

## TYPE MATERIAL OF CARLOS L. SPEGAZZINI IN THE MUSEO DE LA PLATA HERBARIUM (LP), ARGENTINA. III: CACTACEAE

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**ABSTRACT:** Katinas, L., Gutiérrez, D. G. & Torres Robles, S. S. 2004. Type material of Carlos L. Spegazzini in the Museo de La Plata Herbarium (LP), Argentina. III. Cactaceae. *Darwiniana* 42(1-4): 177-200.

A catalogue of the Cactaceae type material of Carlos Luis Spegazzini (1858-1926) deposited in the Herbarium of Museo de La Plata (LP), Argentina, is presented. Spegazzini's collection of vascular plant types includes ca. 700 specimens. This analysis revealed 93 type specimens and photographs of the specimens of the family Cactaceae, 70 of which are deposited in LP. This article includes a list of original names arranged alphabetically, the current names with authors, the original citation or protologue, the exsiccatae followed by the type category, the photographs of the specimens taken by Spegazzini, and all significant observations. In addition, some photographs of living specimens taken by Spegazzini and a list of specimens not found in LP were also included.

**Key words:** C. L. Spegazzini, Types, Cactaceae, Herbarium LP, Argentina.

**RESUMEN:** Katinas, L., Gutiérrez, D. G. & Torres Robles, S. S. 2004. Material Tipo de Carlos L. Spegazzini en el Herbario del Museo de La Plata (LP), Argentina. III. Cactaceae. *Darwiniana* 42(1-4): 177-200.

Se presenta un catálogo del material tipo de Cactaceae de Carlos Luis Spegazzini (1858-1926) depositado en el Herbario del Museo de La Plata (LP), Argentina. La colección de tipos de plantas vasculares de Spegazzini alcanza ca. 700 especímenes. El análisis de la familia Cactaceae dio como resultado 93 especímenes y/o fotografías, de los cuales 70 se hallan depositados en LP. El tratamiento incluye una lista de los nombres originales ordenados alfabéticamente, los nombres actuales con autores, la cita original o protólogo, la exsiccata seguida por la categoría del tipo, las fotografías tomadas por Spegazzini, y observaciones consideradas relevantes. Además, se proporcionan algunas fotografías de especímenes vivos tomadas por Spegazzini y una lista de los especímenes que no se encontraron en LP.

**Palabras clave:** C. L. Spegazzini, Tipos, Cactaceae, Herbario LP, Argentina.

### INTRODUCTION

This is the third work of a series of taxonomic papers (Katinas et al., 2001; Gutiérrez et al., 2002) dealing with the vascular plant specimens of Carlos Luis Spegazzini (1858-1926) deposited in the Herbarium of Museo de La Plata, Argentina (LP).

Some time near 1966, the personal herbarium of vascular plants of Spegazzini (LPS; Holmgren et al., 1990), constituted by an unknown number of non-type specimens and ca. 700 type specimens, was

transferred from LPS to LP. Other specimens of Spegazzini are currently found in BA, BAF, BAB, and CORD in Argentina and in herbaria of Europe and the United States (Katinas et al., 2000).

Carlos Spegazzini had a special predilection for the cacti family. The herbarium LP conserves his notebook written in Italian with descriptions of many genera, and keys to the genera and species. The documentation on cacti of Spegazzini is constituted by: (a) herbarium specimens; (b) living specimens; (c) photographs; and (d) drawings.

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When compared with other plant families, his herbarium collection of type specimens of Cactaceae is rather incomplete since most of the Spegazzini's type sheets are missing. According to Castellanos and Lelong (1940) the types of the majority of Spegazzini's species are not preserved because he generally made his notes on the spot or from the plants cultivated at home from flowering spots without labels.

The living specimens in Spegazzini's residence amounted to approximately 125 different species (Spegazzini, 1900). Shortly before his death in 1926 Spegazzini donated his collection of live cacti to the Zoological Garden of La Plata. Later, the director of the Zoo at that time, Carlos Marelli, gave some "types" and other of these living specimens to the Museum of Natural Sciences of Buenos Aires (herbarium BA). Currently, there is no certainty if some of the cacti still growing at the Zoo belong to those specimens donated by Spegazzini. In addition, the botanist Cristóbal Hicken and Spegazzini himself donated several living specimens to the cacti specialist J. N. Rose during his visit to Argentina in 1915 (cfr. Britton & Rose, 1919: 5; Molino, 1929; Castellanos & Lelong, 1940) without conserving duplicates of this material in Argentina. In this way, many specimens possibly representing type material were lost.

Fortunately, Spegazzini used to photograph most of the living specimens cultivated at home. The collection of photographs and most of their negatives represented by glass plates, are deposited in the herbarium LP, as part of the donation of 1966. The negatives constitute an important register because Spegazzini generally annotated on the glass the name of the species, the locality, if it was a type, etc. As mentioned above, most photographs lack their corresponding voucher herbarium material, which were not found. Therefore, in many cases these photographs are probably the only original existing documentation of a given taxon and could be considered or selected as types. When there exists no evidence making clear that a photograph was taken after valid publication of the name, it would qualify as "original material" under the Code in Art. 9, Notes 1 and 2 of the International Code of Botany (Greuter et al., 2000). On the other hand, even when the photograph was taken afterwards, it could be more

authentic than any other material and can at least help in the interpretation of a name (Leuenberger, pers. comm.).

Finally, a collection of drawings made by Spegazzini of different cacti is deposited in Museo de Botánica Juan A. Domínguez in Buenos Aires (herbarium BAF) (G. Giberti, pers. comm.).

Two works were used as main references in this contribution. The first one is represented by the four volumes of *The Cactaceae*, published by Britton and Rose (1919, 1920, 1922, 1923) which were fundamental for comparing the photographs and negatives in LP with those published by Britton and Rose. Many photographs found in the four volumes were taken by Spegazzini and correspond to his type specimens. Generally, Spegazzini sent duplicates of the photographs to Britton and Rose so most of the original photographs are deposited in LP. The second reference work is that of Roberto Kiesling (1984a), an Argentine botanist specialist in Cactaceae, who published a compilation of all publications of Spegazzini on this family. In his work Kiesling also analyzed the descriptions and the nomenclature, published some of Spegazzini's photographs, analyzed the type specimens, and designated types. Our contribution updates and completes Kiesling's (1984a) work in a catalogue format, emphasizing the analysis of all material deposited in LP. We did not designate types (e.g., lectotypes, neotypes), leaving these decisions to the specialists.

The analysis of the Index Kewensis (Hooker & Jackson 1893-1895, and supplements), Gray Card Index Database (<http://www.herbario.harvard.edu/Data/Gray/gray.html>), International Plant Names Index (IPNI, <http://www.ipni.org/>), and all available Spegazzini's work on Cactaceae leads to 70 cacti specimens and/ or photographs (original or probable original material) deposited in LP, and 23 that are not deposited in LP. Thus, LP contains more than 75 % of the original material of Cactaceae. Spegazzini also described four genera of Cactaceae: *Aylostera* Speg., *Brittonrosea* Speg., *Maihueniopsis* Speg., and *Parodia* Speg.

This article includes a list of the original names arranged alphabetically, the current names with authors, the original citation or protologue, exsiccatae of specimens followed by the type category, a list of photographs, and observations.

*Original name.* Original names of taxa appear in boldface type with the citation of the author's name. The list of names of species and infraspecific taxa of Spegazzini follows "The International Plant Names Index" (IPNI; <http://www.ipni.org/>) and all other appropriate literature, e.g., that of Spegazzini where new taxa are described. The name is followed by the literature containing the original description.

*Current names.* Current names of taxa appear in italics, following mainly Zuloaga & Morrone (1999); otherwise literature is cited between brackets. When the current name is the same as the original name, this item is omitted.

*Protologue.* Collection data of collector, number, dates and locality included in the original description are transcribed.

*Exsiccata.* Label transcription of each type specimen is given, including: country, province, area or locality, month, season and/or year, collector's name and number, LP and/or LPS numbers. The country and political province of collection, and the collector was added by us when the label lacked that data. The quoted label text indicates that it was written by Spegazzini except when indicated otherwise. Labels attached to the specimens by further authors are only cited when relevant for the analysis. For these cases with more than one sheet (e.g., duplicates, syntypes) they were cited separately with different letters, i.e., (a), (b), (c). The exsiccatae are followed by the indication of the nomenclatural type (holotype, lectotype, syntype, etc.). When this designation is annotated on the sheet or cited in the literature by another author (e.g., R. Kiesling), this is also indicated. If there is no complete certainty that the specimen is a type (e.g., data not found in the literature), the material is only cited as "original" or "probable original" material. For these cases with incomplete labels, data concerning the collector, and place and date of collection were extracted from Katinas et al. (2000) to help to determine if it was a type specimen. The characteristics of the specimen (sem, rad, corp, fl, fr, ic) are cited (see in abbreviations). When there is not a reference about the location of the specimen, this item is omitted.

*Photographs.* The photographs of types or probable type specimens taken by Spegazzini and deposited in LP and/or published in the literature are included. For those cases where there were more than one photograph, they are cited separately with different letters, i. e., (a), (b), (c). The annotations made by Spegazzini on the glass negatives are transcribed in quotation marks; it is also indicated when the annotation is not by Spegazzini. The photographs published in this work are those which have not been published elsewhere. In some cases the data of the photographs of LP did not coincide exactly with the data of the same photograph published by Kiesling (1984a) (e.g., more data in one of the sources). This is probably due to the processing of the photographs. When there are no photographs, the item is omitted.

*Observations.* All observations considered interesting or relevant are given.

A list of specimens that are not deposited in LP is included.

#### *Notes, abbreviations, and acronyms*

aest. = aestivus (Latin), summer.  
adumbr., adumbrat. = adumbratio (Latin), sketch, outline.  
C. A. = Carlos Ameghino, a collector.  
corp = corpus (Latin), body.  
C. S. = Carlos Spegazzini.  
comm. = communicavit (Latin), he communicated.  
dec. = december (Latin), December.  
dpto. = departamento (Spanish), department.  
feb., febr. = februarius (Latin), February.  
fl = flos (Latin), flower.  
flor. = florecido (Spanish), flowering.  
fm. = forma (Latin), form.  
fr = fructus (Latin), fruit.  
hab. = habitat (Latin), it inhabits.  
hom. illeg. = homonimum illegitimum (Latin), illegitimate homonym.  
ic = icon (Latin), illustration.  
ined. = ineditus (Latin), unpublished.  
in litt. = in litteris (Latin), in correspondence.  
jan. = januarius (Latin), January.  
leg., lg., lgt. = legit (Latin), collector.  
n., n°, N. = número (Spanish), number.  
N. I. = Nicolás Illfín, a collector.  
nom. inval. = nomen invalidum (Latin), invalid name.  
nom. nov. = nomen novum (Latin), new name.

nom. nud. = nomen nudum (Latin), name unaccompanied by a description or reference to a published description.

nov. = november (Latin), November.

n. sp., n. spec. = nova species (Latin), new species.

prov. = provincia (Spanish), province, the political divisions of Argentina.

R. = río (Spanish), river.

rad = radix (Latin), root.

S. = San (Spanish, masculine, singular), e.g., San Juan, San Julián; Santa (Spanish, feminine, singular), Saint.

S. = sierra (Spanish), e.g. sierra de Curamalal, sierra de la Ventana; mountain ranges.

sem = semina (Latin), seeds.

sept. = septiembre (Spanish), September.

var. = varietas (Latin), variety.

vere = (Latin), of the spring.

