ALGINATE-ENTRAPPED *GLOMUS MOSSEAE* FOR CROP INOCULATION

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In a previous publication (Dommergues et al. 1979) we reported a method to prepare inoculants for legumes by entrapping *Rhizobium* in a polyacrylamide gel. For this purpose, different polymers have been proposed by Jung et al. (in press). Besides *Rhizobium* other microorganisms can also be entrapped in the same way to obtain inoculants. In this communication, we report for the first time the results of pot and field inoculation experiments using an endomycorrhizal fungus, *Glomus mosseae*, entrapped in an alginate gel. We designate here this inoculum as AEE (alginate entrapped endomycorrhizal fungus).

In a pot experiment using *Vigna unguiculata*, both nodulation and growth of plants inoculated with AEE were similar to those of plants inoculated in the usual way with fresh infected roots. N and P content of shoots of mycorrhizal plants were higher than those of non-mycorrhizal plants. In a field experiment with soybean, the effect of the inoculation with AEE was found to increase grain yield (20%, non significant) and to reduce significantly the coefficient of variation between replications. N_2-fixation was also improved by ca. 25% as compared to the controls. Practical potentialities of this new form of endomycorrhizal inoculant are discussed.

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