ABSTRACT

Shallot (Allium ascalonicum L.) is an important horticultural commodity in Indonesia with high economic value. The need for shallot seeds continues to increase with the increasing planting area. True Shallot Seed (TSS) is an alternative for seed propagation besides tubers, but it has problems in germination and viability. This research aims to explore the potential of endophytic fungi as a biostimulant to increase dormancy breaking and growth of shallots from TSS seeds. This study also aims to identify the most effective species of endophytic fungi. The research hypothesis is that there are certain endophytic fungi that can break dormancy and increase the growth of shallots from TSS seeds. The results of the study are expected to provide information on the use of endophytic fungi as a natural, environmentally friendly biostimulant to increase shallot production.

Keywords: Shallot, True Shallot Seed (TSS), Endophytic Fungi, Biostimulant, Dormancy, Growth