The Effectiveness of Soybean and Coconut Water as Alternative Growth Media for Pseudomonas spp Supervised by Iqbal Erdiansyah

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ABSTRACT

Pseudomonas spp is one of the biological agents capable of suppressing disease growth, increasing root uptake and increasing plant growth. Utilization of organic waste in agriculture is as a medium for bacterial growth. The purpose of this study was to prove that liquid organic media, namely boiled water of soybeans and coconut water, can be used as an alternative medium for the growth of Agena Pseudomonas spp bacteria. To determine the characteristics of Pseudomonas spp. the most effective alternative media for the growth of Pseudomonas spp. Data analysis used a non-factorial Completely Randomized Design (CRD) and was further tested using a 1% dunnet level. The characteristics of the Pseudomonas spp bacteria that have successfully grown on alternative media (boiled soybean water and coconut water) have a spherical shape, convex elevation, and yellowish white color and the results are in accordance with the general characteristics of the Pseudomonas spp bacteria. The results of research that has been tested using dunnet with a level of 1% show that growth in alternative coconut water media shows very significant results which are marked by the large number of colonies of coconut water media with a colony count of 3.40E+06CFU/ml which is the most effective medium used for media. alternative for the growth of Pseudomonas spp bacteria compared to Pseuodomas Isolation Agar media and soybean cooking water.

Keywords: Alternative Media, Characteristics, Soybeen, Coconut Water.