EFFECTS OF TIBERON (CYCLANILIDE) ON ORNAMENTALS FOR FINISHED CROP PRODUCTION

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ABSTRACT

Greenhouse and nursery crops often benefit by having increased shoot counts. Such plants have a thicker-fuller canopy, increased quality and sales value. Traditional methods for increasing shoot counts have been by pruning using a hard or soft pinch. Removing the growing tips results in less apical dominance having little to no auxin movement, allowing for lower buds to develop or elongate.

Cyclanilide (Tiberon) has been shown to increase bud and or shoot development in woody and herbaceous plants by inhibiting auxin transport (Meyers, 2005). Early nursery fruit tree work (Elfving and Visser, 2000-2002) showed apples, cherry and pears to significantly increase shoot counts, a term called feathering. This increase in nursery tree shoots resulted in interest in ornamentals. Some Cyclanilide data does exist for greenhouse and nursery crops, however, more data is needed to better understand which crops are positively affected and on a consistent basis.

Tiberon was spray or drenched applied to various ornamentals after transplanting into their respective finished sized pots. Rates varied from 0, 25, 50 or 100 PPM. Sprays were to wet and drenches at their appropriate volume i.e.8 fl oz per 1 gallon pot. Tiberon applications resulted in the release of lower axillary buds and in some cases promoted bud formation. Many species have shown similar response such as calibrachoa, geranium, larkspur, pieris, dogwood, ninebark, (Barcel, Dobbs 2007-2008) smoke tree, ginkgo (Bailey Nursery, 2006-2007) to name a few. Others like pentas, impatiens, maple, olive, and juniper have not shown positive results.

Combination applications (Pilon, 2007) of cyclanilide + cytokinin (6-BA) have shown a possible synergistic effect on echinacea ‘after midnight’. Tiberon alone increased stems by an average 0.5 and Configure (6-BA) increased stems to 2.25. The combination of both materials increased stems to 3.0. The ability to add more stems to blooming plants such as orchids, rose or perennials would have a profound and valuable effect on such crops.

Cyclanilide has shown to significantly improve fruit tree shoots and shows strong promise for improving ornamental shoot development in propagation and finished crops. Current work is on grasses and looking at shoot development on nursery tree whips of maples and oaks.

LITERATURE CITED