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Assessment of mycorrhizae and other fungal communities in soils of akungba-akoko environs

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Various microorganisms present in the soil play vital roles in numerous physiological activities, mediated by association of microorganisms participating in saprophytic, pathogenic and symbiotic association with root. Mycorrhiza probably evolved as a survival mechanism for both partners in the association, allowing each to survive in environment of low fertility, drought, disease and temperature extremes. Soil samples planted with rice (*Oryza sativa*), maize (*Zea mays*), bitter leaf (*Vernonia amygdalina*), tomato (*Solanum lycopersicum*) and pepper (*Capsicum frutescens*) were investigated for mycorrhizal and other fungi using aseptic swap technique. The results of this study shows that a number of common mycorrhizal fungi were associated with certain popular plants: Gigaspora margarita with rice, Glomus brasilianum with maize, Glomus fasciculatum with pepper and Glomus monosporum with bitter leaf. Aspergillus niger had the highest count (20 x 103cfu/ml), while the lowest was observed with A. candidus. Other fungi isolated from the soil include Rhizopus oryzae and Trichoderma harzianium. The environment was a paramount determinant of the type of organism associated with plants, due to rich source of the nutrient to the organisms, as plants harbour both pathogenic fungi, as well as beneficial ones.