EFFECT OF PACLOBUTRAZOL FOLIAR SPRAY ON GROWTH, YIELD AND QUALITY OF AVOCADO (*Persea americana mill.*) CV. FUERTE

Abo El – Ez, A. E.
Hort. Dept., Fac. of Agric., South Valley Univ.

Effect of foliar sprays of paclobutrazol on vegetative growth, flowering, fruit set, yield and quality of Avocado fruits cv. Fuerte was assessed for two successive seasons (1996/97 and 1997/98). Paclobutrazol treatments (0, 500, 1000 and 2000 ppm) were given twice during the first week of November, 1996 and March, 1997.

Results indicate that, all paclobutrazol treatments suppressed vegetative flushing, shoot length and leaf area. They highly significant reduction was recorded at the highest concentration (2000 ppm). Early and profuse flowering was a striking response to paclobutrazol treatments. Histologically, application of paclobutrazol at 2000 ppm advanced the time of flower bud opening compared with the control in both seasons.

All paclobutrazol treatments brought about significant increases in the percentage of flowering shoots than the control. Fruit set and retention were promoted by 1000 ppm concentration. In addition, fruit yield was enhanced by paclobutrazol at 1000 ppm, both paclobutrazol high concentrations (1000 and 2000 ppm) reduced average fruit weight, pulp weight and peel weight than the control. But TSS and oil were not promoted by any of the treatments. Acidity was enhanced by paclobutrazol at the highest concentration (2000 ppm) only in the first season. Paclobutrazol has affected seed weight markedly than the control.

It could be concluded that, 1000 ppm of paclobutrazol showed superior than 2000 ppm concerning most of the studied traits, though economically we could recommend 1000 ppm to be applied every two year to Avocado cv. Fuerte.
MATERIALS AND METHODS
Abo El – Ez, A. E.
Abo El – Ez, A. E.
INTRODUCTION

MATERIALS AND METHODS

REFERENCES