

JOSEPH BURTT DAVY: A DECADE IN CALIFORNIA

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ABSTRACT

The British-born Joseph Burtt Davy spent 1892–1902 at the University of California, Berkeley, where he was affiliated with the Department of Botany and the State Agricultural Experiment Station. During this time he published about 80 articles on diverse aspects of botany, most of them in the journal *Erythea* for which he apparently had substantial editorial responsibility. Burtt Davy's activities in California are partially reconstructed through his correspondence with botanists at Berkeley and at Kew. The circumstances surrounding his departure from California are unclear, but in 1902 he moved to Washington, D.C., for a brief period and then went to Pretoria, South Africa, where he established a herbarium in a unit that eventually became the Botanical Research Unit.

Many western American botanists are familiar with the name of Joseph Burtt Davy through its commemoration in such binomials as *Clarkia davyi* (Jeps.) Lewis and Lewis, *Carex davyi* Mackenzie, *Gilia davyi* Milliken, and *Agrostis davyi* Scribner. Yet one encounters rather little reference to this botanist in articles concerned with the history of California botany. Indeed, Constance (1978) devotes only one sentence to the man's decade in California, and Thomas (1979) does not mention him at all. One day in 1971 while I was browsing through a miscellany of uncatalogued pamphlets in the library of the Bolus Herbarium at the University of Cape Town I came across a privately printed bibliography of Burtt Davy, examined the entries for the 10 years that he spent at the University of California, Berkeley, and concluded that in this short time period he engaged in a remarkable diversity of botanical activities. This led me to search for further details of Burtt Davy's activities while in California, the results of which I report here.

Joseph Burtt Davy was born in Derbyshire in March, 1870, and died in Birmingham (Desmond, 1977; Barnhart, 1965) or Oxford (Gunn, 1940), England, in August 1940. (Burtt Davy was himself inconsistent in hyphenating his surname, but seemed not to favor the hyphen.) He was educated "privately" (Hutchinson, 1940) and received two Ph.D. degrees, one from Cambridge in 1924 and an honorary one from Oxford in 1936 (Ramsbottom, 1940–1941). During 1891–1892, he was assistant to the director of the Royal Botanic Gardens, Kew, but resigned that position because of ill health. The illness was vaguely specified in a letter of December, 1906, to David Prain, director of the Royal Botanic Gardens, Kew, as a "threatening of the lungs which made it desirable to seek a drier climate." Burtt Davy

