Pengaruh Cercospora sp. terhadap Kandungan Asam Askorbat pada MekanismePatogenisitas Bercak Daun Tanaman Cabai : Kajian secara In vitro dan In planta

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Abstract	Red chili is a vegetable commodity that has high economic value in Indonesia. Leaf spot disease caused by the fungus Cercospora sp. is one of the limiting factors in red chili production. The occurrence of leaf spot disease is determined by the success of the pathogenesis by the fungus Cercospora sp. In addition, red chilies that are resistant to leaf spot disease have higher ascorbic acid content than vulnerable red chilies. The purpose of this study was to determine the ability to grow pathogens Cercospora sp. on the medium which was given ascorbic acid and know the effect of inoculation of the pathogen Cercospora sp. against ascorbic acid content in red chili leaves (C. annuum L.). This study used an experimental design with a completely randomized design (CRD). In vitro tests carried out consisted of PDA and PDB medium which were given ascorbic acid with a concentration of 0 mg.l-1, 0,25 mg.l-1, 0,5 mg.l-1, 0,75 mg.l-1 and 1,0 mg.l-1. In planta testing was using hot chili red chili varieties, large red chili varieties and curly red chili varieties. The treatments that were tested included calculation of disease intensity and ascorbic acid content in red chili leaves. In vitro test the main parameters observed were the diameter colony of the fungus Cercospora sp. dan mycelium dry weight. In planta test the main parameters observed were the intensity of the disease, while the supporting parameters were the incubation period of the disease, the content of ascorbic acid in the red chili leaves, temperature and humidity. In vitro test data obtained were analyzed using Analysis of Variance (ANOVA) at a 95% confidence level, then the treatment that gave a real or very real difference was followed by the Least Significant Difference test (LSD). In planta test data obtained were analyzed using Analysis of Variance (ANOVA) at a 95% confidence level, then the treatment that gave a real or very real difference was followed by the Least Significant Difference test (LSD). The results showed that the pathogen Cercospora sp. able to grow well on the PDA medium and GDP medium which were given ascorbic acid. Inoculation of pathogen Cercospora sp. can increase ascorbic acid content in red chili leaves.
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