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## Documentation and revision of the “Sociedad Botánica Barcelonesa” herbarium

### Abstract

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We present a study of the Sociedad Botánica Barcelonesa herbarium, carried out in a project which involves the documentation, computerization and revision of the historical herbaria conserved in the Botanical Institute of Barcelona. This society exchanged plants from 1872 to 1878 and was the first of this kind in Spain.

The herbarium contains 1.211 sheets collected in Spain (58%), France (25%), Italy (13%) and other Mediterranean countries (6%). Among the most important collectors we highlight Gandoger, Negri, R. Bolòs, Vayreda, Rodríguez Femenías, Loscos or Costa.

We present the transcription of the labels of six type sheets (*Allium purpureum* Loscos, *Antirrhinum rusciconense* Debeaux, *Arenaria minutiflora* Loscos, *Chaenorhinum thymiflorum* Loscos, *Cressa loscosii* Trèmols in Loscos and *Delphinium loscosii* Costa) and other specimens of taxonomical or corological interest such as *Nothobartsia spicata* or *Carex bicolor*.

### Introduction

This work shows the first results of a wider study which has as its aim the classification, computerization, documentation, revision and, finally, to make available to the scientific community the historical herbaria of the Botanical Institute of Barcelona.

These collections, segregated from the general herbarium, contain sheets collected from the 17<sup>th</sup> century until the 19<sup>th</sup>. The main ones are the herbaria of the Salvador family (17<sup>th</sup>-18<sup>th</sup> century, 4024 sheets), Costa (19<sup>th</sup> century, 15.000 sheets), Vayreda, Trèmols (19<sup>th</sup> century, about 30.000 sheets) and the Sociedad Botánica Barcelonesa (19<sup>th</sup> century, 1211 sheets).

The aim of this paper is the study of the Sociedad Botánica Barcelonesa herbarium. This was an institution of plant exchange created towards the end of the 19<sup>th</sup> century in Barcelona and promoted by Antoni C. Costa, the author of the first flora of Catalonia. We would like to demonstrate the value of this herbarium in regard to collections of special interest and possible type sheets.

*The Sociedad Botánica Barcelonesa. Historical context and activities*

The second half of the XIX century was very prolific in the formation of societies and associations dedicated to increasing the collaboration for cultural progress (Vallès & al., 2000). In this historical context we situate the creation of the Sociedad Botánica Barcelonesa (from now SBB), promoted by one of the most important authors in the history of Spanish botany, Antoni Cebrià Costa i Cuixart (1817-1886). Costa congregated around him a group of disciples that created, in 1872, the SBB, an institution of plant exchange with the common aim of forming a herbarium for the study of the Iberian flora (Camarasa 1989). This institution was the first Spanish scientific society of plant exchange and established a landmark among the Catalan scientific associations. The Society had the support of the “Real Academia de Ciencias y Artes de Barcelona” (from now RACAB), since most of its members were academics.

During its short period of activity (1872-1878), Costa and his collaborators maintained a prolific exchange, in which noted Spanish and foreign botanists (Loscos, Rodríguez Femenías, Timbal-Lagrave, Debeaux, Gandoger...) also participated. Every year each member had to send as many packages as partners inscribed in the society. Of all these shipments, the Society retained one copy that went on to form a part of the General Herbarium of the Society.

Unfortunately, the SBB coincided with the Carlist wars, which often impeded its smooth functioning. In spite of this circumstance, the Society was able to distribute several important collections, among these 325 species in 1872 and 301 in 1873. When the society was dissolved, in 1878, the General Herbarium was incorporated into the collections of the RACAB.

In 1925, at Font Quer’s request, the herbarium was passed, with other collections of the RACAB, to the Department of Botany of the Museum of Natural Sciences of Barcelona, embryo of the current Botanical Institute of Barcelona.

In this way, with the revision of this herbarium, we thereby assure the study of practically all the materials exchanged by the society.

**Methods***Documentation*

To study the materials of the herbarium we have looked for bibliography and unpublished documentation related to the collection.

In the files of the Botanical Institute of Barcelona we located a catalogue of herbaria given by the RACAB, and in the archives of the RACAB we also analysed the statutes of the Society, the exchange catalogue and a document containing descriptions of the new species distributed by the SBB members.

The searches also extended to the protologues of the possible type sheets. We have also looked for papers including information about the process of typification of these taxa, and whenever possible, we have contacted specialists of the groups, who have provided us with some very valuable information.

Computerization

With the purpose of systematizing the maximum information about the sheets, we have elaborated a formulary using the program “Access” of the package “Office” of Microsoft, which will prove useful when computerizing not only SBB herbarium but all the historical herbaria of the Botanical Institute of Barcelona.

