



JOHN COLBURN BRIDWELL, 1877-1957

John Colburn Bridwell was born at Pella, Texas, September 23, 1877, and died near Culpeper, Virginia, August 9, 1957. Of the Bruchidae, or seed beetles, he became the leading scholar of his time, and he also contributed significantly to our knowledge of other insect groups, especially the aculeate wasps. From 1920 until 1943 he was a member of the Entomological Society of Washington, and during much of that period he was located at the U. S. National Museum. He was an unusual entomologist, endowed with tremendous enthusiasm for natural history, remarkably well schooled in fundamentals and the early literature of his group, very well informed on botanical matters, and a keen observer and indefatigable collector in the field.

Bridwell's paternal ancestors were English; his great-grandfather, Strother Bridwell, moved westward from Stafford County, Virginia, in the middle 1700's. His mother's people were Scotch-Irish and Dutch; they too came to America at an early date, and their descendants still live in eastern Massachusetts. William Wallace Bridwell, a circuit-riding Methodist minister, was father of the future entomologist, who was born in a frontier home at Pella, in northern Texas, not far from the Chickasaw Nation in what is now Oklahoma. He had six brothers and one sister. The family moved to Baldwin, Kansas, site of Baker University, when Bridwell was only four to five years old. He was graduated from Baker with a degree of B.S. in the Class of 1900. In 1899 he published his first paper, a list of Kansas Hymenoptera. As a boy he had suffered an injury to his leg, when a gun went off in a spring wagon while on a hunting trip. This made him lame all the remainder of his life and may have been partly responsible for his spending time in the quiet pursuit and observation of

insects as a young man, thus determining his career. It may also have helped to shape his personality, giving him an independence and a distaste for routine work patterns.

The chronology of Bridwell's professional affiliations after leaving Baker University, and prior to going to Hawaii in 1913, is as follows: Fellow, Ohio State University, 1901-1902; Assistant to State Entomologist, Georgia, 1902; Federal employee on tobacco stalk weevil (*Trichobaris*) at Willis, Texas, March-July, 1903; instructor in Zoology, University of New Hampshire, 1903; Fellow, Massachusetts Agricultural College, 1906; Professor of Biology, Pacific College (Oregon), 1907; instructor in Zoology and assistant entomologist, Oregon State College, 1907-1911; instructor in Entomology, University of California (Berkeley), 1911-1913. Some of the positions were held for brief periods. He remained in New Hampshire at least until the spring of 1904, as shown by the record of *Ctenothrips bridwelli* Franklin, which he collected at Dover, N. H., April 11, 1904. While in Massachusetts he identified many Hymenoptera in the College collection, and he was closely associated with Dr. H. J. Franklin, who was actively studying bumblebees, and with Dr. E. A. Back, who later was with him in Hawaii and who became his supervisor in the Bureau of Entomology.

In 1913 Bridwell was appointed Assistant Superintendent, Division of Entomology, Board of Agriculture and Forestry, Territory of Hawaii. He arrived in Honolulu about June 3, 1913, about two weeks after the arrival of Dr. Filippo Silvestri, who, since the previous July, had been on a trip to Africa in search of parasites which it was hoped would contribute to the control of the Mediterranean fruit fly and the horn fly. His work on the program of rearing and releasing parasites began June 8, and he had the advantage of spending a few days with Dr. Silvestri. During the summer he assisted David T. Fullaway in the rearing activities, and during October 1-December 31 was in charge of the program, aided by a crew of three to five workers. The magnitude of the program is indicated by the published figure of 92,658 parasites (4 species) which were reared during October-December, and the total of 99,376 parasites (5 species) which were liberated in the period June 1-December 31, 1913.

