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HAWAIIAN
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SOCIETY
NEWSLETTER

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Vol. I, No. 6

Honolulu, Hawaii

October 1962

HAWAIIAN BOTANICAL SOCIETY
MEETING

TIME: Monday, October 1, 1962 - 7:30 p. m.

PLACE: Agee Hall, Experiment Station of the Hawaii Sugar Planters' Association,
1527 Keeaumoku Street, Honolulu.

SUBJECT: "Senescence in Plants." This topic will cover the aging and death of plant
organs. They appear to be related to built-in physiological mechanisms
involving growth factors similar to those affecting whole plants.

SPEAKER: Dr. A. Carl Leopold, Carnegie Visiting Professor of Plant Physiology,
University of Hawaii. He is from Purdue University, Lafayette, Indiana.

NEW MEMBERS:

The following were elected to society membership at the June meeting:

PLANT QUARANTINE DIVISION, AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT
OF AGRICULTURE: Vincent D. Kaskeski, Norman Eugene Neff, William R. Pifer, and
Edward S. Shiroma.

NEIL A. MacLEAN CO.: Robert J. McKeand, Jr.

DEPARTMENT OF AGRICULTURE, STATE OF HAWAII: Sotaro Uehara.

Nominations for membership or membership inquiries may be sent to Dr. Constance Hartt
(Membership Committee Chairman), H. S. P. A. Experiment Station, Honolulu 14, Hawaii,
or to the Newsletter Editor.

TROPICAL BOTANICAL GARDEN SURVEYS

Two teams visited Hawaii recently to determine the desirability and feasibility of a
national tropical botanical garden in Hawaii. Both teams inspected potential
botanical garden sites here. (con't on page 2)

HAWAIIAN BOTANICAL SOCIETY

c/o Department of Botany, University of Hawaii, Honolulu 14, Hawaii.

OFFICERS:

President - Dr. Charles H. Lamoureux
(University of Hawaii)
Vice-President - Dr. Maxwell S. Doty
(University of Hawaii)
Secretary-----Alvin K. Chock
(U.S. Dept. of Agriculture, B. P.
Bishop Museum, University of Hawaii)
Treasurer-----William M. Bush
(Castle & Cooke, Inc.)
Executive Committee Members: Officers
and Dr. Donald P. Gowing (Pineapple
Research Institute of Hawaii) and
Mrs. J. H. Beaumont.
Membership Committee: Dr. Constance
Hartt (Hawaiian Sugar Planters'
Association), chairman; Dr. Haruyuki
Kamemoto (University of Hawaii); and
Ichi Yanagihara (Pineapple Research
Institute of Hawaii).

EDITORIAL STAFF:

Editor----- Alvin K. Chock
Reporters: Charles H. Lamoureux (UH)
Constance Hartt (HSPA)
Donald P. Gowing (PRI)

The Hawaiian Botanical Society Newsletter is published monthly, except during the summer months of July, August and September. It is distributed to Society members and other interested individuals and institutions, with the purpose of informing them about botanical news and progress in Hawaii (and the Pacific). The deadline for submission of news items is the 20th of each month prior to publication.

MEMBERSHIP DUES: Annual, \$2.00 for the calendar year (to be submitted to the Treasurer, Mr. Wm. M. Bush, P. O. Box 2990, Honolulu 2, Hawaii).

EDITOR'S NOTE: This number contains the membership directory. With the increasing pressure of other duties, the Editor found it impossible to issue it earlier as anticipated.

Society members are encouraged to submit news items and suggestions to the editor. Of particular interest are personnel changes, community events of a botanical nature, botanical publications pertaining to Hawaii (and the Pacific), seminars, programs, and articles or new items pertaining to botany or flora conservation.

