



The Presence Of Arbuscular Mycorrhizal (AM) Fungi In Some Agricultural Plants

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Abstract The objective of this study was to determine the number of spores,

root colonization and the type of AM Fungi in some agricultural plants in Oransbari District. Soil and root samples were collected across the agricultural land to isolate AM Fungi propagules using wet sieving method and root colonization using gridline method. AM Fungi spores subsequently identified by the Gedermann and Trappe identification manuals, some soil characteristics were also analyzed. The results showed that the number of spores at each sampling location ranged from 5.0 to 35 spores/50 gr of soil. The highest number of spores is found in the rhizosphere of *Lycopersicum esculentum* and the lowest is in *Oryza sativa*. The percentage of roots infected ranged from 15,3 to 76,38%, the highest of infections found in *Oryza sativa* and the lowest in *Capsicum annuum*. There were four AM Fungi morphotypes on agricultural soil of Oransbari i.e *Glomus*, *Acaulospora*, *Scutellospora* and *Gigaspora*. Soil pH and water content influenced the presence of AM Fungi, while Nitrogen and Phosphorus content did not influence the spore numbers in the soil as well as in the root. This might be related to the routine and highly use of inorganic fertilizers and pesticides in these areas.

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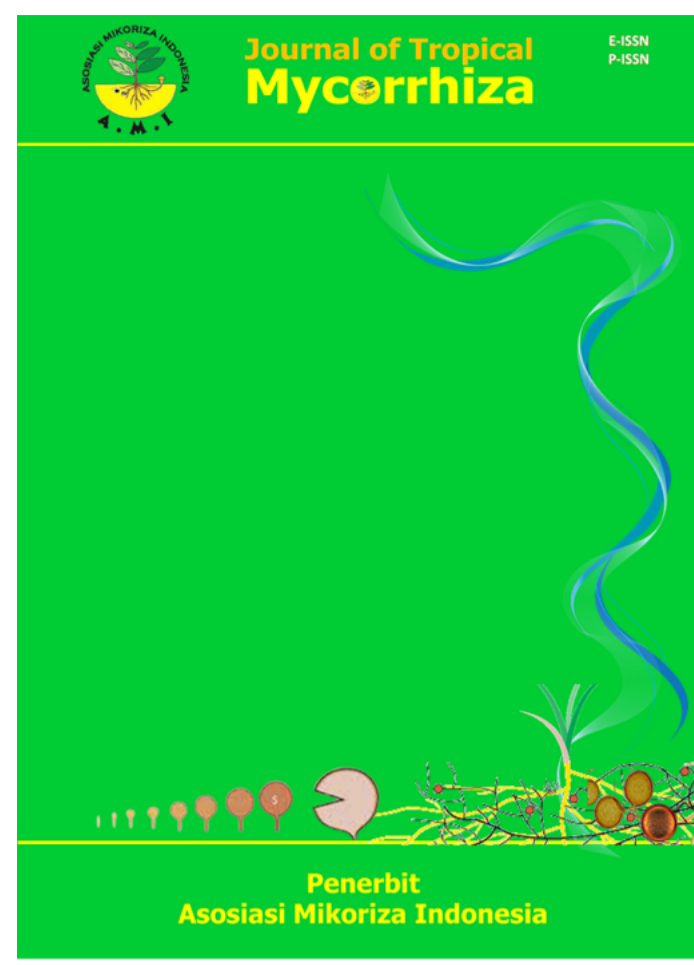
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