

## Abstract

The study was carried out at three locations using six sorghum genotypes in Bomet district, Kenya during the long rains of the years 2001, 2002 and 2003. The objective was to determine the nutrient composition of six sorghum (*Sorghum bicolor* (L) Moench) varieties across agro-ecological zones. The sorghum varieties selected at KARI-Lanet included E1291, Ikinyaruka, Lan-1, BJ28, E6518 and a local variety. The samples collected were analyzed for DM, OM, CP, NDF and ADF. There were significant differences ( $p < 0.001$ ) in OM, CP, NDF and ADF at all locations. There were also significant differences ( $p < 0.001$ ) in nutrient composition among the six varieties. Ikinyaruka had the highest OM across the locations. Mulot had the highest CP while Kapliyo gave the highest amount of ADF among all the varieties. E6518 and Ikinyaruka showed the highest OM, NDF and ADF and were lowest in CP, respectively. Mulot was the best location for all the varieties while BJ28 was the most stable variety with the highest CP and moderate amounts of fibre across all the three locations.