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Growth performance of chicory to plant growth regulators

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Chicory (*Chicorium intybus* (L.) family Asteraceae) is known for its roots, which is used as an association with coffee. The best part is that there is no caffeine in Chicory, and it produces a very fine roosted flavor as compared to coffee. Plant growth regulators like IAA, GA and Kinetin (10-5 M) are generally used to enhance growth and productivity. The seeds of Chicory were sown in plots (1M X 1M) in field. The plant were raised using normal agriculture practice on completion of 40 and 80 days of sowing, the plants were sprayed with DW, IAA, GA, KIN, IAA+GA, IAA+KIN, GA+KIN and IAA+GA+KIN (10-5 M each). DW spray was considered as a control of treatment. Three such sprays were given within a week. The growth response in term of length, fresh weight and dry weight of root and shoot and leaf numbers of control and treated plants were noted at regular intervals. Foliar spray of plant growth hormones increase root length of Chicory plant. KIN was most effective in 60 days old plant but in 90 days old plant IAA+GA, in 120 days old plant GA+KIN and in 150 days old plant IAA+GA gave maximum effect in the plant receiving foliar spays at 40 days. IAA+GA spray at 40 days was most beneficial for root elongation. Generally GA and IAA+GA, IAA+KIN and IAA+GA+KIN may be used for promoting growth. IAA+GA may be used for getting maximum amount of root yield.

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