After studying various sheets and labels and analyzing the information contained within them we elaborated a model that includes five tables (see Fig. 1 and 2):

“Label” collects original label information. We want to highlight the field “Original label” where we have transcribed the label of the sheet in a textual way and we have introduced some “tags” to indicate the type of annotation (manuscript, printed letter, italics, etcetera.)

“Revisavit” collects the information of the revision label.

“Authors”, “Label model” and “Conservation states” are thesauruses of the authors that participated in the collection, of different label models used in the herbarium and of different states of conservation of the plants. These thesauruses are related to the tables “Label” and “Revisavit”.

Revision of sheets

While computerizing the sheets we have upgraded the toponymy, the nomenclature, and, when necessary, we have revised the determination. For the toponymy we have used as a reference the database “GEONet Names Server” and for the nomenclature, the “International Plant Names Index” (1999).

<b>LABEL</b>			Original label	Publication				
Id	155	Genus syn	Original label	Loscos. Descr. Esp.				
Num of DC	001000	Species syn	Original label	Nuevas Planta				
Num of box	3	Author syn	Original label	1873:74:14 (1875,				
Num catalog	3001	Infrasyn	Original label	post. 1.VI): cf. Wilk.				
Num folder	59	Infrasyn tax	Original label	in Wilk. & Lange;				
Name folder	7. Arenaria - va	Infrasyn author syn	Original label	Prod. fl. hispan. 3(3):				
Family	Caryophyllaceae	Reference syn	Original label	620 (VII. 1070).				
Genus	Arenaria	Legit	Original label	(región: Muñoz				
Species	minutiflora	Determinavit	Original label	Gamierala, F. & A.				
Author	Loscos	Authors' letter	Original label	González Bueno,				
Infrasyn taxon 1		Label model	Original label	2001)				
Infrasyn 1		Common name	Original label					
Infrasyn author 1			Original label					
Infrasyn taxon 2			Original label					
Infrasyn 2			Original label					
Infrasyn author 2			Original label					
Referencia	Loscos ad Soc. Bot. Barc. cum descriptione							
Original label	\$NSOCIETAS BOTANICA DANCONENIGN\$ / z Arenaria minutiflora L. nomen / l. nomen ad Soc. Bot. Barc. cum descriptione / \$NHabitat\$ in petrosis siccis et in oliveta / \$NRegionis\$ inferioris Aragoniae / \$NLecto\$ circum circa \$SCastelera\$S\$ comm. / \$NDie\$ -- \$NIII\$ \$Apt. Jur. \$NAnri. 18\$73 / \$NSocio\$Franciscus Loscos et Bernál.							
Publication	Loscos. Descr. Esp. Nuevas Planta 1873:74:14 (1875, post. 1.VI): cf. Wilk. in Wilk. & Lange; Prod. fl. hispan. 3(3): 620 (VII. 1070). (región: Muñoz Gamierala, F. & A. González Bueno, 2001)							
Num in the back								
Internal number								
Comments								
Habitat	Habitat in petrosis siccis et in oliveta.							
Ecology	Habitat in petrosis siccis et in oliveta.							
Innality	Castelera: (I. enri)							
Altitude (m)								
Alt min (m)								
Alt max (m)								
Day								
Month	4							
Year	1873							
Printable type sheet	<input checked="" type="checkbox"/>							
Conservation state	A							
<b>REVISAVIT</b>								
ID	Street num	Genus	Species	Autho	Infrasyn taxon 1	Infrasyn1	Infrasyn author 1	
120	155	Arenaria	leptoclados	(Rchb.) Guss.				
Infrasyn taxon 2	Infrasyn2	Infrasyn author 2	Reference	Revisavit	Label model	Date	Comments	
				77	77	17/03/2003		

Fig. 1. Example of a formulary (see the image of the sheet in fig. 2).

