



*RESEARCH PAPER*

# Effect of plant growth regulators on vegetative and floral of gladiolus (*Gladiolus hybrid L.*) cv. Pusakiran

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**Abstract :** A experiment was carried out on the Effect of Plant Growth Regulators on the Vegetative and Floral of Gladiolus (*Gladiolus hybrid L.*) cv. PusaKiran at Horticulture farm, Department of Horticulture, School of Agricultural Sciences, Dabok, Udaipur from October 2022 to February 2023, The experiment was laid out in Randomized Block Design. Replicated thrice with 10 treatment combinations, comprising three plant growth regulators with 3 levels T<sub>1</sub>-GA<sub>3</sub> 100 ppm, T<sub>2</sub>-GA<sub>3</sub> 150 ppm, T<sub>3</sub>-GA<sub>3</sub> 200 ppm, T<sub>4</sub>-NAA 100 ppm, T<sub>5</sub>-NAA 150 ppm, T<sub>6</sub>-NAA 200 ppm, T<sub>7</sub>-CCC 200 ppm, T<sub>8</sub>-CCC 400 ppm, T<sub>9</sub>-CCC 600 ppm, T<sub>10</sub>-Control (water dipping) for corm dipping for 24hours. The maximum plant height was observed in treatment T<sub>3</sub>-GA<sub>3</sub> 200 ppm (94.40 cm), Among the treatments, T<sub>3</sub>-GA<sub>3</sub> 200 ppm recorded a greater number of leaves per plant (9.90), the days to spike emergence was a significant difference on days to spike emergence. Among the treatments, the earliest days to first floret show color was observed in treatment T<sub>4</sub>-NAA 100 ppm (90.40). Days to last floret show color was a significant difference on days to last floret show color. Among the treatments, maximum spike length was observed in treatment T<sub>3</sub>-GA<sub>3</sub> 200 ppm (88.20 cm). T<sub>3</sub>-GA<sub>3</sub> 200 ppm (73.80) corm dip planting recorded the highest rachis length.

**Key Words :** Gladiolus plant growth regulators, vegetative and floral

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