

Research Article

Arbuscular Mycorrhizal (AM) Colonization and Development of Fungal Structures in Sesame

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Abstract

Variability in root colonization behavior and development of fungal structures by five indigenous arbuscular mycorrhizal (AM) fungi (*Acaulospora delicata*, *Acaulospora lacunosa*, *Glomus dimorphicum*, *Glomus versiformae* and *Scutellospora nigra*) during the growth stages of sesame was studied under glass house condition. The fungal variables such as frequency of colonization (% *F*), intensity of colonization (% *M*), frequency of vesicles (% *V*) and frequency of arbuscules (% *A*) varied significantly in plants inoculated with different AM fungi. At all growth stages, plants inoculated with *G. versiformae* scored a relatively high value for the fungal variables. In general, the fungal structures had a more intense production during the early stages of plant growth and establishment. Pearson correlation analysis revealed the existence of a significant relationship between most fungal variables examined.

Key words: Arbuscular Mycorrhizal (AM), fungal structures, sesame

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