#### LIST OF TYPE MATERIAL

The list below includes all original or probable original material (specimens and photographs) found in the Herbarium of Museo de La Plata (LP):

**Cereus dayamii** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 480. 1905.

**Current name:** *Cereus stenogonus* K. Schum.

**Protologue:** “*Hab.* Frequens in silvis densioribus in Chaco australi praecipue prope Coloniam Resistencia”.

**Exsiccata:** Not located. According to Kiesling (1984a: 215) the type specimen was not found.

**Photographs:** (a) LP: Argentina, Prov. Chaco (cultivated in La Plata), “*Cereus dayami* Speg., typus, ex Chaco, La Plata, I-901 [1901]”. Reproduced by Britton and Rose (1920: 11, fig. 11).

(b) LP: “*Cereus dayami* Speg., typus, XI-98 [1898]”. Label not written by Spegazzini.

**Obs.:** Spegazzini (1925) emphasized the original orthography of the specific epithet as “dayami” (from an indian dialect *dai-amí* = parrots food). However, art. 73 of ICBN suggests to suppress the diacritic signs.

**Cereus guelichii** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 482. 1905.

**Current name:** *Harrisia bonplandii* (Pfeiff.) Britton & Rose

**Protologue:** “*Hab.* Non rarus in silvis territorii Chaco borealis et australis”.

**Exsiccata:** Not located. According to Kiesling (1984a: 215) the type specimens were not found. See also Leuenberger (2001a: 158, 170).

**Photographs:** (a) LP: Argentina, Prov. Chaco (cultivated in La Plata), “*Cereus guelichi* Speg. ex Chaco = La Plata, XI-1904”. Reproduced by Britton and Rose (1920: 158, fig. 228). Lectotype designated by Kiesling (1996a: 391).

(b) LP: without data.

(c) LP: “*C. guelichii* (Sp.) B. & R., I-1903”.

(d) LP: “*Harrisia guelichii* (Sp.) B. & R., *Cereus guelichii* Speg., typus”.

**Cereus lamprochlorus** Lem. var. **salinicola** Speg., Anales Mus. Nac. Buenos Aires 7: 286. 1902.

**Current name:** *Trichocereus candicans* (Gillies ex Salm-Dyck) Britton & Rose

**Protologue:** “*Hab.* Rarissime ad margines salinarum inter Rio Negro et Rio Colorado, aest. 1898, nec non prope Bahia Blanca, aest. 1902 (C. S.)”.

**Exsiccata:** (a) “*Cereus salinicola*, 17-II-1902” (LPS 23021). Lectotype designated by Kiesling (1978: 323, as type). Fl.

(b) “N. 74, *Cereus lamprochlorus*” (LPS 23016). Probable original material (see Kiesling 1984a: 212). Fl.

**Cereus patagonicus** F. A. C. Weber ex Speg., Revista Fac. Agron. Univ. Nac. La Plata 3: 604. 1897.

**Current name:** *Austrocactus patagonicus* (F. A. C. Weber ex Speg.) Backeb.

**Protologue:** “*Hab.* Non rarus in valleculis aridis siccis hinc inde in regione centrali et maritima”. Specimens collected in Chubut in 1889 by C. Moyano.

**Exsiccata:** “*Cereus patagonicus* Webb. (sic)” (LPS 23019). Probable original material. Fl.

**Obs.:** See the observation of Spegazzini (1923: 64).

**Cereus platygonus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 481. 1905, hom. illeg. (non Otto nec Salm-Dyck).

**Current name:** *Cereus argentinensis* Britton & Rose

**Protologue:** “*Hab.* In silvis densioribus subuliginosis Chaco boreali praecipue prope Formosa et secus Rio Pilcomayo”.

- Photographs:** (a) LP: Argentina, Prov. Chaco (cultivated in La Plata), “*Cereus platygonus* Speg. in Chaco, La Plata, XII-904 [1904]”. The label is not written by Spegazzini. Reproduced by Britton and Rose (1920: 12, fig. 12).
- (b) LP: Argentina, Prov. Chaco (cultivated in La Plata), “*Cereus platygonus* Speg. ex Chaco, La Plata, XII-904 [1904]”. This is a set of five different photographs mounted on the same sheet showing the whole plant.
- Cereus roseiflorus** Speg., Anales Soc. Ci. Argent. 99: 113. 1925.
- Current name:** *Cereus stenogonus* K. Schum.
- Protologue:** “*Hab.* En las quebradas algo despejadas a lo largo del arroyo de las Tunas, cerca de Fracrán, Misiones”.
- Exsiccata:** Not located. According to Kiesling (1984a: 237) the type specimen was not found.
- Photographs:** LP: Argentina, Prov. Misiones (cultivated in La Plata), “*Cereus roseiflorus* Speg. ex Misiones, flore rosea, La Plata, I-II-1905”. The label is not written by Spegazzini. Reproduced in the original description (Spegazzini, 1925: 114).
- Cereus silvestrii** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 483. 1905.
- Current name:** *Lobivia silvestrii* (Speg.) G. D. Rowley
- Protologue:** “*Hab.* in montuosis dumetosis inter Prov. Tucuman et Salta”.
- Exsiccata:** (a) “*Cerei silvestrii semina*” (LPS 23023). Lectotype designated by Kiesling (1984a: 216, as holotype). Sem.
- (b) “N. 67, 10-XI-99 [1899]” (LPS 23090). Syntype (Kiesling 1984a: 216, as isotype). Fl.
- Photographs:** (a) Britton and Rose (1922: 48, fig. 61). This photograph or its negative was not found in LP.
- (b) LP: “*Chamacereus silvestrii* (Speg.) Br. y R.” Label not written by Spegazzini.
- (c) LP: “*Chamacereus silvestrii* (Speg.) Br. y R.” Label not written by Spegazzini.
- Obs.:** Castellanos and Lelong (1940) mentioned that type specimens of this species were donated to the herbarium BA by the director of the La Plata Zoo at that time.
- Cereus thelegonoides** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 480. 1905.
- Current name:** *Trichocereus thelegonoides* (Speg.) Britton & Rose
- Protologue:** “*Hab.* In collinis siccioribus Provinciae Jujui”.
- Exsiccata:** Argentina, Prov. Jujuy, “N. 96, *Cereus* ex Jujuy” (LPS 23036). Probable type (Kiesling 1984a: 215). Fl.
- Echinocactus arechavaletae** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 496. 1905.
- Current name:** *Parodia ottonis* (Lehm.) N. P. Taylor
- Protologue:** “*Hab.* Abunde in collinis totius ditionis Montevideensis, rarius in petrosis Misiones”.
- Exsiccata:** (a) “N. 35, *Echinocacti arechavaletae*, 10-I-99 [1899], flores” (LPS 23045). Lectotype designated by Kiesling (1984a: 220, as type). Fl.
- (b) “N. 51, *Echinopsis arechavaletae*” (LPS 23092). Probable original material. Fl.
- (c) Uruguay, Dept. Montevideo, “Montevideo, Arechavaleta” (LPS 23236). Probable syntype (Kiesling 1984a: 220, as probable isotype). Fl.
- (d) Uruguay, Dept. Montevideo, “Montevideo, Arecha” (LPS 23237). Probable syntype (Kiesling 1984a: 220, as probable isotype). Fl.
- (e) “Peñascos San Carlos, octubre 1885” (LPS 23239). Probable syntype (Kiesling 1984a: 220, as probable isotype). Fl.
- Photographs:** (a) LP: Uruguay, Dept. Montevideo (cultivated in La Plata), “*Typus ex Montevideo, La Plata, I-1900*”. Reproduced by Britton and Rose (1922: 196, fig. 210) and Kiesling (1984a: 221, fig. 5 upper).
- (b) LP: Uruguay, Dept. Montevideo (cultivated in La Plata), “*Typus ex Montevideo, II-1900*”. Reproduced by Kiesling (1984a: 221, fig. 5).
- Echinocactus baldianus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 505. 1905.
- Current name:** *Gymnocalycium baldianum* (Speg.) Speg.
- Protologue:** “*Hab.* Rarissime in montanis prope Ancasti, Prov. Catamarca”.
- Exsiccata:** Not located. According to Kiesling (1984a: 228) the type specimen was not found.

**Photographs:** LP: without data. Reproduced by Britton and Rose (1922: 165, fig. 178).

**Echinocactus catamarcensis** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 500. 1905.

**Current name:** *Pyrrhocactus catamarcensis* (Speg.) F. Ritter (Kiesling & Meglioli, 2003)

**Protologue:** “*Hab.* Vulgatus in collinis saxosis aridissimis praeandinis in Mendoza, San Juan et Catamarca”.

**Exsiccata:** “*Malacocarpus catamarcense* (Speg.) Br. et Rose forma *cinerascens*, *Echinocactus catamarcensis* Speg., 22-I-1905, LP” (LPS 23130). Lectotype designated by Kiesling (1984a: 225, as type). The sheet has as description and a drawing made by Spegazzini. Fl, ic.

**Photographs:** LP: Argentina, Prov. San Juan (cultivated in La Plata), “*Echinocactus catamarcensis* Speg. (typus) ex S. Juan, III-1904, flor., La Plata, I-905 [1905]”. It is one photograph showing two specimens. There is an inscription in the rulers contained in both pots “Zonda, S. Juan, III-904 [1904]”.

**Obs.:** Kiesling (1984a: 225) mentioned two additional specimens (LPS 23052 and 23051) under this species from 1925. Both specimens are deposited in LP.

**Echinocactus chionanthus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 499. 1905.

**Current name:** *Acanthocalycium thionanthum* (Speg.) Backeb.

**Protologue:** “*Hab.* In montibus lapidosis aridis circa Cachi, Prov. Salta”.

**Exsiccata:** Not located. According to Kiesling (1984a: 222) the type specimen was not found.

**Photographs:** (a) LP: Argentina, Prov. Salta (cultivated in La Plata), “Typus ex Cachi, La Plata, I-98 [1898]”.

(b) LP: “Typus ex Cachi”. Reproduced by Britton and Rose (1922: 58, fig. 77).

**Echinocactus famatimensis** Speg., Anales Soc. Ci. Argent. 92: 118. 1921.

**Current name:** *Lobivia famatimensis* (Speg.) Britton & Rose var. *famatimensis*

**Protologue:** “*Hab.* Bastante raro entre las grietas de las rocas en el macizo de Famatina, entre 2.000 y 3.000 metros de altura en el verano de 1915”.

**Exsiccata:** Argentina, Prov. La Rioja, “*Echinocactus famatimensis* Speg., *Rebutia famatimensis*, en Famatina, I-1920, typus” (LPS 14748). Holotype. Corp.

**Photographs:** Original description: Spegazzini (1921: 119, fig. 9) published a photograph of this species. This photograph or its negative were not found in LP.

**Obs.:** Spegazzini (1921: 118) described this species, collected in the mountain ranges of Famatina, as “*E. famatimensis*”, which is apparently a typographic mistake. However, Spegazzini maintained this orthography in further works. The art. 60. 1 of the ICBN (Greuter et al., 2000), suggests that the orthographic mistakes should be corrected, being in this particular case the correct name: “*famatinensis*”. We maintain here the name *famatimensis* as originally proposed by Spegazzini. Despite the differences between the dates on the label (January 1920) and in the protologue (summer 1915), we consider the specimen LPS 14748 as the type of *E. famatimensis* because Spegazzini himself annotated it as a type.

**Echinocactus gibbosus** (Haw.) DC. var. **cerebriformis** Speg., Anales Soc. Ci. Argent. 48: 50. 1899.

**Current name:** *Gymnocalycium gibbosum* (Haw.) Pfeiff. ex Mittler

**Protologue:** “*Hab.* Rarius cum typo ad ripas Rio Negro prope Carmen de Patagones, Febr. 1898 (C. S.)”.

**Exsiccata:** Argentina, Prov. Buenos Aires, “*Echinocactus gibbosus* var. *cerebriformis*, S. Curamalal” (LPS 23055). Non type material. Corp.

