

Harry D. Thiers, 1919–2000

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Harry Delbert Thiers was born Jan. 22, 1919, in Fort McKavett, Texas, on the sparsely populated Edwards Plateau of western Texas, and died Aug. 8, 2000, in southwestern Ohio. He was the third son of Harry and Sudie Merck Thiers, both from families of European origin who had lived in the region for several generations. Thiers' early years were spent on several ranches in the area where his father worked. He received his early education in rural, often one-room, schools. Because Thiers showed academic promise, the family moved to Junction, Texas, so that he could attend high school, an educational opportunity unavailable to many ranch children of the area. Thiers repaid his family for their sacrifices on his behalf by acquitting himself well in high school and gained acceptance to Schreiner Institute, a two-year military college in Kerrville, Texas.

After earning a bachelor of arts degree from Schreiner Institute, Thiers entered the University of Texas. It was during his undergraduate years at Austin that he was introduced to mycology and served as a student assistant mycologist with Dr. Marie B. Morrow (1939–1941). The United States became involved in World War II as Thiers was completing his bachelor's degree, and after graduation he enlisted in the Navy. He served from 1942 to 1945 in the hospital unit of a troop transport ship. He returned to the University of Texas in 1945 to enter a master's degree program under the direction of Dr. Morrow. His thesis was on airborne plant pathogenic fungi (Thiers and Morrow 1948, Morrow and Thiers 1949).

Thiers obtained a teaching position at Texas A&M University in College Station upon completion of his master's degree in 1947. In addition to teaching, he worked as a plant pathologist, providing advice to local farmers. This extension work gave him the op-



FIG. 1. Harry D. Thiers

portunity to familiarize himself with the vegetation of eastern Texas, which is very different from that of the western part of the state because of greater rainfall. Mushrooms, rarely conspicuous in western Texas, were abundant and diverse in the wet summers of eastern Texas, and Thiers began to collect and study them. He quickly became fascinated by these organisms and found that little work had been published on the agarics of the southeastern United States. He recognized not only that he had found a great research opportunity but also that he needed more specialized training to pursue it. He wrote to Dr. Alexander H. Smith at the University of Michigan about the possibility of studying with him. Smith responded immediately by inviting Thiers to join him in Wyo-

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ming for fieldwork in the Medicine Bows during the upcoming summer.

Although the summer of 1950 was not noteworthy for the abundance of agarics in the Rocky Mountains, it was a turning point in Thiers' career. He found much in common with Smith: Both men came from rural backgrounds and shared an active curiosity about natural history in general and an enjoyment of the physical and intellectual challenges of collecting, identifying and classifying fungi. As a result of this mutually satisfying encounter, Thiers made arrangements to pursue a doctorate at the University of Michigan under Smith's direction. Because he could take a leave of absence from Texas A&M for no more than a year, Thiers spent only that year in residence at Ann Arbor, during which time he completed all course work and other requirements for the doctorate, except for the dissertation. His dissertation topic was the Agaricaceae of the pine belt and adjacent areas in eastern Texas. After the initial year at Michigan, he conducted fieldwork in Texas during the academic year and spent summers at the Michigan Biological Station, where he served as Smith's teaching assistant and recorded the results of his research (Thiers 1956, 1957, 1958, 1959a, b). While at the biological station in 1952, he met Ellen Jeanette Birkett (a science teacher at Schimer College, Mount Carroll, Illinois), whom he married in 1953. Back in College Station in 1955, a daughter, Barbara Mary, was born.

In 1959, Thiers accepted a teaching position at San Francisco State College in California. The lure of California was primarily the poor knowledge of the agarics there. In the history of the state, there had never been a resident agaricologist, but the little that had been published on the agarics of the state indicated that its mycota was potentially as distinctive as its vascular plant flora.

