

# PACIFIC SCIENCE

A QUARTERLY DEVOTED TO THE BIOLOGICAL  
AND PHYSICAL SCIENCES OF THE PACIFIC REGION

---

VOL. XVII

OCTOBER 1963

NO. 4

---

*Previous issue published September 17, 1963*

## CONTENTS

	PAGE
<i>The Role of Climatology in the Hawaiian Sugar-Cane Industry: An Example of Applied Agricultural Climatology in the Tropics.</i> Jen-hu Chang.....	379
<i>Root Development in Aluminous Hawaiian Soils.</i> D. L. Plucknett, J. C. Moomaw, and C. H. Lamoureux .....	398
<i>Studies in the Hawaiian Rutaceae, IV. New and Critical Species of Pelea A. Gray.</i> Benjamin C. Stone.....	407
<i>A Prior Name for the Hawaiian Gouldia terminalis (Rubiaceae).</i> Robert L. Wilbur.....	421
<i>Population Dynamics in a Sublittoral Epifauna.</i> Willis E. Pequegnat.....	424
<i>Preliminary Report on the Marquesan Sardine, Harengula vittata, in Hawaii.</i> Thomas S. Hida and Robert A. Morris.....	431
<i>Hawaiian Records of Folliculinids (Protozoa) from Submerged Wood.</i> Donald C. Matthews.....	438
<i>Investigations of Rhinoceros Beetles in West Africa.</i> Charles P. Hoyt.....	444
<i>Characteristic Features of the Volcanism of the Siberian Platform.</i> V. S. Sobolev .....	452
<i>Gibsmithia hawaiiensis gen. n. et sp. n.</i> Maxwell S. Doty.....	458
<i>Revision of the Genus Pandanus Stickman, Part 16. Species Discovered in Thailand and Vietnam.</i> Harold St. John .....	466
<i>Index.</i> .....	493

---

PACIFIC SCIENCE is published quarterly by the University of Hawaii Press, in January, April, July, and October. Subscription price is \$4.00 a year; single copy, \$1.25. Check or money order payable to University of Hawaii should be sent to University of Hawaii Press, Honolulu 14, Hawaii, U. S. A. Printed by Star-Bulletin Printing Company, 420 Ward Avenue, Honolulu 14, Hawaii.