

APPLIED AND ENVIRONMENTAL MICROBIOLOGY

Volume 74

July 2008

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Cover photograph (Copyright © 2008, American Society for Microbiology. All Rights Reserved.): Elemental composition in a cluster of hyphae and spores of the mycorrhizal fungus *Glomus intraradices*. The mycelium was cultured in vitro with transformed carrot roots as the host. Shown are mass distribution (upper left panel), calcium (upper right panel), phosphorus (lower left panel), and potassium (lower right panel). (See related article on page 4144.)