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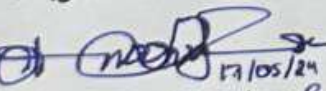
DEPARTMENT OF BOTANY



B.Sc. PROJECT REPORT

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ALLELOPATHIC EFFECTS OF LEAVES OF *Eleutheranthera  
ruderalis* ON SEED GERMINATION AND SEEDLING GROWTH OF  
*Vigna radiata*.

A project work submitted to the University of Kerala in partial  
fulfillment of the requirements for the B.Sc. Degree of Science in  
Botany

PROJECT REPORT

Under the guidance of

**Mrs. Jisha M.S**



DEPARTMENT OF BOTANY  
TKM COLLEGE OF ARTS & SCIENCE  
KOLLAM-691005

# CERTIFICATE

This is to certify that this project report entitled "ALLELOPATHIC EFFECTS OF LEAVES OF *Eleutheranthera ruderalis* ON SEED GERMINATION AND SEEDLING GROWTH OF *Vigna radiata*" is an original work carried out by AFREEN P SAJEEV.

Certify that this is a bonafide work carried out under my supervision and guidance.



Mrs. Jisha M. S

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Karicode

April 2024





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**Karicode**

**April 2024**



## DECLARATION

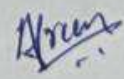
I hereby declare that this project "ALLELOPATHIC EFFECTS OF LEAVES OF *Eleutheranthera ruderalis* ON SEED GERMINATION AND SEEDLING GROWTH OF *Vigna radiata*" has been prepared by me during the year 2023-24, under the supervision and guidance of Mrs. **Jisha M.S**, Assistant professor of TKM College Of Arts and Science, Kollam-5 in partial fulfillment of requirements for the award of the Bachelors of science Degree by the University of Kerala.

I also declare that this project is conducted individually and prepared by me.

**Karicode**

**April 2024**

**Name** : AFRREEN P SAJEEV

**Signature** : 

# ABSTRACT

*Eleutheranthera ruderalis* is rapidly grown as a weed in our ecosystem. It is similar to another weed called *Synedrella nodiflora*. *Eleutheranthera ruderalis* may have allelopathic effects that help in the invasive nature of plants. In the present study, we examined the effect of aqueous extracts from the leaves of the plant on the germination of *Vigna radiata* seeds. We found out that leaf extracts inhibited the germination and growth of *Vigna radiata* seeds. The effect of inhibition was maximum at 15% leaf extract and it is revealed that more the concentration of extract more will be the inhibitory effect. Thus, the allelopathic effect of *Eleutheranthera ruderalis* may have helped the plant to become an invasive species in our ecosystem.

Key words: *Eleutheranthera ruderalis*, allelopathic effects, *Synedrella nodiflora*, invasive species