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## Mediterranean specimens of the Prussian Botanist Jacob Breyne (1637–1697) in the Van Royen Herbarium, Leiden, The Netherlands

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### ABSTRACT

Directors of the Leiden botanic garden Adriaan van Royen (1704–1779) and his nephew David van Royen (1727–1799) accumulated a large number of plant specimens in their herbarium collection. The “Van Royen herbarium” at Naturalis Biodiversity Center (Leiden, the Netherlands) holds 89 specimens currently attributed to the Prussian botanist Jacob Breyne (1637–1697). The identity, provenance and history of these Breyne specimens were never studied, although this collection may contain specimens missing from two book herbaria by Breyne (dated 1659 and 1673). Here, we reveal the species represented by the Breyne specimens in the Van Royen collection, as well as their origin and the information contained on their labels. A total of 75 species were identified in Breyne’s specimens, mostly collected in the surroundings of Montpellier (south-eastern France). Of the 89 specimens attributed to Breyne, 54 contain labels in his own handwriting, confirming they were collected (or at least owned) by him. The specimens are not derived from Breyne’s book herbaria also kept in the Leiden collection, as these contain mostly Polish plants. Breyne most likely did not collect these specimens himself, but received them from one or several of his correspondents with ties to Montpellier. It is not known how Breyne’s specimens ended up in the Van Royen herbarium (possibly through his son Johann Philipp), but they provide an insight in the flora of Mediterranean France in the 17<sup>th</sup> century, and reflect changes in nomenclature and the state of botanical science at that time.

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Historic herbaria; Adriaan van Royen; David van Royen; montpellier; mediterranean flora



## Introduction

As directors of the Leiden Hortus Botanicus, Adriaan van Royen (1704–1779) and later his nephew David van Royen (1727–1799) were able to compile an herbarium with as many as 3000 plant specimens. Over two generations, the Van Royens managed to accumulate a substantial collection of native and exotic species, which was of great importance to the work of Carolus Linnaeus during his stay in the Netherlands (1735–1739), because of its size and diversity (Thijssse and Veldkamp 2003). The so-called Van Royen herbarium, which was transferred from the Leiden Botanical Garden to the National Herbarium of the Netherlands, is now stored at Naturalis Biodiversity Center (L) in Leiden, the Netherlands. It contains many specimens collected by other botanists than the Van Royens, such as Paul Herman (1646–1695), Herman Boerhaave (1668–1738), George Clifford (1685–1760) and Carl Peter Thunberg (1743–1828). The historic Van Royen herbarium has recently been digitized, and the digital specimens will soon be publicly available. Some parts of the Van Royen herbarium are well-studied (Thijssse and Veldkamp 2003), but the majority of the specimens has not been

subjected to recent botanical revision. Here we focus on the 89 specimens in the Van Royen collection that are currently attributed to the Prussian botanist Jacob Breyne (1637–1697).

Breyne was a merchant of Dutch descentance who practiced botany in his free time, and corresponded extensively with fellow botanists throughout the world, exchanging knowledge as well as specimens (Pękacka-Falkowska 2018; Fleischer 2019; Goeing et al. 2020). He wrote two multi-part works on local as well as exotic plants: the *Exoticarum aliarumque minus cognitarum plantarum centuria prima* (Breyne 1674–1678) and the *Prodromus fasciculi rariorum plantarum* (Breyne 1680–1689). The collection at Naturalis contains two book herbaria by Breyne, of which the specimens have recently been revised (De Jong et al. 2021). From these book herbaria many specimens have been removed. It is unknown who removed these specimens, when and why, and where they are now.

The identity, provenance and history of the Breyne specimens in the Van Royen herbarium were also largely unknown, as they had not been revised recently. Possibly, these loose sheets contained

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specimens taken from the Breyne book herbaria in the Leiden collection. Therefore, we revised all specimens attributed to Breyne in the Van Royen herbarium.

We wanted to answer the following questions:

- Which species are represented by the Breyne specimens in the Van Royen herbarium?
- What information is contained on the labels attached to the specimens?
- Where were these specimens collected?
- Were all specimens currently attributed to Breyne actually collected by him?
- How did these specimens end up in the Van Royen herbarium collection?
- Do these specimens contain plants missing from Breyne's book herbaria?

Answering these questions can give us further insights into the life and times of Jacob Breyne and his fellow botanists in the 17<sup>th</sup> and 18<sup>th</sup> centuries, and may reveal who took the missing specimens from Breyne's book herbaria, and why. Finally, names used on labels can help to better understand the history of nomenclature and taxonomy.

## Methods

All specimens considered here were primarily accessed through digital images held in the Naturalis Bioportal ([www.bioportal.naturalis.nl](http://www.bioportal.naturalis.nl)). These images will soon be freely available by typing the associated barcode (as found in the Appendix) in the search field at the Naturalis Bioportal. We compiled a list of specimens attributed to Jacob Breyne using the Catalog of the Van Royen herbarium by Thijssse and Veldkamp (2003), as well as searching for "Breyne" in the "collector" field of the Naturalis Bioportal. Identification of the specimens was carried out using Duistermaat (2020), Seybold (2011), Tison and de Foucault (2014), Tutin et al. (1964–1980), as well as herbarium material deposited in L. When identification depended on details not visible from the digital images, the actual specimens were consulted for examination using a stereo microscope.

