

**GROWTH TOLERANCE AND MYCOACCUMULATION POTENTIAL OF  
MYCELIA AND FRUITING BODY OF *Pleurotus djamor* IN Mercury (Hg<sup>+</sup>)  
CONTAMINATED MEDIA**

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## ABSTRACT

**CUMBE, ALESSANDRA P.**, Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **JUNE 2019, GROWTH TOLERANCE AND MYCOACCUMULATION POTENTIAL OF MYCELIA AND FRUITING BODY OF *Pleurotus djamor* IN Mercury (Hg<sup>+</sup>) CONTAMINATED MEDIA**

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*Pleurotus* species have been found to demonstrate a very effective bioabsorption potential for a wide range of environmental contaminants including heavy metals. The study was conducted to determine the growth tolerance and myco-accumulation potential of mycelia and fruiting body of *P. djamor* in mercury contaminated media.

The mycelial growth performance was evaluated on coconut water liquid media with two concentrations of mercury. Meanwhile, *P. djamor* fruiting bodies were evaluated on rice straw-based substrate contaminated with mercury. Mycelia and fruiting bodies were analyzed by Inductively Coupled Plasma- Optical Emission Spectrometry.

Mycelial biomass of *P. djamor* was significantly inhibited in 1000 ppm of mercury. However, 1ppm of mercury and control showed no significant difference. A decreasing pattern in volume loss was also observed having statistically significant. The fruiting bodies also showed decreased yield in contaminated substrate. Inductively Coupled Plasma- Optical Emission Spectrometry analysis showed that mercury cannot be detected in both mycelia and fruiting bodies of *P. djamor*. Suggests that *P. djamor* was safe food source even grown in mercury contaminated substrates.

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