

Emory Guy Simmons 1920–2013

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Emory Simmons lived a long and productive life (FIGS. 1–4). He outlived many of his contemporaries, but he never lacked colleagues. He adopted younger generations, and the new mycologists embraced Emory because of his knowledge of fungi and just as likely for his good advice, humor and twinkling eye.

Early life.—Emory was born 12 April 1920, in Hillsboro, Fountain County, Indiana, the son of Floyd and Estel May McAlister Simmons, the middle child of three girls and two boys. He was very fond of Minnie, his maternal grandmother, called “Dolly” by everyone, who lived with the family. The family moved to Crawfordsville, Indiana, before Emory entered school to a home whose former location is now marked by second base of the Wabash College baseball field. Emory attended schools in Crawfordsville and graduated from Wabash College in 1941. During his days at Wabash he described gigs playing piano on Saturday nights in “juke joints where there were gangsters and fights”. Often he would play the organ for church services the following morning. Music was to remain important to him throughout his life.

Emory served in the Army (1942–1945) north Africa and Italy campaigns; he was one of the last members of the Mycological Society of America (MSA) to have been involved in World War II. Pvt. Emory Simmons was assigned to the 1st Motion Picture Unit of the Army Air Forces, Culver City, California, where he was trained to use a military-issue

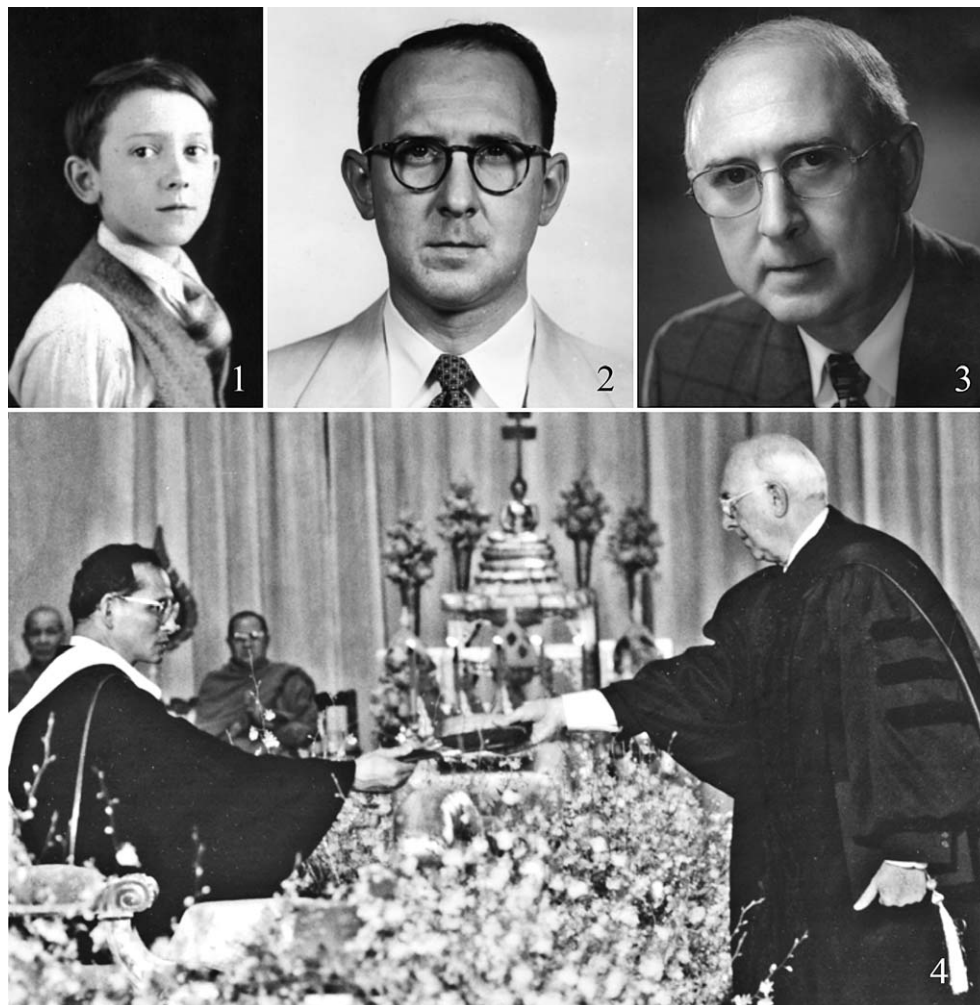
Speed Graphic, 4×5 format, probably a C-3, camera. He soon was promoted to staff sergeant and had several temporary promotions to technical sergeant. In Dec 1942 he was transferred to the 9th Combat Camera Unit XII ASAF AC and traveled abroad for the first time. As attested to by a certificate signed by the fictional Davy Jones, on his first trip Emory crossed the equator on “censored” date at “censored” longitude; the censored ship, later revealed as the “Mariposa,” crossed the equator as it headed to Rio de Janeiro for refueling on its way to the Mediterranean. He spent time in Cairo, where he recalled playing many games of bridge. As a photographer, he was sent to Palestine and Syria in late Apr 1943 and later to Bari, Italy. In early Feb 1944 Emory returned to Culver City where the 9th Combat Camera Unit received battle honors with a distinguished unit badge.