**Photographs:** (a) LP: Argentina, Prov. Buenos Aires, “Ex Carmen de Patagones, II-1898”.

(b) LP: without data. Reproduced by Britton and Rose (1922: 157, fig. 166, sub *Gymnocalycium gibbosum*).

**Obs.:** Britton and Rose (1922) did not mention to which of Spegazzini’s varieties of *E. gibbosus* corresponds the photograph that they published. There are two more photographs of Spegazzini in LP determined only as “*Gymnocalycium gibbosum*” that could correspond to any variety of *Echinocactus gibbosus*. We cite the specimen LPS 23055 because it is cited by Kiesling (1984a: 210) as belonging to this variety, although the locality does not coincide with the locality of the protologue.

**Echinocactus gibbosus** (Haw.) DC. var. **ventanicola**

Speg., Anales Mus. Nac. Buenos Aires 3 (2): 7. 1903.

**Current name:** *Gymnocalycium platense* (Speg.) Britton & Rose var. *ventanicola* (Speg.) R. Kiesling

**Protologue:** “Con alguna frecuencia en todos los cerros hasta una elevacion notable”. Specimens collected in Prov. Buenos Aires, sierra de la Ventana, Valle de las Vertientes in 1895 by Spegazzini.

**Exsiccata:** (a) Argentina, Prov. Buenos Aires, Partido Tornquist, Abra de la Ventana, 19-XI-1968, A. L. Cabrera, H. A. Fabris et A. Sagástegui 19621 (LP). Neotype designated by Kiesling (1982a: 441).

(b) Argentina, Prov. Buenos Aires, “N. 15, Echinocactus gibbosus, Ventana, 4-XII-98 [1898]” (LPS 23082). Probable original material. Fl, fr.

**Photographs:** (a) LP: “*Echinocactus gibbosus* DC. var. *ventanicola* Speg., typus”.

(b) LP: “*Echinocactus gibbosus* DC. var. *ventanicola* Sp., ex S. Ventana, La Plata, X-98 [1898]”.

(c) LP: “*Echinocactus gibbosus* DC. var. *ventanicola* Speg.” This is a photograph of a sheet showing different flowers, some of them correspond to the var. *ventanicola*.

See obs. in *E. gibbosus* var. *cerebriformis*.

**Obs.:** A full description of this variety can be found in Contr. Fl. Sierra Vent.: 27. 1896, under the name *Echinocactus ottonis* Lehm.

**Echinocactus haematanthus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 498. 1905.

**Current name:** *Lobivia haematantha* (Speg.) Britton & Rose var. *haematantha*

**Protologue:** “*Hab.* In montuosis aridissimis circa Amblaio, Prov. Salta”.

**Exsiccata:** “*Echinocactus haimathanthus* (sic) Speg., *Lobivia haematantha* (Speg.), typus!, flores” (LPS 14337). Holotype (Kiesling, 1984a: 222, as type). Corp, fl.

**Photographs:** (a) LP: Country and Prov. unknown (cultivated in La Plata), “Typus ex La Plata, I-1898”.

(b) LP: Argentina, Prov. Salta (cultivated in La Plata), “La Plata, XII-1897, typus ex Amblaio”. Reproduced by Britton and Rose (1922: 57, fig. 73), and Kiesling (1984a: 223, fig. 7).

**Obs.:** See Kiesling (1984a: 222) for observations on the photographs.

**Echinocactus loricatus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 502. 1905, hom. illeg. (non Poselg.)

**Current name:** *Gymnocalycium spegazzinii* Britton & Rose

**Photographs:** LP: Argentina, Prov. Salta (cultivated in La Plata), “Typus ex La Viña, La Plata, XI-1899”. Label not written by Spegazzini. Reproduced by Britton and Rose (1922: 155, fig. 162, as *Gymnocalycium spegazzinii*). Lectotype designated by Kiesling and Metzling (1996: 403; the authors reproduce the photograph).

**Obs.:** See observations of the specimens LPS 23071 and 23114 in the work of Kiesling and Metzling (1996).

**Echinocactus mammulosus** Lem. var. **hircinus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 496. 1905.

**Protologue:** The locality is only cited for the species *Echinocactus mammulosus*: “*Hab.* Sat frequens in collinis pampeanis Argentinae, magis tamen vulgatus in ditone Montevideensi”.

**Photographs:** LP: Uruguay, Dept. Montevideo (cultivated in La Plata), “*Echinocactus mammulosus* var. *hircina*”. There is another label that is not written by Spegazzini “Ex Montevideo, La Plata, X-99 [1899]” (Fig. 1).

**Echinocactus mammulosus** Lem. var. **pampeanus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 496. 1905.

**Protologue:** The locality is only cited for the species *Echinocactus mammulosus*: “*Hab.* Sat frequens in collinis pampeanis Argentinae, magis tamen vulgatus in ditone Montevideensi”.

**Photographs:** (a) LP: “*Malacocarpus mammulosus* (Lem.) Br. and R. *pampeana* Speg., typus” (Fig. 2).

(b) LP: “*Malacocarpus mammulosus* var. *pampeana*”. Label not written by Spegazzini (Fig. 3).

**Echinocactus microspermus** F. A. C. Weber var. **erythranthus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 498. 1905.

**Current name:** *Parodia microsperma* (F. A. C. Weber) Speg. subsp. *microsperma*

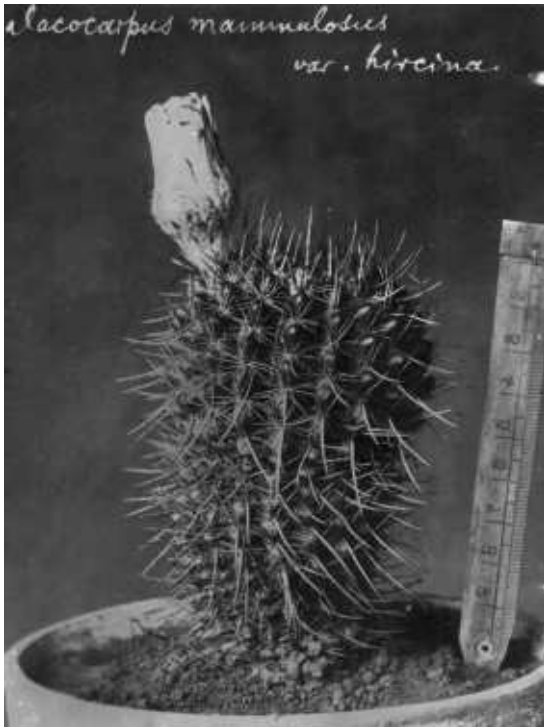


Fig. 1.- Photograph of a living specimen of *Echinocactus mammulosus* var. *hircinus* Speg. taken by Spegazzini.

**Protologue:** The distribution is only cited for the species *Echinocactus microspermus*: “Hab. Sat frequens in collinis et montanis aridis Prov. Catamarca, La Rioja, Tucuman, Salta et Jujuy”.

**Exsiccata:** “N. 3, Echin. microspermus rubriflora, 4-XII-99 [1899]” (LPS 23057). Holotype. Probably this is the type mentioned by Kiesling (1984a: 220) as: “LPS s.n. *E. microspermus* var. *erythranthus* Speg. 4-12-99”. Fl.

**Photographs:** (a) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”. Reproduced by Kiesling (1984a: 223, fig. 6).

(b) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”.

(c) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”. There is a label: “Ex Salta, I-1900” not written by Spegazzini.

(d) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”. Reproduced by Britton and Rose (1922: 207, fig. 221) and Kiesling (1984a: 224, fig. 8).

(e) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”.

(f) LP: “*Parodia microsperma* (Web.) Speg. var. *erythrantha*”. There is a label: “Ex Salta, I-1898” not written by Spegazzini. Reproduced by Britton and Rose (1922: 207, fig. 220).

**Obs.:** Britton and Rose (1922: 208, fig. 222) reproduced another photograph of *E. microspermus* (original not deposited in LP) without mentioning to which variety it belongs.

**Echinocactus pampeanus** Speg., Contr. fl. Sierra Vent.: 27. 1896.

**Current name:** *Parodia submammulosa* (Lem.) R. Kiesling subsp. *submammulosa*

**Protologue:** “Esta especie no escasea en los cerros muy bajo (sic) y secos del valle”. Specimens collected in Prov. Buenos Aires, Sierra de la Ventana, Valle de las Vertientes in 1895 by Spegazzini.

**Exsiccata:** Argentina, Prov. Buenos Aires, “*Echinocactus pampeanus* Speg., S. Ventana, 25-I-1899” (LPS 23064). Neotype designated by Kiesling (1984a: 206). Sem, corp, fl.

**Echinocactus platensis** Speg., Contr. fl. Sierra Vent.: 28. 1896.

**Current name:** *Gymnocalycium platense* (Speg.) Britton & Rose var. *platense*

**Protologue:** “Comun en las grietas de las rocas en los cerros del valle. Especie bastante frecuente también en Curá-malal y en otras sierras pampeanas ...”. Specimens collected in Prov. Buenos Aires, Sierra de la Ventana, Valle de las Vertientes in 1895 by Spegazzini.

**Exsiccata:** Argentina, Buenos Aires, Partido de Tornquist, Sierra de la Ventana, cerros atrás de la estancia Las Vertientes, 30-XII-1981, R. Kiesling 3356 (SI). Neotype designated by Kiesling (1982a: 441).

**Photographs:** The following photographs of *Echinocactus platensis* may probably correspond to the var. *platensis*:

(a) LP: without data. Reproduced by Britton and Rose (1922: 164, fig. 177) and Kiesling (1984a: 229, fig. 12).

(b) LP: Argentina, Prov. Buenos Aires. There are several photographs with the label “*Gymnocalycium platense* var. *ventanicola*, Bs. As., Sierra de la Ventana, II-1916”.

**Obs.:** See obs. in *Echinocactus stellatus*.





Fig. 2. Photograph of a living specimen of *Echinocactus mammulosus* var. *pampeanus* Speg. taken by Spegazzini.

***Echinocactus platensis* Speg. var. *leptanthus***

Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 504. 1905.

**Current name:** *Gymnocalycium leptanthum* (Speg.) Speg. (Kiesling, 1984a)

**Protologue:** The locality is only cited for the species *Echinocactus platensis*: “*Hab. Vulgatus* in montuosis aridis Sierras pampeanas (Ventana, Curámalál, Olavarria etc.) et prope Córdoba”.

**Exsiccata:** Argentina, Prov. Córdoba (probably cultivated in La Plata), “N. 43, *E. platensis* f. *leptantha*, ex Cordoba, 18-I-99 [1899]” (LPS 23076). Lectotype designated by Kiesling (1984a: 228, as type). Fl.

**Photographs:** LP: without data. Reproduced by Britton and Rose (1922: 164, fig. 176).

**Obs.:** See obs. in *Echinocactus stellatus*.

***Echinocactus platensis* Speg. var. *parvulus* Speg.,**  
Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4):  
505. 1905.

**Current name:** *Gymnocalycium parvulum* (Speg.)  
Speg.

**Protologue:** The locality is only cited for the species *Echinocactus platensis*: “*Hab. Vulgatus* in montuosis aridis Sierras pampeanas (Ventana, Curámalál, Olavarria etc.) et prope Córdoba”. It is interesting to note that later Spegazzini (1925) mentioned the mountain ranges of San Luis as the location of this variety (Leuenberger, pers. comm.).

**Exsiccata:** “N. 80, *Echinocactus parvulus*” (LPS 23081). Lectotype (designated by Till, 1994: 124). There are three different materials in the sheet with the same label. These materials are marked as “1”, “2”, and “3”; number 2 has been designated as lectotype by Till and the other two correspond to other species. Fl.

