Abstract:

Improved crop production is very important in Africa, especially in such time when food required exceeds food produced. However, improved yield is constrained by a number of biophysical factors including poor planting density, cropping systems and low yielding crop components in mixtures. Manipulation of these factors will not only improve plant growth and grain yield in systems with limited external inputs but will also provide food security and poverty alleviation in small scale farming systems. This review presents the possible influence of these factors on; rhizosphere mineral elements concentration, acid and alkaline phosphatase activities, flavonoids and anthocyanins concentrations, N2-fixation, photosynthetic activities, leaf chlorophyll contents and their effect on yield improvement in crop components in mixtures.