Response of two F1 summer squash hybrids to graded doses of nitrogen fertilization

Hassan B. Al Baba; Suleiman O. Gadalla; Idress A. Al Gehani; Ibrahim A. Ibrahim

ABSTRACT

Successful production of any vegetable crop is conditional to multifarious factors comprising selecting cultivars having pronounced qualitative and quantitative features and applying judicious amounts of nutrients specially the nitrogenous ones. The current study was proposed to identify the response of two F1 summer squash hybrids (Five Stars and Top Kapi) to graded doses of nitrogen fertilizer (0, 70, 120 and 170 Kg / ha). To achieve the goal of the suggested study, two field trials were performed during the summer seasons of 2004 and 2005 in a private farm located at El-Bida city, El-Gabal El-Akdar region. The results, generally, displayed that Top Kapi hybrid surpassed Five Stars hybrid in the fresh and dry weights of the canopy, number and area of leaves / plant. Top Kapi hybrid produced more number and heavier weight of fruits, better leaf N and K contents than Five Stars one, but the reverse for fruit N content was really. The influence of increasing N applied rate on enhancing the aforementioned vegetative traits and fruits yield were notable. In addition, response of leaf N, P and chlorophyll contents as well as fruit N content was obvious. Yielding ability of summer squash crop augmented when the hybrid Top Kapi combined with nitrogen level 170 Kg / ha compared with other treatment combinations.