Effect of plant growth regulators on yield of cabbage (Brassica oleracea var. capitata)

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SUMMARY
The effect of GA3 and/or NAA (both at 25, 50, 75 or 100 ppm) on the yield and yield parameters of cabbage (cv. PRIDE OF INDIA) was investigated in the field at Department of Horticulture, college of Agriculture, Parbhani. The highest yield was obtained with GA3 at 50 ppm followed by NAA at 50 ppm (332.01 and 331.06 q/ha, respectively) Combinations and higher concentrations of plant growth regulators proved less effective.

Key words : Plant growth regulators, Cabbage, Yield, Yield parameters.

Vegetables are high yielding and provide nutritional security, more employment, more cash and foreign exchange. Cabbage is one of the most popular vegetable in India accounting 6.3 per cent of total world production. To increase the yield of cabbage, application of major and minor nutrients is helpful as well as this can also be improved by breeding. Nowadays plant growth regulators have been tried to improve growth and ultimately yield. Ram et al. (1973), Patil et al. (1987) and Kumar et al. (1996) tried various growth regulators to obtain better yield of good quality heads in cabbage and obtained encouraging results. Hence, it was felt necessary to undertake the work on the effect of foliar spray of plant growth regulators on yield of cabbage.

MATERIALS AND METHODS
The experiment was conducted at Department of Horticulture, College of Agriculture, MAU, Parbhani during rabi season 2001-2002 on cultivar “Pride of India”. The experiment was laid out in RBD with 14 treatments and 3 replications. The experimental site was having fairly uniform, black cotton soil with good drainage. The treatments consisted of two sprays of GA or NAA at concentrations 25, 50, 75 or 100 ppm along with their combinations and 1 per cent urea was sprayed at 15 and 3 days after transplanting. All standard cultivation practices were adopted and observations regarding time of head initiation and maturity, weight and size of head, yield per hectare were recorded.

RESULTS AND DISCUSSION
Data relating to the effect of GA and NAA along with urea on yield and yield parameters of cabbage are presented in the Table 1.

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