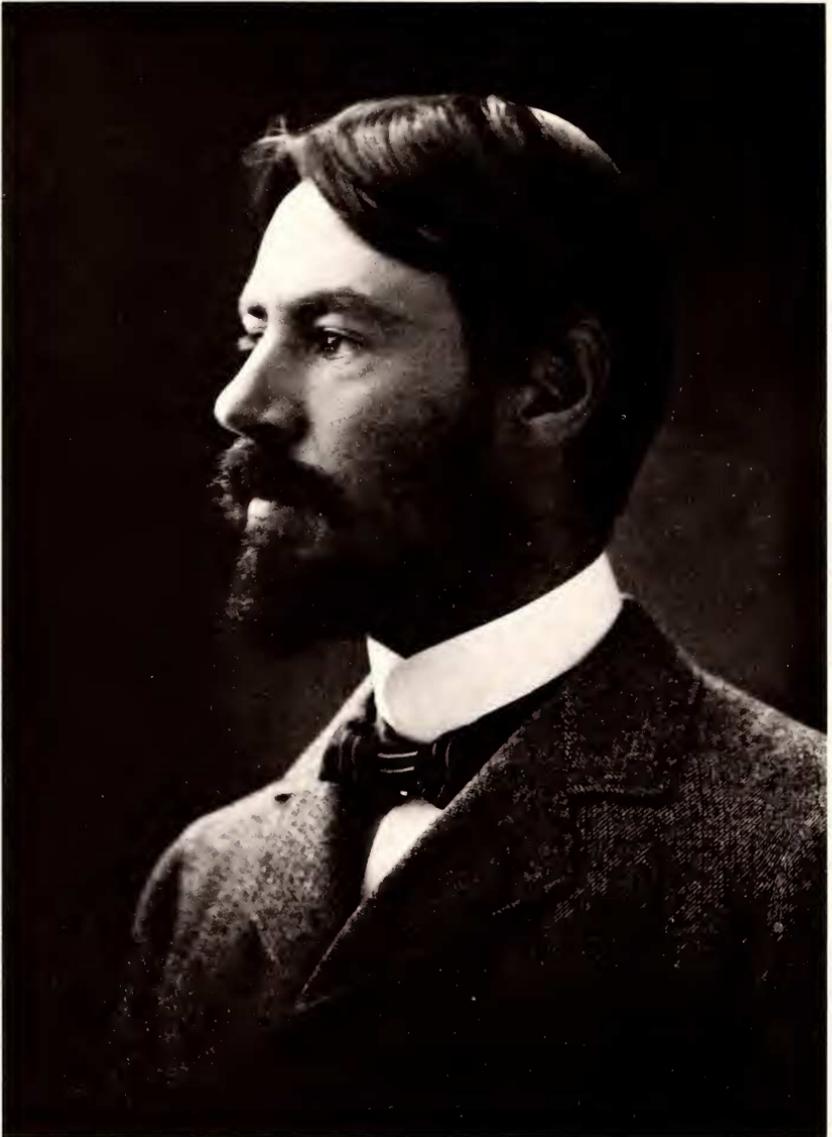


FIG. 1. Joseph Burt Davy in December, 1899.

made plans to leave England, apparently intending initially to seek employment in Canada (letter from Thistelton-Dyer, 1892). Instead, he went to the University of California, Berkeley, where he "obtained temporary employment in the Herbarium" of the Department of Botany (letter to W. T. Thistelton-Dyer, May 6, 1893). From 1893 to

1896 he termed himself "assistant in botany"; from 1896 to 1901 Lecturer in Botany and Assistant Botanist, California State Agricultural Experiment Station; and in 1901 and 1902 Instructor in Botany (Burt Davy, n.d.). Dates of these various posts provided by Lee Bonar (pers. comm., 1971) and University Archivist J. R. K. Kantor (pers. comm., 1980) differ somewhat from those given by Burt Davy and from each other as well.

Burt Davy's published bibliography reflects a diversity of interests while in California; in his decade in the state he published 80 articles. These range from miscellaneous minor notes to translations, reviews, accounts of introduced species, nomenclature, horticulture, ethnobotany, and agriculture. Most of these were published in Jepson's journal *Erythea*. Burt Davy contributed the treatments for a number of genera in L. H. Bailey's *Cyclopedia of American Horticulture* and was responsible for the Gramineae, Cyperaceae, and Juncaceae in Jepson's *Flora of Western Middle California*. As a consequence of his appointment in the experiment station, he also published articles on range plants and on alkali lands, the latter a particular interest of the influential soil chemist, Dean of Agriculture E. W. Hilgard. Burt Davy's first "new" species was *Diplacus speciosus*, based on a plant cultivated in the university botanical garden and called to his attention by E. L. Greene; later novelties grew out of extensive general collecting trips in various parts of the state. Apparently in connection with his survey of the vegetation of alkali soils, Burt Davy collected and described the "remarkable" grass genus *Neostaffia* (as *Staffia*). Also, midway during his stay in California, Burt Davy met and married Alice Bolton of Berkeley, who illustrated numerous of his papers.

In going through his correspondence with W. L. Jepson, one gets an insight into certain attitudes and events of the day. A letter of June, 1895 to Jepson mentions indecision concerning the administrative housing the Department of Botany, and refers to a rumored change that would allow Hilgard "to absorb control of this Department and work his own sweet havoc". There are pressures to publish: "Hilgard wants me to get out a Bulletin on my alkaline soils and their flora within a few weeks" (September, 1896). At this time Jepson was indicated as editor for the journal *Erythea*, and was "assisted" by Alice Eastwood and Burt Davy. But there is evidence that Burt Davy had primary responsibility for editing this journal for at least part of his time in Berkeley. In October, 1896, he wrote Jepson from Los Angeles that he had "just heard that I have got into hot water with Dr. [H. H.] Behr for my treatment of his article". In a letter to W. A. Setchell written at the same time, he commented that "Miss Eastwood says the good old Dr. is really angry." A week later, he wrote Jepson that "Dr. [Anstruther] Davidson . . . does not intend to send any more to *Erythea*, as he does not like the way in which Hasse's Lichen-paper has been treated He says that Hasse is very sore about the

matter". Finally, exasperation overtook Burt Davy and two days before Christmas, 1896, he wrote Jepson that "I have had a terrible time over *Erythea*, and you must not ask me to do a thing for it next term. I had to give up all my Chemistry on account of it, and have put off my grass work and Bulletin work from time to time on the same account". The January, 1897 number of *Erythea* no longer carried Burt Davy's name, nor that of Miss Eastwood.