San Francisco State College (now University) was primarily a teacher's college in the late 1950s, and at that time most of the professors did not have active research programs. However, Thiers was encouraged in his desire to build a research program, herbarium and curriculum in cryptogamic botany by forward-looking department head Dr. John Hensill. During years of normal rainfall, it is possible to collect fungi in some area of California from September through May or early June, and thus the academic year was the prime time for research. Because an unrelentingly heavy teaching load and the distance to prime collecting areas from the campus precluded conducting research during work hours, Thiers devoted as many weekends as possible to collecting. Early morning and late evenings during the week were devoted to "getting those pesky things identified," he often said.

During the dry California summers, Thiers turned his attention to recording the year's research and conducting fieldwork in other parts of the country.

During each field season in California, Thiers searched for new collecting areas and he returned to favorite sites as well. Two of his favorite sites stand out for their distinctive and plentiful mycota. Jackson State Forest is located approximately 240 miles north of San Francisco, just east of the coastal town of Mendocino. The forest, dominated by *Abies grandis*, *Lithocarpus densifolia*, *Pseudotsuga menziesii*, *Sequoia sempervirens* and *Tsuga heterophylla*, is typical for the north-central coastal areas of California. Thiers first visited the area in 1960, and he continued to collect there until 1989. Most notable were particular stops along Mendocino County roads 408 and 409 that he or his students dubbed "Amanita Avenue," "Aleuria Glen," "Suillus Park," "Cortinari Canyon," and at the junction of those roads, "Mushroom Corners." In a year of ample rainfall, Thiers usually would visit these sites 5–10 times between October and January. Under optimal conditions, a weekend trip could yield 50–100 different species of fleshy fungi. Jackson State Forest is the type locality for 17 species of fungi described by Thiers and his students.

The second collecting area is an entirely different habitat near Yuba Pass on California 49 in Sierra County, at an elevation of 7000 feet. The forest there is a mixture of *Abies magnifica*, *Pinus murrayana*, *P. monticola*, *P. jeffreyi*, *P. ponderosa*, *Populus tremuloides*, and at the highest points, *Tsuga mertensiana*. Thiers became acquainted with the area because it was near the Sierra Nevada Field Station (formerly known as Camp Leonard), the field campus of San Francisco State University. He first visited the site in 1961. The Yuba Pass region has two brief agaric seasons, one extending 2–4 weeks from late May to early June (as the snow melts) and the other from mid- to late September into early October (until snowfall). The spring mycota is rich with "snow bank" fungi (i.e., those that fruit exclusively in or adjacent to melting snow) and species that, although related to epigeous agarics, have become at least partially hypogeous and have lost the ability to forcibly discharge their spores. This phenomenon, suspected to be a response to unfavorable climatic conditions, has been described by Thiers as the "secotioid syndrome" and was the subject of his presidential address to the Mycological Society of America (Thiers 1984a).

The fall mycota at Yuba Pass is very different from the spring aspect, although it still is characterized by a large number of hypogeous fungi. Boletes, not a conspicuous part of the spring fungi at Yuba Pass, are diverse and abundant in the fall. The rich mixture of ectomycorrhizal associates, together with favorable

terrain (flat or gently sloping, with an open understory), are factors that make this site especially favorable for these fungi.

The continual monitoring of Mendocino and Sierra counties by Thiers and his students has made these sites living classrooms for students of mycology. Since the early 1980s, mycology courses at San Francisco State University and the University of California at Berkeley and at Davis have met for a late autumn field trip to Jackson State Forest as an introduction to the fleshy fungus mycota of northern California. In 1982, Thiers initiated a weeklong field course at the Sierra Nevada Field Station, which has provided an opportunity for mycologists from throughout North America, as well as students and amateurs, to experience this rich and distinctive mycota.

The training of students was one of Thiers' great joys. During his 30 years on the faculty of San Francisco State, he supervised 36 master's degree theses, all of which contributed in some way to the documentation of the cryptogamic flora of California. A festschrift compiled by Thiers' students was published to mark his retirement from teaching in January 1989. The volume (*Mycotaxon* 31:1–276. 1989) contains, in addition to research articles, reminiscences by his students who share their experiences with Thiers and give the flavor of his teaching methods. The volume also includes a list of master's degree theses and an index to the type specimens of fungi on deposit at San Francisco State University at the time.

