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# EFFECT OF GROWTH RETARDANT AND SPACING ON GROWTH OF SUMMER OKRA cv. PARBHANI KRANTI

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#### **ABSTRACT**

The experiment was laid out in Randomized Block Design with three replications. In all these there were eleven treatments. Viz, 45 cm x 15 cm spacing, 45 cm x 22.5 cm spacing, 45 cm x 37.5 cm spacing, 45 cm x 45 cm spacing, 45 cm x 52.5 cm spacing, 45 cm x 60 cm spacing. Application of 250 ppm cycocel to plants at recommended spacing (45 x 30 cm), application of 500 ppm cycocel to plants at recommended spacing (45 x 30 cm), application of 750 ppm cycocel to plants at recommended spacing (45 x 30 cm), application of 1000 ppm cycocel to plants at recommended spacing (45 x 30 cm), no application of cycocel to plants at recommended spacing (45 x 30 cm) was given, respectively. The seeds of Parbhani Kranti were sown on 17.1.2003. The treatment of growth retardant cycocel were prepared by dissolving required quality of cycocel in distilled water to obtain a solution of 250, 500, 750 and 1000 ppm, respectively. The foliar spray of cycocel was given 30 days after sowing in recommended spacing plots. The findings of experiment revealed that parameter plant height, was maximum under treatment 45 cm x 15 cm spacing, while minimum was recorded in the treatment application of 1000 ppm cycocel to plants at recommended spacing (45 x 30 cm). Whereas, the parameters number of leaves per plant, number of branches per plant, number of internodes per plant were maximum under treatement. Application of 1000 ppm cycocel to plants at recommended spacing (45 x 30 cm) was maximum and minimum in treatment 45 cm x 15 cm spacing.

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The demand of okra is increasing day by day being a short duration and high yielding, ultimately growers get more profit per unit area. The spacing is an important factor, which influence the yield of okra crop. The proper spacing of okra plants for the production of maximum yield is of considerable interest to the cultivators. The amount of growth made by individual plant is marketably influence by spacing. Among the growth regulators growth retardant help to reduce the vegetative growth by shortening the internodes which is finally associated with the optimum quality yield of okra. With these aspects in view, the present investigation 'Effect of growth retardant and spacing on growth of summer okra cv Parbhani Kranti' was conducted during summer season of 2003.

#### MATERIALS AND METHODS

The experiment was laid out in Randomized Block Design with three replications. In all these were eleven treatments. The details of treatments is given in the Table 1.

The experimental plot was ploughed once with mould board plough and harrowed twicely to bring soil in good tilth condition. Well composed farmyard manure @ 20 cartload per hectare were applied before preparation of beds and it was incorporated uniformly in the soil. All recommended fertilizer doses were applied before and after sowing. The seeds of variety Parbhani Kranti were sown on 17.1.2003. The treatment of growth retardant cycocel were prepared by dissolving required quality of cycocel in distilled water to obtain a solution of 250, 500, 750 and 1000 ppm respectively. The foliar spray of cycocel was given 30 days after sowing in recommended spacing plots. All the intercultural operations were carried out as and when needed. The observations on plant height, number of internodes per plant, internodes length and stem diameter were recorded periodically and analyzed statistically.

## RESULTS AND DISCUSSION Plant Height:

The observation on height of plant was recorded at the interval of 15 days and presented in Table 2

It is clear from Table 2 that maximum plant height were