TROPICAL BOTANICAL GARDEN SURVEYS (con't from page 1)

The first team, representing the Botanical Society of America, consisted of Dr. Pierre Dansereau, Assistant Director, New York Botanical Garden; Dr. William Stewart, Director, Los Angeles City & County Arboretum; and Dr. Fritz Went, Director, Missouri Botanical Garden (St. Louis). They were hosted by the Hawaiian Botanical Gardens Foundation, Inc.

The second team represented the U. S. Department of Agriculture. Team members included Dr. Henry T. Skinner, Director, U. S. National Arboretum; Dr. Francis DeVos, Assistant Director, U. S. National Arboretum; and Dr. John L. Creech, Assistant Chief, New Crops Branch, surveyed the following Oahu sites: Kahana, Waiahole, Waikane, and upper Manoa valleys. Tours were also made of the Foster Botanical Garden and its Wahiawa branch, the University of Hawaii's Lyon Arboretum, and upper Kalihi and Nuuanu valleys.

The U.S.D.A. team was escorted on their Oahu tours by Mr. Collin Lennox (formerly with the State Dept. of Agriculture), Mrs. Lester Marks, Mr. Marshall M. Ross (Plant Quarantine Division, USDA), Dr. H. F. Clay (Horticulture Dept., Univ. Hawaii), and Dr. Tom Sheehan (Hort. Dept., UH). After Dr. DeVos and Dr. Creech departed for Nepal, Dr. Skinner, Mrs. Marks, and Mr. Shipman made a tour of potential sites on the island of Hawaii.

GEORGE C. MUNRO HONORED BY GARDEN CLUB: The 1962 Garden Club of America Medal of Honor was awarded to George Campbell Munro for his life long work in bird and plant life. The citation also reads that he is "equally distinguished in both the fields of conservation and horticulture." He is the author of "Birds of Hawaii" and was elected honorary society member in April 1960. He came to Hawaii from New Zealand in 1899 and was a ranch overseer and manager on Molokai and Lanai until his retirement in 1935, when he moved to Honolulu. Since that time he has been very active in the establishment and continuation of Na La'au Hawaii, the native dryland garden on the slopes of Diamond Head.

A. I. B. S. MEETING: The meeting of Biological Societies, sponsored by the American Institute of Biological Sciences, was held on August 26-31 at Oregon State University in Corvallis, Oregon.

Papers presented of interest to Hawaii included the following (society, author, institution and title of paper):

- American Fern Society: V. J. KRAJINA, Univ. of British Columbia (Univ. of Hawaii, 1961-62), A revision of the Hawaiian species of Cibotium.
- American Phytopathological Society: JOHN D. RADEWALD, P.R.I. (and Dewey J. Raski, Univ. of Calif.), A study of the life cycle of Xiphinema index, and Studies on the host range and pathogenicity of Xiphema index;
M. ARAGAKI, Univ. of Hawaii, Basal mineral requirements for the growth and sporulation of Alternaria tomato; R. B. HINE and M. ARAGAKI, Univ. of Hawaii, Phytophthora wilt of carnation.
- American Society for Horticultural Science: GEORGE A. JOHANNESSEN, P.R.I., Illustrated talk on history and recent developments in pineapple breeding research in Hawaii; Film, "Pineapple Country - Hawaii; The Fruit of Research"; ROMAN R. ROMANOWSKI, Univ. Hawaii, (and George J. Raleigh, Cornell Univ.), Effect of time on harvest on yield, color development, scale retention and storage losses of the onion (Allium cepa L.).
- American Society of Plant Physiologists: CONSTANCE E. HARTT, HSPA, Translocation of C^{14} in detached blades of sugar cane; JAMES A. LOCKHART, Univ. Hawaii, Physiology of light and gibberellin action on internode elongation.
- American Society of Plant Taxonomists: WARREN H. WAGNER, JR., Univ. Michigan, Interspecific crosses and spore characteristics in the genus Psilotum (Psilotaceae), and The evolutionary pattern of living ferns.
- Botanical Society of America: JAMES A. LOCKHART, Univ. Hawaii, Light and hormones in development; WARREN H. WAGNER, JR., Univ. Michigan, The evolutionary patterns of living ferns.

