

Curating the collections of José Cuatrecasas Arumí (1903-1996)

By Vicki A. Funk

A new project spearheaded by **Vicki Funk** has begun to make available in herbaria and through hard copy publication (and eventually documents on the web), the specimens, photographs and notebooks of José Cuatrecasas A. The goal of this specific sub-project is to curate 75 percent of the remaining specimens of the Cuatrecasas collections and to complete work on organizing the photographic slides. Cuatrecasas, a prolific collector and world renowned scientist, died in 1996 and although some progress has been made, three-fourths of his material remains to be processed. Many of the collections and slides of Cuatrecasas are central to ongoing research projects in Colombia and are greatly needed by researchers. Because of funding constraints this project must be done in stages.

The career of Cuatrecasas extends from his birth, 19 March 1903, in Campodrón (Gerona), Spain, through his studies in Barcelona and Madrid (1924-1931), graduate work in Berlin (1930-31) where he knew Adolph Engler, time at the Jardín Botánico de Madrid (1933-39), the years in Colombia (1939-47) and in Chicago (1947-1955) to his years in Washington at the Smithsonian Institution (1955-1996). In 1939 he was on a trip to South America and if he had not been warned about the Spanish Civil War, before returning to Spain, his botanical

career might have ended almost 60 years earlier. Cuatrecasas never returned to Spain until after the death of dictator Francisco Franco. Since the death of Cuatrecasas, the Herbario Nacional Colombiano (COL) in Bogotá, located at the Universidad Nacional de Colombia, has been named in his honor, and the library from his home has been reconstructed and is on display at the Institut Botànic de Barcelona (BC) in Spain.

Cuatrecasas' first publication was in 1924 and his last one is still in press. Over the years he published 265 papers most of them single authored. For 73 years he published something nearly every year, missing only 1939, 1974, and 1983; an incredible accomplishment. He was an author or coauthor of two subtribes and many genera of the Compositae. A quick check of Index Kewensis gives a list of 2,391 records with Cuatrecasas in the author field of which an astounding 1,307 are Compositae records. Few taxonomists can work in the family Compositae without making use of his work. At the time of the 1985 festschrift in his honor, Cuatrecasas was listed with B.L. Robinson, S.F. Blake, A.L. Cabrera, and H. Merxmüller, as individuals who had made truly constructive and insightful contributions to the study of the Compositae in the first three quarters of this century.

Cuatrecasas collected extensively and in areas that were difficult to reach. Over the years many new taxa have been

described based on his collections and many have been named after him, including eight genera in five families (*Cuatresia* A.T. Hunziker, Solanaceae; *Cuatrecasea* Dugand, Palmae; *Cuatrecasasiella* H. Robinson, *Cuatrecasanthus* H. Robinson, *Joseanthus* H. Robinson, and *Neocuatrecasia* R.M King & H. Robinson, all in the Asteraceae; *Cuatrecasiodendron* Standley & Steyermark, Rubiaceae; and *Quadricasaea* Woodson, Apocynaceae). A list of species honoring Cuatrecasas shows species in mosses, liverworts, ferns, and in 37 plant families. Tributes of this type will inevitably continue as the many collections by Cuatrecasas continue to be processed by the US National Herbarium and sent for study to specialists around the world. In addition, Cuatrecasas was an excellent photographer and his research files contain numerous photographs, (many on large format negatives that were printed on glass plates) dating from his field work in Colombia in the 1930s and 40s. Many of the Cuatrecasas photographs are priceless because they are from high elevation areas that have since been destroyed.

In August we were successful in obtaining funds for the first part of the project. The Collections Improvement committee headed by Carol Butler provided a grant to hire a researcher for four months to work on the photographs and Compositae specimens. The Department of Botany also provided supplemental funding from the Cuatrecasas Fund. Finding the right person to do the job might have been difficult but the Director of the National Museum of Natural History, **Cristián Samper**, came to the rescue and identified Mauricio Diazgranados C., Director Herbario, Investigador UNESIS, Departamento de Biología, Facultad de Ciencias, Pontificia Universidad Javeriana, Bogotá D.C., Colombia. Diazgranados turned out to be perfect: he is fluent in both Spanish and English, he knows Colombia and he is an expert in the Compositae. He arrived in October and has worked hard to complete much of the goals of the sub-project. **Linda Hollenberg**, **Carol Kelloff**, **Marjorie Knowles**, and **Harold Robinson** have



José Cuatrecasas (in Spain in 1923 , left, and at the Smithsonian in the 1970s).

