TITLE: EVALUATION OF TECHNIQUES TO PRODUCE SCLEROTIA OF *Botrytis squamosa* IN THE MIDDLE OF CULTURE.

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ABSTRACT:
Botrytis squamosa (Walker) is the etiological agent of Botrytis leaf blight of onion, characterized as the main leaf disease in the seedling phase of the crop, and one of the primary sources of inoculum are the sclerotia of the pathogen. Works related to the survival and epidemiology of the primary inoculum of the disease require the purified organism and with expressive formation of sclerotium. Pathogen sclerotia are formed naturally in culture medium, but in small amounts, in small clustered and even deformed. Therefore, this work aimed to develop a method of mass production of sclerotia in culture medium. In a completely randomized design with four replicates, an experiment was carried out at the Federal Institute Catarinense-IFC / Campus Rio do Sul with a *B. squamosa* isolate obtained from the conidia collection on the injured leaf tissue of onion seedlings and multiplied by six days at 20ºC in BOD-type greenhouse and without light in Petri dishes containing BDA (Potato-Dextrose-Agar) culture medium for mycelial development. After this the smear technique was performed on the mycelium with the aid of a scalpel, with and without sterile water on the mycelium; Through paintbrush (nº8) with and without water; Using the drigalski loop with and without sterile water and comparing with the control without smear with and without water. The plates were incubated for 15 days in B.O.D at 20 ° C and after that the number of sclerodia formed was quantified. The average of the treatments were submitted to analysis of variance and compared by the Tukey 5% test. The treatment using the brush without water provided the largest amount produced, with an average of 142 sclerodia formed, differing statically from the other treatments. The scalpel with scalpel with and without water were statistically intermediate, with a mean of 86 and 84 sclerotia respectively, while the other treatments were statistically equal to the control. Through this work, we conclude that the technique using the smear with the brush without sterile water on the mycelium, provided a greater number of sclerotia. This methodology is extremely important where it requires large numbers of sclerotia to perform laboratory or field epidemiological work.

Keywords: *Botrytis squamosa*, techniques, sclerotia

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