In May 1914, Bridwell and Fullaway left Hawaii for Olokomeji, Nigeria, for the special purpose of obtaining *Tetrasticus giffardianus*, a parasite which Silvestri had discovered the previous year, but which did not survive the trip to Hawaii. They soon found it and other parasites, and Fullaway departed with them for Honolulu. Bridwell remained in West Africa to collect specimens of the rich fauna, and within a few months made a large collection. However, he contracted a serious case of malaria and went to South Africa to be hospitalized. After recovering, he made further collections, made an extended stop in Australia for additional field work, and finally returned to Hawaii late in 1915.

Early in 1916 Bridwell left the employ of the Board of Agriculture and Forestry, spent some time working privately at the Experiment Station of the Hawaiian Sugar Planters' Association, and late in the fall was appointed to the staff of the Bishop Museum as an assistant to O. H. Swezey, Honorary Curator of Entomology. A primary task was to aid in the arrangement of the Helms Collection, recently obtained from Australia, but an accident disabled him so that little was accomplished that year. By 1918 he had returned to private research and was studying Bruchidae with great enthusiasm. This specialty led to his employment, November 20, 1919, to February 1, 1920, by the Union Feed Company of Honolulu, to study the insects, mainly bruchids, attacking algaroba beans.

In January 1920 Bridwell was appointed as a specialist on Bruchidae and their parasites by the Bureau of Entomology, and in the late spring of that year went to Washington to undertake the study of the family, thus beginning his long association with the U. S. National Museum. In December he went to Texas to collect and ship bruchid parasites to Hawaii, and from then until he left the Bureau in early 1924 he divided his time between the Museum and the field.

Bridwell left for India in August 1924 and remained there until 1927, engaged in a business partnership based on the exportation of cashew nuts. His time, except for side trips, was mainly divided between Portuguese Goa and the vicinity of Bombay.

Following his return to Washington in 1927, Bridwell did private research, mainly on bruchids, at the National Museum until he left the Washington area in March 1944. During part of this period he was aided by a private cooperator interested in supporting research on bruchids. While working at the Museum Bridwell lived in several communities, mainly in Virginia, and twice his residence burned. After leaving the Museum he lived about two years at Hillsboro, Virginia, then at Culpeper for about a year, and finally he lived alone in a small country house at Lignum, Virginia, from May 1947 until it burned in December 1955. While there he assembled a few notes for publication, but suffered the loss of nearly all remaining unpublished notes, of which there were many, in the fire. In the spring of 1956 failing health forced him to enter a home for the aged. Following his death and cremation, the ashes were scattered in a woodland area of natural beauty, at Cabin John, Maryland, in accordance with his wish.

Surviving relatives include a daughter, Juliet, in Washington, D. C., and seven granddaughters, also two brothers, Arthur in Baldwin, Kansas, and Robert in Cleveland, Oklahoma. On November 11, 1912, at Ukiah, California, Bridwell married Miss Juliet Greer, who was President of her class at Vassar College, and was Dean of Domestic Science and Art at Oregon State College, when they met. Mrs. Bridwell continued some teaching, both in Hawaii, where their daughter was born in 1918, and in New York City during her husband's

early years in Washington. She shared many travels with him, joining him in India in 1925, and meeting him in Australia on his return from Africa. In Australia his collecting ventures in unexplored areas led to long absences, and after one such occasion he and Mrs. Bridwell sat in their hotel in Sydney and read in New York and San Francisco newspapers that he had been lost in the bush! She died December 12, 1942, when the family was living at Vienna, Virginia, near Washington, D. C.

During his residence in Honolulu, Bridwell was a member of the Hawaiian Entomological Society, and he was elected Secretary-Treasurer for 1914, but was able to serve only briefly because of his departure for Africa. He was very active in the presentation of notes at meetings, and they may be consulted in the Proceedings, volumes 3 and 4. Later he became active in the Entomological Society of Washington. Abstracts of the notes given by him there appear in volumes 10-13, 15 and 19 (1920-23, 1925, 1929) of the Journal of the Washington Academy of Sciences (pages carrying reports of Entomological Society meetings shown in Contents at end of each volume), and in the Proceedings of the Entomological Society of Washington, volumes 35-37, 39, 44, and 46 (1933-1944). Among notes dealing with bruchids, the following merit special mention: Jour. Wash. Acad. Sci. 12: 464, 467, 1922; 13: 261-262, 1925; 15: 80, 1925; Proc. Ent. Soc. Wash., 37: 185, 1936; 46: 23, 1944.

