CONIDIA PRODUCTION FROM *Beauveria bassiana* Balsamo (Vuill.) ON RICE GRAIN (*Oryza sativa* L.) AS SUBSTRATE UNDER DIFFERENT TREATMENT

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Key words: Beauveria bassiana, rice, conidia

Introduction. *Beauveria bassiana* Balsamo (Vuillemin) is one of the most used entomophatogenic fungus in worldwide plague's control (1). Spore production could be achieved through crafted, semi-industrial or industrial methods, however, in the selection of ideal substrate for propagation in vitro, its low cost, easy acquisition, high conidia production and virulence maintenance of the strains, should be considered (2). One of most widely substrates used in the production of entomopathogenic fungus is the rice (*Oryza sativa* L.); however, his election may vary according the region and purpose of the multiplication.
In this study, native strains of *B. bassiana* were evaluated, as well as substrate preparation (rice grain) for conidia production.

Methods. Four native strains of *B. bassiana* from different states of México where citrus-growing and GHA strain were evaluated. Plastic bags of high density of 1 kg were filled with rice grain prepared of three different ways: a) Hydrated rice: 50 g of rice with 30 ml of bi-distilled water were added to each bag (3). b) Rice with chloro and antibiotic: the rice was submerged into a solution of 0.065% chlorine plus 130 ppm antibiotic solution for 30 min, it was rinsed with bi-distilled water and the moisture excess was removed. 60g of moist rice were added to each bag. c) Rice with chloro: the rice was submerged into a 0.065% chlorine solution for 30 min, it was rinsed with bi-distilled water and the moisture excess was removed. 60g of moist rice were added to each bag. At end of each treatment all bags were sterilized, then were inoculated with 5 ml of 1 x 10^7 conidia/g suspension and they were allowed to incubate for 14 days. Finally, the conidia concentration was determinated in a Neubauer chamber. All experiments were made three times.

Results. The strains used to this assay showed a production between 10^7 and 10^9 conidia/g. The highest production was 3.33 x 10^9 conidia/g and was showed by strain HIB-6 on treated rice according to treatment c, and lowest production was 1.52 x 10^7 conidia/g and corresponds to strain HIB-14 on treated rice to treatment b. On average, a higher conidia production was showed by treated rice according to treatment c than the others treatments.

Table 1. Conidia production from native strains of *B. bassiana* and GHA on treated rice in three different ways.

Strains	Treatments		
	a	b	c
HIB-6	3.75E+08	2.50E+07	3.33E+09
HIB-7	1.73E+09	6.50E+07	2.17E+08
HIB-14	2.40E+08	1.52E+07	3.17E+08
HIB-17	2.70E+08	3.87E+07	3.33E+08
GHA	3.49E+08	2.40E+07	1.17E+08
(a) Hydrated rice, b) Rice with chloro+antibiotic and c) Rice with chloro.			

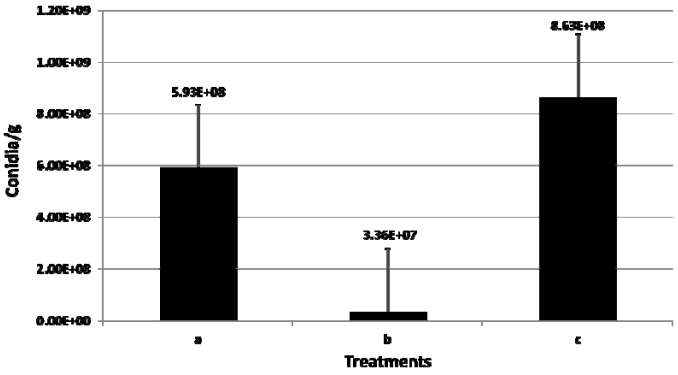

Fig.1 Conidia production from natives strains of *B. bassiana* and GHA at 14 days of incubation, 25±2°C, between the three treatments given to rice, (a) Hydrated rice, b) Rice with chloro+antibiotic and c) Rice with chloro.

Conclusions. On average, the treatment c for rice showed greater productivity of conidia/g on rice grain.

Acknowledgements. PAICYT CN 1008-11.

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