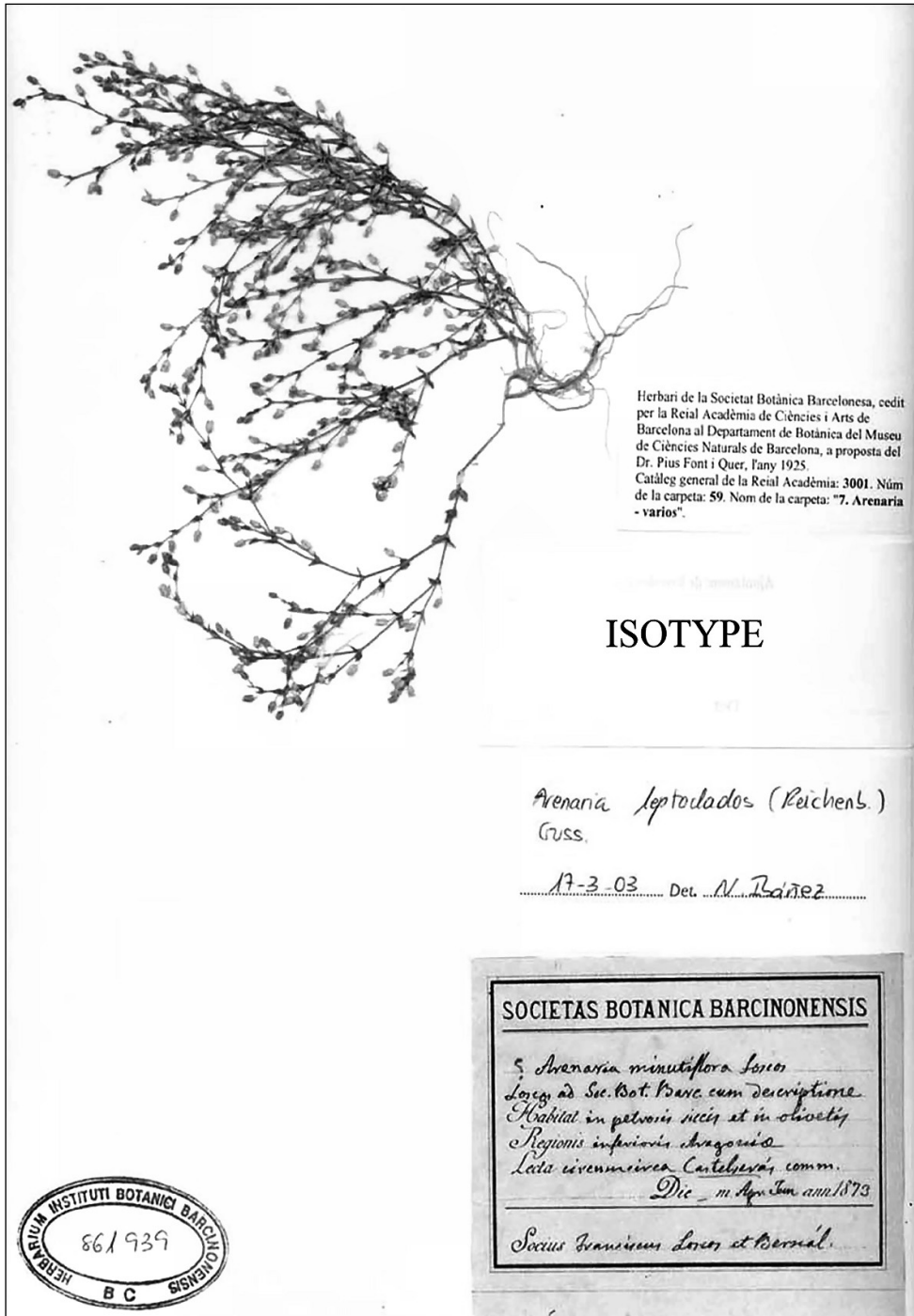


Fig. 2. Sheet of *Arenaria minutiflora* Loscos (BC 861939).

For the revision of the determinations we have used “Flora Europaea” (Tutin & al. 1964-1980), “Flora Iberica” (Castroviejo & al. 1986-2002) and “Flora dels Països Catalans” (Bolòs & Vigo 1984-2002). Concerning the possible types, we have indicated the reference of the protologue following the “International Plant Names Index” (1999).

In the results section we present a list of possible types. We also include comments and we indicate, where possible, the kind of type we are referring to.

## Results

The herbarium of the SBB contains 1211 sheets, all of them listed in the catalogue of herbaria given by the RACAB. At present, these sheets are distributed in 24 boxes and arranged in families according to the catalogue number.

### *Taxonomical groups*

In table 1 we show the main taxonomical groups represented in the herbarium. The proportions of these groups are similar to those of local floras from the northern Iberian Peninsula such as “Atlas de la Flora del Pirineo Aragonés” (Villar & al. 2001) or “Flora del Parc Natural del Cadí-Moixeró i de les serres veïnes” (Vigo & al. 2003). However, regarding the families, we would point out the *Rosaceae*, which represents over 11.8% of the total collection, due to the Gandoger exsiccate of *Rosa* that enriched the herbarium with 143 sheets.

### *Collectors and collection localities*

In tables 2, 3 and 4 we present statistics both of the authors that furnished the herbarium and of the prospected localities.

As expected, most of the sheets (708: 58%) come from Spain, the native country of the majority of the authors. The highest collection intensities correspond to Catalonia (provinces of Barcelona and Girona), the Balearic Islands and Central Spain. The majority of Catalan sheets were collected by R. Bolòs, Vayreda, Costa and Trèmols; the sheets from the Balearic Islands, by Rodríguez Femenías; from Teruel, by Loscos and Martin Cercós and from Madrid, largely, by Laguna and Carlos de Mazarredo.

