

Carlos Spegazzini: *Icones Cactacearum*
Photo album and photographs of Cactaceae from Dr. Carlos Spegazzini
in the Herbarium of the Museum of Pharmacobotany “Juan A. Domínguez”
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Resumen

The personal photo album of Cactaceae compiled by Carlos Spegazzini *circa* 1925 – *Icones Cactacearum* – and other Cacti photographs are presented for the first time in semi-facsimile edition, together with other Cactaceae photographs lodged in the Herbarium file of the Museum “Juan A. Domínguez” (BAF). The collection comprises a total of 350 pictures from several authors, including Spegazzini.

Carlos Luis Spegazzini. Biography

Carlos Luis Spegazzini was born in Bairo, Piemonte, Italy, on April 20th, 1858. He began his education in Venice and completed his studies in the School of Viticulture and Enology in Conegliano. He was a disciple of the mycologist Pedro Andrés Saccardo. Spegazzini arrived in Argentina in 1879; started working with the botanist and pharmacist Domingo Parodi, who was then Vice-Dean of the University of Buenos Aires and Professor of Botany. Through Parodi, Spegazzini was hired to work in the Cabinet of Natural History of the Faculty of Physical-Natural Sciences in 1880. The following year he entered the office of Municipal Chemistry, recently created, which was in charge of Dr. Pedro Arata.

Spegazzini started there a mycological-botanical scientific work that did not cease until his death. His legacy were hundreds of botanical publications and explorations of flora and fauna collection in all the Argentinian territory (Katinas and col., 2000),

He took several academic university positions, as well as being a public officer of the Ministry of

Agriculture. In 1882, he took part in the Commission of the Foundation of La Plata City, where he settled in 1884 with his wife María de la Cruz Rodríguez and their children.

Carlos Spegazzini died on July 1st, 1926. He left almost all his possessions and his house to the Museum of La Plata so that a Botanical Institute could be set there. On July 26th, 1930 the Museum “Carlos Spegazzini” was opened, dependent on the Museum of La Plata.

He is considered to be the father of the Argentinian mycology, even though his contributions extend into the whole branches of Botany (Molfino, 1926; 1951).

Introduction

Within the vascular plants, Cactaceae were his favorite, he grew them in his own yard. It is said that he didn't use to make herbarium samples with the

plants, unfortunately, but he did photograph them even though this is contradictory to what he himself stated in the prologue of his last cactological publication (Spegazzini, 1925). The truth is that standard samples of numerous new species he described have not been preserved, have not existed, or perhaps some of them have not been identified unequivocally among the samples he herborized.

Spegazzini donated the private collection of cactus to the Zoological Garden of La Plata in 1926, but it was completely lost over the years. Carlos Merelli (1926), who was the Director of the Zoological Garden of La Plata, published a complete list of that collection – made and revised by Spegazzini. Furthermore, a facsimile reproduction was published by Kiesling (1984).

The photographic collection in glass negatives that remained in the Spegazzini Institute since 1926, together with the Herbarium of Superior Plants was incorporated much later, in 1966, to the Museum of La Plata (LP) (Katinas and col., 2004; Kiesling 1984), while another group of copies of those negatives and unpublished photographs in paper, belong to the collection of Dr. Roberto Kiesling.

There is a last collection in paper that is presented here: the personal photo album of Cactaceae from Dr. Carlos Spegazzini in the Herbarium of the Museum of Pharmacobotany “Juan A. Domínguez” (BAF), Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Buenos Aires, Argentina.

The publishing of the personal photo album of Cactaceae from Dr. Carlos Spegazzini aims to disclose and make available to the general public, the personal photographic material of Cactaceae, which so far, has been practically unknown. This is why it has not been mentioned by biographers or investigators that have devoted themselves to the documentation or revision of the Cactaceae species described by Spegazzini (Kiesling, 1984; Katinas and col., 2000; 2004).