All of Thiers' research and teaching activities have contributed to the enhancement of the herbarium that began with a few herbarium cases in his office in the early 1960s. His concern and dedication to that collection was evident when he took the type specimens home for protection during the student riots at San Francisco State in the mid-1960s. Although the development and maintenance of an herbarium is time consuming, and the space required is large, Thiers always had given this work priority. He believed that in a group of organisms as poorly documented in the scientific literature as the Agaricales, properly named and curated specimens were essential reference tools for teaching and research. Although fungi always have been the emphasis at the San Francisco State herbarium, Thiers actively collected other groups of terrestrial cryptogams as well. Together with his students, he built an herbarium that today consists of well over 100 000 specimens of fungi, lichens and bryophytes.

In 1978, Thiers embarked on the production of an agaric flora of California. The goal of this multi-authored, multivolume work was to include descriptions along with color illustrations of all taxa. The loose-

leaf format of the work was conceived in response to the peculiarities of the agaric life cycle. Many agarics do not produce basidiocarps on a regular basis, and thus photographs cannot be made at will. The loose-leaf format allows illustrations to be incorporated as they become available. Eleven volumes of the flora have been published by Mad River Press in Arcata, California.

Soon after the completion of his doctorate, the Boletaceae became Thiers' focus research group. In a conversation with Alex Smith, Thiers lamented that he had no group to call his own, while fellow classmates at Ann Arbor such as Howard Bigelow had *Clitocybe* and Orson Miller had the Gomphidiaceae; he wanted his own group. Smith suggested that he work on boletes because no one else was working with them in western North America. His first postdoctoral research project was a survey of the boletes of the Gulf Coast region of the United States, which resulted in a revision of the Strobilomycetaceae for the region (Thiers 1963). He later collaborated with Alex Smith on two major bolete projects: *A Contribution toward a Monograph of the North American species of Suillus* (Smith and Thiers 1964) and the monumental *Boletes of Michigan* (Smith and Thiers 1971). Thiers later brought together 15 years of his painstaking work on the boletes of California in his book, *California Mushrooms: A Field Guide to the Boletes* (Thiers 1975), which is out of print but available on the Internet. Of the 85 species included in the book, almost half were unknown to science before Thiers began collecting in California. Boletes have been the primary focus of most of his research outside California. In the mid 1970s, Thiers spent two summers collecting in the mountains of Arizona, New Mexico and Utah, which resulted in a review of the boletes of the southwestern United States (Thiers 1976b), and he spent sabbaticals in Europe (1973) and in Australia and New Zealand (1981) gathering comparative data on boletes.

The contributions that Harry D. Thiers has made to mycology have been well recognized by his colleagues. He was an invited participant to international symposia: *Evolution in the Higher Basidiomycetes* (Knoxville, Tennessee) and *Species Concepts in the Hymenomycetes* (Lausanne, Switzerland), where he presented his ideas on bolete evolution, classification and species concepts (Thiers 1971, 1976a). In 1982, the Mycological Society of America recognized his educational skills by awarding him the William H. Weston teaching award (1982) and his contributions to mycology with the Distinguished Mycologist award (1989). The collection that Thiers developed at San Francisco State was named The Harry D. Thiers Herbarium (1989) in his honor. After getting his final

contribution to the agaric flora of California well under control (*Russula*) (Thiers 1997, 2000), he and Ellen moved to Peoria, Illinois (Ellen's childhood home). While there, he served as a consultant to the U.S.D.A. Northern Regional Research Laboratory. From 1995 to 1998, Thiers made general collections of fungi in the central Midwest that were screened for biologically active compounds. This project resulted in the discovery of a new mycophilic species of *Penicillium*, *P. thiersii*, that produces two novel anti-insectan diterpenoids, thiersinines A and B, exhibiting potent activity against the fall armyworm (Li et al 2002). Until the very end of his life, Harry Thiers maintained his lively interest in the natural world around him, and in his many students and colleagues. He considered himself a most fortunate man because he was able to earn a living doing exactly what he enjoyed the most.

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