Burt Davy engaged in various other botanical activities while in Berkeley. In addition to his herbarium work, he wrote that his duties included "direction of the University Botanic Garden" (Burt Davy, n.d.). In 1894 he wrote to Thistelton-Dyer that "I am trying to form the nucleus of a Museum of Economic Botany for the University". If he succeeded in this, the collection has subsequently been dispersed. In general, Burt Davy's letters were business-like, though on occasion he commented pointedly on some of his contemporaries. In June, 1897, he wrote Setchell from Reno that "Marcus Jones is here . . . he is a droll bird and is hunting for rare *Astragali* to fill his botanical gizzard, which, however, seems inclined to the omnivorous, snapping up anything in sight from a grass or *Equisetum* to a root. I take good care not to commit myself to the expression of a botanical opinion in his presence, but find him wonderful good company nevertheless".

The circumstances surrounding Burt Davy's departure from California are not clear. Apparently during a visit to Washington, D.C., in 1901 he was offered a herbarium curatorial position at the USDA by Frederick V. Coville, and in 1902 he moved to Washington to fill one of the vacancies left by the departures of C. L. Scribner and E. D. Merrill for the Philippines. In October, 1902, he wrote Setchell from Washington that "I am safely here and settled down". Possibly a cause of his departure from Berkeley was that his relationships with various of his colleagues were not satisfactory. Nearly 25 years later in a letter written to Jepson (who at the time was in Britain and had visited with Burt Davy) in July, 1926, he reflects that "I think I did suggest to W.A.S. [Setchell] that the U.C. might see its way to grant me the B.A. or B.Sc. (not *Honorary* B.A.). I feel sore about it for had I used my job at Berkeley as a means to a degree I should have shirked my work but should have had the degree . . . I do feel sore that the head of the Department could not see his way to grant my request . . . you can imagine how my California friends smile at a Faculty which considers its B.A. worth more than a Cambridge Ph.D. or an Oxford M.A.!" He continued that ". . . I feel strongly that the training and experience of the last 30 years ought to be made use of to further the cause of botanical science, and to assist in training the men who are to follow us. I had hoped I might be allowed to do this at the U.C., but the door was slammed in my face". Nevertheless, he goes on to say that "I am none the less indebted to California for what she has done for me, and in spite of all that has happened, I hope to do

something to show my gratitude. If you can consider further the point we discussed about a fund to encourage post-graduate work in Systematic Botany, I shall be glad to consider the possibility of leaving \$5,000 in my will, to start such a fund. I have already mentioned to President [W. W.] Campbell the desire to do *something*". In the letters written by Jepson to Burtt Davy later the same year, there is no mention of this proposal, and when Burtt Davy died in 1940 he left £7,000 to the Imperial Forestry Institute at Oxford University to establish the Burtt Davy Research Scholarship for research in taxonomic botany and/or tropical plant ecology.

Burtt Davy remained in Washington for only six months. "This post I resigned on receiving a call from the Transvaal" (letter to Prain, 1906). He left the United States for the post of Government Agrostologist and Botanist in Pretoria. He later became the Chief of the Division of Botany of the Department of Agriculture there. In 1907 he wrote to Prain that "news from the Transvaal is very disturbing as regards the future of British-born civil servants and I am advised confidentially to seek another post". In the same year, he returned to the United States and spent several months studying plant breeding with the noted cytologist-geneticist H. J. Webber at Cornell University. Despite his advice to leave government service, Burtt Davy wrote Prain in the same year that "I do not intend to resign or give notice" and returned to South Africa late in 1907.