Precisely, the novelty of this presentation is that it is a “personal album”, made by Carlos Spegazzini and labeled by himself as *Icones Cactacearum*. It is probable that it has been used as an “aide memoire”, “photographic herbarium”, or “personal catalogue” of Cactaceae. Many of these photographs had already been presented in previous botanical works, but determinations, notes, corrections, and erasures about them belong to the private area.

Material analysis

The album consists of a book of 20 x 24 cm blank pages, over which Cactaceae photographs were stuck in alphabetical order according to the Britton and Rose (1919-1923) classification. It contains 148 pages (covers and 31 in blank, no published here) with 321 photographs with notes on the front and on the back. Neither the photographs nor the pages were originally numbered. Many of those notes on the back still remain with determinations made by Spegazzini for his work *Cactacearum Platensium Tentamen* of 1905, while the last classification, corresponding to the updated determinations with the work of Britton and Rose, was transcribed on the front.

Finally, two other groups of photographs are included that remained loose next to the album. One group corresponds to 11 photographs and 1 drawing of copies of the manuscript of *Nuevas Notas Cactológicas*, in thinner photographic paper, that carry the numbering Spegazzini used for the species of that publication, 10 of them are in the album in original format. Another group are 17 photographs of unknown author, some of them dated from 1926 and others, that might have corresponded to the album but they were detached. These two groups have been organized and put in binders and they are published as appendixes to the album (p.149).

The presentation method of this publication is semi-facsimile. Pages have been scanned with 300ppp resolution in an Epson XP-211 scanner. Photographs remain stuck to the album in alphabetical order, as Spegazzini left them, according to their specific name (sometimes incorrect) which appears written on the front (F) and on the back (B) of the picture. Detailed work of revision of names exceeds the proposed objective, which is the presentation of the album as was compiled by Spegazzini. A second part of this work, which is completed with a detailed and commented list of the photographs and their names, may be consulted in digital format (Font, 2016-2017).

Discussion

Responding to the work of Britton and Rose, finished in four volumes in 1923, Spegazzini published two works of corrections and updated nomenclatures,

Breves Notas Cactológicas in 1923 and *Nuevas Notas Cactológicas* in 1925, after 18 years without publishing any news about Cactaceae.

As clearly stated by Spegazzini in his prologue of 1925 – written in August, 1924 – after the regulation of the cactological material of his Herbarium, on finding numerous new species and critical have made Spegazzini deal with them and renew the nomenclature according to the last case study about the family. It is probably in this sense that Spegazzini, using his complete collection of photographs, from the ones taken in the late XIX century, compiled his album during 1924-1925. Many of the oldest photographs carry on the back, the small print and nomenclature that Spegazzini used (1905) in the collection of his first works. These photographs were cut so that they could be stuck in the album, thus many of the oldest notes and old determinations on the back have been lost as a result of this cut.

It is highly probable that the incorporation of the album of Cactaceae and other documents of Spegazzini to the Museum of Pharmacobotany has been made by his son-in-law, José Fortunato Molfino (1892-1965), married to the eldest daughter of Spegazzini in the 1920s. It was Molfino who received the inheritance of the goods and collections of Spegazzini and who incorporated to the Museum of Pharmacobotany the first collections of plants made in his beginnings as botanical collector for the Faculty of Physical-Natural Sciences, in the surroundings of Buenos Aires City in 1880, which is today a completely urbanized area (Molfino, 1929: 19).

José F. Molfino held important positions in the botanical and pharmacological areas since 1917 in the most important Institutes and National Universities of Buenos Aires, until his last position as Professor of Botany in Pharmacy and Biochemistry between 1956-1961, and Director of the Museum of Pharmacobotany and curator of the Herbarium [BAF].

Most of the photographs belong to Dr. Spegazzini, many of them were collaborations of Dr. Spegazzini to the American Dr. Joseph Nelson Rose (1862-1928), botanist of the Smithsonian, in his campaign trip around South America between 1915 and 1918 and were published in the extensive work “*The Cactaceae. Descriptions and illustrations of plants of the Cactus Family*” in four volumes between 1919 and 1923, in co-authorship with Dr. Nathaniel Lord Britton (1857-1934), American botanical eminence of those times, Director of the Botanical Garden of

New York. In this work, 46 photographs of Spegazzini were published, 10 of which have not been found in BAF.