Regarding the rest of Europe we find quite a lot of French sheets, thanks to Gandoger’s collection of *Rosa* and also contributions of Debeaux and Timbal-Lagrange. The Italian sheets were collected by Negri, Levier, Groves, Sommier and Piccone and the sheets coming from the Greek island of Rhodes were presumably collected by Bourgeau, who then offered the collection to Manel Compañó, a member of the society. As for the sheets from Hungary, Germany and Transylvania we think that they were particular donations or isolated exchanges with spare copies not collected by members of the Society.

### *Collection years*

We find specimens collected from 1838 to 1878 (see Fig. 3). The maximum activity was between the years 1872 and 1873, in the early years of the Society. Then the number declines, with the exception of 1876. Two sheets of the years 1838 and 1839 collected by Josep Oriol Bolòs were most likely incorporated into the herbarium by his son, Ramón

Table 1. Main taxonomical groups.

	<b>Sheets</b>	<b>%</b>
Pteridophyta	21	1.7
Gymnospermae	3	0.2
Dicotyledones	1027	84.8
Monocotyledones	160	13.2

Table 2. The main collectors and magnitude of their collections.

<b>Number of sheets</b>	<b>Collectors</b>
>100	M. Gandoger
76-100	F. Negri, R. Bolòs
51-75	E. Vayreda, O. Debeaux, J. J. Rodríguez Femeninas, F. Iparraguire, J. Pujol
26-50	M. Compañó, F. Loscos, A. C. Costa, F. Trèmols, M. Laguna, J. Jover, Conde de Torrependo, I. Zubia
15-25	E. Levier, H. Hanry, H. Groves, S. Sommier, J. Lacoizqueta, E. Quet, A. Huet, E. Timbal-Lagrave, J. R. Casaviella, R. Masferrer, Bordère

Table 3. Collection countries.

<b>Countries</b>	<b>Number of sheets</b>
Spain (Catalonia)	332
Spain (except Catalonia)	376
France	299
Italy	156
Greece	23
Hungary	2
Transylvania	1
Germany	1
No locality	21

Table 4. Collection intensities in Spain.

<b>Number of sheets</b>	<b>Province</b>
>100	Girona, Barcelona
51-100	Teruel, Balearic Islands, Guadalajara, Madrid
26-50	Navarra, La Rioja, Lleida
1-25	La Coruña, Pontevedra, Huesca, Tarragona, Segovia, Ciudad Real, Murcia

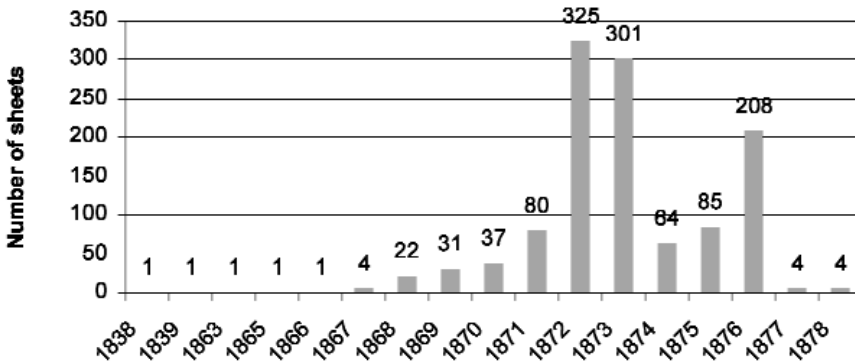


Fig. 3. Collection years of the sheets.

Bolòs, and 170 sheets dating from between 1863 and 1871 were collected by future members of the Society.

*Types and other sheets of taxonomical interest*

We consider a type sheet to be one that was collected by the author of the taxon before the publication of the protologue and that, in consequence, was, or could have been used for its description. According to Greuter & al. (2000), a “type sheet” includes the following cases: lectotype, isotype, syntype, paratype, neotype and epitype.

We present below the transcription of the labels of six type sheets. Moreover, eight sheets of taxonomical interest are also listed. We have not taken into account the type sheets of *Rosa* of Gandoger (11) owing to the complexity of this genus and because some of Gandoger’s works were not published in the correct way (e. g. *Flora Europaea*).

For all the sheets we have listed the sheet number, the taxon name and author corrected and normalized, the protologue, the transcription of the original label, the author of the label in brackets (m= manuscript), the text of the revision label (with the name of the author of this label in brackets) and the locotype indication. We also include remarks about the current state of the typification in the cases in which we have been able to refer to a monograph or contact specialists.

