

Chapter 1

INTRODUCTION

In India 70% of population depends on agriculture. Nowadays technology plays a vital role in agriculture. Farmers have wide range of diversity to select suitable fruit and vegetable crops. However, Farmers can adopt technology to get optimum yield. Hence agriculture is a backbone of Indian economy. To get the better yield crop management is very much essential. Crop management includes disease management. Improper disease management affects the production significantly in the post harvest life. Variation in physiological function of plants, leads to characteristic symptoms. A symptom is a phenomenon accompanying something and is regarded as evidence of its existence. Disease is caused by pathogen which is any agent causing disease [6]. Rubber trees are one of the world's most prominent natural. The consumption of the rubber increased with the advent of the 20th century, when industrialization took place.

Natural rubber is also called as India rubber or caoutchouc, as initially produced, consists of polymers of the organic compound isoprene, minor impurities of other organic compound and water. Rubber is harvested mainly in the form of latex from trees. The latex is sticky, milky colloid drawn off by making incisions into the bark and collecting the fluid in vessels in a process called “tapping”. For commercial purpose latex is refined into rubber. Natural rubbers are widely used as products either alone or in combination with other materials. Rubber is used in a variety of applications such as latex gloves, textile manufacturing, valves in machinery and automobiles. Rubber trees are used as bio-fuel, raw material for manufacturing and for furniture production.

Nowadays glove industry is moving towards synthetic rubbers made from carbon based raw materials. Compared to natural rubber, these synthetic rubbers are non bio-degradable. A synthetic rubber releases harmful chemicals into environment when it is disposed off through the furnaces. The greatest problem now faced by the growers is rubber tree diseases. It is very essential to identify the appropriate disease and take necessary control measures for the same before tree dies off. Hence this project aims to identify the diseases using the features of rubber leaves from its image.