Pius Font i Quer (1888–1964), the greatest Catalan botanist

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Summary. Pius Font i Quer (1888–1964) graduated in chemistry and pharmacy at the University of Barcelona. While studying for his doctorate at the University of Madrid, he entered to the Military Health Corps and became a military pharmacist, which allowed him to make expeditions throughout Spain and northern Africa. He carried out many botanical field studies at different areas of the Peninsula. During the Primo de Rivera dictatorship (1923–1930), Font i Quer, as a military pharmacist, was forced to choose a destination outside Barcelona. He decided to go to the Spanish protectorate in Morocco, where he stayed for four years. During his stay in Africa, he was able to explore the country's flora. With the proclamation of the Second Spanish Republic in April 14, 1931, Font i Quer was appointed professor of pharmaceutical botany at the recently created Autonomous University of Barcelona (1932). During the Spanish Civil War (1936–1939), he continued to work to safeguard Barcelona's botanical heritage. Three months after the end of the war, Font i Quer was arrested and was put in prison for a year and a half at Montjuïc Castle, with another six months in attenuated prison. Having lost all official positions in 1939, he started working at Editorial Labor. There, he wrote several relevant books: Geografía botánica de la Península Ibérica, 1953; Diccionario de botánica, 1953; Botánica, 1956; Botánica pintoresca, 1960 (partially translated into English); Plantas medicinales, 1962. In the last years of his life, Font i Quer had begun to think about collaborating on a new treatise on the flora of Catalonia. He died on January 3, 1964. Pius Font i Quer has left a legacy of more than 200 published works, the description of more than 200 new taxa, and the creation of the Catalan school of botany, which he raised to an international level. [Contrib Sci 11(1):121-124 (2015)]

Born in Lleida, Catalonia, on April 9, 1888, Pius Font i Quer (Fig. 1) was the only son of Manuel Font i Balué, a pharmacist, and Sofia Quer i Roca, a school teacher. When he was four, the family moved to Manresa, capital of the Bages district, in central Catalonia, where he soon discovered a passion for nature and joined the Centro Excursionista del Bages [4]. As a

young adult, Font i Quer studied chemistry at the University of Barcelona, graduating with honors. While attending classes given by the pharmacist and botanist Manuel Llenas (?–1937), at the Institució Catalana d'Història Natural, he discovered his vocation for botany. He then began to study pharmacy at the University of Barcelona, the only university degree with

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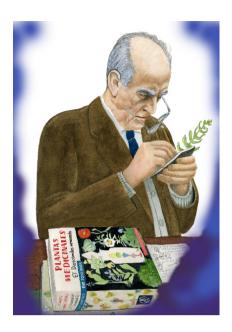


Fig. 1. In the book *Plantas medicinales*, Pius Font i Quer describes the characteristics of many medicinal plants, and the active principles to which curative effectiveness is attributed. (Illustration by Carlos Puche, in the journal *Mètode*, University of Valencia [6])

botanical training at the time. Font i Quer completed this second degree in two years (1908–1910), instead of four, again with honors. Another inspiration for Font i Quer was botanist Joan Cadevall i Diars (1846–1921), to whom he would report his findings about the flora of the Bages countryside. Cadevall impressed upon him the need for providing evidence for his explanations and as a result, scientific rigor was a constant in Font i Quer subsequent works [1,2]. While studying for his doctorate at the University of Madrid (at that time, the only Spanish university where doctorates were given), he took the test to enter to the Military Health Corps and became a military pharmacist, which allowed him to make expeditions throughout Spain and northern Africa. He defended his thesis *Ensayo fitotopográfico de Bages* in May of 1914, with honors.

The early years

By 1917, Font i Quer was assistant naturalist at the Natural Sciences Museum of Barcelona and in 1921 he was promoted to the position of director. Meanwhile, he carried out a considerable number of botanical field studies throughout Catalonia, the Aragonese Pyrenees, and the Balearic Islands, part of Valencia, Murcia, Mallorca, Navarra and Central Aragon. This research resulted in around fifty

published works.

From 1917 to 1922 he was assistant professor at the Faculty of Pharmacy of the University of Barcelona. Rather than traditionally structured lectures, Font i Quer's classes were organized to observe nature. Whenever possible, he led student trips to study different vegetation. In 1922, Font i Quer applied for the newly vacant position of Botany Chair at the Faculty of Pharmacy but it was awarded to a less-qualified candidate. Years later, the botanical community would recognize the injustice of this oversight, but at the time, it resulted in his departure from the University of Barcelona.

Meanwhile, in 1919, he married Emilia Civit, and they had two sons and three daughters. During the Primo de Rivera dictatorship (1923–1930), Font i Quer, as a military pharmacist, was forced to choose a destination outside Barcelona. He decided to go to the recently 'pacified' Spanish protectorate in Morocco, where he stayed for four years [5]. During his sojourn in Africa, he was able to explore the country's flora, which was rather unknown at the time (Fig. 2). In 1930, he returned to his position as director of the Natural Sciences Museum of Barcelona and began a new stage as organizer and guide of naturalist research in Catalonia.

During this time, Font i Quer ensured that the Museum acquired the collections of plants, books, journals and material necessary for optimum efficiency and quality. In 1928 he founded the international botanical journal *Cavanillesia, Rerum Botanicum Acta*, which he wrote and published on his own, without any financial support until 1938. Named in honor of the famous Valencian botanist Antonio José de Cavanilles (1745–1804), the journal specialized in the flora and vegetation of southern Europe and northern Africa.

