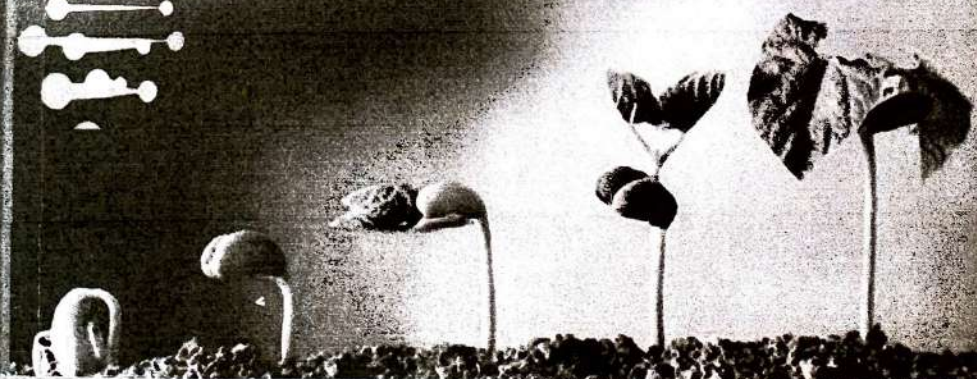


# FRONTIERS IN BIOLOGICAL SCIENCES




Dr. S. G. Yadav



  
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Shri Guru Buddhiswami Mahavidyalaya  
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# Frontiers in Biological Sciences

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## PROTEASE ACTIVITY OF COMMON AND DOMINANT VEGETABLE MYCOFLORA OF SPINACH (*SPINACIA OLERACEA* L.)

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**Abstract** - Spinach is a good source of minerals vitamins B complex, ascorbic acid, carotenoids, phenols and omega 3 fatty acid. The plants are medicinally important and are used in traditional medicine. It is used treat diabetes, leprosy, urinary diseases, vomiting, sneezing fever and the diseases related to brain and heart. The total thirteen fungi were found to be showing their association with leaves and seed of the palak. The yield of vegetable is reducing gradually every year due to the soil borne pathogen fungi. Soil Borne diseases cause significant damage to almost all crops particularly to the vegetables. The objective of present investigation is to study effect of enzyme metabolites of common dominant test vegetable on seed health of spinach are evaluated. Determination of protease activity was done with the help of cup plate method adopted by Hislop and Bottoni. Total thirteen fungi were found to be associated with the Palak leaves. Out of these thirteen seed borne fungi *Alternaria tenuis*, *Aspergillus flavus*, *Aspergillus niger*, *Curvularia lunata*, *Dreschlera tetramera* found to be common and dominant on Palak leaves. These common and dominant seed borne fungi produced protease enzyme in variable quantity, which help the fungi degrade the seed and ultimately affected seed quality yield.

**Keywords:** Spinach leaves, Mycoflora, Protease activity.



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*[Signature]*

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