

EFFECT OF TOPPING AND NITROGEN LEVEL ON  
YIELD, YIELD COMPONENTS AND FIBER  
PROPERTIES OF COTTON cv GIZA 75

By

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ABSTRACT

Two field experiments were conducted at the Agricultural Research and Experiment Center Faculty of Agriculture at Moshtohor, Kalubia Governorate, Egypt; during 1989 and 1990 seasons. The target of these investigations was to study the effect of topping dates (at 36 days and 50 days ages), and nitrogen levels (30, 60 and 90 kg N/feddan), as well as their interaction on the yield, yield components and fiber properties of cotton cv. Giza 75. Results indicated that topping treatments significantly decreased plant height, seed cotton yield per plant and per feddan as well as lint yield per feddan. However, topping at 50 days ages gave the highest values in number of monopodia per plant as compared with the control (without topping). Meanwhile, topping treatments had no beneficial effect on yield components and fiber properties.

Plant height and number of green bolls/plant significantly increased by increasing N level up to 90 kgs N/feddan. Whereas, nitrogen levels did not affect yield, yield component or fiber properties of cotton cv. Giza 75.

INTRODUCTION

Topping or removal of the main-stem growing point of cotton plant affected yield and yield components. Jen (1961), in China, found that the highest yield was obtained from pruning 5-7 fruiting branches per plant, due to the increased percentage of pre forest picking, improved boll development and decreased boll shedding as well. Along the same line Singh and Sanyal (1968). in India, concluded that removal of growing points from the main stem at 40 days from flower initiation increased sympodia, boll number and yield. Whereas, removal of growing points 20 days after flower initiation, decreased yields.