

ORIGINAL ARTICLE

**DIVERSITY OF SEED MYCOFLORA: ITS IMPACT ON GERMINATION  
AND NUTRITIONAL VALUES OF TWO VEGETABLE SEEDS IN STORAGE,  
PURULIA, WEST BENGAL**

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**Abstract:** *The present investigation was carried out to identify the diversity of seed mycoflora, decrease in nutritional values, and loss of germinability in the case of two fresh and stored vegetable seeds, *Abelmoschus esculentus* (Okra) and *Hibiscus sabdariffa* (Roselle). Vegetable seeds were collected from the village farmers of Purulia District, West Bengal, India. Thirteen fungal genera were prevalent in Okra and Roselle seeds during the incubation test. The fungal genera were *Rhizopus* sp., *Aspergillus niger*, *A. flavus*, *Mucor mucedo*, *Macrophomina phaseolina*, *Fusarium* sp., *Curvularia lunata*, *Cladosporium* sp., *Alternaria* sp., *Diplodia* sp., *Chaetomium* sp., *Trichoderma* sp., *Paecilomyces* sp., and sterile mycelia. From both of the vegetable seeds, Roselle showed a higher diversity of seed mycoflora than the Okra seeds in storage. The nutritional values like protein content decreased from 21.62% to 12.24% and from 18.86% to 13.03% whereas carbohydrate content decreased from 13.95% to 10.09% and from 28.7% to 26.1% in Roselle and Okra respectively. The germination rate decreased from 82% to 39% in okra seeds and from 79% to 28% in the case of roselle seeds indicating that the storage environment and seed mycoflora play a vital role in seed deterioration and proper harvesting with scientific storage is essential for the viability and health of stored seeds.*

**Keywords-** *Seed-mycoflora, *Abelmoschus esculentus*, *Hibiscus sabdariffa*, Nutritional value, Germination rate.*

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