ACID AIDS WOODROSE GERMINATION

Out-of-state shipments of woodrose returned $59,000 to producers in Hawaii in 1972. Much of this harvest is from native stands of this perennial vine. In some areas of the State, this ornamental plant is slowly disappearing from our natural landscape because of our rapidly growing urban development.

Growers have encountered some difficulty in germinating seeds of the woodrose. Under normal field conditions, seed germination begins anywhere from 3 to 8 weeks after maturity with very few seeds actually germinating. Trials were conducted to determine if seed treatment with acid would aid germination of woodrose seeds.

Seeds were harvested from vines growing in the Wahiawa area during the early part of January 1973. Fifty uniform seeds were selected for each treatment and germinated in flats containing No. 2 grade vermiculite. Each seed was treated with twice its volume of concentrated sulfuric

Table 3. Percentage of woodrose seeds germinating 4 weeks after treatment with concentrated sulfuric acid.

Months after harvest	Hours in acid					
	0	4	5	8	13	18
	(percentage)					
1	2					0
4	16			66	60	
5	28	100	92			

acid, stirred periodically with a glass rod, and washed in running tap water for 10 minutes prior to planting. Final ratings were made after 4 weeks and the results are presented in Table 3.

Best germination was obtained by soaking the woodrose seeds in concentrated sulfuric acid for 4 to 5 hours prior to planting. Soaking for longer durations was apparently too long, and it caused injury to the seed embryo. It also appears that woodrose seeds germinate better if stored prior to planting. Only 2 percent of the untreated seeds germinated when planted 1 week after harvest, while those planted 5 weeks after harvest had 28 percent germination.

Ted Kunimitsu
Vocational Agricultural Instructor

Fred D. Rauch
Assistant Specialist in Horticulture