F O S T E R B O T A N I C A L G A R D E N: The City Council of Honolulu is still in the process of considering the proposed expansion of Foster Botanical Garden. The site in question is the corner property at Nuuanu and Vineyard Streets. It is presently pledged to the Sun Yat Sen school and the Kuo Min Tang Society by the Honolulu Redevelopment Agency.

Support for this addition to the garden has been given by the community, including the two dailies, Mayor Neal Blaisdell, and over twenty organizations and groups (including this society).

UNIVERSITY OF HAWAII COURSES: Courses being offered this fall semester (1962-63) at the University of Hawaii include the following:

BOTANY 101, General botany; Bot 105, Economic plants of Hawaii; Bot 110, Plants and man; Bot 161, Plant geography; Bot 399, Botanical problems; Bot 410, Plant anatomy; Bot 418, Cytology; Bot 426, Vascular plants; Bot 460, Systematic botany of flowering plants; Bot 553, Plant ecology; Bot 562, Advanced taxonomy; Bot 570, Advanced physiology; Bot 572, Techniques in physiology; Bot 586, Biological productivity of the sea; Bot 610, Botanical seminar; Bot 612, Advanced botanical problems; Bot 675, Physiology seminar; Bot 683, Phycology; Bot 699, Directed research; and Bot 799, Directed research.

AGRICULTURE 100, Orientation course; Ag 201, An introduction to forestry; Ag 399, Agricultural thesis; and Ag 601, Seminar in forestry.

AGRONOMY 501, Tropical crop production; Agron 605, Seminar in tropical range management; Agron 699, Directed research.

HORTICULTURE 101, General horticulture; Hort 161, Principles of plant propagation; Hort 162, Principles of horticulture; Hort 392, Commercial vegetable production; Hort 463, Principles of floriculture; Hort 666, Radiation biology; Hort 667, Horticulture seminar; Hort 699, Directed research; and Hort 711, Special topics in experimental horticulture.

GENETICS 321, Human heredity; Genet 451, Principles of genetics; Genet 654, Genetics seminar; Genet 699, Directed research; and Genet 799, Directed research.

GENERAL SCIENCE 120, Introduction to science; Sci 620, Natural science as a human activity; and Sci 650, Seminar in science for the secondary school teacher.

HONORS PROGRAM (Senior Honors Thesis): Ag 394 and Bot 394.

For further information, consult the U. H. General Catalogue, 1962-1963, and the Schedule of Courses, Fall 1962.

HORT. 101 - GENERAL HORTICULTURE: A new course in General Horticulture (Hort. 101) will be offered for the first time this fall. It represents an effort by the entire staff of the University's Horticulture Department to reach the people who want a general knowledge but do not plan to specialize in the field. Lectures will be held on Tuesdays and Thursdays at 8:10 a.m., in Miller Hall 7, on the dates indicated, with the subject and instructor as follows: Sept. 25, Introduction to horticulture, J. Gilbert; Sept. 27, Flower production in Hawaii, H.F. Clay; Oct. 2, Vegetable production in Hawaii, Y. Nakagawa; Oct. 4, Fruit and nut production in Hawaii, W. Yee; Oct. 9, Morphology of plants, R. Romanowski; Oct. 11, Plant propagation, H. Nakasone; Oct. 16, Landscaping of the year, H. F. Clay; Oct. 18, House plants, T. Sheehan; Oct. 23, Orchids, Anthuriums and other commercial cut flowers, T. Sheehan; Oct. 25, Plant nutrition, R. Romanowski; Oct. 30, Exam; Nov. 1, Root crops (including the sweet potato, etc.), J. Tanaka; Nov. 6 (holiday); Nov. 8, Leafy crops (including cabbage, lettuce, etc.), J. Gilbert; Nov. 13, Cucurbits and solanaceous crops, J. Gilbert; Nov. 15, Pineapple culture, D. Gowing; Nov. 20, Citrus culture, R. Warner; Nov. 22 (holiday); Nov. 27, Banana, papaya, and macadamia culture, R. Hamilton; Nov. 29, Guava and passion fruit culture, F. Bowers; Dec. 4, Exam; Dec. 11, Acerola and other miscellaneous fruits, H. Nakasone; Dec. 13, Diseases and their control, S. Goto; Dec. 18, Insects and their control, W. Mitchell; Dec. 20, Weeds and their control, R. Romanowski; Jan. 8, The physiology of plants, T. Murashige; Jan. 10, Growth regulators, T. Murashige; Jan. 15, Plant Breeding and its relation to the basic needs of man - food, shelter, clothing, J. Cameron or J. Brewbaker; Jan. 22, The sciences in horticulture and a look into the future, J. Brewbaker; Jan. 24, Final Examination.

