

Yield of groundnut crop as affected by use of polythene mulch and raised beds

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SUMMARY

Groundnut is an important oilseed crop of the country. The yield of Groundnut though varies from variety to variety, the cultivation practices also affect much in case of Groundnut. One of the major practice which is supposed to increase yield of Groundnut is use of Polythene mulch on raised beds especially in summer groundnut. The polythene mulch technology was tested in summer groundnut in the fields of farmers so as to see its effect on yield of the crop. 7 micron transparent polythene sheet was used on raised beds of 75 cm top. Different plots belonging to different farmers at different locations irrespective of the variety and other package of practice they are using, were selected for study to avoid environmental and experimental error. Each farmer's plot was divided into control and experimental plot. The cultural practices except raised beds and polythene mulch were same as that of control in each plot. Observations were recorded for yield. Mean yield level of the control plots was 19.84 q/ha while that of experimental was 23.48 q/ha. There was significant rise in the levels of yield from approximately 10 to 25 % (average 18%) after using polythene mulch for groundnut crop, depending upon individual difference in other practices and management of different farmers.

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Key words : Groundnut yield, Polythene mulch, Raised beds

Groundnut is one of the major oil crop of India. Oil and oilseed prices are reaching high and if the yield per hect. increases, surely farmer will get benefited and the oil availability will be more. The yield of Groundnut though varies from variety to variety, the cultivation practices also affect much in case of Groundnut. One of the major practice which is supposed to increase yield of Groundnut is use of Polythene mulch on raised beds. The polythene mulch technology was tested so as to see the effect on yield of the crop.

MATERIALS AND METHODS

7 micron transparent polythene sheet with one inch diameter holes on 20 cm by 20 cm distance was used for study i.e. for treatment. The breadth of the paper was 100 cm. Raised beds of 75 cm top and 30 cm wide furrow in-between were used in both control and treatment plots. Total 4 lines were sown on one raised bed.

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Locale of the study:

Different plots belonging to different farmers at different locations irrespective of the variety and other package of practice they are using, were selected for study to avoid environmental and experimental error.

The farmers were convinced to use this new technique in their plots. The field was divided in two parts as, in first part all the practices were commonly used by the farmer (control plot) where as in second raised beds and polythene mulch technology was used.

The fertilizer doses and other practices were kept common in both control and experimental plots. Maximum farmers offered less area for this experiment and major portion for the regular package of practice.

Control plot:

Each plot with raised bed was divided into two parts. Beds in one of the part were not covered with polythene mulch. This plot was considered as control.

Treatment plot:

Beds in second i.e. remaining part of the plot were covered with 7 micron polythene paper. This plot was considered as treatment plot.

Cultivation practices:

Except polythene mulch, all other practices were kept