

Effect of Growth Regulators on Growth and Development of Caladium(*Caladium X hortulanum* Birdsey)

Bing-Dwo Su¹

Abstract

The effect of GA₃ and BA on growth and development of *Caladium X hortulanum* Birdsey was studied under greenhouse condition. Four concentrations 0, 20, 200, and 2000mg/l of GA₃ as well as 0, 10, 100, and 1000 mg/l of BA were taken. In the soaked concentration of GA₃ on caladium tubers, the maximum number of inflorescences produced per viable tuber and plant height was in 2000mg/l. Maximum average number of shoot sprouts and plant leaves per viable tuber was in 20mg/g of GA₃ while minimum flower days was also found. In the foliar application of GA₃, the maximum number of inflorescences, height of plant, leaf area, and weight of tubers was obtained in 2000mg/l.

In the foliar applied concentration of BA, the maximum number of inflorescences was in 1000mg/l, while the maximum length of leaf and tuber weight was found in 100mg/l. Therefore it appears that different concentrations of particular growth regulator evoke different responses on caladium growth and development.

Key words: *Caladium X hortulanum*, Tuber, Growth regulator.

¹Assistant Horticulturist of Taitung DAIS.