

ABSTRACT

Electrophoretic variation of esterase (Est), peroxidase (Per), phosphoglucoisomerase [glucose-6-phosphate isomerase] (Pgi) and phosphoglucomutase (Pgm) was studied in seven *Amaranthus* populations, namely, Jumla, F₁ Jumla, population 1023 (*A. hypochondriacus*), population A1113 (*A. caudatus*), Vietmeyer (*A. cruentus*), Ex-Ngugi (*A. tricolor*) and pigweed (*A. hybridus*). There was variation among the cultivars for Est banding pattern. Although heterozygosity was observed for some allozymes, homozygosity was prevalent for Est. Per and Pgm showed less variation with a high degree of homozygosity. All *A. hypochondriacus* populations had similar alleles for Per and Pgm. Heterozygosity was noted for one Per isoenzyme in population A1113. One of the Pgi isoenzymes showed homozygosity, while for the other isoenzyme there was heterozygosity in all cultivars, except Ex-Ngugi and pigweed.