

GOVERNMENT DEGREE COLLEGE, AGRAHARAM

RAJANNA SIRCILLA- DIST. -505302

(Re-accredited with B Grade by NAAC and ISO 9001: 2015 Certified)

Department of Botany

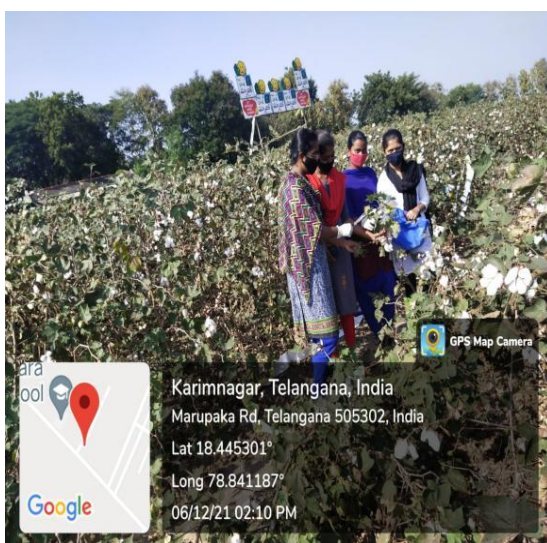
Best Practices (Student Study Projects) - 2021-22

1. Under Jignasa Students Study Project for this academic year, we conducted a project title

**“STUDIES ON POST HARVEST FUNGAL INFECTIONS OF COTTON PLANT (*GASSIPIUM HERBACIUM.L*)IN
RAJANNA SIRCILLA DISTRICT OF TELANGANA “**

By Students of B.Sc BZC I Yr Students

1. K.Yamuna
2. E.Bhavani.
3. R.Srujana.
4. S.Rakshitha.
5. S.Archana.
6. B.Akanksha.






Devrukh Shikshan Prasarak Mandal's
 NYA. TATYASAHEB ATHALYE ARTS, VED. S.R. SAPRE COMMERCE &
 VID. DADASAHEB PITRE SCIENCE COLLEGE [AUTONOMOUS], DEVRUKH, (MS) INDIA


CERTIFICATE OF PAPER PRESENTATION

This is to certify that **Dr T. Srinivas**
 of **Govt Degree College Agraharam Rajanna Siricilla District**
 has presented the research paper titled **Identification and Characterization of Cotton Plant
 Post-Harvest Fungal Infections in The Siricilla District**

In **International Conference (Online) on Environment Development and Sustainability (ICEDS 2022)**
 on **March 29 -30, 2022** organized by Department of Botany and IQAC, Athalye-Sapre-Pitre College
 (Autonomous), Devrukh, Dist. Ratnagiri, Maharashtra, India in collaboration with Srushtidnyan and
 Sahyadri Sankalp Society


Dr. P. V. Naikwade
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CHAPTER 7 Identification and Characterization of Cotton Plant Post-Harvest Fungal Infections in The Siricilla District

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Abstract

The current study was carried out in the Department of Botany, Govt Degree College Agraharam in order to determine the fungal diversity in the Cotton (*Gossypium hirsutum* L.) Plant's leaves, roots, and fruits, among other things. According to research, the cotton plant has been recognised as one of the most vulnerable to fungi that may be discovered on its leaves, roots, and in the surrounding soil. During a survey of cotton fields in the villages of Siricilla and Agraharam Rajanna siricilla District in the state of Telangana, samples of cotton leaves, fruits, and roots were collected, and the results were examined. It was completed at the pathological laboratory during the experimental phase, when it was carried out in the Pathogenicity laboratory. Growing fungus in artificial mycological medium was accomplished using the techniques of leaf and root plating, and the results were quite positive in nature. A total of nine isolates were generated from cotton leaves and roots throughout the course of the experiment. All of the isolates were identified by a pathologist with substantial experience using a standard key and a standard procedure. *Rhizoctonia solani*, *Fusarium solani*, *Fusarium oxysporum*, *Fusarium Chlamydosporum*, *Sclerotinia rolfii*, *Sclerotinia sclerotiorum*, *Rizopus* spp., *Aspergillus niger*, and *Penicillium notatum* were among the fungi that were discovered. As a result, *Rhizoctonia solani* and *Fusarium solani* are present. According to our findings, *R. solani* and *F. solani* had much higher percentages of leaves, fruits, and root colonisation than the other species studied. Upon examination of symptomatic plant samples, researchers discovered that the *R. solani* had a root colonisation proportion of more than 50 percent. In this study, *F. solani* had 30 percent


Department Incharge


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