

ชื่อเรื่อง

**Grass Variety Trials for Soil Conservation in Arid and Semi-Arid Lands,
KENYA**

ชื่อผู้วิจัย

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Abstract

Introduced *Vetiveria zizanioides* (Vetiver) grass and three native grasses: *Panicum maximum* (Pmax), *Panicum makarikariense* (Pmak), and *Sehima nervosum* (Sn) were planted as contour hedges to establish the variety with better efficiency to soil conservation. The grass splits were planted in each plot at a spacing of 230 mm at the plot bottom as a single strip. Each plot was 15x5 m wide contiguous and replicated 5 times, including a control plot, a block measured 15x25 m. Soil surface build-up was measured by using a dumpy-level at the end of every rainfall season. Height measurements were taken at co-ordinate distances of 0.5 m, 1 m, 2 m and 4 m (beyond previous reading) away from the hedge and 1 m interval x 4 along the hedge. The soil build-ups from 3/1992 to 3/1995 are assessed. It was noted that the overall block slope has reduced from 3% to 2.3%. Other than failure of the Vetiver grass to form 'tight' hedge in comparison to the other grasses, it proved to be susceptible to termite attack during the dry spell hence comparative low rates of soil build-up were noted. Further trial monitoring is expected to identify recommended management for the grasses as a viable biological soil conservation approach in the arid zones.