Some of these photographs were taken and sent to Spegazzini by the Hispanic-Uruguayan botanist José Arechavaleta (1838-1912), pharmacist, naturalist, pioneer in the Natural Sciences of Uruguay, who published in the *Flora Uruguaya* of 1902, where Spegazzini was author of a few species of Cactaceae. It also includes photographs of his personal friend, Dr. Carlos Bruch (1869-1943), pioneer of Argentinian entomology, although he was really a photographer, photo typist, recorder and printer; together with his father they were directors of the printing press of the Museum of La Plata and they were the ones who printed the first samples of *Revista del Museo de La Plata* and *Anales del Museo de La Plata* with their corresponding engravings. Their photographs were used in almost all the areas of Natural Sciences that took place in the Museum of La Plata (Lanteri and Martínez, 2012).

There is also a series of photographs that belong to a photographic catalogue of Cactaceae of the collection of A.H. Franck (Albert Harry Franck from Frankfurt, deceased on August, 15th, 1906), an active amateur collector of the German Society of Cacti Growers (*Deutschen Kakteen-Gesellschaft*), whose photographs illustrate many articles in several German publications about succulent plants, such as the one directed by Karl Schumann (*Monatsschrift für Kakteenkunde*), on which Spegazzini updated the nomenclature overwriting them in reference to the pages of the work of Britton and Rose.

There were 165 photographs taken by Spegazzini himself or possibly by Carlos Bruch, 18 sent by Arechavaleta, some used for *Flora Uruguaya*, 138 are from the German collector Albert Harry Franck, and 29 of the appendixes, which make a total of 350 compiled photographs.

A first edition of Spegazzini's photographs that remain unpublished was made by Dr. Roberto Kiesling, based on the collection of photographs set in the Division of Vascular Plants of the Museum of La Plata, with nomenclature purposes in the appendix of his compiling work, in facsimile edition, of all the works or references about Cactaceae published by Dr. Carlos Spegazzini (Kiesling, 1984). Other unpublished photographs belonging to his private collection of glass negative copies in La Plata were published by the same author (Kiesling, 1998 and 1999).

A second group of unpublished photographs of Cactaceae from Spegazzini was published by Katinas and col. (2004), in the third series of works about the standard material from Carlos Spegazzini deposited in the Herbarium of the Museum of La Plata.

In the two previous publications (Kiesling, 1984 and Katinas and col., 2004) photographs that could represent or represent original standard material of the names published by Spegazzini were considered, most of them restricted to Argentinian flora. In this publication, all the photographs found in BAF have been included, both of native species and exotic or cultivated. Therefore, it is possible that there are copies of these last ones in La Plata that were not considered. In the three collections (BAF, LP, and Kiesel.) there are repetitions, although the legends that they present are variable, both in their writing and in their authorship.

Spegazzini has published in broad sense (new names, infraspecific, and new combinations) around 133 names of Cactaceae, from which 78 are in the labels of the photographs in BAF.

Compilation

In addendum in page 17 is presented the compilation that contains the alphabetical list of names of species just as they appear quoted in the album, even with the old nomenclature. Pages of the album had not been numbered originally; the first page started with the first photo. Pages and photographs were numbered for this publication. In the Addendum the numbers in italics indicate the paging in the Appendices which are correlative with the numbering of the album.

In the tables, the specific names in Franck's photographs are presented in italics, Spegazzini intervened on the photographs of Franck overwriting them; in this work it was considered that the partial intervention of Spegazzini on the Franck's labels were likely names accepted by Spegazzini using another generic combination and therefore are thus included to facilitate its location in the index and table.

In this compilation the sign (*) has been used to stress the pictures without name and determined for this publication. Numbers of the pages of the names included in the appendixes that do not belong to the album are indicated in italics. Some of the names that appear in the presentation are located on the back

of the photographs (B), detailed and commented information about each photograph can be consulted online (Font, 2016-2017).

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