Flowering of *Aglaonema* with Gibberellic Acid (GA_3) A Follow-up Report

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In a previous issue of *Aroideana* (1) it was reported that a single foliar spray with 100-400 ppm gibberellic acid (GA_3) induced flowering in *Aglaonema commutatum* 'Treubuii' plus several other species and cultivars. An average of 6-7 flowers per stem were produced following the 400 ppm treatment which exceeded the number produced at lower treatment levels.

As a routine part of our foliage breeding program, we treated several plants with 250 ppm GA_3 (our normal rate) on November 10, 1982. The results were phenomenal! Treated plants had open flowers in mid-April and continued to produce new blossoms into July. Some plants, growing in 8-inch pots with 3-4 stems produced upwards of 50 inflorescences during this time (Figures 1 & 2). As in previous studies, flowers were normal in appearance and fertile. In addition, unrelated species and cultivars again flowered simultaneously enabling cross pollination attempts.

Flowering was so heavy and con-

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Figure 1. *Aglaonema* stock plant 8 months after a single GA_3 spray showing heavy flower and seed production. Note seeds in various stages of development, plus newly opened flower ready for pollination (→). The plant was treated in November and pollination started in April (photograph taken in July).

tinuous that some plants, initially pollinated in the middle of April, were still being pollinated at the end of July (a period exceeding 3 months). Such plants contained seeds in varying stages of development (Figures 1 & 2). Normally, flowering resulting from a 250 ppm GA_3 treatment is not as heavy. It is possible that the plants were beginning to initiate flowers at the time GA_3 was applied and they were, therefore, more sensitive to the treatment.

These results have enabled us to make maximum use of limited greenhouse space and a small number of stock plants. Also, the large number of seedlings we hope to produce will be beneficial in determining the genetic basis of the different foliar variegation patterns present in the breeding stock.

Literature Cited

1. Stimulation of flowering in *Aglaonema* with Gibberellic Acid (GA_3) Aroideana 6 (3):71-72.

Figure 2. *Aglaonema* stock plant showing heavy flower and seed production. The above plant received a single foliar spray with 250 ppm GA_3 in November (photograph taken in July).