D E P A R T M E N T O F B O T A N Y F A C U L T Y: New additions to the Department of Botany (University of Hawaii) faculty include the following: Visiting Professor Dr. George Hollenberg (phycology), University of Redlands, Redlands, California (first semester); Visiting Assistant Professor Dr. Tom S. Cooperrider (taxonomy), Kent State University, Kent Ohio; Lecturer Dr. (Mrs.) Shanti Batra (cytology), Chairman, Department of Botany, Lady Brabourne College, Calcutta, India (first semester); Dr. A. Carl Leopold, Carnegie Visiting Professor of Plant Physiology (first semester), Purdue University, Lafayette, Indiana; Instructor George Fogg (ecology) Wabash College, Butler, Indiana; Instructor Henry O. Whittier (bryology), Miami University, Oxford, Ohio; Graduate Assistant Richard Buggeln, Buckness University; Graduate Assistant Dennis Great-house, Wabash College; and Graduate Assistant Ralph Kenner, Bradley University.

"Old-timers" on the botany staff are: Professor Dr. Maxwell S. Doty (phycology), Professor Dr. Bruce Cooil (physiology), Associate Professor Dr. Edison Putman (physiology), Associate Professor Dr. James Lockhart (physiology), Assistant Professor Dr. Charles Lamoureux (anatomy and morphology) and Lecturer Alvin K. Chock (taxonomy and ethnobotany).

There will be 21 graduate and 9 undergraduate students in the department this year. Department Chairman is Dr. Charles Lamoureux.

R E C E N T P U B L I C A T I O N S:

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- CLEMENTS, H. F. 1962. The ripening of sugar cane. Sugar y Azucar 57: 29-33 (HAES Misc. Pap. 148).
- DEGENER, OTTO & ISA DEGENER (with P. AELLEN, SAUER, STAUFFER, B. C. STONE & ZIEGENSPECK). 1962. Flora Hawaiiensis. 37 pp., 37 figs.
- DOUE, STEPHEN M. 1962. Some questions and answers on Act 187 or the state zoning law. CES, U. H. Pub. Aff. Sr. 9, 19 pp.
- H. L. LYON ARBORETUM. 1962. Biennial report, Nov. 1, 1961-Apr. 30, 1962.
- KAMEMOTO, H., R. TANAKA & K. KOSAKI. 1961. Chromosome numbers of orchids in Hawaii. HAES Bul. 127.
- KENNY, RON & NOEL HAYSOM. 1962. Shore organisms at Macquarie Island. Pacific Science XVI(3): 245-263, 12 figs., 4 tab.
- KRAJINA, V. J., J. F. ROCK & HAROLD ST. JOHN. 1962. Campus trees and plants. 28 pp., 1 map. Univ. Hawaii.
- NAKASONE, H. Y. 1962. Chromosome doubling in orchids with colchicine. Na pua okika o Hawaii nei, p. 46-50 (Apr.) (HAES Misc. Pap. 141).
- ST. JOHN, HAROLD. 1962. Revision of the genus Pandanus. Part 12. Queensland Pandanus. Pacific Science XVI(3): 291-346, figs. 107B-139A.
- SPOEHR, ALEXANDER. 1962. Science and education, annual report for 1961. 29 pp., illus. B. P. Bishop Museum.
- STONE, BENJAMIN C. 1961. Studies in the Hawaiian Rutaceae, III: on the New Caledonia species of Pelea, and a misunderstood species of Platydesma. Adansonia 1: 94-100.
- _____. 1962. Taxonomic and nomenclatural notes on Platydesma (Hawaii) and a new name for a Melicope (Solomon Islands). Madroño 16(5): 161-166, 2 figs.
- U. S. FOREST SERVICE. 1962. Forestry research in Hawaii. Prepared by the Pacific Southwest Forest and Range Experiment Station, in cooperation with the Division of Forestry, Dept. of Land & Natural Resources, State of Hawaii.
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B O T A N I C A L N O T E S :

