

Abstract Template

Abstracts are to be emailed to Dr. Omoanghe Isikhuemhen (omon@ncat.edu) and Dr. Felicia Anike (fnanike@ncat.edu) by April 6th, 2026. (MUST INDICATE IN EMAIL WHETHER YOU ARE DOING A POSTER OR ORAL PRESENTATION)

Title: [Concise and informative title]

Authors: [Full names of all authors, with * indicating the presenting author(s)]

Institutional Affiliations: [Name(s) of institution(s) and addresses]

Abstract:

[Begin with a brief background to introduce the topic and its significance. State the research question or hypothesis clearly. Summarize the methods used, including key experimental approaches. Present the main findings concisely, highlighting significant results. Conclude with the study's implications and potential applications. Ensure clarity and precision while maintaining the word limit (350).]

Keywords: [2-4 relevant keywords]

Example Abstract

Impact of Storage on the Stability and Viability of *Pleurotus ostreatus* Spores.

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Pleurotus ostreatus produces mushrooms, mycelia, and bioactive compounds that hold significant value for food, industrial, and environmental applications. The viability and physiological integrity of *P. ostreatus* spores are critical for breeding and genetic improvement programs, as well as their persistence in the environment. However, little is known of how the most common methods of spore storage affect their integrity. This study investigates how storage method, storage duration, and genetic background influence spore viability and germination rate. Spores from four strains of *P. ostreatus*, collected from wild and commercial production, were stored for defined intervals of 0 day, 1 week, 3 months, and 6 months at room temperature (23°C) and refrigerated conditions (4°C). Viability and germination response were

assessed using standardized plating assays. Results showed that refrigeration preserved spore viability and the rate of germination regardless of strain origin. The storage method had a pronounced effect, with refrigeration preservation maintaining the highest germination in all strains. Refrigeration preserved spore viability, decreased the time to first germination, and increased total germination regardless of strain origin. The length of storage significantly influenced spore performance; there were marked declines in germination beyond 6 months of storage at room temperature. Genetic background played a substantial role in germination behavior. Findings suggest that refrigeration is preferable to room temperature for long-term *P. ostreatus* spore storage.

Keywords: *Pleurotus ostreatus*, Genetic background, Spore viability, Germination rate