

## Abstract

Agrobacterium-mediated transformation of tropical maize has been manipulated in only a limited number of genotypes, because a majority of maize germplasm is recalcitrant to in vitro response. Establishment of a highly efficiency and widely used tissue culture system for maize will accelerate the application of transformation technology in breeding programs, and the study of the functions of maize specific genes. Out of the three media evaluated, it was established that two media could guarantee the production and proliferation of a large number of embryogenic calli with high regeneration capacity from immature zygotic embryos representing different maize germplasm. The results suggest that the evaluated tissue system will be widely applicable for the tissue culture of Elite Kenyan Highland inbred maize lines