After the war Emory returned to Indiana where he attended DePauw University, Greencastle. He received a master of arts degree (1946) with a thesis, “A monographic study of the Indiana species of the stromatic Sphaeriales”. He acknowledged Truman G. Yuncker and Winona H. Welch of the Botany Department for “resources of information, advice and friendly encouragement made freely available” during his study; they perhaps were his major professors, although not stated. Emory spent the next four years at the University of Michigan where he worked on his doctorate, using cultural methods to study ascomycetes. Although his advisor, Louis E. Wehmeyer, did not encourage culture work, Emory wanted to determine the amount of variation within fungi grown on different media and to establish teleomorph-anamorph connections observed from single-ascospore cultures. After completing his degree at Michigan (1950) Emory moved to Hanover, New Hampshire, where he was an instructor at Dartmouth College (1950–1953) before moving to the Quartermaster Culture Collection.

The Quartermaster Collection.—When the United States became involved in war in tropical southeastern Asia, the Army learned how quickly cotton fabrics and other materials, including paper, plasticizers and optical and electrical equipment, were attacked by fungi. The Quartermaster Corps, the support branch of the Army responsible for procurement, storage and transport of large amounts of food, clothing, footwear and fuel, had problems with rot. Cultures from decaying materials were isolated for identification,

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FIGS. 1–4. Emory Simmons. 1. In 1929. 2. In 1960. 3. In 1971. 4. In 1988 Bhumibol Adulyadej, the king of Thailand known as Rama IX, awarded Emory an honorary doctorate from Kasetsart University. Photographers unknown; photographs found on Emory's computer.

mechanism of degradation and prevention of deterioration (Reese et al. 1950). Emory served as head of the Mycology Group and research microbiologist and director of the Army Quartermaster Culture Collection of Fungi (1953–1974), first at Philadelphia then, in 1954, as part of a new Quartermaster Research and Development Command at the Army Laboratories in Natick, Massachusetts. During this time and later at the University of Massachusetts he traveled extensively, providing instruction, consulting and training courses at regional collections and research centers.

When Emory joined the Quartermaster group in Philadelphia, there were about 14 000 “mold” cultures in the collection (Reese 1976). Of all the cultures the most famous strain remains to this day “QM 6a”. QM 6a was isolated from a tent on Bougainville Island in the Solomon Islands that was sent to W.H. Weston and W.L. White in 1944. Its many

derivatives and mutants continue to have biotechnological importance because they secrete large amounts of cellulase and hemicellulase enzymes that break down plant cell walls. New uses of the fungus continue to be developed. For many years QM 6a was misnamed until Emory conducted morphological and physiological comparisons concluding that the well known mold was an undescribed species. He named it *Trichoderma reesei* for Elwyn Reese and validly published it as an abstract for IMC 2 (Simmons 1977).

Emory had not heard of the secretary of the Army research fellowship until he received one for the 1968–1969 academic year. The fellowship gave him complete freedom to travel, and he chose Thailand but also visited Indonesia, India and England (Kew). When the Quartermaster Collection and its personnel suffered a reduction-in-force in 1974, Emory retired from the

government and moved to the University of Massachusetts, Amherst, where, supported by an Army grant, the culture collection was housed 1974–1977.

Happy days at the University of Massachusetts.—Emory once said that his 50s were the happiest years of his life (Carol Shearer pers comm 2013). During these years he had an exciting intellectual life surrounded by compatible mycological colleagues Margaret Barr Bigelow and Howard Bigelow and several mycological graduate students. In the first three years at Amherst with the title “professor of botany and staff administrator, and principal investigator, Army Culture Collection of Fungi (QM), Emory maintained the collection. Eventually the cultures were transferred to the Northern Regional Research Laboratory (NRRL) collection, Peoria, Illinois (1977), and a number of strains designated “QM” are still listed in the NRRL catalog. Unfortunately most of the cultures, particularly those layered with oil, did not survive. After 1977 Emory remained in Amherst working as professor of microbiology and staff administrator (1977–1982) and adjunct professor of botany (1983–1987). He held other adjunct appointments at the University of Rhode Island (1972–1980) and at Kasetsart University, Bangkok, Thailand (1984–1992).