With the proclamation of the Second Spanish Republic (April 14, 1931), Font i Quer was appointed professor of pharmaceutical botany at the recently created Autonomous University of Barcelona, 1932. In 1935 the Botanical Institute was founded, with Font i Quer as director. The Botanical Institute became the main center of Catalan botanical research.

The Spanish Civil War and the dark time of sorrow

In the summer of 1936, a Botanical Society's seminar (summer course) was organized. One objective of this course was to bridge the time difference between the academic year and the time of flowering, in order to study the vegetation in the



Fig. 2. Pius Font i Quer in 1932 with other scientists, probably in the camp of Hauta-el-Kasdir, Morocco, at 1750 m altitude. From left to right: Sr. Ferrer (entomologist), Jaume Àngel (plant recollector), Font i Quer and Joan-Bautista Aguilar-Amat (lepidopterologist). (Courtesy of the Institut Botànic de Barcelona, CSIC-Ajuntament de Barcelona.)

mountains and in the appropriate season [2,3]. When civil war broke out in 18 July 1936, Font i Quer was doing fieldwork with students and assistants in Orihuela del Tremedal, Aragon. He continued working with his students, while keeping informed of the political situation. By September, he realized that the conflict would be long and that the students should return home. While attempting to return the students to Barcelona, Font i Quer apparently was at the wrong place at the wrong time, and he ended up close to the front line on the Republican side. This would lead him to prison after the war was finished. However, during the war, Font Quer continued to work tirelessly to safeguard Barcelona's botanical heritage. He was aware of the precarious situation the Botanical Institute was in. The Institute was housed in the Natural Sciences Museum building in Parc de la Ciutadella, which was exposed to the bombing by the facist Italian aircraft. So, he temporarily hid all valuable materials in a house in the Sant Gervasi district, in a neighbourhood unlikely to be affected by the bombs. Botanical research was continued there despite the atmosphere of war and potential destruction of the work done.

Three months after the end of the war, Font i Quer was arrested and sentenced to eight years of prison for "aiding the rebellion", due to his so-called "irregular" return with his students from Aragon to Barcelona. The fact that he was a military pharmacist during the Second Republic and possibly his insistence in writing articles in Catalan were also used as

proof against him. All told, Font i Quer was in prison a year and a half at Montjuïc Castle, an 18th century military fortress on the top of Montjuïc hill that served as a prison. Afterwards, he spent another six months in attenuated prison, where he was allowed out daily to go to work. In 1942 he was appointed a member of the Institut d'Estudis Catalans, then a clandestine organization, maintained by Josep Puig i Cadafalch. Botanists were included in the Institució Catalana d'Història Natural.

The long time of forced silence

Having lost all official positions in 1939, he started to work at Editorial Labor, a Barcelona publishing house. The managers of the publishing house suggested he should address his work to a more generalized public, resulting in the scientifically rigorous and relevant works: *Geografía botánica de la Península Ibérica*, 1953; *Diccionario de botánica*, 1953; *Botánica*, 1956; *Botánica pintoresca*, 1960 (partially translated into English); *Plantas medicinales. El Dioscórides renovado*, 1962 [6] (Fig. 3).

All these works were written in Spanish, at the time the only language permitted. The *Diccionario de botánica* made the largest impact on the scientfic community. While working at Editorial Labor, Font i Quer found that the quality of the Spanish language for botany and in general for science was very irregular and in most cases totally inadequate.



Fig. 3. Three of the books by Pius Font i Quer: *Iniciació a la botànica* (Biblioteca del Pagès, 1938). *Diccionario de botánica* (Editorial Labor, 1953). *Plantas medicinales. El Dioscórides renovado* (Editorial Labor, 1962).

This forced him to seek expert linguistic co-operation, particularly in scientific terminology, from others, including several members of the Institut d'Estudis Catalans Catalan Studies. He soon realized that the solutions to the Spanish language problems would also be useful for Catalan, since, in many cases, the terminology was the same. Font i Quer's terminology, although not considered 'mandatory', has been used for 50 years by the Institut d'Estudis Catalans to publish a large number of scientific works on botany, medical sciences, etc.

In the last years of his life, Font i Quer had begun to think about collaborating on a new treatise on the flora of Catalonia in conjunction with the Institut d'Estudis Catalans. But this was not to be, because on 3 January 1964 Font i Quer suddenly died.

Pius Font i Quer dedicated his life fully to science and to his country. He contributed to research and scientific dissemination, and he played a major role as promoter and manager of the most relevant research center of Catalan botany, the Botanical Institute of Barcelona. This Institute, in its day, was comparable to the most advanced centers in the world—a place for research, documentation and training geared to young researchers. Moreover, Font i Quer set up important projects in botany (flora, taxonomy, phytogeography, etc.); opened new lines on areas that remained unstudied, including mycology and phytosociology; and inspired many young naturalists that would later become noted scientists, including Ramon Margalef, Pere Montserrat

and Oriol de Bolòs. In addition to the Botanical Institute of Barcelona, Font i Quer founded the Botanical Garden of Barcelona. He has left a legacy of more than two hundred published works, the description of more than two hundred new taxa, and the creation of the Catalan school of botany, which he raised to an international level.

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