***Echinocactus pygmaeus* Speg., Anales Mus. Nac.**  
Buenos Aires 11 (ser. 3, 4): 497. 1905.

**Current name:** *Frailea pygmaea* (Speg.) Britton &  
Rose



Fig. 3. Photograph of a living specimen of *Echinocactus mammulosus* var. *pampeanus* Speg. taken by Spegazzini.

**Protologue:** “*Hab.* Frequentissimus in montuosis totius Montevideensis, rarius in collinis Prov. Entre Rios secus Rio Uruguay”.

**Exsiccata:** Uruguay, Dept. unknown, Herbario de J. Arechavaleta, Plantas de la República del Uruguay, “*Echinocactus pygmaeus* Speg., sp. nov.” (LPS 23075). Lectotype designated by Kiesling (1984a: 220, as type). Corp, fl, fr.

**Obs.:** Kiesling (1984a: 220) mentions an original photograph of this species. This photograph was not found in LP.

***Echinocactus pygmaeus* Speg. var. *phaeodiscus* Speg.**, *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 498. 1905.

**Current name:** *Frailea phaeodisca* (Speg.) Speg.

**Protologue:** “*Hab.* Rarissima, ut videtur, in collinis saxosis prope Tacuarembó ditionis Montevideensis”.

**Exsiccata:** Not located. Kiesling (1984a: 220) mentions that only a photograph is conserved of the type material. Castellanos (1966-67: 23) mentions the specimen n. 23068 from Spegazzini’s herbarium (not found in LP) as the only specimen that he could analyze of this species, without mentioning if it is a type.

**Photographs:** LP: “*Echinocactus pygmaeus* (sic) Speg. var. *phaeodisca* (typus)” (Fig. 4).

***Echinocactus sanjuanensis* Speg.**, *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 501. 1905.

**Current name:** *Pyrrhocactus sanjuanensis* (Speg.) Backeb.

**Protologue:** “*Hab.* Species rarissima in montuosis aridissimis Prov. San Juan”.

**Exsiccata:** Not located. No type specimen was conserved (Britton & Rose, 1922; Kiesling, 1984a: 255). Britton and Rose (1922: 206) mention: “We know this species definitely only from the original description and a photograph obtained by Dr. Rose in 1915 from Dr. Spegazzini”; the authors do not reproduce this photograph.

**Photographs:** LP: “Typus!” not written in Spegazzini’s hand (Fig. 5).

***Echinocactus stellatus* Speg.**, *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 505. 1905, hom. illeg. (non Scheidw.).

**Current name:** *Gymnocalycium stellatum* Speg. (Spegazzini, 1925).

**Protologue:** “*Hab.* Frequens in collinis aridis in Córdoba, La Rioja et Catamarca”.

**Exsiccata:** Argentina, Prov. Córdoba, “*Echinocactus stellatus*, *Gymnocalycium platense* (Speg.) Br. & R., ex Córdoba” (LPS 14338). Probable original material. Corp. The illustration in the original description (Spegazzini, 1925) is designated lectotype by Till in *Gymnocalycium* 8: 166. 1995.



Fig. 4.- Photograph of a living specimen of *Echinocactus pygmaeus* var. *phaeodiscus* Speg. taken by Spegazzini.

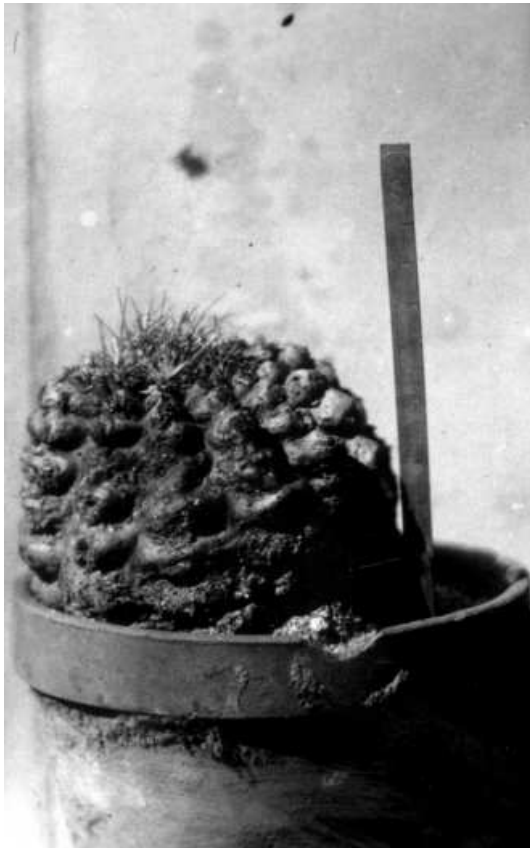


Fig. 5.- Photograph of a living specimen of *Echinocactus sanjuanensis* Speg. taken by Spegazzini.

**Photographs:** (a) LP: Argentina, Prov. Córdoba (cultivated in La Plata), “Typus ex Córdoba, I-99 [1899], La Plata”. Reproduced by Kiesling (1984a: 226, fig. 11).

(b) LP: “*Echinocactus stellatus* Speg., forma”.

**Obs.:** Spegazzini (1925: 139) reproduced the photograph (b) under the name *Gymnocalycium leptanthum* and reproduced another photograph (1925: 143) under the name *Gymnocalycium stellatum*; the last photograph or its negative were not found in LP.

***Echinocactus stuckertii* Speg.,** Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 502. 1905.

**Current name:** *Gymnocalycium stuckertii* (Speg.) Britton & Rose

**Protologue:** “*Hab.* In collinis aridissimis Prov. San Luis, Córdoba, Tucuman et Salta”.

**Exsiccata:** (a) “N. 53, *Echinocactus stuckertii*, flores, 12-II-99 [1899]” (LPS 23077). Probable original material. Sem, fl.

(b) There are three different specimens in the same sheet, each one with a different label. Argentina, Prov. Córdoba, “N. 46, *Echinocactus grosse gibbosus*, Stuckert, Córdoba, 22-I-99 [1899]”, “N. 42, Ech. *grosse gibbosus afinis*, 18-I-99 [1899]”, “N. 25, flores *Echinocacti grosse gibbosus*” (LPS 23088). Probable original material. Fl.

(c) “N. 47, N. 141, *Echinocactus cordobensis grosse gibbosus stenopetalus*, 22-I-99 [1899], Stuckert” (LPS 23054). Probable original material (Kiesling 1984a: 225, as “type?”). Fl.

**Photographs:** (a) LP: Argentina, Prov. Córdoba, “*Gymnocalycium sagliane* (sic), *Echinocactus stuckertii*, typus ex Cordoba”. Label not written by Spegazzini.

(b) LP: “*Gymnocalycium stuckertii* (Speg.) Br. & R.”. Reproduced by Britton and Rose (1922: 165, fig. 180) and Kiesling (1984a: 226, fig. 10).

***Echinocactus thionanthus* Speg.,** Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 499. 1905.

**Current name:** *Acanthocalycium thionanthum* (Speg.) Backeb.

**Protologue:** “*Hab.* In altiplanitie petrosa aridissima prope Cachi, Prov. Salta”.

**Exsiccata:** Not located. According to Kiesling (1984a: 222) the type specimen was not found.

**Photographs:** LP: Argentina, Prov. Salta (cultivated in La Plata), N. “72, *Echinocactus thionanthus* Speg., typus ex Cachi, La Plata I-98 [1898]”. Reproduced by Britton and Rose (1922: 57, fig. 74), and Kiesling (1984a: 224, fig. 9).

***Echinopsis ancistrophora* Speg.,** Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 492. 1905.

**Protologue:** “*Hab.* In summis montibus inter Prov. Tucuman et Salta, non communis”.

**Exsiccata:** Not located. According to Kiesling (1984a: 219) the type specimen was not found.

**Photographs:** LP: “*Echinopsis ancistrophora* Speg. (typus)”. Reproduced by Britton and Rose (1922: 69, fig. 86).

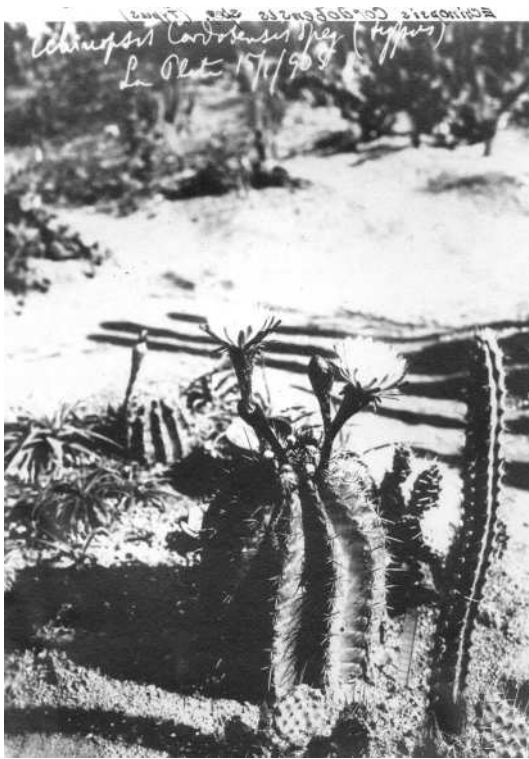


Fig. 6.- Photograph of a living specimen of *Echinopsis cordobensis* Speg., taken by Spegazzini.

***Echinopsis cachensis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 493. 1905.

**Current name:** *Lobivia haematantha* (Speg.) Britton & Rose var. *kuehnrichii* (Fric) Rausch

**Protologue:** “*Hab.* In montibus aridissimis 2.500 m alt. s. m. propre (sic) Cachi, Prov. Salta”.

**Exsiccata:** (a) “*Echinopsis cachensis* sp., *Lobivia cachensis*, typus, flores” (LPS 23116). Holotype (Kiesling 1984a: 219, as type). The word “typus” is not written by Spegazzini. Corp, fl.

(b) Sheet without data (LPS 23049). Isotype (Kiesling 1984a: 219). Fl.

**Photographs:** LP: Argentina, Prov. Salta (cultivated in La Plata), “*Lobivia cachensis* (Speg.) Br. et R. = *Echinopsis cachensis* Speg., Typus, ex Cachi, La Plata, I-1899”. Label not written by Spegazzini. Reproduced by Britton and Rose (1922: 52, fig. 68).

**Obs.:** Hunt (1999) lists *E. cachensis* as a synonym of *Echinopsis saltensis*.

***Echinopsis cordobensis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 489. 1905.

**Current name:** *Echinopsis leucantha* (Gillies ex Salm-Dyck) Walp.

**Protologue:** “*Hab.* In silvis Prosopidium rarissime prope Villa Mercedes, Prov. Córdoba”.

**Exsiccata:** Not located. According to Kiesling (1984a: 218) the type specimen was not found.

**Photographs:** LP: “*Echinopsis cordobensis* Speg. (typus), La Plata, 15-I-905 [1905]” (Fig. 6).

**Obs.:** As noted by Kiesling (1984a: 218) the locality Villa Mercedes in the protologue belongs to the province of San Luis, it is not located in Córdoba.

***Echinopsis intricatissima*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 491. 1905.

**Current name:** *Echinopsis leucantha* (Gillies ex Salm-Dyck) Walp.

**Protologue:** “*Hab.* Non rara in aridissimis saxosis planitiei circa Mendoza”.

**Exsiccata:** Not located. According to Kiesling (1984a: 218) the type specimen was not found.

**Photographs:** LP: Country and province unknown (cultivated in La Plata) “*Echinopsis intricatissima* Speg., typus, La Plata, XII-904 [1904]”. Label not written by Spegazzini (Fig. 7).

