Production of herbaceous perennials has been one of the most rapidly growing areas of floriculture for the last 10 to 15 years. However, greenhouse and nursery production of herbaceous perennials requires a significant effort to control the growth of some of these very vigorous plants. Until very recently the primary methods of control were scheduling and pruning. If a grower missed the target date, he cut the crop back.

Herbaceous perennial growers understand that plant height affects the perceived quality of the plant, i.e., a plant in balance with its container size is of higher quality, which means that these plants are the most saleable. Growers using PGRs to accomplish this height control have fewer production losses due to the more saleable plants as well as the physiological enhancement of stress tolerance, which results in longer shelf-life in the greenhouse or in the retail setting. Another major advantage to growers using PGRs is that more compact plants can be more easily and economically shipped and displayed on typical retail racks.

This talk summarizes many years of our research on crop responses to a variety of PGRs.