

10:00 a.m.

Response of *Zantedeschia rehmannii* Engl. 'Rubylite Rose' tubers to GA3 treatments

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Zantedeschia rehmannii Engl. 'Rubylite Rose' (Rubylite Rose Calla) is a very popular plant in both container production and garden-planting because of its hot pink, long lasting flowers. To increase its container appearance, two-inch tubers were treated with gibberellin acid (GA) (0, 100, 200, 300, 400, 500 ppm) on three positions (top, bottom, and both) right before they were planted into 6" standard pots. GA had significant influence on flowering and growth of Rubylite Rose Calla. The total number of flowers per treated plant increased five times than untreated one. The highest number (10 flowers per plant) occurred under the 300 ppm GA applied on both sides of the tubers. No significant difference was observed among the different GA concentrations and application positions. The total number of shoots per treated plant (10) was significantly higher than untreated tubers (8). GA also significantly increased the plant height. All treated plants were 1 to 5 cm taller than untreated plants (49 cm). Plants with GA treatments emerged one or two days earlier than untreated ones, which subsequently shortened the flowering time by 6 to 10 days. The overall appearance was significantly affected by GA concentrations. Plants had much better appearance under 200ppm or higher concentrations. The application positions had no significant effect on plant performance. To produce better container Rubylite Rose Calla, the tubers should be treated with 200 or 300 ppm Gibberellin Acid before they are planted. Further studies should be carried out for controlling the plant height in order to produce suitable container plants.