*Type sheets:*

**737. *Antirrhinum ruscinonense*** Debeaux, Bull. Soc. Bot. France 20: 14 (1873)

Original label: “*Antirrhinum ruscinonense* / Debeaux / A. Siculum Ucria / var a- gichone / Vieux —parts de Perpignan / 14 7bre 1872 / 1era distribué en 1873 / O. Debeaux” [m. Debeaux]

**Ind. loc.:** “Crescit in muris vetusis exterioribus opiidi dicti *Villeneuve de Perpignan*, regionis ruscinonensis, ubi copiose occurrit, floretque fere per totum annum” (Debeaux 1873).

**Remarks:** Lectotype, designated here: the bottom specimen of the first sheet. Some spe-

cialists consider *Antirrhinum ruscinonense* Debeaux as a synonym of *Antirrhinum majus* L. subsp. *striatum* (DC.) Rothm. (Sánchez-Cuxart & Bernal, 2001).

**714. *Cressa loscosii*** Trèmols in Loscos, Descr. Esp. Nuevas Reparto 1873-74: 14 (1875, post. 1.VI)

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *Cressa Loscosii*, Trémols, ad Soc. Bot. / Barc. cum descriptione / **Habitat** in salsugineis / **Regionis** infer Aragoniae / **Lecta** circa Castelserás loco unico La Sa- / ladeta dicto: v, v.v. **Die 1 m. Aug. ann. 1874** / **Socius** Franciscus Loscos et Bernál” [m. copyst of Loscos].

Revision label 1: “Species Gen. (mihi) novi Loscos ad Soc. Bot. Barcinonensis. Habitat in Aragonia. 1872. Socius Franciscus Loscos et Bernal”. [m. Loscos]

**Ind. loc.**: “Hab. ad margines foveae LA SALADETA dictae inde Castelserás ad Andorra: die 1 Aug. c. fl. et fr.” (Loscos 1986).

**Remarks**: Lectotype, designated here: the top specimen of the fourth sheet. Bolòs & Vigo (1995) consider this name to be a synonym of *Cressa cretica* L.

**953. *Allium purpureum*** Loscos, Trat. pl. Aragon: 7 (1876)

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *Allium purpureum* Loscos non Salisb. /serie imperfecta n. 1908 / **Habitat** in campis siccis / **Regionis** submontanae Aragoniae / **Lecta** circa Peñarroya rar juxta El / Castillo **Die...m. Jul. ann. 1865** / **Socius** Franciscus Loscos et Bernál” [m. Loscos]

**Ind. loc.**: “En los alrededores de Peñarroya, señaladamente en los campos pegados á la parte meridional de las rocas del Castillo, LOSC. PARD. d. 20, jul.” (Loscos & Pardo 1866).

**Isotype**: “Circa Peñarroya, 1865. Loscos” COI-Willk. (Valdés & Pastor 1983).

**Remarks**: Isotype. Valdés & Pastor (l.c.) consider this name to be a synonym of *Allium sphaerocephalon* L.

**155. *Arenaria minutiflora*** Loscos, Descr. Esp. Nuevas Reparto 1873-74:14 (1875, post. 1.VI)

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *¿ Arenaria minutiflora* Loscos / Loscos ad Soc. Bot. Barc. cum descriptione / **Habitat** in petrosis siccis et in olivetis / **Regionis** inferioris Aragoniae / **Lecta** circum circa Castelserás comm. / **Die — m. Apr. Jun. ann. 1873** / **Socius** Franciscus Loscos et Bernál.” [m. Loscos]

**Ind. loc.**: “Hab. Circumcirca Castelserás in petrosis calcareis siccis in rupibus et in campis paulo irrigatis.” (Loscos, Descr. Esp. Nuevas Reparto 1873-74: 14) (archives of Botanical Insitute of Barcelona).

**Lectotype**: “Cogida en Castelserás muy comun sobre cascajo en ribazos secos junto al origen de Acequia nueva, May. Jun. etc. 1873.” Loscos nº 470, Herb. Loscos. Benedí & Montserrat (2001) pg. 129.

**Remarks**: Isotype. The specialists consider this name to be synonymous with *Arenaria leptoclados* (Rchb.) Guss. (López González 1990).



**644. *Chaenorhinum thymiflorum*** Loscos, La Farmacia Española 6 (39): 602 (1874).

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *Chaenorhinum thymiflorum* Losc. m. cys. / Apud Societ. Botanicam Barcinonensem. / **Habitat** in petroso-siliceis solo gypsaceo / **Regionis** inferioris Aragonia (Tierra-baja) / **Lecta** c. Castelserás ad pedem eminentia ubi situm est / El Pilon del Pilar, c.c. **Die 10 m. Junii ann. 1872** / **Socius** Franciscus Loscos et Bernál.” [m. Loscos]

**Ind. loc.**: “Legi pr. Castelserás in collibus gypsaceis et petroso-siliceis juxta eminentiam ubi situm est El Pilon del Pilar, diebus 8-16 Jun-1872” (Loscos 1986).

