INTISARI

Kompos merupakan bahan organik yang dapat memperbaiki sifat fisik, kimia, dan biologi tanah, serta dapat membangun tanah supresif. Penelitian ini bertujuan untuk mengetahui potensi kompos supresif dalam menekan patogenisitas *Sclerotium rolfsii* dan dampaknya terhadap pertumbuhan tanaman bawang merah. Penelitian ini dilakukan pada percobaan rumah kaca dengan media tanam berupa tanah Regosol yang diaplikasikan kompos steril dan tidak steril. Perlakuan inokulasi patogen dilakukan dengan mencampurkan inokulum *S. rolfsii* dengan media tanam. Umbi bawang merah varietas Bima Brebes ditanam pada media tanam tersebut. Parameter penelitian keparahan penyakit, kandungan klorofil daun, dan berat kering tanaman bawang merah diamati 7 hari setelah tanam (HST). Hasil penelitian menunjukan bahwa aplikasi kompos tidak steril dan kompos steril pada media tanam yang diinokulasi *S. rolfsii* dapat menurunkan keparahan penyakit busuk putih pertanaman bawang merah berturut-turut 75% dan 5%. Pemberian kompos ke media tanam dapat meningkatkan pertumbuhan tanaman bawang merah yang diinfeksi *S. rolfsii* secara signifikan hingga 181,5%, tetapi kurang signifikan pada pertanaman yang tidak dinfeksi *S. rolfsii*.

Kata kunci: Bawang merah, kompos, *Sclerotium rolfsii,* tanah supresif

ABSTRACT

Compost is an organic material that can improve the physical, chemical, and biological properties of soil, as well as build suppressive soil. This research aims to determine the potential of suppressive compost in reducing the pathogenicity of *Sclerotium rolfsii* and its impact on the growth of shallot plants. The study was carried out in a greenhouse experiment with planting media of Regosol which was applied with sterile and non-sterile composts. Pathogen inoculation treatment was performed by mixing *S. rolfsii* inoculum with the planting medium. Shallot bulbs var. Bima Brebes were planted in the planting medium. Research parameters included disease severity, leaf chlorophyll content, and dry weight of shallot plants were observed 7 days after planting (DAP). The results showed that the application of non-sterilized and sterilized composts in the planting medium inoculated with *S. rolfsii* could reduce the severity of white rot disease in shallot plants by 75% and 5%, respectively. The addition of compost into the planting medium significantly increased the growth of shallot infected with *S. rolfsii* up to 181,5%, but less significantly in plants that are not infected with *S. rolfsii*.

Keywords: Shallot, compost, *Sclerotium rolfsii*, suppressive soil