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Comparative performance of Entomopathogen infecting rice bug in region 8

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he study was to emphasizing entomopathogens in pest management of rice crop over chemical pesticides. Biological control with pathogenic fungi might provide long lasting insect control without damage to the environment or non-target organisms. Metarhizium anisopliae SPW and Beauveria bassiana are two of several natural agents for controlling a broad range of insects by direct penetration of the host cuticle. Percent infection of rice bug depends on number of spores and timing of application. Rice bug showed infection three days after application with 75.83% for M. anisopliae SPW while 55% for B. bassiana under laboratory infection using 1x108 spore count. In pot experiment, it showed that increasing its spore count from 1x106 to 1x108 can increased its effectiveness. However, after applying of entomopathogens in the field, it showed that heavy rains (615mm-788.6mm) may affect its effectiveness to the insect. On 1st trial, only B. bassiana showed promising effect to the insect. Infected insects were found in all treatments with highest infection of 44.26% however, M. anisopliae SPW only infects other rice pest. On 2nd trial, M. anisopliae SPW (29.83%) showed its effectiveness higher than B. bassiana (12.1%). Infection occurrence can last up to the harvesting of the crops.

Speaker Biography

Brenda Balbarino-Almeroda is a science research specialist II in the department of agriculture-RFO8, Abuyog experiment station, Leyte, Philippines. Currently, she is the unit head of on-station research and off-station collaboration unit in Abuyog experiment station. She is also a training coordinator for on-the-job training and occupational internship program. She is a technical expert in pest management on jackfruit, rice, corn and banana. She has participated in various international conferences and received awards for her contribution. She also has membership in various association/organization in Philippines.

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