**Lectotype**: “Habitat in petroso-siliceis solo gypsaceo. Regionis inferioris Aragonia (Tierra-baja). Lecta c. Castelserás ad pedem eminentia ubi situm est El Pilon del Pilar, c.c. Die 10 m Jun. ann 1872” MA 110795 (Benedí 1991).

**Remarks**: Isotype.

**28. *Delphinium loscosii*** Costa, Anales Soc. Esp. Hist. Nat. 2:26 (1873)

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *Delphinium Loscosii* Costa / Ampliación al Catalogo de Cataluña: Madrid 1873 / **Habitat** ad margines agrorum / **Regionis** Navarrae orientalis (et Aragoniae) / **Lecta** circa Caparroso in Navarra / **Die - m. .. ann. 1872** / Legit Socius Joannes Ruiz Casaviella / **Socius** dedit Franciscus Loscos et Bernal” [m. Loscos]

**Ind. loc.**: “Hab. Sembrados, rastros, etc., de Navarra, hacia Caparroso, etc., *Casaviella* !; alto Aragón hacia Fiscal, *Nuet* !; Aranda, *Calavia* !; bajo Aragón cerca de Peñarroya, Castelserás, Caspe, etc., *Loscos* !; Cataluña principalmente occidental, como Llano de Urgel, Segarra, *Costa* !; Prats de Rey, *Puiggari* !; Vallés, San Llorens del Munt, etc., *Costa* “ (Costa 1873)

**Lectotype**: “Hab. in Aragonia australis pratis arvisque quoque in Catalaunia”. BC, Herbari Costa (Blanché & Simón 2000).

**Remarks**: Isotype. The specimen comes from one of the localities cited in the protologue. The specialists consider this taxon to be a synonym of *Consolida pubescens* (DC.) Soó. (Blanché 1986).

*Other sheets of taxonomical interest:*

**646. *Chaenorhinum robustum*** Loscos, Descr. Esp. Nuevas Reparto 1873-74: 13 (1875)

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / ¿*Chaenorhinum robustum* Loscos / Ad Soc. Bot. Barce. cum Syn. et descriptione / **Habitat** in olivetis etc. / **Regionis** inferioris Aragoniae / **Lecta** c. Castelserás in planitie arida contra / Los Tormazos **Die 21 m. Maj. ann. 1873** / **Socius** Franciscus Loscos et Bernal.” [m. copyst of Loscos]

Revision label: *Linaria serpyllifolia* Lange subsp. *robusta* (Loscos) O. Bolòs & Vigo [Neus Ibáñez]

**Ind. loc.**: “Hab. Prope Castelserás (Aragonia) ubi detexi” (Descripción de las especies nuevas del reparto de 1873-74, archives of Botanical Institute of Barcelona).

**Lectotype**: “Cogida en Castelserás en la llanura frente á los Tomazos derecha del Guadalope.” Loscos n° 1927, Herb. Loscos, pg. 258 (Benedí & Montserrat, 2001).

**Remarks:** Our specimen was collected in 1873 at the type locality by the same collector of the lectotype.

**968. *Crocus magontanus* J. J. Rodr.**

Original label: “**J.J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)** / Crocus..... / **Localidad** entre la Mesquita y el Cap-negre / **Estacion** sitios estériles pedregosos / **Época** 31 enero 72 / **Recogido por** Rodriguez” [m. R. Femenías]  
Revision label: *Crocus magontanus* J.J. Rodr., Anales Soc. Esp. Hist. Nat. 3:56 (1874). [m. Costa]

**Ind. loc.:** “Hab. Prefiere los sitios pedregosos: La Mola, Binisarmaña, San Antonio, inmediaciones de la Mezquita, camino de Adaya [sic]; Forma-nou en Mahon [sic]; Santa Ponsa en Alayor; cerca de la playa de Algayrens, Santa Ana, inmediaciones de la cala de Santa Galdana en Ciudadela.- Noviembre a febrero”. Rodríguez (1874) pg. 56-58 .

**Lectotype:** Binisarmaña (Mahon), sitios pedregosos, 17-XII-1872, Rodríguez (COI-Willkomm), (Roselló & Sáez, 2000), pg. 95.

**Remarks:** Our exemplar comes from the type locality.

**252. *Cyclamen balearicum* Willk., Oesterr. Bot. Z. 25: 111 (1875)**

Original label: “**J. J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)**/ Cyclamen... / **Localidad** Mezquita (Mahon) / **Estacion** al pie de los lentiscos / **Época** 16 abril 71 / **Recogido por** Rodriguez.” [m. R. Femenías].

