

**MANAGEMENT OF VA MYCORRHIZAL FUNGI FOR SUSTAINABLE
PRODUCTION OF COTTON.**

US 21C

ABSTRACT

The research program examined how common agricultural factors influenced the population of VAM fungi in soil. In soils from Warren, Narrabri and Dalby, VAM fungi were common in the upper soil profile. Densities of the fungi appear to decline very rapidly with depth. The fungi were not seriously depleted by fallows up to 18 months, cultivation, and use of some pesticides. Rainfall events caused some fungi to germinate and the initiation of VAM was slowed, though production is probably not significantly affected. Still to be clarified are: the relationship between lint formation and VAM, the development of infection down the root system, and the effect of reduced oxygen, especially in flooded or heavy clay soils, on the spread of VAM in roots.