Intisari

Pisang cavendish (*Musa acuminata*) dan Pisang kepok (*Musa paradisiaca* L.) merupakan tanaman perkebunan yang memiliki kemampuan untuk berinteraksi dengan jamur tanah secara simbiotik membentuk Mikoriza Arbuscular. Jenis jamur yang terlibat dalam pembentukan mikoriza ditentukan oleh jenis tanaman inang. Penelitian ini bertujuan untuk membandingkan keanekaragaman spora jamur mikoriza dari rizosfer dua jenis pisang (pisang Cavendish dan pisang Kepok) yang telah dibudidayakan di Perkebunan Plasma Nutfah Pisang, Malang, Desa Giwangan, Kecamatan Umbulharjo, Kota Yogyakarta. Spora jamur mikoriza diisolasi dengan metode pengayakan basah multi-tahap. Spora yang diperoleh kemudian diidentifikasi berdasarkan karakter morfologisnya. Spora jamur mikoriza yang diperoleh teridentifikasi termasuk dalam genus *Glomus* sp. dan *Acaulopora* sp. Hasil penelitian menunjukkan bahwa jumlah spora jamur mikoriza pada pisang cavendish dan pisang raja kepok masing-masing adalah 78 dan 76 spora/100 gram tanah, dan indeks keanekaragaman Shannon Wiener-nya dikategorikan sebagai sedang. Berdasarkan hasil tersebut, dapat disimpulkan bahwa jenis tanaman pisang tidak secara signifikan mempengaruhi jumlah dan keanekaragaman spora jamur mikoriza di rizosfer.

Kata kunci : Jamur mikoriza arbuskular (JMA), pisang cavendish (*Musa acuminata*), pisang kepok (*Musa paradisiaca*), isolasi spora JMA, keberagaman JMA

Abstract

Cavendish bananas (*Musa acuminata*) and Kepok plantain (*Musa paradisiaca* L.) are plantation crops that have the ability to interact with soil fungi symbiotically to form Arbuscular Mycorrhiza. The type of fungus involved in the formation of mycorrhizae is determined by the type of host plants. This study aims to compare the diversity of mycorrhizal fungal spores from the rhizosphere of two types of bananas (Cavendish bananas and Kepok plantain) which have been cultivated at the Banana Germplasm Plantation, Malang, Giwangan Village, Umbulharjo District, Yogyakarta City. Mycorrhizal fungal spores were isolated by multi-stage wet sieving method. The obtained spores were then identified by their morphological characters. The mycorrhizal fungal spores obtained were identified to belong to the genus of *Glomus* sp. and *Acaulopora* sp. The results show that the number of mycorrhizal fungal spores in cavendish bananas and kepok plantain are 78 and 76 spores/100 grams of soil, respectively, and their Shannon Wiener diversity index are categorized as medium. Based on those results, it can be concluded that the type of banana plant does not significantly affect the number and diversity of mycorrhizal fungal spores in the rhizosphere.

Keywords: Arbuscular mycorrhiza fungus, cavendish banana (*Musa acuminata*), kepok plantain, mycorrhizal fungal spores isolation, mycorrhizal fungal spores diversity