***Echinopsis melanopotamica*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 492. 1905.

**Current name:** *Echinopsis leucantha* (Gillies ex Salm-Dyck) Walp.

**Protologue:** “*Hab.* Vulgata in aridis secus Rio Negro et Rio Colorado”.

**Exsiccata:** Argentina, Prov. Buenos Aires, “*Echinopsis leucantha*, Carmen Patagones” (LPS 23100). Lectotype designated by Kiesling (1984a: 219, as type). Fl.

***Echinopsis minuana*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 488. 1905.

**Current name:** *Echinopsis rhodotricha* K. Schum.

**Protologue:** “*Hab.* In campis secus flumen Paraná in Prov. Entre Ríos”.

**Exsiccata:** Not located. According to Kiesling (1984a: 218) the type specimen was not found. Britton and Rose (1922: 63) mention that they only saw the original description and one photograph (not reproduced).

**Photographs:** LP: Argentina, Prov. Entre Ríos (cultivated in La Plata), “Ex Parana, La Plata, I-98 [1898]” (Fig. 8).



Fig. 7.- Photograph of a living specimen of *Echinopsis intricatissima* Speg. taken by Spegazzini.

***Echinopsis mirabilis*** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 489. 1905.

**Current name:** *Setiechinopsis mirabilis* (Speg.) de Haas

**Protologue:** “*Hab.* Sat rara in silvis circa Colonia Ceres, Prov. Santiago del Estero”.

**Exsiccata:** There are two labels in the same sheet. Argentina, Prov. Santa Fe (probably cultivated in La Plata), “*Echinopsis mirabilis*, ex Ceres, fructus” (LPS 23103). Holotype. Label written by Spegazzini. “Santiago del Estero, Colonia Ceres”. Label not written by Spegazzini. (Kiesling, 1984a: 218, as type). Corp, fl.

**Photographs:** (a) LP: Argentina, Prov. Santa Fe (cultivated in La Plata), “*Echinopsis mirabilis* Speg., typus ex Ceres”. Label not written by Spegazzini.

(b) Britton and Rose (1922: 62, fig. 81). This photograph or its negative were not found in LP.

**Obs.:** As noted by Kiesling (1984a: 218) the locality Ceres in the protologue belongs to the province of Santa Fe, it is not located in Santiago del Estero.

***Echinopsis molesta*** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 490. 1905.

**Current name:** *Echinopsis leucantha* (Gillies ex Salm-Dyck) Walp.

**Protologue:** “*Hab.* In silvis Prosopidium sporadice non rara in Prov. Córdoba”.

**Exsiccata:** Not located. According to Britton and Rose (1922: 74) and Kiesling (1984a: 218) the type specimen was not found.

**Photographs:** (a) LP: Argentina, Prov. Córdoba (cultivated in La Plata), “Ex Córdoba, La Plata, 15-I-1905”. Label not written by Spegazzini (Fig. 9).

(b) LP: Argentina, Prov. San Luis (probably cultivated in La Plata), “Ex Villa Mercedes (Córdoba)”. Label not written by Spegazzini (Fig. 10).

**Obs.:** With reference to the photograph (b) there is no locality Villa Mercedes in the province of Córdoba, but in the north of the province of San Luis.



Fig. 8.- Photograph of a living specimen of *Echinopsis minuana* Speg. taken by Spegazzini.

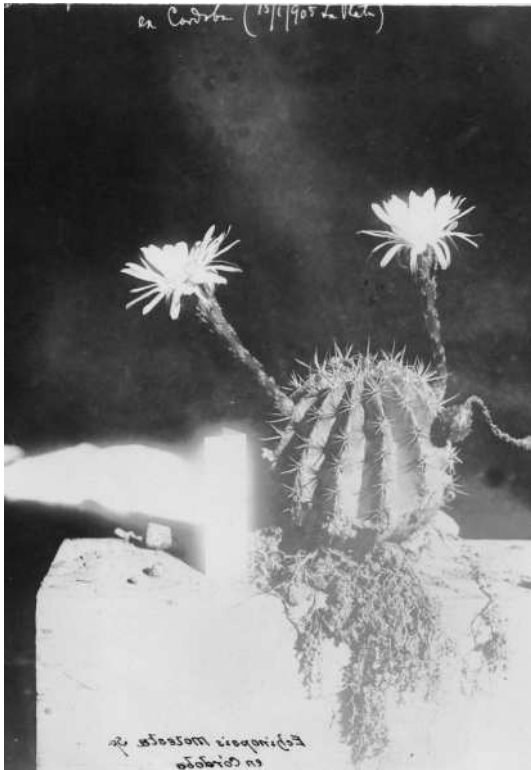


Fig. 9.- Photograph of a living specimen of *Echinopsis molesta* Speg. taken by Spegazzini.

***Echinopsis pseudominuscula*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 488. 1905.

**Current name:** *Rebutia deminuta* (F. A. C. Weber) A. Berger

**Protologue:** “*Hab.* Rarissime in alpinis (3.500 m alt. s. m.) Prov. Salta”.

**Exsiccata:** Not located. Kiesling (1984a: 217) mentions the specimen LPS 23002 as the type. This specimen was not found in LP.

**Photographs:** (a) LP: “*Aylostera pseudominuscula* (Speg.) Br...” Label not written by Spegazzini.

(b) Britton and Rose (1922: 46, fig. 58). This photograph or its negative were not found in LP.

***Echinopsis saltensis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 487. 1905.

**Current name:** *Lobivia saltensis* (Speg.) Britton & Rose

**Protologue:** “*Hab.* In alpinis prope (sic) Amblaiio inter Tucuman et Salta”.

**Exsiccata:** According to Kiesling (1984a: 217) the type specimen was not found.

(a) Argentina, Prov. Salta (cultivated in La Plata), “*Echinopsis? saltensis* Speg., *Lobivia saltensis* Britt. & Rose, La Plata ex Salta, estas flores son de una *Rebutia*” (LPS 23106). Probable original material. Fl.

(b) “*Echinopsis saltensis*, XII-97 [1897]” (LPS 23119). Probable original material. Corp, fl.

**Photographs:** LP: Argentina, Prov. Salta (cultivated in La Plata), “*Lobivia saltensis* (Speg.) Br. et R., *Echinopsis saltensis* Speg. typus ex Pampa Grande, La Plata XI-1898”. Reproduced by Britton and Rose (1922: 53, fig. 70).

**Obs.:** In the specimen (b) there is another label of 1955, signed by the botanist Nikolai Alboff, saying the this specimen does not fit with the original description of *E. saltensis*. The locality mentioned in the photograph does not coincide with that of the protologue.

***Echinopsis silvestrii*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 486. 1905.

**Protologue:** “*Hab.* In rupestribus dumetosis montanis inter Prov. Tucuman et Salta”.

**Exsiccata:** “N. 78, *Echinopsis silvestrii*, typus” (LPS 23107). Holotype (Kiesling 1984a: 217, as type). The label is written in Spegazzini’s hand but the word “typus” is not. Fl.

**Photographs:** (a) LP: Argentina, Prov. Salta: “N. 7, Salta, Dr. F. Silvestri”. Reproduced by Britton and Rose (1922: 68, fig. 84).

(b) LP: “*Echinopsis silvestrii* Speg.”. Label not written by Spegazzini.

***Frailea bruchii*** Speg., Anales Soc. Ci. Argent. 96: 73. 1923.

**Current name:** *Gymnocalycium bruchii* (Speg.) Hosseus var. *bruchii*

**Protologue:** “*Hab.* In montanis Sierra de Córdoba prope Alta Gracia, aest. 1918 (lgt. et comm. dr. C. Bruch)”.

**Exsiccata:** Not located. According to Kiesling (1984a: 234) the type specimen was not found. The iconography in the original description (Spegazzini, 1923) was designated lectotype by Metzger et al. (1995: 194).

**Photographs:** LP: without data. Reproduced in the original description by Spegazzini (1923: 74).

**Obs.:** See observations on lectotypification in Metzger et al. (1995: 194).



Fig. 10.- Photograph of a living specimen of *Echinopsis molesta* Speg. taken by Spegazzini.

**Gymnocalycium brachypetalum** Speg., Anales Soc. Ci. Argent. 99: 135. 1925.

**Current name:** *Gymnocalycium gibbosum* (Haw.) Pfeiff. ex Mittler

**Protologue:** “*Hab.* En las lomas y barrancas del río Negro, en los alrededores de Carmen de Patagones”.

**Exsiccata:** “N. 68, *Echinocactus brachypetalum*” (LPS 23048). Probable type (Kiesling, 1984a: 237, as “type?”; Metzinger et al., 1995: 194). Fl.

**Lobivia hyalacantha** Speg., Anales Soc. Ci. Argent. 99: 122. 1925.

**Current name:** *Trichocereus huascha* (F. A. C. Weber) Britton & Rose (Kiesling, 1984a)

**Protologue:** “*Hab.* Entre las grietas de las rocas de las colinas del valle de Piedra Blanca, Catamarca”.

**Exsiccata:** Not located. According to Kiesling (1984a: 237) the type specimen was not found.

**Photographs:** LP: Argentina, Prov. Jujuy (probably cultivated in La Plata), “*Echinocereus hyalacanthus* ex Jujui”. Reproduced in the original description by Spegazzini (1925: 123).

**Obs.:** The distribution cited in the protologue does not coincide with that written by Spegazzini in the photograph’s negative nor with the distribution of the species (Leuenberger, pers. comm.)

**Lobivia oreopepon** Speg., Anales Soc. Ci. Argent. 99: 125. 1925.

**Current name:** *Lobivia formosa* (Pfeiff.) Dodds var. *formosa*

**Protologue:** “*Hab.* Frecuente en las grietas de los peñascos de las montañas de los alrededores de Cacheuta, Mendoza”.

**Exsiccata:** According to Kiesling (1984a: 237) the type specimen was not found. There are two labels in the same sheet. Argentina, Prov. Mendoza, “*Lobivia oreopepon*, Mendoza, I-1926”, “*Lobivia oreopepon*, Mendoza, XII-1925, fructus” (LPS 23120). Probable original material. Sem, corp, fl.

**Photographs:** LP: Argentina, Prov. Mendoza: “*Echinocactus*, melón de la sierra, 101, Cacheuta, *Lobivia oreopepon* Speg. (n. sp.), pg. 237”. Reproduced in the original description by Spegazzini (1925: 126).

**Obs.:** Cited by Hosseus (1926) as: “...; *L. areopegon* Speg. de Mendoza; ...”. Spegazzini never described this species, it is an orthographic error of *Lobivia* “*oreopepon*”. See observations concerning this name in Castellanos (1957: 2).

**Maihuenia tehuelches** Speg., Anales Mus. Nac. Buenos Aires 7: 288. 1902.

**Current name:** *Maihuenia patagonica* (Phil.) Britton & Rose

**Protologue:** “*Hab.* Non rara in aridis inter S. Julian et Rio Deseado, vere 1899 (C. A.), secus Rio Chubut, aest. 1899-900 (N. I.) et in Sierras de Sanquil et Haichol, Neuquen, Dec. 1899 (O. Asp)”.

**Exsiccata:** (a) Argentina, Prov. Santa Cruz, “*Maihuenia tehuelche* (sic) Speg. (n. sp.), S. Julian-R. Deseado, vere 1899, C. Ameghino” (LPS 14747). Lectotype designated by Leuenberger (1997: 63), considered holotype by Kiesling (1988: 227). Annotated “typus” not by Spegazzini. Corp, fl, fr.