Back home.—In 1987 Emory was appointed research associate at his alma mater, Wabash College. As described in his CV, he “engaged in continuing mycological research and publishing; in a moderate amount of consulting and service work in the USA; as a consulting resource for university graduate students in the USA and internationally on *Alternaria* and *Stemphylium* research programs; and with professional colleagues pursuing *Alternaria* programs on an international basis”. Also he provided “advice on master’s thesis and doctoral dissertation work for students at Cornell University, University of British Columbia and University of California at Davis. He maintained advisory and cooperative research activity with colleagues in Australia, Canada, Denmark, Iran, New Zealand, Norway, Russia and USA (USDA in Maryland and Washington states; university departments in Arizona, Idaho, Louisiana).”

In Crawfordsville Emory was given access to the Wabash library and assistance from the college computer technicians. He continued his studies on pleosporalean anamorphs, including “*Alternaria* themes and variations” (Nos. 54–335) and the six-pound book mentioned below. Emory continued to teach *Alternaria* workshops beyond the age of 90. At home Emory had a basement lab complete with a work area delimited by shelves filled with cloth-bound laboratory notebooks, books and drawers of his

extensive slide collection; his desk contained the computer from which he sent and received messages from around the world.

Few mycologists were aware of the depth of Emory’s interest in music. At 5 PM daily, Emory emerged from research and writing to have a drink and an hour on the piano before dinner. Piles of sheet music lay on the window seat behind his piano including Rachmaninoff, Chopin, Satie, Albeniz, Turina, with Bach on his piano at the time of his death. He drank Johnnie Walker Red blended whisky rather than long-aged single-malt Scotch. Another of Emory’s evening rituals was to have, not another whisky before bed, but ice cream. In later years many early evenings were spent in his comfortable chair with a backyard view, where he waited for his small herd of deer to appear.

Travel and books.—WWII gave Emory his first taste of travel, and he continued to travel the rest of his life. He taught training courses around the world, often sponsored by the United Nations Environment Program (UNEP) and the United Nations Organization for Education, Science and Culture (UNESCO). He was consulted on mycology and microbiology curriculum development and on research matters. He traveled and enjoyed visits worldwide including Brazil (1973), Mumbai (1976), Taipei (1985–1989), Lyngby (1995) and Caracas and Maracay (1999) and frequently the Netherlands during the latter part of his life. He retained friendships with mycologists in these places until his death. For example friends in Lyngby phoned him almost weekly in the last months of his life. He had many colleagues in Bangkok, and Thailand was a favorite place for Emory, one he revisited many times over almost 50 years. One of the things he especially enjoyed in Thailand, and for that matter throughout the world, was good food, some of which he cooked himself.

Twice Emory celebrated his 80th birthday with trips to China; the first included a boat trip on the Yangtzi River and second, when the trip he had originally wanted became available, included a train ride across China. In the fall of his 91st year he enjoyed a last trip with a cruise on the Danube. Emory was an avid reader, and perhaps his train trip across Asia was reminiscent of *Murder on the Orient Express* and other mysteries he read and traded with mycologists and their spouses, in a swap established by Cathy Pfister. She sent stories of Gianrico Carofiglio’s Italian antihero attorney set in Bari, Italy, a city Emory had visited during the war. Books on oriental rugs, history and world travel filled his shelves. He had old copies of Trollope and Kipling but used the Crawfordsville library extensively.

Publications.—Emory's first published scientific paper was 36 pages long (Simmons 1947), and 60 years later (Simmons 2007) his last major scientific work was a six-pound book, 775 pages long with 228 illustrations, all drawn by Emory. His first two papers, based on his masters' degree, were surveys of stromatic Sphaeriales, Xylariaceae (Simmons 1947) and Diatrypaceae (Simmons 1949) of Indiana based on collections. After those he observed asexual ascomycetes by culturing them. Emory wrote among other things of a need for "knowledge of the range and the mechanism of variation in both the ascus and the conidial stages and of the correlation of these two stages" (Simmons 1952). Very early he established single-ascospore cultures to confirm anamorph-teleomorph connections. He spent the rest of his life working on the variation of conidial states.