Revision label: *Cyclamen balearicum* Willk. [Neus Ibáñez]

**Ind. loc.:** “In solo pingui saxoso Balearium abundat atque in insula Majore ad summa montium cacumina usque adscendit. Floret Martio-Majo.” Rosselló & Sáez (2000) pg. 143.

**Lectotype:** Mallorca: in nemoribus pr. Miramar, 16-IV-1873 Willkomm, Herb. balear. n. 20. (COI-Willkomm), (Roselló & Sáez (l.c.)).

**Remarks:** This taxon was described from Mallorca in the year 1875, but Rodríguez Femenías had already found it in 1871 in Menorca.

**27. *Delphinium hispanicum* Willk. ex Costa, Anales Soc. Esp. Hist. Nat., 2:27 (1873)**

Original label: “**SOCIETAS BOTANICA BARCINONENSIS** / *Delphinium Hispanicum* Willk. sp. ined. / D. consolida. Asso. non L. nec Echeandia / **Habitat** ad segetes vulgaris. / **Regionis** montanae Aragoniae. / **Lecta** pr. Mosqueruela / **Die** 24 m Julii **ann.** 1876 / **Socius** suppl. Ramon Martin Cercós” [m. Loscos]

Revision label: *Consolida orientalis* (Gay) Schröd. subsp. *orientalis* [Neus Ibáñez]

**Ind. loc.:** “circa Linares à cl. Vivas lectam”. (Blanché & Simón, 2000).

**Lectotype:** “*Delphinium hispanicum* Wk. mss. cogida en Linares (Vivas) en 1864.” Determ. Loscos. BC-Herbari Costa (Blanché & Simón, 2000).

**Remarks:** Our specimen was collected in the type locality by Ramon Martin Cercós, who also sent material to Willkomm, the author of this taxon. Moreover, Loscos determined the lectotype in the Costa herbarium.

**767. *Digitalis dubia* L.**

Original label: “**J. J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)** Digitalis... / **Localidad** Son Blanc (Alayor) / **Estacion** al pie de grandes rocas / **Época** 19 mayo 72 / **Recogido por** Rodriguez” [m. R. Femenías]

Revision label 1: *Digitalis dubia* J.J. Rodr. in Anales Soc. Esp. Hist. Nat. 3: 45 (1874) [m. Costa]

**Ind. loc. *Digitalis dubia***: “Grietas de los peñascos y al pie de las rocas siempre con exposición al Norte: Mezquita, San Antonio, Calafiguera, Barranco del Fararet, Formanou, y Capifort en Mahon; barranco de Sa Mola, Santa Ponsa y Lluquelquelba y Son Blanc en Alayor; monte Toro, Son Vidal en Son Cristóbal; camino del barranco de Algendar en Ferrerías; Cala forcada en Ciudadela. Mayo, Junio” (Rodríguez 1874), pg. 47.

**Lectotype**: “Localité Mezquita. Station au pied des rochers. Epoque juin 69.” MPU (Pericàs & al 1987).

**Remarks**: *Digitalis minor* L. is a prior name and is correct for the plants designated as *Digitalis dubia* J. J. Rodr. (Hinz 1987).

**768. *Digitalis dubia* L.**

Original label: “**J. J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)** / Digitalis.../ **Localidad** Mezquita (Mahon) / **Estacion** al pie de las rocas y peñas / **Época** 17 junio 72 / **Recogido por** Rodriguez” [m. R. Femenías]

Revision label 1: *Digitalis purpurea* L. subsp. *dubia* (Rod.Fem.) Knoche [m. P. Montserrat]

**Remarks**: This sheet was collected by the author of the taxon in the type locality after the publication of the protologue.

**104. *Lepidium carrerasii* J. J. Rodr.**

Original label: “**J.J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)** / Lepidium / **Localidad** camino de la Mezquita cerca Mahon / **Estacion** bordes del camino, sitios húmedos / **Época** 4 mayo 70 / **Recogida por** Rodriguez” [m. R. Femenías]

Revision label: *Lepidium carrerasii* J.J. Rodr., Anales Soc. Esp. Hist. Nat. 3: 7 (1874) [m. Costa]

**Ind. loc.:** “Hab. Inmediaciones de Mahon en sitios frescos, tanto incultos como cultivados: hácia [sic] los caminos de la Mezquita de la Albufera, Rodr.; margen [sic] del torrente de la huerta de San Juan, Casall!” Rodríguez (1874) pg. 8.

**Lectotype**: Binisarmaña (Mahon), sitios frescos herbosos, 19-IV-1874, Rodríguez (COI-Willkomm) (Rosselló & Sáez 2000) pg. 45.

**Remarks**: Our exemplar was gathered by the same collector of the lectotype, but in another locality. Synonym of *L. spinosum* Ard.