(b) Argentina, Prov. Santa Cruz, “*Maihuenia tehuelche* (sic) Speg., S. Julian-R. Deseado, vere 1899, C. Ameghino” (LPS 23124). Duplicate of lectotype (designated as isotype by Kiesling 1988: 227 and Leuenberger 1997: 63). Corp, fl.

**Photographs:** LP: without data. Reproduced by Britton and Rose (1919: 41, fig. 53).

**Obs.:** For details of typifications see Leuenberger (1997).

**Maihuenia valentinii** Speg., Anales Mus. Nac. Buenos Aires 7: 289. 1902.

**Current name:** *Maihuenia patagonica* (Phil.) Britton & Rose

**Protologue:** “*Hab.* Non rara passim cum priore in aridissimis prope Trelew, Chubut, Nov. 1897 (J. Valentin) et secus Rio Chubut, aest. 1899 (N. I.)”.

**Exsiccata:** (a) Argentina, Prov. Chubut, “N. 48, *Maihuenia poeppigii* (aff.) Web., *Maihuenia valentini* Speg., n. sp., Trelew, Cima Alta, leg. Dr. Valentin, 11-XI-1897”. (LPS s/n). Lectotype designated by Leuenberger (1997: 64, figs. 2f, g), considered holotype by Kiesling (1988: 227). Corp, fl.

(b) “*Maihuenia valentinii* Speg.” (LPS 23126). Probable original material.

**Photographs:** (a) LP: without data. Reproduced by Britton and Rose (1919: 40, fig. 50).

(b) LP: “*Maihuenia valentinii* Speg.”. Label not written by Spegazzini.

**Obs.:** According to Leuenberger (1997: 64) the specimen of Río Chubut mentioned in the protologue was not found. The specimen (b), without data, was not mentioned by Leuenberger (1997) because it is unsuitable for type designations as long as there is material with data (Leuenberger, pers. comm.).

**Opuntia anacantha** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 513. 1905.

**Current name:** *Opuntia anacantha* Speg. var. *anacantha*

**Protologue:** “*Hab.* Non rara in silvis densis Santiago del Estero et Chaco australis”.

**Exsiccata:** Not located. According to Kiesling (1984a: 230) the type specimens were not found.

**Photographs:** (a) Kiesling (1984a: 232, fig. 14; 1998: 472, fig. 1): “Typus ex Chaco, La Plata, I-98 [1898], LP”. Lectotype designated by Crook & Mottram (1995: 99). This photograph or its negative were not found in LP.

(b) Britton and Rose (1919: 110, fig. 136). Reproduced by Kiesling (1984a: 239, fig. 16). This photograph or its negative were not found in LP.

(c) LP: “*Opuntia anacantha* Speg (typus), La Plata, I-905 [1905]”.

**Obs.:** See Kiesling’s (1998: 473) observations on photographs of the types. There are different opinions concerning the journal of the first formal

publication of *Opuntia anacantha*. Some authors (e.g., Hooker & Jackson, 1893-1895; Kiesling, 1998) consider this species as first published in: Bull. Mus. Hist. Nat. (Paris) 10: 391. 1904. On the other hand, other authors (e.g., Leuenberger, pers. comm.) consider that the Anales Mus. Buenos Aires 11 (ser. 3, 4): 513. 1905 should be taken as the first formal publication of *O. anacantha* since there is no specimen-based information in the former publication, i.e., there is no type material at all.

**Opuntia arechavaletae** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 520. 1905.

**Protologue:** “*Hab.* Non communis in collinis lapidosis prope Montevideo”.

**Exsiccata:** Uruguay, Dept. Maldonado, “*Opuntia arechavaletae* Speg., sp. nov., Pan de Azúcar, XI-1903, J. Arechavaleta, fruto maduro” (LPS 14750). Holotype (Kiesling, 1984a: 233, as type; Crook & Mottram, 1995; Leuenberger, 2002). Corp.

**Opuntia bonaerensis** Speg., Contr. fl. Tandil.: 18. 1901.

**Current name:** *Opuntia paraguayensis* K. Schum. (*O. elata* Hort. according to Leuenberger, 2002)

**Protologue:** “Especie que parece rara porque la pude observar solo una vez en uno de los cerros mas pedregosos; es más abundante y de mayor crecimiento en las sierras de Curamalál y de Tornquist”. Specimens collected in Prov. Buenos Aires, sierras de Tandil by C. Spegazzini.

**Photographs:** LP: Argentina, Prov. Buenos Aires: “*Opuntia bonaerensis* Speg., La Plata, I-99 [1899]”. Reproduced by Spegazzini in a further publication (1925: 94). Neotype designated by Crook & Mottram (1995: 114).

**Opuntia bruchii** Speg., Physis (Buenos Aires) 8: 239. 1925.

**Current name:** *Tephrocactus alexanderi* (Britton & Rose) Backeb.

**Protologue:** “Mi amigo el Dr. Carlos Bruch me relató varias veces que, en sus viajes por la provincia de Catamarca, al pasar por la estación Mazán, le había llamado la atención una lomita que ofrecía un hermoso color ... A principio de este año, el Dr. Bruch tuvo la grata sorpresa de que el ingeniero Vladimiro Weiser, que viajaba por esas regiones con fines arqueológicos, le remitiera algunos ejemplares de la codiciada tuna, los que, con su bien conocida amabilidad, compartió conmigo, acompañándolos con la hermosa fotografía que adjunto”



**Exsiccata:** (a) Argentina, Prov. Catamarca, “*Opuntia Bruchi* Speg., ex Tinogasta, 1-XII-1925, W. Veisser (sic), fructus” (LPS 23140). Stamped “Typus”. Neotype designated by Kiesling (1984a: 238). Corp, fr.

(b) Argentina, Prov. Catamarca, “Botón de la flor de *Opuntia Bruchi*, ex Tinogasta, XII-1925, W. Veisser (sic)” (LPS 23141). Duplicate of neotype (Kiesling, 1984a: 238). Fl.

(c) Argentina, Prov. unknown (cultivated in La Plata), “*Opuntia Bruchi*, La Plata, 20-IV-1925” (LPS 23143). Duplicate of neotype (Kiesling, 1984a: 238). Corp.

(d) Argentina, Prov. unknown (cultivated in La Plata), “Envoltura floralis, *Tephrocactus Bruchi* Speg., La Plata, I-1926” (LPS 23216). Duplicate of neotype (Kiesling, 1984a: 238). Fl.

**Photographs:** Original description: Spegazzini (1925: 239) published a photograph. This photograph or its negative were not found in LP.

**Obs.:** Kiesling (1984a: 238) selected a neotype probably because there were not found specimens that coincide exactly with the date in Spegazzini’s original description (may 1925).

***Opuntia chakensis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 519. 1905.

**Current name:** *Opuntia cardiosperma* K. Schum. (Leuenberger, 2001b)

**Protologue:** “*Hab.* Frequentissima in silvis Chaco borealis et australis, Misiones et facile etiam in ditione Montevideensi”.

**Photographs:** (a) Original description: Spegazzini (1925: 95) published a photograph of this species. Lectotype designated by Crook & Mottram (1996: 106). This photograph or its negative were not found in LP.

(b) LP: “*Op. chakensis* Speg.” Label not written by Spegazzini.

**Obs.:** According to Kiesling (1984a: 233) the type specimens were not found. The specific epithet appears occasionally changed in the literature to “*chaquensis*”, but there is no reason to change the original spelling (Leuenberger, 2001b).

***Opuntia cordobensis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 513. 1905.

**Current name:** *Opuntia ficus-indica* (L.) Mill. f. *amyclaea* (Ten.) Schelle (Kiesling, 1999b)

**Protologue:** “*Hab.* Frequens ad saepes circa Córdoba, La Rioja, Catamarca et San Juan”.

**Photographs:** (a) Kiesling (1984a: 229, fig. 13; 1999: 313, fig. 3): “*Opuntia cordobensis* Speg., typus ex Cordoba, La Plata XI-99 [1899]”. Lectotype designated by Crook & Mottram (1996). This photograph or its negative were not found in LP.

(b) LP: Argentina, Prov. Córdoba (cultivated in La Plata): “*Opuntia cordobensis* Speg., typus, ex Córdoba, La Plata, XI-99 [1899]”.

(c) LP: Argentina, Prov. Córdoba (cultivated in La Plata): “*Opuntia cordobensis* Speg., typus, ex Córdoba, La Plata, XI-900 [1900]”.

**Obs.:** According to Kiesling (1984a: 230) the type specimens were not found. There is a specimen in LP with the label: “*Opuntia cordobensis?* ex Córdoba, Stuckert” (LPS 23144) written in Spegazzini’s hand.

Castellanos and Lelong (1940) mentioned that type specimens of this species was donated to herbarium BA by the director of the La Plata Zoo (see Introduction).

***Opuntia diademata*** Lem. var. ***inermis*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 511. 1905.

**Current name:** *Tephrocactus articulatus* (Pfeiff.) Backeb. var. *articulatus*

**Protologue:** The distribution is only cited for the species *Opuntia diademata*: “*Hab.* Vulgatissima locis aridissimis Prov. Mendoza, San Juan, La Rioja, Catamarca, Salta, Jujui et Santiago del Estero”.

**Exsiccata:** “*Opuntia diademata* var. *inermis*” (LPS 14272). Probable original material. Fl.

***Opuntia diademata*** Lem. var. ***oligacantha*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 511. 1905.

**Current name:** *Tephrocactus articulatus* (Pfeiff.) Backeb. var. *oligacanthus* (Speg.) Backeb.

**Protologue:** The distribution is only cited for the species *Opuntia diademata*: “*Hab.* Vulgatissima locis aridissimis Prov. Mendoza, San Juan, La Rioja, Catamarca, Salta, Jujui et Santiago del Estero”.

**Exsiccata:** (a) Argentina. Mendoza: Dpto. Las Heras, inmediaciones del cerro de La Gloria, XII-1931, Adrian Ruíz Leal 2589 (MERL). Neotype designated by Kiesling (1984b: 188).

(b) Argentina, Prov. Mendoza (cultivated in La Plata), “*Opuntia diademata* fm. *oligacantha* (Planctium La Plata, 20/25-XII), Mendoza, XII-1925” (LPS 14334). Non type material. Corp, fl.

**Obs.:** We cite the specimen (b) because it corresponds to a specimen collected in the type locality by Spegazzini.

**Opuntia diademata** Lem. var. **polyacantha** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 511. 1905.

**Current name:** *Tephrocactus articulatus* (Pfeiff.) Backeb. var. *oligacanthus* (Speg.) Backeb.

**Protologue:** The distribution is only cited for the species *Opuntia diademata*: “*Hab.* Vulgatissima locis aridissimis Prov. Mendoza, San Juan, La Rioja, Catamarca, Salta, Jujui et Santiago del Estero”.

**Exsiccata:** Argentina, Prov. Catamarca, “Fruto de *Opuntia glomerata* var. *polyacantha*, ex Catamarca, XII-1925”. (LPS s/n). Non type material. Fr.

**Obs.:** Due to the lack of type material, we included in the exsiccata a specimen of Spegazzini’s herbarium collected in the type locality.

**Opuntia halophila** Speg., Anales Soc. Ci. Argent. 99: 97. 1925.

**Current name:** *Tephrocactus halophilus* (Speg.) Backeb.

**Protologue:** “*Hab.* En los salitrales de los vallecitos de la sierra Pie de Palo, a lo largo del ferrocarril de Serrezuela, provincia de San Juan”.

**Exsiccata:** Not located. According to Kiesling (1984a: 236) the type specimen was not found.

**Photographs:** LP: Argentina, Prov. San Juan: “*Opuntia halophila* Speg., n. spec. ined. Sierra Pie de Palo, San Juan”. Reproduced in the original description by Spegazzini (1925: 98).

