

Tuberose (*Polianthes tuberosa* L.) is an important export crop among small-scale farmers in Kenya. One of the main challenges facing production and marketing of good quality Tuberose cut flowers is the lack of clean planting material as the resource-poor farmers multiply their own propagules. The main objective of the present study was to evaluate the potential of Thidiazuron (TDZ), a phenyl urea, benzylaminopurine (BAP), a cytokinin and naphthalene acetic acid (NAA), an auxin, on in vitro propagation of tuberose from shoot tip explants. No multiple shooting was observed in any of the treatments tested. Results from the study indicated that TDZ, at low concentrations, was more potent than BAP in increasing shoot length and quality as well as the number of leaves per shoot. However, TDZ at high concentration (5 μ M), was toxic leading to death of the shoot explant. Inclusion of NAA in media either supplemented with TDZ or BAP led to formation of calluses, which did not differentiate further.