## RHODODENDRONS IN HAWAII

In November 1969, 12 Rhododendron cultivars from the PNW were selected to determine their suitability for use in the landscape at higher elevations in Hawaii. An additional 6 cultivars were planted in October 1971. Each were planted 4 feet apart in loose, silty loam soil (adjusted to a pH of 6.0) at the Agricultural Research Center at Kula on the island of Maui. All plants received applications of an acid-reaction fertilizer (Azalea Special, 5-10-10). Prior to planting, hardwood sawdust treated with sulfate of ammonia was incorporated into the soil at the rate of approximately 1/3 cubic foot of sawdust per cubic foot of soil.

## Results and Observations

Detailed observations were taken over a 5 year period for the plants under test. Results on the best cultivars are as follows:

- 1) 'Chev. Felix de Sauvage'-Good vigor and foliage color; attractive shrub for landscape; large flower clusters, blooming from December through February.
- 2) 'Roseum Elegans'—Compact shrub with good foliage color; bloom was delayed until 4th year; scattered flowering occurred in January, 1974
- 3) 'Loder's White'—Slow growing and compact; an attractive bush, but foliage tends to be light green; blooming has been sparse.
- 4) 'Blue Jay'-Good vegetative vigor and foliage color; flower buds set in 1973 blasted due to drought so flowering did not occur in 1974.
  5) 'Gomer Waterer'-Good vigor and foliage col-
- 5) 'Gomer Waterer'-Good vigor and foliage color; a few large white flowers appeared in May-June, 1974.
  6) 'Snow Lady'-Slow growing but interesting
  - shrub because of its pubescent leaves; flower bud set tended to be heavy but subject to blasting.

    7) 'Jock'—Open growth habit of medium vigor:
  - Jock'-Open growth habit of medium vigor; flowered in June, 1974.

Cultivars which performed poorly include: 'Kluis Triumph,' 'Atroflo,' Doncaster, Unique, Fabia, PJM, Praecox (Lilac Pink), Blue Til Grosclaude, Eldorado, and Doubloons. In general the dwarf, small leafed types were less adapted than the more vigorous, large-leafed types.

A number of factors must be considered for growing rhododendrons in Hawaii such as chilling, light period, watering, shading, and soil conditions. At higher elevations where cool nights occur, there is enough chilling for flowering if rhododendron cultivars adapted to Southern California and the southeastern parts of the United States are used. Hawaii's short summer days, with a maximum of 14½ hours, may reduce flower bud initiation but the best cultivars in this test all set flower buds at one time or another. Better growth and survival might be achieved with a lower soil pH, shading, and improved irrigation.

It appears that rhododendrons can be grown at higher elevations in Hawaii. However, rather extensive testing will be necessary to develop a varied list of rhododendrons which would grow and flower well at these locations.

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