

species were distinguished with spores of *Acaulospora* spp. most abundant. Banana cultivars significantly affected spore abundance with spores highest at rhizosphere of sweet banana 'William', hybrids 'Gros michel' and 'Valery', and local banana 'Kiganda', and 'Giant Cavendish'. Four TC banana cultivars had the highest species richness and diversity. Highest spore abundance (≥ 100 spores per 350 g soil), species richness (≥ 10 species) and diversity (1.5-2.0) was in soils with exchangeable P between 13.8 and 47.8 ppm. Variable effects on AMF were also evident in trap cultures with two banana cultivars (cooking and desert), soy beans and sorghum. Soybean had the highest species richness and diversity, sorghum was highest in spore abundance, while 'Giant Cavendish' was second highest. AMF species showed preference for host in both field and in trap cultures.

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Importance of plant nutrition on banana resistance to the root burrowing nematode *Radopholus similis*

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The root burrowing nematode *Radopholus similis* is a notorious endoparasitic pest of banana plants. The nematode exhibits high rates of multiplication in banana roots causing toppling. Control of this pest has been a challenge in most banana growing areas around the world owing to its cryptic nature. Improvement of plant nutrition is a primary strategy in the integrated management of *R. similis*. This study investigated the role of nitrogen, phosphorus and potassium on resistance to nematode in tissue culture bananas. Compared to the control (with all nutrients), N-deficient plants were associated with significant increase in root densities of *R. similis*, while P and K-deficient plants were similar to the control. Nitrogen is therefore necessary for resistance to nematodes by banana plants.

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Effect of dual endophyte inoculations on plant colonization, and control of *Radopholus similis* and the banana weevil

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The root burrowing nematode *Radopholus similis* and the banana weevil *Cosmopolites sordidus* are major pests of banana in the Lake Victoria basin region. An integrated pest management approach that includes habitat management, biological control, host plant resistance and chemical control is currently used to control populations of the two pests. Biological control strategies with potential to control the banana weevil and *R. similis* include the use of entomopathogenic fungi *Beauveria bassiana* and non-pathogenic *Fusarium oxysporum* endophytes of banana. The current study was designed to investigate the effect of dual endophyte inoculations on control of the two pests in 'Nabusa' (spp., AAA-EA group). Endophytic *F. oxysporum* isolate V5w2 known to reduce *R. similis* numbers in screenhouse pot trials was inoculated together with isolate Emb2.4o, known to be effective against the banana weevil. Root and rhizome colonization was higher