

**THURUCARE: PREDICTION OF WHITEROOT DISEASE
IN THE RUBBER PLANTS**

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Abstract

The system ThuruCare is designed and implemented by the author to predict the White Root Disease of Rubber plants. The White root disease is a fatal disease that can occur to the rubber plants and as well as the other plants. The White root disease can be very destructive destroying the number of rubber yards if infected. The identification of the rubber plant being infected with the White Root Disease can be done by the experts of the field by looking at the symptoms of the tree leaves and the trunk and also by looking at the roots of the trees. The applicable approach of this project is to find a solution to the fatal disease of white root disease for early prediction of the disease to protect number of yards from this fatal disease. The design and the implementation of the project is done as a web application where the user have to input an image of the rubber plant leaf and the image of the trunk to get the prediction of the white root disease and it is the core component of the system. The system is also can get the answers by posting a question to the community. CNN is used in the model and the accuracy of the prediction result is around 90%. The dataset which was used to train the model was created by the author by the healthy and the unhealthy leaves, healthy and the unhealthy trunks of the trees. The backend is implemented with Python and the PHP. The frontend of the system is created with Html, CSS, PHP. The accuracy can be expanded by enhancing the accuracy of the dataset.

Keywords: Machine learning, CNN, White root disease, image processing