

# jean h. langenheim

1986–1987

Dr. Jean H. Langenheim, Professor of Biology, University of California, Santa Cruz, is the new president of the Ecological Society of America. Born in Homer, Louisiana, she grew up in Tulsa, Oklahoma, where she became interested in geology and natural history. She went to the University of Tulsa to major in geology, but was influenced by Harriet G. Barclay and switched her orientation to plant ecology. Upon graduation in 1946 she moved to the University of Minnesota for her M.S. and Ph.D., majoring in ecology (with a minor in geology) under the direction of Dr. W. S. Cooper, his last Ph.D. student. Her Master's research was on plant succession of a subalpine earth flow, and her Doctorate on the vegetation and environmental patterns of the Crested Butte area of Colorado. Both studies were conducted at the Rocky Mountain Biological Laboratory; her Ph.D. was done in collaboration with her husband, who was studying the stratigraphy and paleontology of the area. Her work provides the basic vegetational background for many researchers of that area. Dr. Langenheim taught field ecology at RMBL for many years and then served as Vice President of their Board of Directors.

The Langenheims moved to the University of California, Berkeley in 1953, and during this period she taught at Mills College and San Francisco College For Women and did joint field research with her husband in Alaska, the Great Basin, Rocky Mountains, and the Columbian Andes. She was a Research Associate in the Botany Department at Berkeley and collaborated with H. L. Mason on provocative papers using language analysis to evaluate ecological concepts, such as environment and natural selection. From 1959–1962 she was a Teaching Associate in the Department of Botany, University of Illinois, Urbana.

Jean started her own full professional career in 1961 when she moved to Harvard University to work with E. S. Barghoorn in paleoecology on the study of fossil resin, amber. From 1961–1966 she was a Fellow in



the Biological Laboratories and a Scholar of Radcliffe Institute for Independent Study (now The Bunting Institute). She was also a Cabot Fellow and an American Association of University Women Wiley Fellow. She undertook the first chemical studies of the botanical origin of amber through geologic time, studies which showed that the greatest diversity of trees producing terpenoid resins occurred in the tropics and subtropics. These studies have served as the evolutionary basis of her current ecological research on the amphiatlantic legume genera *Hymenaea* and *Copaifera*.

Her studies of tropical trees, initiated at Harvard, have continued with her move to the then new University of California, Santa Cruz in 1966. She was a founding member of the Adlai E. Stevenson College and helped develop the graduate program at UCSC. She progressed from Assistant Professor to become Professor in 1973 and chaired the Department of Biology from 1974–1976.

Although her research has concentrated on chemical ecological studies of resin-produc-

ing trees, the studies have included systematic revisions of the genera *Hymenaea* and *Copaifera*, identification and structural determination of the chemicals, and anatomical studies of the secretory systems of these resin-producing species. She has documented the intraplant, interplant, interpopulation, and interspecies variation in leaf terpenes. Laboratory experiments have been conducted to assess the effects of physical and biological factors on the patterns of chemical variation as this influence plant defenses in relation to insects and fungi. Her research has taken her to lowland tropical ecosystems of Mexico, Costa Rica, Panama, Columbia, Venezuela, Surinam, Brazil, and to several eastern and western countries of Africa.

In the course of her tropical research she has served on the Board of Directors of The Organization of Tropical Studies and its Executive Committee (1971–1977) as Secretary and Academic Vice President. She has chaired several United States National Academy–Brazil National Research Council Advisory Committees on the humid tropics, has served on the NSF Committee on Projects Flora Amazonica since 1977, and was elected President of the Association for Tropical Biology 1985–1986. In 1983 she was elected to serve on the Executive Committee to found the International Society of Chemical Ecology, became its Vice President in 1985–1986 and now serves as its President. Honors include appointment as Fellow of the California Academy of Sciences in 1973 and Distin-

guished Alumna of the University of Tulsa in 1973.

In addition to her research, Dr. Langenheim has maintained excellence in her teaching, where she always finds time to talk and work with students. The text *Plant Biology and Its Relation to Human Affairs*, coauthored with K. V. Thiman, speaks to their concern to make botany interesting and applicable to the beginning student. She has fostered strong ties among scientists, economists, sociologists, and government officials to solve problems in the utilization of forest products and the need for conservation practices to save the extremely valuable dwindling natural resources.

For the ESA, Jean has chaired the Publications Committee, served on the Nominating Committee, and was the Society's Vice-President in 1981. As the second woman President of the Society, (Dr. E. Lucy Braun served in 1950), Dr. Langenheim brings many organizational skills and much knowledge of the roles that ecologists play within the Society. She is concerned about the future role of our journals, the contributions of women to ecology, and wants to strengthen the role of ecologists on both the national and international scene. Her wisdom, perception, administrative skills, and her concern for people will serve the Society well in the coming year.

Larry Bliss  
University of Washington

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