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## USING ARBUSCULAR MYCORRHIZAL FUNGI TO IMPROVE INPUT USE EFFICIENCY

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Biotechnology is expected to bring about a second Green Revolution in which more food is produced with fewer inputs and in a sustainable manner. Arbuscular mycorrhizal fungi (AMF) possess important attributes to be major players in tomorrow's agriculture. They have evolved as sun-powered resource managers in successful ecosystems. Advances in mycorrhizal research are revealing AMF as a heterogeneous group of soil fungi with requirements of their own, a picture contrasting with our initial understanding of these organisms. The value of their input to agricultural production can be enhanced through plant breeding, soil management, inoculation and use of signal molecules. The development of AMF-based technologies to enhance plant productivity under reduced input systems is seen as a means to improve farming profitability at a time of increasing resource costs.