INFLUENCE OF TEMPERATURE ON FLOWERING OF LEUCOSPERMUM CORDIFOLIUM

Weekly harvest of selected plants of Leucospermum cordifolium at the Kula Station on Maui and from a commercial planting were plotted against time to determine: 1) the number of heat units* which accumulated between September 1 and the time that 50% of the flowers were harvested, and 2) the duration of the period during which the mid-50% of flowers were harvested. Yield data from three seasons were available from the experiment station plants. Over these 3 seasons, the average heat unit requirement for 50% cut ranged from 1750 to 2500 with close agreement among years for selected plants. Certain clones, however, had great deviation due to a more or less continuous flowering habit. The commercial planting had an accumulation of approximately 2300 heat units to the mid-50% harvest point during the 1976-1977 season. Clonal differences were observed in the duration of the mid-50% harvest period with the most consistent plants across 3 years producing half the crop in 22 to 60 days. A short peak was more likely in January-February than earlier or later in the season.

There were some differences among years, but whether these were due to the weather or ad-

[•]Heat unit is defined as the difference between 40⁰F and the daily average temperature for each day.

vancing maturity of the plants was not clear. In 1972-1973 an average of 2200 heat units were needed to the start of the mid-50% harvest while 1750 heat units were needed in 1973-1974 and 1540 in 1974-1975. In 1976-1977, the commercial planting required 1750 heat units to the start of the mid-50% harvest with another 550 to the mid-harvest (50% cut) point.

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