In 1913 Burtt Davy resigned his government post and began breeding corn on his own farm at Vereeniging, Transvaal. In 1920, he went to Kew, where he published the first two volumes of *The Flora of the Transvaal and Swaziland*. In 1925, he was appointed Lecturer in Tropical Forest Botany at the Imperial Forestry Institute, Oxford, a post he held at the time of his death. In the same year, he returned again to California, where "while collecting material for a flora of the Redwood belt . . . [he] had an accident which necessitated a return home for special treatment" (Ramsbottom, 1940-1941). Ramsbottom (1940-1941) characterized Burtt Davy as enthusiastic, a perfectionist, indefatigable, humane (he was a Quaker), and a man who served to inspire many students.

In his government post in South Africa, Burtt Davy's duties included extensive travelling throughout the Transvaal to meet farmers, to observe and discuss agricultural practices, to collect and identify weeds or toxic plants, and to collect and preserve native species as well. He is credited with establishing the herbarium in a unit that eventually became the Botanical Research Institute in Pretoria; the herbarium is now the largest in Africa, with approximately 600,000 specimens. The Institute celebrated its 75th anniversary on 1 May 1978, the 75th anniversary of Burtt Davy's appointment in 1903. The birthday celebrations commenced with a "symbolic re-collection" of *Aloe davyana* Schoenl., a species first collected by Burtt Davy and

named for him very shortly after his arrival in South Africa. Later in the day, the plants were placed in a small commemorative garden outside the Institute's building.

ACKNOWLEDGMENTS

Letters to Prain and to and from Thistelton-Dyer are in the archives at Kew, those to Jepson in the Jepson Herbarium, and those to Setchell in the University Herbarium, Berkeley. Obituaries of Burt Davy include those by M. D. Gunn (S. African J. Science 37:xvii-xix, 1940; Bothalia 4:45-46, 1941); J. Hutchinson (Nature 146:424, 1940); A. D. Cotton (J. Kew Guild 6:84-85, 1941 [1942]); A. J. H. Goodwin (Trans. Royal Soc. S. Africa 29:lxiii, 1942); and J. Ramsbottom (Proc. Linn. Soc. Lond. 153:291-293, 1940-1941 [1942]). There is also an anonymous but informative biographical note inspired by the award of his Cambridge Ph.D. (Gard. Chron. 75:266, 1924). I am indebted to D. E. Johnson for scouring the files at the Hunt Institute for Botanical Documentation, L. Constance for reading the first draft of this sketch, and J. R. K. Kantor for archival assistance.

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NOTEWORTHY COLLECTIONS

HEMIZONIA MINTHORNII Jeps. (ASTERACEAE: MADIINAE).—USA, CA, Ventura Co., Simi Hills, Sage Ranch (34°30'N, 118°40'W), 0.8 km nw. of Rocketdyne Laboratory on Black Canyon Rd, scattered on open, rocky, sandstone outcrops in crevices with *Eriogonum fasciculatum*, *Ribes indecorum*, *Prunus ilicifolia*, and *Eriodictyon* sp., 670 m, 28 Nov 1979, *Tanowitz 1803 and Whitmore* (UCSB); Los Angeles Co., Santa Monica Mts. (34°05'N, 118°44'W), Corral Canyon, at end of county-maintained Corral Canyon Rd, ca. 8.2 km (5.1 mi) e. of hwy 1, scattered on steep, sandstone outcrops in crevices with *Rhus laurina*, *Adenostoma fasciculatum*, and *Quercus dumosa*, 600 m, 11 Apr 1980, *Tanowitz 1848 and Gordon* (UCSB).

Previous knowledge. Known only from the type locality (34°16'N, 118°38'W)—a small population in chaparral on e. side of Santa Susanna Pass summit (480 m) on either side of Ventura-Los Angeles co. line. (Herbaria consulted: CAS, DS, JEPS, LA, MO, NY, POM, RSA, UC, UCSB, US; published sources: Munz, A Calif. fl. 1959; Munz, A fl. S. Calif. 1974; Abrams and Ferris, *Illus. fl. Pac. States.* 1960; Smith et al., *Inv. rare endang. vasc. pls. Calif.* CNPS Spec. Publ. 1, ed. 2. 1980; Raven and Thompson, *Fl. Santa Monica Mts., Calif.* 1966.)

Significance. Second and third sites for this narrow endemic. Considered "Rare and Endangered" by Smith et al. (op. cit.); the cited specimens were included in that de-