**Abstract**

The last two decades have seen a renewed interest in organic farming and amelioration of soils affected by conventional agriculture. Different types of organic substances like farmyard manures, green manures, composts, sludges and effluents are added to the soil to enhance fertility. These organic amendments influence soil microbial populations and function. Arbuscular mycorrhizal (AM) fungi are an integral component of most agricultural and natural systems, and provide a range of benefit to the host plant. The prime benefit of AM fungi to plants include improved nutrition especially phosphorus (P) and nitrogen (N) in nutrient stressed soils. Other non-nutritional benefits include improved water relations, enhanced resistance to soil-borne pathogens, improved drought resistance, heavy metal tolerance and soil structure. As most crop and horticultural plants are mycorrhizal any factors that influence AM fungi affects plant growth and productivity. Organic amendments improve plant mycorrhization, AM fungal spore numbers and their diversity. However, certain organic sources rich in certain chemicals like phenols inhibit mycorrhization. The effect of organic amendments on AM fungi depends on the composition of the organic sources.