

HORTICULTURE DIGEST

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FROM THE EDITOR

This is the fourth in the Horticulture Digest series on Flowers and Nursery Information. We hope that it is providing you with interesting and useful information. We would like to think that this is your newsletter and would sincerely welcome your comments and suggestions on how we can better serve your needs.

Mahalo, Fred D. Rauch Assistant Specialist in Horticulture

CHEMICAL PRUNING OF AZALEAS

Two azalea cultivars, 'Skylark' and 'Whitewater,' were sprayed with 3 percent and 5 percent concentrations of two chemical pruning agents, Off-Shoot-0 (Proctor and Gamble) and Emgard 2077 (Emery Industries, Inc.). The plants were grown in 6-inch containers at the Manoa glasshouses or in ground beds at the Kula Experiment Station at 3,200-foot elevation on Maui.

Plants at Manoa were handpruned May 13, 1970 to shape them; the plants at Kula were sheared at the beginning of July to stimulate new growth. The Manoa plants were sprayed at midday on May 15, 1970; the Kula plants at midmorning August 14, 1970. About 4 weeks after spraying, the number of new laterals were

counted on 7 representative shoots for each of the 14 plants in each treatment. The data are presented in Table 1.

It is obvious that more laterals were stimulated by handpruning than by the chemical pinch. However, it must be remembered that handpruning was necessary to *shape* the plant and that considerable labor can be saved in subsequent steps by using chemical pruning agents to stimulate additional breaks. The 5 percent concentration would be selected as more effective. The lower concentration could be used on plants protected from rapid drying or at early or late hours of the day when less active ingredient would be lost due to evaporation. In these tests, Emgard 2077 was the more effective chemical pruning agent.

A chemical pruning agent should not be applied too soon after handpruning. If new laterals have been activated by the handpruning, they may be destroyed by the chemical. Allow 4 to 6 weeks for new growth to develop and mature before applying the chemical.

There are numerous reports in the literature of the chemical pruning agents being used on other plant materials. At present, however, the registration for these materials is limited to azaleas. Growers who wish to try them on other plant materials will find the following list a guide to plants which have responded to chemical pruning: (0.5 to 2%): chrysanthemums, agera-

Table 1. Average number of new lateral shoots on Azalea 4 weeks after spraying with Off-Shoot-0 or Emgard 2077.

Treatment	'Skylark'		'Whitewater'	
	Manoa	Kula	Manoa	Kula
Handpruned	3.4		3.0	-
No pruning	1.4	0	1.4	1.7
3% Off-Shoot-0	2.2	2.8	1.6	2.9
5% Off-Shoot-0	1.7	2.4	1.5	2.8
3% Emgard 2077	2.4	2.6	1.6	2.9
5% Emgard 2077	2.0	2.4	2.2	3.2



tum, snapdragon and other herbaceous plants; (3 to 5%): cotoneaster, forsythia, carnation, American elm; (6% or higher): cornellia, holly, mockorange, some conifers, some fruit treesguava. In chrysanthemums, carnations and poinsettias there are differences among cultivars in responsiveness to the chemical pruning agents. Richard A. Criley Assistant Horticulturist