A great many unusually valuable specimens deposited in the National Museum, mostly in Bruchidae, Chrysomelidae, Curculionidae, and Hymenoptera, attest Bridwell's remarkable observational ability through their significant associated biological information. For many years he cooperated closely with the late H. S. Barber, not only in the acquisition of notes on the habits and relationships of various beetles, but on the intricacies of their nomenclature as well. He always retained a deep interest in Hymenoptera. In 1936 he discovered in Virginia, for the first time in the United States, the ant *Anergates*, a social parasite of another ant, *Tetramorium*. In the middle and late 1930's he worked out the unusual biology of the previously little known primitive sawflies of the genus *Xyela*, and studied their parasites of the genus *Idiogramma* (formerly *Lysiognathus*) (reported in notes, and by Cushman, Jour. Wash. Acad. Sci. 27: 438-444, 1937). He was proud that standard reference works, such as Clausen's Entomobaceous Insects, contained references to his pioneer work with wasps in Hawaii.

Bridwell's life was plagued by misfortunes, the accidents and fires already mentioned, and also by his own fertile mind that seemed ever to beckon him along the untrodden paths of new investigations before the results of the previous ones were written. It is a pity that an entomologist of his great and proven ability did not publish more, yet his published record and the assembled material resulting from his collecting and observations are marks of long-lasting accomplishment.

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PAPERS BY JOHN COLBURN BRIDWELL

1899. A list of Kansas Hymenoptera. Trans. Kansas Acad. Sci. 16: 203-211.
1904. (Letter to Dr. L. O. Howard, dated Sept. 5, 1903, under "Additional observations on the tobacco stalk weevil"). U.S.D.A., Div. Ent. Bull. 44: 44-46.
1906. A second species of the hymenopterous genus *Odontophyes* Konow (Xyelinae.) Ent. News 17: 94.
1914. (Report [Division of Entomology, Board of Agric. & For.] for period from Oct. 1 to Dec. 31, 1913). Bull. Board of Agric. & For., Terr. of Hawaii 3: 154-160 (plus 7 tables).
1916. Breeding fruit-fly parasites in the Hawaiian Islands. Jour. Econ. Ent. 9: 472-476.
1917. Notes on *Synagris*. Proc. Hawaiian Ent. Soc. 3: 261.
- A note on an *Epyris* and its prey. Ibid., 3: 262-263.
- Notes on the Thynnidae. Ibid., 3: 263-265.
- Notes on a peregrine bethylid. Ibid., 3: 276-279.
- Notes on *Dictyophorodelphax micabilis*. Ibid., 3: 279-280.
1918. Notes on the entomology of Hawaiian *Euphorbia* with the description of a new *Dictyophorodelphax* (Homoptera, Delphacidae). Ibid., 3: 385-387.
- Notes on the habits of *Brasconynus optatus* Sharp (Carabidae). Ibid., 3: 391-392.
- Certain aspects of medical and sanitary entomology in Hawaii. Trans. Med. Soc. Hawaii for 1916-1917: 27-32.
- Insects in relation to the storage of food in Hawaii. Proc. Hawaii Ent. Soc. 3: 506-509.
- Notes on the Bruchidae and their parasites in the Hawaiian Islands. Ibid., 3: 465-505.
1919. Descriptions of new species of hymenopterous parasites of muscoid Diptera with notes on their habits. Ibid., 4: 166-179.
- Bruchididae of the Helms Collection. Ibid., 4: 41.
- *Dictyophorodelphax praedicta* sp. nov. (Homoptera, Delphacidae). Ibid., 4: 72-73, fig. 1.
- Miscellaneous notes on Hymenoptera. With descriptions of new genera and species. Ibid., 4: 109-165.
- Some notes on Hawaiian and other Bethyridae (Hymenoptera) with descriptions of new species. Ibid., 4: 21-38.
- Notes on *Nesomimesa antennata* (Smith) (Hymenoptera). Ibid., 4: 40-41.
- Some additional notes on Bruchidae and their parasites in the Hawaiian Islands. Ibid., 4: 15-20.
1920. Some notes on Hawaiian and other Bethyridae (Hymenoptera) with description of a new genus and species. 2nd paper. Ibid., 4: 291-314.
- The insect fauna of the Hawaiian bunch grasses (*Eragrostis variabilis* and allies). Ibid., 4: 278-283.
- Insects injurious to the Algaroba feed industry. Hawaiian Planters' Record 22: 337-343.
- Notes on the Bruchidae and their parasites in the Hawaiian Islands, 3rd paper. Ibid., 4: 403-409.