**516. *Senecio rodriguezii* Boiss. & Reuter**

Original label: “**J. J. RODRIGUEZ. PLANTAS DE MENORCA. (BALEARES)** / Senecio ... **Localidad** Mongofre-nou (Mahon) / **Estacion** sitios pedregosos c. del mar / **Época** 22 abril 72 / **Recogido por** Rodriguez” [m. R. Femenías]

Revision label: *Senecio rodriguezii* Willk. ex J. J. Rodr. [Neus Ibáñez]

**Ind. loc:** “Hab. Cerca del mar en terrenos arenosos y pedregosos: mezquita, Capifort en el Pou den [sic] Carles, Mongofre-nou, Rodr.; Son Saura cerca del arenal den [sic] Castell, Casall!; entre la Torre del Ram y el puerto de Ciudadela, Rodr.” Rodríguez, 1874, pg. 36.

**Lectotype:** Menorca: in glareosis rupibusque arenosis et limosis ad finum Cala-Mezquita. Legi d. 5 Aprili 1873, Willkomm, Herb. balear. n. 34. (COI-Willkomm) Rosselló & Sáez (2000) pg. 38.

**Remarks:** Our exemplar was gathered by the same collector of the lectotype, but in another locality.

*Sheets of chorological interest*

Next, we present 3 other non-type sheets that we consider to be interesting, either because these plants are endangered or endemic.

**476. *Asperula rigida* Sibth.**

**Original label:** “**HERB. M. COMPAÑÓ** / *Asperula Rigida* (Sibth.) / **Hab.** Incultis / Dedit E. Bourgeau / **Legi.**t Prope Salakos (Insula Rho- / di. 17-VI-1871”

**Remarks:** According to Arne Strid (personal communication) this species is endemic to the island of Crete. The island of Rhodos has been thoroughly investigated from a floristic point of view, so it is thought that there may be a mistake in labelling or identification of Bourgeau’s specimen.

**781. *Nothobartsia spicata* (Ramond) Bolliger & Molau**

**Original label:** “**SOCIETAS BOTANICA BARCINONENSIS** / *Bartsia spicata* Ram. / **Habitat** Pascuis / **Regionis** Alpinae ad 1200 m. / **Lecta** Gèdre (Pyr) / **Die** 25 m. Aug. ann. 1876 / **Socius** Dr. Franciscus Gonzalez”

**Revision label 1:** *Bartsia spicata* [P. Montserrat]

**Revision label 2:** *Nothobartsia spicata* (Ramond) Bolliger & Molau [Neus Ibáñez]

**Remarks:** This plant, rare in the Pyrenees, is included in the provisional list of taxons in the second volume of the threatened flora of France as a species to monitor (Balayer 1995).

**1025. *Carex bicolor* All.**

**Original label:** “**SOCIETAS BOTANICA BARCINONENSIS** / *Carex bicolor* All. / **Habitat** Pascuis / **Regionis** Alpinae ad 2500 mts. / **Lecta** Marboré (Pyr.) / **Die** 27 m. Aug. ann. 1876 / **Socius** Manuel Compañó”

**Remarks:** This plant also appears in the provisional list of taxons of the threatened flora of France as a specie to monitor (Balayer 1995).

**Conclusions**

The 1.211 sheets in the Sociedad Botánica Barcelonesa herbarium provide us a balanced sample of the main taxonomical groups in comparison with the floras of Western Europe, a great part, 58%, coming from the Iberian Peninsula. Among the most important authors we consider it our duty to highlight R. Bolòs, Vayreda, Rodríguez Femenías, Loscos or Costa. From beyond the Iberian Peninsula we would like to emphasize the contributions of

Gandoger (mainly of French territory); Negri (who collected in the Italian region of Monferrato) and Debeaux (plants of Corsica and Perpignan).

We highlight some specimens of taxonomical interest or type sheets of Loscos (*Allium purpureum*, *Arenaria minutiflora*, *Chaenorhinum thymiflorum*...), Costa (*Delphinium loscosii*), Trèmols (*Cressa loscosii*), Debeaux (*Antirrhinum ruscinonense*), Rodríguez Femenías (*Digitalis dubia*, *Crocus magontanus*, *Lepidium carerasii*...) and Willkomm (*Delphinium hispanicum*). In the collection floristic rarities such as *Nothobartsia spicata* or *Carex bicolor* also appear.

Besides the inherent generic interest that exists in any historical collection, we think that a very high value should be attributed to the Sociedad Botánica Barcelonesa. It was the first Spanish institution that made possible the exchange of plants among Spanish and other Mediterranean botanists and fomented discussions on the description of new species or varieties among its members, something unusual until that moment in Spain. To conclude, the Sociedad Botánica Barcelonesa herbarium bring us a good witness to the activities and botanical relationships at the end of the 19<sup>th</sup> century.

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