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PROMISING APPROACH WITH *BACILLUS VELEZENSIS* S26 FOR GRAPEVINE ANTHRACNOSE DISEASE MANAGEMENT CAUSED BY *ELSINOË AMPELINA*

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Elsinoë ampelina cause infections in all area parts of the plant and has been associated with grapevine anthracnose, related to production losses when the vine is contaminated. Strategies for controlling anthracnose in grapevine consist in application of chemical fungicides that persist on the fruit as residues, impacting human health and contributing to the emergence of resistant pathogens. However biocontrol strategies are gaining interest as an alternative to disease management. This work had the objective to evaluate the biocontrol potential of *Bacillus velezensis* S26 against *Elsinoë ampelina* in paired-culture assay. *Elsinoë ampelina* was grown in PDA medium with streptomycin sulfate, after 14 days, a colony fragment was mashed using a pestle and fragments with 2 mm were transferred to 125 mL erlenmeyer containing 40 mL of sterile rainwater (filtered through four layers of gauze), and incubated on an orbital shaker at 200 rpm, 25 ± 2 °C for seven days in the dark for sporulation. The conidial suspension obtained was filtered through two layers of gauze. Was pipetted 20 uL of the conidia suspension in the center of a petri dish containing PDA medium and in four equidistant points 20 uL of bacterial suspension (1×10^8 UF C mL^{-1}) was applied. Petri dishes were sealed and incubated at 25 °C, with a 12 h photoperiod in a culture chamber. Pathogen growth was photographed after 14 days and the colony measures were taken on ImageJ software. The bacteria *B. velezensis* (S26) had shown significative difference from the control of the pathogen, reducing more than a half of the grown area of the pathogen. Further tests are necessary to assure if the bacteria could serve as an efficient agent for biocontrol of anthracnose in grapevines.

Palavras-chave: Biological control, Paired culture, Antagonism

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