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Cuatrecasas

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also helped with the project

As one might expect the work was more difficult and more interesting than we had anticipated. During the first phase of the project, Diazgranados worked on organizing the photographic archives. Photography was a passion of Cuatrecasas and during his life he took over 20,000 pictures, about 12,000 of which are here at the museum (the others are missing). These photographs, many taken in remote areas, have enormous potential for science and social commentary. In addition to taking photographs Cuatrecasas kept detailed notes as to where they were taken and who or what was in them. The photographic material housed at the museum has been placed in archival sleeves and notebooks. The journals have been copied onto archival paper and an overview of what is housed here at the museum has been prepared. Other funds were used to scan about 400 slides and we are exploring various ways to use them. Plans are also underway for other research projects. Additional slides and photographs have been found and are being incorporated into the folders. This phase is more or less finished. Several thousands of the large format negatives will eventually be scanned for digital

accessibility.

During Phase 2, Diazgranados has been working on the specimens. During his life Cuatrecasas collected over 40,000 plants and he received thousands more as gifts for determination. Diazgranados is trying to reduce the backlog of unprocessed material by identifying material and checking it against our current holdings. So far he has curated all unfiled specimens of the Espeletiinae (the group of particular interest to Cuatrecasas). In addition he has rounded up and processed nearly 1,200 unmounted specimens that were Compositae but not Espeletiinae. During this processing of material he found many mistakes as well as plants without labels or otherwise disorganized and he was able to straighten out most of these. The duplicates were segregated into groups to be sent to Museo Argentino de Ciencias Naturales Bernardino Rivadavia (Buenos Aires), Real Jardín Botánico (Madrid), Field Museum of Natural History (Chicago), New York Botanical Garden, Universidad de Los Andes (Merida, Venezuela), Universidad Nacional de Colombia (Bogota), and other herbaria, according a previous established flowchart. This activity is not finished yet but will be completed soon.

Diazgranados has only a few days of work left but he departs with the goals of

his sub-project completed. And there is more good news, Diazgranados is applying to graduate schools in the USA and he hopes to study the one genus, *Espeletiopsis* (Espeletiinae), that Cuatrecasas did not cover in his monograph. All in all it has been a pleasure working with Diazgranados and we hope he will be able to come back soon and continue to work on this most interesting group of plants.



Visitors

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Guido Mathieu, Ghent University, Belgium; *Peperomia* (11/3-11/17).

Tara Massad, World Wildlife Fund; restrictive range plant families (11/8-12/20).

Teresa Woods, Kansas State University; *Lespedeza* (Fabaceae) (11/15; 11/18).

Yolanda Herrera-Arrieta, Instituto Politécnico Nacional, Durango, Mexico; *Muhlenbergia* (Poaceae) (11/20-12/18).

Melissa Luckow, Cornell University; Leguminosae (11/21-11/26).

Gale Robertson, Independent researcher; volunteer interview (11/21).

Jamie Whitacre, Independent researcher; contractor interview (11/30).

Curry Keide, Maryland Department of Natural Resources; seagrasses (12/1).

Cindy Skema, Cornell University; *Dombeya* (Sterculiaceae) (12/12-12/16).

Steve Popovich, United States Department of Agriculture - Arapaho and Roosevelt National Forests, Fort Collins, Colorado; grass identification (12/13).

Michael Nee, New York Botanical Garden; Solanaceae (12/20-12/22).

Andrew Henderson, New York Botanical Garden; *Arecaceae* (12/27).



Mauricio Diazgranados C. in the US National Herbarium (photo by Marjorie Knowles)