

S U M M A R Y.

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The present study was conducted at Bahtem Agriculture Research Station in order to have better understanding on the effect of intensive agriculture on the rate of infestation of different cotton insects.

Four treatments ( hill spacing , row spacing , planting on both sides of row in comparison with the normal planting ). Experiments were conducted in block design during 1981, 1982 seasons. " Giza-67" cotton variety was planted in an area of two feddans divided into 4 equal parts. Each part representing an experimental unit . The following results were obtained :

1 - Aphids and Thrips:

A- Hill spacing:- The tested treatment showed that in 15 cm. hill spacing was severely attacked while the lowest damage was recorded in 35 cm. hill spacing . Analysis of variance showed highly significant difference between the four treatment .

B- Row spacing:- The maximum rate of infestation by Aphids and Thrips in 14 rows/2Kassaba while 10 rows/2Ka. were less attacked . Analysis of variance gave highly significant difference in the tested treatments .

C- Planting on both sides of row

Planting on both sides of row showed higher infestation than the control treatment but "t" tested was insignificant between the two treatments .

2 - Cotton leafworm infestation :

A - Hill spacing :

Results showed that 15 cm. treatment attracted the highest number of egg-masses while 35 cm. hill spacing gave the lowest number of egg-masses . Analysis of variance showed highly significant difference between the tested treatments .

B - Row spacing :

Results obtained showed that 14 row / 2 kassaba harboured the highest number of egg-masses while 10 rows / 2 kassaba harboured the lowest egg-masses Analysis of variance showed highly significant difference between tested treatments .

C - Planting on both sides of row :

Planting on both sides of row harboured high numbers of egg-masses that the control treatment "t" test showed that no significant difference between exists the two treatments .

3 - Pink and spiny bollworm infestation :

The population of pink bollworm was higher than the spiny bollworm . The degree of spiny bollworm infestation of tested treatment was very low . It was noticed that it attacked the green bolls during the end of the season . Analysis of variance of the data obtained during 1981 and 1982 seasons showed that no significant differences between the number of pink, bollworm in the different tested treatments . It was noticed that the highest number of pink bollworm was observed in 35 hill spacing and 10 row spacing.

Yield loss :

The yield loss percentages generally increased by the increase of the distance separating the cotton hills or rows. The planting on both sides of row treatment gave the least yield losses.