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Phycological Literature for 1956

(concluded)

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References marked with asterisks have been obtained from secondary sources and have not been verified.

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Necrology

Dr. Kathleen M. Drew Baker of the University of Manchester died September 14, 1957, in the course of an unusually successful botanical career during which she made many significant contributions to our knowledge of the morphology, cytology, and life histories of red algae. Mrs. Baker was born November 6, 1901, and entered the field of research in which she was later to distinguish herself during the tenure of a Commonwealth Fellowship at the University of California (1925-1927), where she studied under W. A. Setchell and N. L. Gardner. Her first major work, which appeared in 1928 in the University of California Publications in Botany, was a taxonomic study of the marine species of the *Aerochaetium-Rhodochorton* complex of the Pacific coast of North America. In this paper she treated 34 species, of which 19 were newly described and are still accepted. Her work on the cytology of *Spermothamnion* and *Plumaria* has been widely acclaimed for its significance and is a model of meticulous investigation. In a series of beautifully written papers Mrs. Baker elucidated the problem of the occurrence of polysporangia in *S. snyderae* and the problem of the occurrence of both tetrasporangia and sexual organs on the same plant of *S. turneri*. She showed that the polysporangium of *S. snyderae* is homologous with the tetrasporangium of other red algae, the only difference being that the sporangium primordium contains several diploid nuclei instead of one. In *S. turneri* she established the presence of sterile triploid plants in addition to haploid and diploid plants. The triploid plants could be accounted for by the fact that diploid plants produce functional diploid gametes in addition to tetraspores. The absence of tetraploid plants in nature suggests that tetraploid carpospores may not be viable. In *Plumaria elegans*, in which parasporangia as well as tetrasporangia and sexual organs are known, Mrs. Baker discovered that the plants which bear parasporangia are triploid and that they reproduce by means of triploid paraspores, constituting an asexual cycle independent of the normal sexual cycle involving the alternation of haploid and diploid plants. The genetic

and evolutionary implications of this work excite the imagination and call for further investigation of these plants. Mrs. Baker is perhaps best known for her recent work on the life histories of *Bangia* and *Porphyra*. Her discovery that the filamentous shell-inhabiting alga known as *Conchoecelis* is a phase in the life history of *Porphyra* immediately attracted world-wide attention. This discovery is not only of great botanical interest but has far-reaching practical implications in those countries in which *Porphyra* is extensively cultivated for food. Stimulated by Mrs. Baker's work, a large group of investigators are rapidly closing the gaps in our knowledge of the life history of this important alga. In recent years Mrs. Baker applied herself with characteristic thoroughness and caution to the unraveling of certain nomenclatural entanglements in the red algae. With the untimely death of Kathleen Drew Baker, phycologists lost a distinguished colleague, a productive scholar, and a sincerely kind friend.

Hugh P. Bell, Emeritus Professor of Botany, Dalhousie University, Halifax, Nova Scotia, died October 25, 1957. Professor Bell was born in Halifax February 22, 1889, and was educated at Dalhousie and the University of Toronto. In collaboration with Constance MacFarlane he published a significant study of the marine algae of the Maritime Provinces of Canada (Can. J. Res. 9: 265-293, 1933).

Richard Lee Caylor, Professor of Natural Sciences, Delta State Teachers College, Cleveland, Mississippi, died recently. Professor Caylor was born at Union Springs, Alabama, January 11, 1894, and was educated at Mississippi College, George Peabody College, George Washington University, and Louisiana State University. He was a charter member of the Phycological Society of America and was interested in the marine algae of the Gulf coast.

Mr. I. C. G. Cooper, Curator of the Davis Collections at the Staten Island Institute of Arts and Sciences, died September 29, 1957, thus ending a remarkable full life. He was, before his re-

tiement, a naval architect and engineer, and came to this country from his native England in 1920. His interest in the natural sciences came about largely through his meeting the late William T. Davis in 1931. Mr. Cooper will be remembered not only as a careful and highly skilled curator of botanical and automological collections, but also as a warm and beloved friend. He was keenly interested in the cultivation of algae and was a charter member of the Phycological Society of America.

Professor Georg Funk of Giessen died January 24, 1958. Noted as a student of the marine algae of the Gulf of Naples, Professor Funk published numerous articles and a major taxonomic and ecological work, "Die Algenvegetation des Golfes von Neapel" (1927). In 1955 he published a supplementary volume entitled, "Beiträge zur Kenntnis der Meeresalgen von Neapel zugleich mikro-photographischer Atlas."

Dr. Hubert Kufferath of Bruxelles died December 17, 1957. He was especially interested in physiological aspects of algal cultures.

Miss Josephine E. Tilden, Emeritus Professor of Botany, University of Minnesota, died May 15, 1957, after a year's illness, at her home near Lake Wales, Florida. She was born in Davenport, Iowa, March 24, 1869 and was educated at the University of Minnesota. She joined the faculty of that university in 1898, holding a professorship from 1910 until her retirement in 1937. Miss Tilden devoted her life to phycology with unflagging enthusiasm and was unusually successful in inspiring and stimulating students during her long teaching career.

Together with Conway MacMillan and other botanical colleagues, Miss Tilden was largely responsible for the founding of the Minnesota Seaside Station at Port Renfrew, Vancouver Island, British Columbia. Much botanical work was carried on at this station and published in its year book, "Postelsia" (1902, 1906), and in various journals. Unfortunately, this station was discontinued, but Miss Tilden turned her attention to the development of the Lake Itasca field station. She greatly admired William Henry Harvey, the eminent Irish phycologist, and hoped to retrace his famous journeys. Toward this goal she made two extensive collecting trips to Australia, New Zealand, and the South Pacific islands. On the last trip, 1934-1935, she led a group of ten graduate students eastward around the world. The exsiccatae resulting from Miss Tilden's trips are especially important in that they include much topotype material. Her textbook, "The algae and their life relations" (1935), provides interesting and informative reading even today. Especially thought-provoking are the chapters dealing with classification and evolution of algae with particular reference to pigmentation, food reserves, and evolution of the environment. Miss Tilden was keenly interested in phycological bibliography and prepared a card index, the Index Algarum Universalis (popularly called the "Tilden Index"), which is of considerable usefulness. In research, her contribution was proportionately smaller. She was especially interested in blue-green algae and published extensively on this group. In the history of American phycology, Josephine E. Tilden must be accorded an important, although perhaps somewhat controversial, role.

News and Notes

Professor William Randolph Taylor has received the high honor of being elected a foreign corresponding member of the Institut de France, Academie des Sciences.

Dr. D. E. G. Irvine of Cambridge University will be Research Associate at the University of Illinois for two years, engaged in a project sponsored by the National Science Foundation entitled, "The preparation of an index of scientific names of algae: determination of magnitude and procedures." Dr. Irvine will be accompanied by his wife, Linda M. Newton, formerly curator of marine algae at the British Museum (Natural History).

Mr. Kozo Imahori of Kanazawa University is at the University of Rhode Island for two years, working with Dr.

R. D. Wood on a project sponsored by the National Science Foundation entitled, "Revision of Characeae."

A request for collections of epizoic fresh-water algae has been made by William C. Vinyard, Department of Botany, Humboldt State College, Arcata, California, and Phillip J. Halicki, Department of Botany, Michigan State University, East Lansing. Contributors are requested to send material to either of these investigators in live condition, if possible, and to include taxonomic identification of the host as well as habitat notes. Likely hosts include gastropods, mussels, and turtles.

Preparations are being made for the Phycology Section of the Ninth International Botanical Congress, to be held at Montreal, August 19-29, 1959.

