## THE FLORAL BIOLOGY OF THE HAWAIIAN MALVACEAE\*

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Hawaiian representatives of the family Malvaceae were studied in an attempt to learn their biological relationships with the native insect and bird faunas within Hawaiian ecosystems. Flowers were periodically studied on a round-the-clock basis to determine blooming periods, flower form and function, nectar production and timing, and bird and insect users and their methods of utilization. Flower nectars were analyzed for sugar types and proportions, amino acid composition and concentrations, and for other constituents. These data are combined in a comprehensive biological evaluation of ten groups of significant and distinct flower types within the Hawaiian Malvaceae. Three tables are included.

ABSTRACT