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Evaluation and solates Selection of Entomopathogenic Fungi to Control Plutella xylostella

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The diamondback moth *Plutella xylostella* L. (*Lepidoptera*, *Plutellidae*) is one of the main pests of cruciferous crops. The more severe damages occur in dry season of year occasionally causing total lost of crop fields. Especially in the region of the study - Itabaiana/SE/BR, where the chemicals are used indiscriminate, the resistance to chemicals has been a factor of population increasing. The entomopathogenic fungi are prominent in the alternative control approach considering their selectivity, low impact to environment and small risks to spray men. Aiming to choice the best isolate to control this pest at the cited region this work was taken place in the Biological Laboratory of Embrapa Coastal Tablelands (Aracaju/SE) using nine isolates from different origins of *Beauveria bassiana* (Bals.) Vuill. and one of *Paecilomyces fumosoroseus* (Wise) Brown and Smith. The experimental design was a completely randomized one in a factorial scheme 10x4, with four replications (10 caterpillars/replications) and one control plot in which the leaves were only sprayed with water. Collard leaves were sprayed with suspensions of isolates at concentration of 1x108 conidia m·L-1 and given to fed to 2nd stages caterpillars maintained at 25 + 1 ºC and at relative humidity of 70 + 10% and 12hrs photo phase. The evaluations were made daily during seven days. The caterpillars died were put into wet chambers for sporulation and on the results it was applied Abbott´s formula. The isolates 1213 and 447 of B. bassiana shown the higher mortality rates, 73 and 78% respectively, indicating be good alternatives to control of the pest.