## Abstract

An experiment was conducted at Kipkebe Estate, Sotik, Kenya, with the aim of establishing the effects of pruning time and resting period on total non-structural carbohydrate (TNC) reserves, regrowth and yield of tea. In this experiment, tea bushes were freely left unplucked for 45 and 90.d before pruning. Control treatments were continuously plucked until pruning. Results showed that TNC was significantly (P<0.05) increased at pruning time. October pruning significantly increased leaf, stem, and root TNC. A longer resting period of 90 d significantly increased leaf and root TNC to 294 and 230 g kg -1, respectively. Generally, TNC declined after pruning and thereafter increased. Root TNC significantly correlated with regrowth period, diebacks and yield. Generally, the best resting period for increased TNC, regrowth and yield, is between 45 and 90 d. The best pruning time is October, if drought stress can be avoided.