This can cause inadequate food to humans which result in starvation or death in worst cases.