A Survey of Detection and Classification of Rice Leaf Disease Using Image Processing

R. Dhivya* and N. Shanmugapriya

Department of Computer science and Engineering, Dhanalakshmi Srinivasan University, India

*Corresponding authors: successdhivya11@gmail.com, shanmugapriyavinod@gmail.com

ABSTRACT

Rice is an important crop in India. People are facing food insecurity problem all over the world. There exists a variety of food crops out of which rice is considered as a main food crop especially in the Asian countries which are affected by different diseases at the different stages. Mostly bacterial blight, rice blast, brown spot, Tungro, sheath blight, leaf smut are the diseases found in the rice crop. According to the World Bank the projected demand for rice will be about 584 million tons or less towards 2050. Therefore, any damage of rice crops is unacceptable. There are a number of diseases that affect the quality and the growth of the crop. Sometimes it is very difficult to find out the disease in the traditional way. Whereas a computerized system is very helpful to find the disease at the right time which will help the farmers to prevent the crop from damage in an earlier stage. This paper reviews the literature of various types of diseases in rice crops and comparisons on the basis of accuracy, techniques and datasets have been analyzed using Deep Learning and Image Processing Techniques.

Keywords: Rice Leaf Disease, Deep Learning, Image Processing

DOI: 10.21467/abstracts.158 ISBN: 978-81-965621-0-6 (eBook)