Dr. Bruce Cooil, Professor of Plant Physiology and Botany, University of Hawaii, will spend the first semester (1962-63) at the University of California at Berkeley. He will do research during his sabbatical.

Mr. Alvin K. Chock (society secretary) was married to Miss Yona Bielefeldt on June 18 at Kawaiahao Church.

Dr. Frederick G. Krauss, Professor Emeritus of Agriculture, University of Hawaii, and society charter member, died on June 5. Sympathy is extended by the society to his survivors.

Dr. Albert J. Bernatowicz, Associate Professor of Botany (in General Science), U. H., spent his sabbatical visiting marine biological stations and book stores in Puerto Rico, Italy, France, and England. He also taught one quarter at the University of Chicago and studied one term at Cambridge University (England).

Dr. Theodor Philip Haas, Retired Professor of Botany at the Philadelphia College of Pharmacy and Science, spent two months in Hawaii. He presented a talk entitled "Morphological observations on bananas and dates" at a special botany seminar at the U. H. on Sept. 17. The illustrated seminar was based on observations and investigations made with the United Fruit Company in Honduras, Panama, Colombia, and Peru. Dr. Haas hails from Munich, Germany, and was with the Philadelphia College for 19 years, and hopes to return here next year. His fields are morphology and taxonomy. While in Hawaii, he visited the islands of Maui and Hawaii, and observed Dr. A. Brash's collection of banana plants.

Drs. Otto & Isa Degener received a \$6,000 grant from the National Science Foundation to continue botanical exploration of the Hawaiian Islands. This grant will enable Dr. O. Degener (Collaborator in Hawaiian Botany, New York Botanical Garden) to publish volume six of "Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands."

Dr. Edward J. Britten, Professor of Agronomy, University of Hawaii, spent his sabbatical as a Fulbright fellow at the University of Melbourne in Australia.

Dr. Maxwell S. Doty visited botanical institutions and book stores in Australia, Indonesia, Philippines, Japan and Hong Kong, on a recent three weeks' trip. He spent over a week on the Russian research vessel "Vityaz" doing intercalibration work for the International Indian Ocean Expedition. This included investigations of the primary productivity of the Indian Ocean. He also made arrangements for algal material for research purposes from institutions at Hong Kong, Singapore and the Philippines.

T R O P I C S M A G A Z I N E: A new bimonthly publication, with many illustrations, appeared in June 1962. It is devoted to plants and gardens in tropical areas. Regular articles feature ferns, bromeliads, palms, aroids, tropical fruits, travel, and cooking. Subscription price is \$4.00 per year (if subscription is made through the Society, our organization receives a \$1.00 commission), or single copies (current issue only, \$1.00).

The Horticultural Publications (P. O. Box 435, Coconut Grove 33, Florida) also publishes the Orchid Journal, The Orchid Weekly and other publications edited by Alex D. Hawkes.