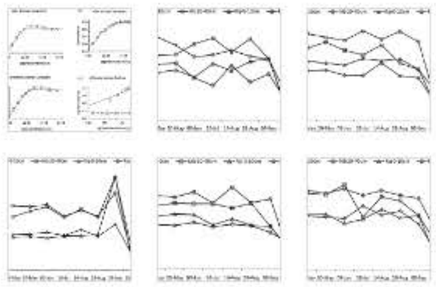
Outline



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Original Research Article

Soil moisture dynamics under different tillage practices in cassava–sorghum based cropping systems in eastern Uganda

Abstract

Soil moisture storage in the root zone determines availability of water in crop production, but there is limited attention on water resource management in cassava–sorghum production systems. Soil moisture content was higher under ripping than mouldboard ploughing. Mouldboard ploughed plots had more moisture in the upper (0–10 cm) layer while, the ripped plots accumulated more moisture in the lower (20–40 cm) root zone. Soil surface roughness was stable two months after ploughing. Crop combinations and seasons influenced soil moisture storage over the growing period. The different cropping systems vary in their soil moisture extraction capacities at different growth stages, hence influencing the overall moisture storage and water used in the root zone.

Previous article in issue

Next article in issue

Keywords

Crop water use; Ripping; Mouldboard; Soil surface roughness

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Edited by Professor Michael E. McClain, Professor Paul J. DuBowy

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