Although his major contribution was the discovery of species and their precise descriptions based on cultural studies of pleosporalean fungi, Emory also was concerned with classification of asexual fungi. His ideas on the theoretical basis for what we now speak of as phylogenetic classification were expressed in a paper (Simmons 1966) in which he distinguished between "taxonomy" as "a special sort of classification of organisms according to their natural relationships", as opposed to "classification" that might be so simple as to divide fungi based upon color, exemplified by the system of Saccardo. Emory said that the taxonomic theories available in 1966 had "foundations ... on quicksand" and cited pessimistic quotations on taxonomies (phylogenetic classifications) of nonfungal microorganisms. He discussed the merits of the Saccardo system of classification in providing a niche for every fungus but accepted and applied Hughes' system (Hughes 1953) as a morphological approach toward a phylogenetic classification of forms that previously had been separated artificially. Emory called for increased numbers of developmental observations and broader sampling of taxa in monographic studies (Simmons 1966). He mentioned that chemical characters would be useful, but sparse data prevented their use in evaluation of taxa. He suggested that the study and acquisition of characters for classification were the obligation of all who study fungi, including biochemists, geneticists, phytopathologists, medical clinicians and industrial microbiologists.

Early in his career Emory claimed pleosporalean anamorphs, particularly *Alternaria*, as his own by publishing extensively on the group. His claim was reaffirmed with the description of the genus *Nimbya* for anamorphs of *Macrospora* (Simmons 1989). Emory wrote, "Etym.: from the USA jargon acronym for 'not in my backyard', used when some action,

though recognized as useful or even necessary, is opposed in one's own neighborhood; knowledgeable systematists have pushed some anamorphs included here from genus to genus over the years, and finally into *Alternaria*, at which point my taxonomic reaction is 'nimby')." Recently Emory was concerned with the implementation of the move toward "one fungus, one name" and changes in the International Code of Nomenclature. Heavily conditioned by the fungi he studied, he foresaw difficulty in applying the one correct name within a reasonable time (see above Simmons 1952).

Meetings, elections and honors.—Emory faithfully attended meetings of both MSA and, after its inception, the International Mycological Association (IMA). Emory loved socializing with mycologists. At his last meeting, the 9th International Mycological Congress in Edinburgh (Aug 2010), he set himself up in the hotel where he could have decent food and enjoyed himself tremendously as he held court all day and had drinks with friends later in the day.

Emory's mycological colleagues elected and honored him on many occasions. He held all offices of MSA: president (1967–1968), vice president (1965–1966), secretary-treasurer (1962–1965) and councilor (1959–1961). He was vice president of IMA (1983–1990) and was named lifetime honorary president of IMA (IMA Fungus 2002). He served as officer, representative or committee member of many groups, including the Organization for Economic Cooperation and Development (OECD), Committee on Deterioration; OECD International Biodegradation Research Group, Committee on Taxonomy; IMA Subcommittee on Living Type Material, Nomenclature Committee; American Type Culture Collection, Advisory Committee on the Collection of Fungi; U.S. Federation for Culture Collections; World Federation for Culture Collections; and UNEP/UNESCO/ICRO Panel on Microbiology, Advisory Committee on Culture Collections. Fellow and council member of AAAS, honorary life member of MSA and the World Federation for Culture Collections, centennial fellow of the British Mycological Society (1996) were other titles held by Emory. One of his most cherished awards was an honorary doctorate (1988) from Kasetsart University, made special because it was received directly from Bhumibol Adulyadej, the king of Thailand known as Rama IX (FIG. 4).

Emory won the highest award of MSA, the distinguished mycologist award (1990) for his long service to the society. He was involved in early discussions about the establishment of the IMA, an organization whose time had come; and at the 1st International Mycological Congress at Exeter (1971)

approximately 750 participants from 45 countries approved the resolution to establish IMA, the slate of officers and the draft statutes. Emory had chaired the committee that produced the proposal. He played important roles as chairman of delegates at the Exeter Congress, chairman of the Executive Committee and president of the board at the 2nd Congress in Tampa, Florida (1974–1977) and chairman of the Resolutions Committee at the 3rd Congress at Tokyo, Japan (1983). Emory's contributions on behalf of IMA were recognized by his being named honorary president for life in 2002 and also by awarding him the Ainsworth Prize at IMC9 (2010) for “truly extraordinary service to world mycology”.

Finale.—On a Sunday afternoon Emory's niece wrote to say that her uncle was near death, but he was ready, unafraid and knew he was loved; he died the next evening on 3 June 2013. Emory Simmons was a great mycologist who transformed mycology in many ways, but more important he inspired the next generations of mycologists by his generosity and friendship.

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