

**EFFICACY OF SELECTED PLANT EXTRACTS ON THE  
CONTROL OF LEAF CURL IN CHILLI (*Capsicum annum*)**



**BY**

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FTC 113



Project Report  
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**2023**

## **ABSTRACT**

Chilli leaf curl is a major viral disease that affects chilli plants and causes significant yield losses worldwide. Chemical pesticides have been widely used to control the disease, but their negative impact on human health and the environment has prompted the search for safer and more sustainable alternatives. In this study, the effectiveness was investigated that of organic solutions made from Onion peels, Kohomba leaves, and Tobacco leaves against chilli leaf curl. The experiment was conducted in a randomized complete block design with four treatments and three replications. The treatments included three organic solutions prepared from Onion peels, Kohomba leaves, and Tobacco leaves, and a control. The results showed that all three organic solutions significantly reduced chilli leaf curl symptoms compared to the control. Among the organic solutions, Kohomba leaf extract showed the highest effectiveness in controlling the disease, followed by Tobacco leaf extract and Onion peel extract. Furthermore, the organic solutions did not have any negative impact on the plant growth and development. In contrast, the chemical pesticide treatment had a negative impact on the plant growth and yield. These findings suggest that Onion peels, Kohomba leaves, and Tobacco leaves could be used as effective and sustainable alternatives to chemical pesticides for controlling chilli leaf curl. Further research is needed to optimize the application methods and dosage of these organic solutions for maximum effectiveness.

### **Keywords:**

Chilli, Chilli Leaf Curl Disease, Plant extracts

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