

IN-VITRO INTERACTION OF FUNGI ISOLATED FROM ONION FIELD

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ABSTRACT

LUZANO, ANGELIE KRISSHA F., Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, **JUNE 2019, IN-VITRO INTERACTION OF FUNGI ISOLATED FROM ONION FIELD.**

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Fungi present in onion fields may exhibit antagonistic interactions which can influence the growth of other microorganisms and suppression of fungal disease on plants. Thus, to identify new species of fungi for biological control, the interactions among different species of fungi isolated from onion field were evaluated. Three species of fungi isolated from onion field namely; *Aspergillus niger*, *Penicillium citrinum* and *S. brevicaulis* were used in this study. The result of the study showed a fungistatic antagonism between *A. niger* when paired with *P. citrinum* and *S. brevicaulis*, in which *A. niger* was the aggressor and both *P. citrinum* and *S. brevicaulis* were the victim. Mutual inhibition at a distance was exhibited by *P. citrinum* and *S. brevicaulis* whereas a noticeable zone of inhibition was formed near the interacting fungi thus preventing the interaction of *P. citrinum* and *S. brevicaulis*. The results of the study showed that the ethanol and crude extract of three fungal isolates *A. niger*, *P. citrinum* and *S. brevicaulis* has a promising antifungal activity and can be used as biocontrol agent.

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