Research Title:	Virulence and genetic at molecular level of indigenous strain of *Beauveria bassiana* affected by artificial and mass production media usage for sustainable insect control (Phase two)
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The objective of this study is to evaluate the effects of artificial media comprising of Potato Dextrose Agar (PDA), Sabouraud Dextrose Agar (SDA), Sabouraud Dextrose Agar Supplemented with Yeast Extract (SDAY), Malt Extract Agar (MEA), Nutrient Agar (NA) and Water Agar (WA), and sterilized mass production media consisting of cooked rice, unmilled rice, sorghum seed and dog feed on growth, virulence and molecular characteristics of entomopathogenic fungus, *Beauveria bassiana* (Balsamo) Vuillenim (Acomycota: Hypocreales) isolate 01 (Bbs01). The studies showed that NA gave highest growth rate (3.04 $\pm$ 0.17 mm. per day) while SDAY induced highest sporulation (8.80 $\pm$ 0.55 spore per ml.). The fungus cultured on SDAY was highest at 7 days Percent Cumulative Mortality (PCM) to aphids, *Lipaphis erysimi* (Hemiptera: Aphididae), flea beetle, *Phyllotreta sinuata* (Coleoptera: Chrysomelidae) and cutworm, *Spodoptera litura* (Lepidoptera: Noctuidae) averaging 94.20 $\pm$ 4.02, 71.4 $\pm$ 3.85 and 79.00 $\pm$ 1.58 percent respectively. The molecular biological studies, DNA fingerprinting and enzymatic studies based on RAPD-PCR (Random Amplified Polymorphic DNAs), and acrylamide gel electrophoresis were conducted. Neither the artificial nor mass production media affected Bbs01's genetic stability while the artificial or mass production media affected protease enzyme associated with the virulence of Bbs01 ($p=0.01$). Correlation study indicated that pathogenicity of the fungus increased with protease enzymatic activity. According to the correlation analysis, it could be concluded that SDAY and dog feed were suitable for respective artificial and mass production media of Bbs01.