**Opuntia hypsophila** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 509. 1905.

**Current name:** *Austrocylindropuntia verschaefeltii* (Cels ex F. A. C. Weber) Backeb.

**Protologue:** “*Hab.* In fissuris rupium in Andibus (2.500-4.000 m alt. s. m.) Prov. Salta”.

**Exsiccata:** “*Opuntia hypsophila* Speg., typus” (LPS 14331). Holotype. Corp.

**Opuntia kiska-loro** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 516. 1905.

**Current name:** *Opuntia anacantha* Speg. var. *kiska-loro* (Speg.) R. Kiesling

**Protologue:** “*Hab.* Sat frequens in desertis dumetosis La Rioja, Catamarca, Santiago del Estero et Salta”.

**Exsiccata:** Not located. According to Kiesling (1984a: 231) the type specimen was not found.

**Photographs:** LP: Argentina, Prov. Santiago del Estero (cultivated in La Plata): “*Opuntia kiska-loro* Speg. (typus), ex Santiago del Estero, La Plata I-905 [1905]”. Reproduced by Britton and Rose (1919: 108, fig. 132) and Kiesling (1998: 474). Lectotype designated by Kiesling (1998: 474).

**Opuntia molinensis** Speg., Anales Soc. Ci. Argent. 96: 63. 1923, nom. nov. pro *Opuntia schumannii* Speg. in Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 511. 1905, hom illeg. (non F. A. C. Weber).

**Current name:** *Tephrocactus molinensis* (Speg.) Backeb.

**Protologue:** “*Hab.* Semel abunde prope Molinos, Prov. Salta”.

**Exsiccata:** “*Opuntia schumannii-Tephrocactus molinensis*” (LPS 14335). Lectotype designated by Kiesling (1984a: 230, as type). Corp.

**Photographs:** LP: without data. Later, Spegazzini (1925: 102) published this photograph, although he did not mention if it corresponds to the type.

**Obs.:** Spegazzini (1923) created a new name: “*Opuntia molinensis* Speg. (nom. nov.) = *O. Schumanni* Speg. (non Web.), *Cactacearum platensium tentamen*, n° 106”, since the name *Opuntia schumanni* was already created by Weber in 1904.

**Opuntia montevidensis** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 515. 1905.

**Current name:** *Opuntia aurantiaca* Lindl.

**Protologue:** “*Hab.* Vulgata in Cerro de Montevideo et in rupestribus prope La Colonia”.

**Exsiccata:** Uruguay, Dept. Montevideo, “*Opuntia montevidensis* Speg., Cerro de Montevideo” (LPS 23158). Probable original material. Corp.

- Opuntia retrorsa** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 517. 1905.
- Current name:** *Opuntia anacantha* Speg. var. *retrorsa* (Speg.) R. Kiesling
- Protologue:** “*Hab.* Frequens in campis magis aridis dumetosis, Chaco australi”.
- Exsiccata:** Not located. According to Kiesling (1984a: 231) the type specimen was not found.
- Photographs:** (a) LP: “*Opuntia retrorsa* Speg.” Label not written by Spegazzini. Reproduced by Britton and Rose (1919: 109, fig. 134). Neotype designated by Kiesling (1998: 475).
- (b) LP: “*Opuntia retrorsa* Speg.” Label not written by Spegazzini.
- Opuntia subsphaerocarpa** Speg., *Anales Soc. Ci. Argent.* 99: 104. 1925.
- Protologue:** “*Hab.* Bastante frecuente en los bosques de los alrededores de Formosa y de Posadas, Misiones”.
- Exsiccata:** Not located. According to Kiesling (1984a: 236) the type specimens were never found.
- Photographs:** LP: Argentina, Prov. Entre Ríos (cultivated in La Plata): “Typus ex Entre Ríos”. Reproduced by Spegazzini (1925: 105) in the original description.
- Obs.:** It is cited as a doubtful taxon by Kiesling (1999a). See also Leuenberger (2002).
- Opuntia tuna-blanca** Speg., *Anales Soc. Ci. Argent.* 99: 107. 1925.
- Current name:** *Opuntia ficus-indica* (L.) Mill.
- Protologue:** “*Hab.* En las lomadas más áridas y secas de la Quebrada de Humahuaca, provincia de Jujuy”.
- Exsiccata:** Not located. According to Kiesling (1984a: 237) the type specimen was not found.
- Photographs:** (a) LP: “*Opuntia tuna-blanca* Speg., typus”. Label not written by Spegazzini. Reproduced by Spegazzini (1925: 108) in the original description. Lectotype designated by Kiesling (1999b: 310).
- (b) LP: “*Opuntia tuna-blanca* Speg.”. Label not written by Spegazzini.
- (c) LP: “*Opuntia tuna-blanca* Speg.”. Label not written by Spegazzini.
- Opuntia utkilio** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 516. 1905.
- Current name:** *Opuntia anacantha* Speg. var. *utkilio* (Speg.) R. Kiesling
- Protologue:** “*Hab.* In silvis siccoribus Prov. Santiago del Estero et Tucumán”.
- Exsiccata:** Not located. According to Kiesling (1984a: 231) the type specimens were not found.
- Photographs:** (a) LP: “*Opuntia utkilio* Speg., Sgo. del Estero y Tucumán”. Label not written by Spegazzini. Reproduced by Britton and Rose (1919: 110, fig. 135) and Kiesling (1984a: 232, fig. 15). Neotype designated by Kiesling (1998: 476).
- (b) LP: “*Opuntia utkilio* Speg.”. Label not written by Spegazzini.
- Opuntia weberi** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 509. 1905.
- Current name:** *Tephrocactus weberi* (Speg.) Backeb. var. *weberi*
- Protologue:** “*Hab.* Sat rara in montibus Sierra Pié de Palo, Prov. San Juan, et prope Molinos Prov. Salta”.
- Exsiccata:** (a) Argentina, Prov. San Juan, “Sierra Pié de Palo, S. Juan, I-99 [1899]” (LPS s.n.). Lectotype designated by Kiesling (1984b: 190, as holotype, and Kiesling & Meglioli, 2003; duplicates in BAF and US). Corp.
- (b) Argentina, Prov. Salta, “Molinos, 1900, Holmberg” (LPS s.n.). Syntype. Corp.
- (c) Argentina, Prov. Salta, “*Opuntia Weberi* Speg., Molinos, III-1897, flores et fructus” (LPS 14336). Syntype. Corp, fr.
- Photographs:** (a) Britton and Rose (1919: 84, 85, figs. 99, 100) published two photographs: “Figure 99 is from a photograph of the plant of Molinos, Argentina; figure 100 is from a photograph of the type specimen in the collection of Dr. Spegazzini to whom we are indebted for both of these illustrations”. None of these photographs or their negatives were found in LP.
- (b) LP: Argentina, Prov. San Juan (probably cultivated in La Plata), “Ex San Juan: Pie de Palo”.
- Obs.:** See comments on typification in Eggli and Leuenberger (1998).

**Parodia paraguayensis** Speg., Anales Soc. Ci. Argent. 96: 70. 1923.

**Current name:** *Parodia ottonis* (Lehm.) N. P. Taylor (Hunt, 1999).

**Protologue:** “*Hab.* Ad fissuras rupium in Sierra de Amambay, Paraguay, Sept. 1833, lg. Karl von Guelich”.

**Exsiccata:** There are two labels in the same sheet. Probably Paraguay, Dept. Amambay, “*Parodia paraguayensis* Speg., n. sp., Matto Grosso, cactus, flores amarillas”. This label is written by Spegazzini. “*Parodia paraguayensis* Speg., n. sp., Sierra de Amambay, Paraguay, Sept. 1883, Karl von Guelich” (LPS 14749). This label is not written by Spegazzini. Holotype. Fl, ic.

**Photographs:** LP: Argentina, Prov. Misiones (cultivated in La Plata), “*Malacocarpus ottonis* (Lehm.) Br. and R. var. *paraguariensis*, *Echinocactus ottonis* Speg. var. *paraguariensis*, ex Misiones, La Plata, XII-904 [1904]”.

**Pterocactus valentinii** Speg., Anales Soc. Ci. Argent. 48: 51. 1899.

**Protologue:** “*Hab.* In aridis saxosis prope Trelew, Nov. 1897 (Dr. J. Valentin) et in Peninsula Valdes, Jan. 1898 (Dr. F. Lahille)”.

**Exsiccata:** Argentina, Prov. Chubut, “*Pterocactus valentini* (sic) Speg., Valdes, Lahille” (LPS 23189). Lectotype designated by Kiesling (1988: 240). Stamped “Typus”. Corp.

**Obs.:** See observation of Kiesling (1982b).

**Tephrocactus bruchii** (Speg.) Speg. f. **brachyacanthus** Speg., Revista Argent. Bot. 1: 202. 1926.

**Protologue:** “En Diciembre de 1925, el señor Ingeniero don Wladimiro Veisser (sic), habiendo vuelto a Catamarca envió desde Tinogasta al mismo doctor Bruch, varios grandes y lindos ejemplares de la misma cactácea, los cuales representaban dos forma diferentes bien reconocibles ...”.

**Exsiccata:** (a) “*Tephrocactus bruchii* forma *brachyacantha*” (LPS 23219). Lectotype designated by Kiesling (1984a: 240, as type). Corp.

(b) Argentina, Prov. Catamarca, “*Opuntia bruchi* Speg. var. *parvispina*, ex Catamarca, Wladimiro Weisser (sic)” (LPS 23142). Probable original material. Corp.

**Photographs:** Original description: Spegazzini (1926: without page nor figure number) published a photograph of this species. This photograph or its negative were not found in LP.

**Obs.:** Although not designated as a type, we cite the specimen (b) because of the coincidence of the label with the protologue.

**Tephrocactus bruchii** (Speg.) Speg. f. **macracanthus** Speg., Revista Argent. Bot. 1: 202. 1926.

**Protologue:** “En Diciembre de 1925, el señor Ingeniero don Wladimiro Veisser (sic), habiendo vuelto a Catamarca envió desde Tinogasta al mismo doctor Bruch, varios grandes y lindos ejemplares de la misma cactácea, los cuales representaban dos forma diferentes bien reconocibles ...”.

**Exsiccata:** Argentina, Prov. Catamarca, “*Tephrocactus Bruchi* fm. *macracantha*, ex Catamarca, V-1926, Massucchi (?), fructus maturus” (LPS 23220). Lectotype designated by Kiesling (1984a: 240, as type). The label has a diagnosis made by Spegazzini. Fr.

#### LIST OF TAXA WITH SPECIMENS AND PHOTOGRAPHS NOT FOUND IN LP

**Cereus dusenii** F. A. C. Weber ex Speg., Anales Soc. Ci. Argent. 48: 49. 1899.

**Current name:** *Austrocactus dusenii* (F. A. C. Weber ex Speg.) Backeb. (considered a doubtful taxon by Kiesling, 1999a).

**Protologue:** “*Hab.* In praeruptis saxosis prope Trelew, Chubut, Nov. 1897 (Dr. J. Valentin)”.

**Obs.:** See the observation of Spegazzini (1923: 63-64) concerning this species.

**Cereus santiaguensis** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 478. 1905.

**Current name:** *Trichocereus santiaguensis* (Speg.) Backeb.

**Protologue:** “*Hab.* In silvis Provinciae Santiago del Estero, praecipue prope Estacion Icaño”.

**Obs.:** According to Kiesling (1984a: 212) there are no original specimens or photographs of this species. Cited as a doubtful taxon (Kiesling, 1999a).

