Isolation and Identification of Photosynthetic Bacteria Using Baiting Method Conventional

Supervised by Iqbal Erdiansyah, SP, MP

Devinda Mardhalita Chomayaroh
Food Crop Production Technology Study Program
Department of Agricultural Production

ABSTRACT

Research on ***Isolation and Identification of Photosynthetic Bacteria Using Baiting Method Conventional*** *Sources was conducted to determine the characteristics of the Photosynthetic Bacteria that were isolated from using the baiting method. This research was conducted for 4 months, starting from December 2020 to April 2021, at the Bioscience Laboratory of Jember State Polytechnic. This research was conducted using exploratory and descriptive methods. The exploratory method was carried out by isolating bacteria from agricultural water sources. Meanwhile, the descriptive method was carried out in the process of bacterial identification and characterization. The data obtained namely isolation, identification, and characterization were presented in the form of tables of observations and objects descriptive table. Observations parameters were morphological characteristics, chemical property of bacterial colonies, number of bacterial colony, and Rhizoctonia solani antagonistic ability test. The results showed that the bacterial colonies that were successfully identified belong to genus Bacillus spp. The bacterial genus identified had the ability as an antagonistic biological agent against the Rhizoctonia solani (the cause of leaf midrib blight) as shown by inhibition power of 71.4%.*

Keywords: Baiting method, Bacillus spp., Leaf blight fungi, Photosynthetic Bacteria, Rhizoctonia solani,