Residue management in Ethiopia. (A06-mermut035315-Oral)

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Abstract:

Sustainable crop production is a prime requirement of agriculture and food security in Ethiopia. The country has the third lowest GNP per capita in the world. Inappropriate land use together with poor soil management practices have resulted in land degradation in many areas. The objective of this study was to test simple soil management and agronomic practices for optimizing crop yields and to combat soil degradation in the selected two sites (Humbo and Alaba) in South-central Rift Valley of Ethiopia. Alley cropping, residue incorporation and conventional practice were the main treatments. The plots were divided into as fertilized and unfertilized with recommended rates of NP. The major crops were Maize, haricot bean, and Teff. NP application has increased yields of all three crops. The incorporation of plant residues, however, had positive effects on growth and yield. Residue incorporation increases organic matter and seems to capture more moisture. Current research is concentrated on the rate of organic matter mineralization of the residue.

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