**Echinocactus acuatus** Link & Otto var. **depressus** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 494. 1905.

- Protologue:** The distribution is only cited for the species *Echinocactus acuatus*: “*Hab.* Vulgatus in collinis et montuosis pampeanis a Rio Negro usque ad Sierra del Tandil; frequentissimus etiam in tota ditone Montevideensi”.
- Echinocactus acuatus** Link & Otto var. **tetracanthus** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 494. 1905.
- Protologue:** The distribution is only cited for the species *Echinocactus acuatus*: “*Hab.* Vulgatus in collinis et montuosis pampeanis a Rio Negro usque ad Sierra del Tandil; frequentissimus etiam in tota ditone Montevideensi”.
- Echinocactus caespitosus** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 495. 1905.
- Current name:** *Parodia concinna* (Monv.) N. P. Taylor (Hunt, 1999)
- Protologue:** “*Hab.* In montuosis aridissimis ditionis Montevideensis”.
- Obs.:** According to Kiesling (1984a: 219), the type specimen was not found.
- Echinocactus catamarcensis** Speg. var. **obscurus** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 501. 1905.
- Current name:** *Pyrrhocactus catamarcensis* (Speg.) F. Ritter (Kiesling & Meglioli, 2003)
- Protologue:** The distribution is only cited for the species *Echinocactus catamarcensis*: “*Hab.* Vulgatus in collinis saxosis aridissimis praeandinis in Mendoza, San Juan et Catamarca”.
- Echinocactus catamarcensis** Speg. var. **pallidus** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 500. 1905.
- Current name:** *Pyrrhocactus catamarcensis* (Speg.) F. Ritter (Kiesling & Meglioli, 2003)
- Protologue:** The distribution is only cited for the species *Echinocactus catamarcensis*: “*Hab.* Vulgatus in collinis saxosis aridissimis praeandinis in Mendoza, San Juan et Catamarca”.
- Echinocactus gibbosus** (Haw.) DC. var. **chubutensis** Speg., *Anales Mus. Nac. Buenos Aires* 7: 285. 1902.
- Current name:** *Gymnocalycium gibbosum* (Haw.) Pfeiff. ex Mittler var. *chubutense* (Speg.) Papsch (Papsch, 1996)
- Protologue:** “*Hab.* Frequens in aridis secus Rio Chubut, aest. 1899-900 (N. I.)”.
- Photographs:** See obs. in *E. gibbosus* var. *cerebriformis*.
- Obs.:** The Index Kewensis (Hooker & Jackson, 1893-1895) mentions a neotype: “Papsch, *Gymnocalycium* 9: 201. 1996”, collected by Papsch WP92-139/205 (WU) in February 7, 1992. However, Papsch designated an epitype, not a neotype (Papsch, 1996: 201).
- Echinocactus microspermus** F. A. C. Weber var. **thionanthus** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 498. 1905.
- Current name:** *Parodia microsperma* (F. A. C. Weber) Speg. subsp. *microsperma*
- Protologue:** The distribution is only cited for the species *Echinocactus microspermus*: “*Hab.* Sat frequens in collinis et montanis aridis Prov. Catamarca, La Rioja, Tucuman, Salta et Jujuy”.
- Obs.:** According to Kiesling (1984a: 222) the original material (specimen and photographs) was not found. See obs. in *Echinocactus microspermus* var. *erythranthus* concerning the photograph reproduced by Britton and Rose.
- Echinopsis baldiana** Speg., *Anales Mus. Nac. Buenos Aires* 11 (ser. 3, 4): 490. 1905.
- Current name:** *Echinopsis leucantha* (Gillies ex Salm-Dyck) Walp.
- Protologue:** “*Hab.* In montanis saxosis aridissimis prope Ancasti, Prov. Catamarca”.
- Obs.:** There were not found type specimens or photographs of this species (Kiesling, 1984a).
- Echinopsis leucantha** (Gillies ex Salm-Dyck) Walp. var. **brasiliensis** Speg., *Anales Soc. Ci. Argent.* 99: 120. 1925.
- Current name:** Doubtful, presumably not *E. leucantha* (Leuenberger, pers. comm.).
- Protologue:** “*Hab.* En los peñascales de los alrededores del puerto de Santos, Brasil, Dec. 1914”.
- Obs.:** According to Kiesling (1984a: 237) the type specimen was not found.
- Leocereus paulensis** Speg., *Anales Soc. Ci. Argent.* 99: 116. 1925.
- Current name:** *Coleocephalocereus fluminensis* (Hunt, 1999)

- Protologue:** “*Hab.* En los peñascales, alrededor de la estación Raiz da Serra del ferrocarril entre Santos y São Paulo, Brasil, 29 de diciembre de 1914”.
- Obs.:** According to Kiesling (1984a: 237) the type specimen was not found.
- Maihueiopsis molfinoi** Speg., Anales Soc. Ci. Argent. 99: 86. 1925.
- Current name:** *Maihueiopsis glomerata* (Haw.) R. Kiesling
- Protologue:** “*Hab.* En los pedregales de la Puna, cerca de Santa Catalina (3650 m s/m.), provincia de Jujuy, Ig. F. Claren 16, I, 1901 (F. Kurtz, *Herbarium argentinum*, n° 11463)”.
- Exsiccata:** Argentina. Jujuy. Dpto. Santa Catalina, puna de Santa Catalina, 3650 m, 16-17/I/1901, F. Claren s.n. (BAF holotype; CORD, isotype herb. Kurtz 11463). (Kiesling 1984b: 204).
- Opuntia atrovirens** Speg., Anales Soc. Ci. Argent. 99: 91. 1925.
- Protologue:** “*Hab.* En los montes de la costa del Uruguay, en la provincia de Corrientes”.
- Obs.:** Cited as a doubtful taxon (Hosseus, 1939; Kiesling, 1999a). According to Kiesling (1984a: 236) no original material (specimens or photographs) was found.
- Opuntia canina** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 518. 1905.
- Current name:** *Opuntia anacantha* Speg. var. *anacantha*
- Protologue:** “*Hab.* In dumetis aridissimis prope Pampablanca, Prov. Jujui”.
- Photographs:** Britton and Rose (1919: 108, fig. 133). Neotype designated by Crook & Mottram (1996: 104). This photograph or its negative was not found in LP.
- Obs.:** According to Kiesling (1984a: 231) the type specimen was not found. See Kiesling’s (1998: 473) observations on photographs of types.
- Opuntia ficus-indica** (L.) Mill. var. ***gymnocarpa*** Speg., Anales Mus. Nac. Buenos Aires 11 (ser. 3, 4): 512. 1905.
- Current name:** *Opuntia ficus-indica* (L.) Mill. f. *ficus-indica* (Kiesling, 1999b)
- Protologue:** The distribution is only cited for the species *Opuntia ficus-indica*: “*Hab.* Culta et vulgatissima in omnibus Provinciis septemtrionalibus Corrientes, Misiones, Chaco, Jujui, Salta, Tucumán, Santiago del Estero, Catamarca, La Rioja, Córdoba, San Luis”.
- Exsiccata:** Argentina, Prov. Tucumán: Dpto. Capital, Río Salí, 21-XI-1924, Venturi 3556 (LIL). Neotype designated by Kiesling (1999b: 310).
- Obs.:** Spegazzini (1905) mentions this variety as a combination: “var. *gymnocarpa* (sic) (Web.)”. Since *Opuntia gymnocarpa* Weber corresponds to a nomen nudum, Kiesling (1999b: 310) confirms this as a variety of Spegazzini and designates a neotype for the variety.
- Opuntia pampeana** Speg., Contr. fl. Sierra Vent.: 30. 1896.
- Current name:** *Opuntia sulphurea* Gillies ex Salm-Dyck var. *pampeana* (Speg.) Backeb.
- Protologue:** “Escasa y esparcida en la base de los cerros y en las quebradas muy secas”. Specimens collected in Prov. Buenos Aires, Sierra de la Ventana, Valle de las Vertientes in 1895 by Spegazzini.
- Obs.:** Castellanos (1957: 17) mentioned the specimen BA 19229 that fit with the original description: “La descripción de Spegazzini concuerda muy bien con el ejemplar BA 19229, el cual no representa el conjunto de los caracteres de la especie, lo que prueba que no la hizo con una planta bien desarrollada”.
- Opuntia penicilligera** Speg., Anales Mus. Nac. Buenos Aires 7: 291. 1902.
- Protologue:** “*Hab.* Non rara in planitie arida inter Rio Negro et Rio Colorado nec non prope Bahia Blanca, aest. 1897-98 (C. S.) et in Pampa de Sanquil-co, Neuquen, Dec. 1899 (O. Asp)”.
- Obs.:** According to Kiesling (1984a: 212) the type specimens were not found.
- Opuntia prasina** Speg., Anales Soc. Ci. Argent. 99: 103. 1925.
- Current name:** *Opuntia elata* Hort. (Leuenberger, 2002).
- Protologue:** “*Hab.* En las barrancas del río Paraná, a lo largo de la costa de la provincia de Entre Ríos”.
- Obs.:** According to Kiesling (1984a: 236) the type specimen was not found.

**Parodia brasiliensis** Speg., Anales Soc. Ci. Argent. 99: 128. 1925.

**Protologue:** “*Hab.* Entre los peñascales a lo largo del Ferrocarril cerca de Santos, Brasil, diciembre 1914”.

**Photographs:** Original description: Spegazzini (1925: 129) published a photograph of this species. This photograph or its negative were not found in LP.

**Obs.:** According to Kiesling (1984a: 237) the type specimen was not found.

**Pereskia foetens** Speg. ex Weingart, Monatsschr. Kakteenk. 14: 134. 1904.

**Current name:** *Pereskia aculeata* Mill.

**Obs.:** Mentioned by Weingart as cultivated in his collection as : “a) *Peireskia foetens* Spegazz.” adding some characters. The name was cited in the synonymy of *P. aculeata* (Britton & Rose, 1919) but considered to be a nom. nudum by later authors including Leuenberger (1986). If accepted as valid publication, authorship should be “Speg. ex Weingart”. The connection of this name with Spegazzini is not clear and may be erroneous. No material was found, and the name has apparently never been mentioned by Spegazzini (Leuenberger, pers. comm.).

**Tephrocactus glomeratus** (Haw.) Backeb. var. **inermis** Speg., Revista Argent. Bot. 1: 200. 1926.

**Current name:** Probably a synonym of *Tephrocactus articulatus* (Pfeiff.) Backeb. var. *oligacanthus* (Speg.) Backeb. (Leuenberger, pers. comm.)

**Protologue:** Spegazzini (1926) made an extensive comment regarding the two varieties of *Tephrocactus glomeratus*. Spegazzini described the varieties *inermis* and *oligacantha* on the basis of specimens sent from Mendoza by the Mácola brothers. At that time Spegazzini suspected that the specimens that he had described as *Opuntia glomerata* Haw. in Anales Soc. Ci. Argent. 99: 99 (1925) were new taxa which could correspond to varieties of *Tephrocactus glomeratus*. The specimens described by Spegazzini under *O. glomerata* has the following protologue: “*Hab.* Muy común y abundante en la parte llana y desértica de los alrededores de las ciudades de Mendoza y San Juan”.

**Photographs:** Original description: Spegazzini (1926: without page nor figure number)

published two photographs of this species. These photographs or their negatives were not found in LP.

**Tephrocactus glomeratus** (Haw.) Backeb. var. **oligacanthus** Speg., Revista Argent. Bot. 1: 201. 1926.

**Current name:** *Tephrocactus articulatus* (Pfeiff.) Backeb. var. *oligacanthus* (Speg.) Backeb.

**Protologue:** See protologue and obs. in *Tephrocactus glomeratus* var. *inermis*.

**Photographs:** Original description: Spegazzini (1926: without page nor figure number) published a photograph of this species. This photograph or its negative were not found in LP.

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