1920. Miscellaneous notes on Hymenoptera, 2nd paper, with descriptions of new species. *Ibid.*, 4: 386-403.
- . A new lowland Plagithmysine carambycid from Oahu with notes on its habits (Coleoptera). *Ibid.*, 4: 314-323.
- . Notes on *Nesotocus Giffardi* Perkins (Coleoptera). *Ibid.*, 4: 250-256, 6 figs., 1 pl.
1923. The host plant and habits of *Acanthoscelides griseolus* (Fall) (Coleoptera). *Proc. Ent. Soc. Washington* 25: 79-80.
1929. Description of a bruchid immigrant into Hawaii breeding in the seeds of Convolvulaceae (Coleoptera). *Ibid.*, 31: 112-114.
- . The cowpea bruchid (Coleoptera) under another name—a plea for one kind of entomological specialist. *Ibid.*, 31: 39-44.
- . A preliminary generic arrangement of the palm bruchids and allies (Coleoptera) with descriptions of new species. *Ibid.*, 31: 141-160.
- . Thelytoky or arrhenotoky in *Sclerodermus immigrans*. *Psyche* 36: 119-120.
1930. (Designation of *Bruchus robiniae* F. as genotype of *Amblycerus* Thunberg). Footnote 7, p. 29, *In* Pierce, *Proc. U. S. Nat. Mus.* 77: Art. 17, pp. 1-34.
1931. Bruchidae infesting seeds of Compositae, with descriptions of new genera and species (Coleoptera). *Proc. Ent. Soc. Washington* 33: 37-42.
1932. The subfamilies of the Bruchidae (Coleoptera). *Ibid.*, 34: 100-106.
- . Collecting insects in herbaria. *Jour. N. Y. Bot. Garden* 33: 105-109.
1933. (J. C. Bridwell & L. J. Bottimer) The hairy vetch bruchid, *Bruchus brachialis* Fahræus, in the United States. *Jour. Agric. Research (U. S.)* 46: 739-751.
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- . *Specularius erythrinae*, a new bruchid affecting seeds of *Erythrina* (Coleoptera). *Jour. Washington Acad. Sci.* 28: 69-76.
1940. (H. S. Barber & J. C. Bridwell) Dejean catalogue names (Coleoptera). *Bull. Brooklyn Ent. Soc.* 35: 1-12.
1942. Two new American bean bruchids (Coleoptera). *Rev. Chilena Hist. Nat.* 44: 249-258 (1940).
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1946. The genera of beetles of the family Bruchidae in America north of Mexico. *Jour. Washington Acad. Sci.* 36: 52-57.
1952. A new genus of Bruchidae affecting *Hibiscus* in Argentina (Bruchinae: Acanthoscelidini). *Ibid.*, 42: 49-50.
- . Notes on Bruchidae affecting the Anacardiaceae, including the description of a new genus. *Ibid.*, 42: 124-126.