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**MANIPULATING TRANSPLANT MORPHOLOGY TO ADVANCE POST-TRANSPLANT GROWTH AND YIELD IN STRAWBERRY**

**Julia Y. Reekie**

**Agriculture and Agri-Food Canada, 32 Main Street, Kentville, Nova Scotia**

Prohexadione-calcium (BASF Corp. trade name Apogee and Regalis) is a gibberellin biosynthesis inhibitor which can be used to reduce leaf growth and petiole elongation. This gibberellin biosynthesis inhibitor was applied to 'Camarosa' and 'Sweet Charlie' strawberry nursery plants in Nova Scotia before they were harvested in the fall and transported to Florida to be transplanted in a winter annual plasticulture strawberry production system. Application of prohexadione-calcium to strawberry plants in Canadian nurseries resulted in several morphological changes in the transplants: reduced plant height and total leaf area, increased root to shoot ratio, and decreased specific leaf area. Physiological changes in response to treatment included; a higher rate of photosynthesis, an increase in root initials, an increase in fruit number, and osmotic adjustment that pre-adapted transplants to water stress. Production changes caused by treatments included; an increase in the number of harvestable daughter transplants produced in the nurseries, decreased irrigation requirement, and increased early or seasonal fruit yield. The application of prohexadione-calcium is effective in manipulating strawberry plant morphology in the Canadian nurseries to produce more robust transplants, resulting in better post-transplant growth, higher fruit yields, earlier fruit production and lower irrigation costs. This has the potential to significantly improve profitability for nursery and fruit producers.