To reveal the provenance of the specimens, as well as other information, Breyne's original labels were transcribed. Labels that were added later by other authors were not. We compared the handwriting on the labels of the presumed Breyne specimens with Breyne's own handwriting in his two book herbaria (dated 1659 and 1673) in the Naturalis collections (Pękacka-Falkowska 2018; De Jong et al. 2021).

## Results & discussion

The 89 Breyne specimens in the Van Royen collection generally consist of cut-out pieces of paper, containing a specimen with or without original label, glued onto

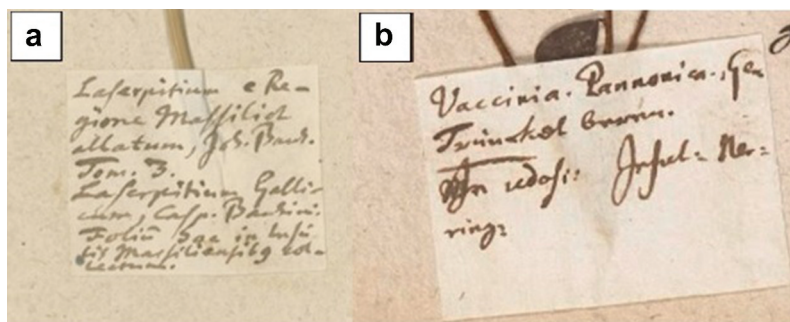
a larger herbarium sheet (Figure 1). They represent a total of 75 taxa, belonging to 29 families. The most represented families are Brassicaceae (12 specimens), Fabaceae (ten specimens), Caryophyllaceae and Lamiaceae (nine specimens each). Nine taxa are represented more than once.

In total, 54 specimens attributed to Breyne in the Van Royen herbarium contain labels with Breyne's own handwriting (Figure 2A), identical to the handwriting on the labels in his book herbaria in the Naturalis collections (Figure 2B) (De Jong et al. 2021). The other specimens lack labels in Breyne's handwriting, although some of the original sheets on which the specimens were mounted contain references to Breyne, like "Herb. v Royen [Breynius]" in a different handwriting, possibly that of Adriaan or David van Royen (Figure 3). Because original Breyne labels are absent, we cannot be completely sure whether these specimens were actually collected or owned by Jacob Breyne or, perhaps, his son Johann Phillip Breyne (1680–1764). Several specimens do not contain any reference to Breyne, and it is unclear why they have been attributed to him.

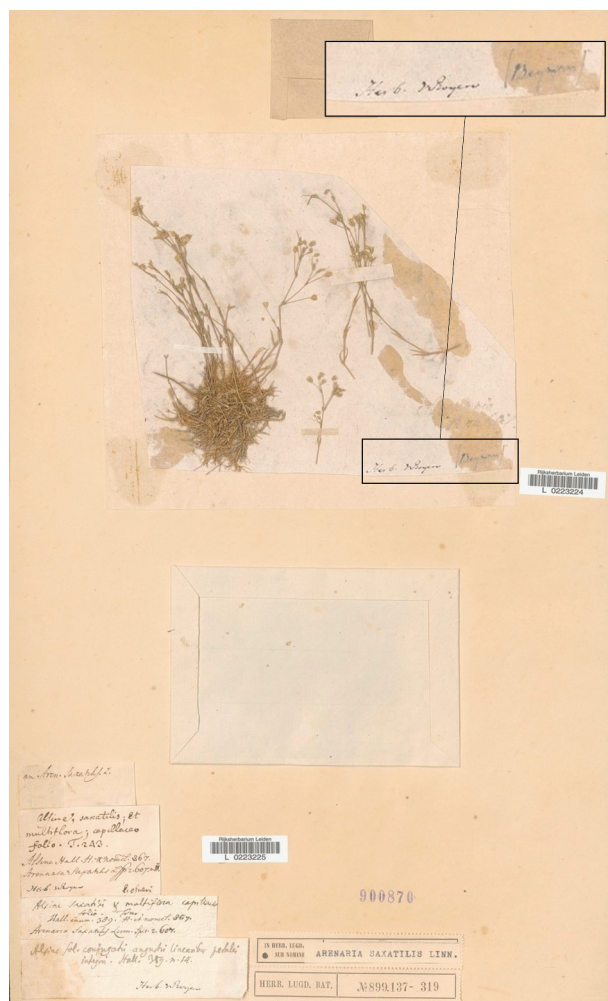


**Figure 1.** A specimen of *Trifolium aureum* (L 0100156). The label attached to the plant is in Breyne's handwriting, suggesting this specimen is a true Breyne specimen.





**Figure 2.** Examples of Breyne's handwriting found (A) on a specimen in the Van Royen herbarium, and (B) in his 1659 book herbarium.



**Figure 3.** A specimen of *Eremogone saxatilis* (L 0223224), attributed to Breyne. The writing on the paper onto which the specimen is glued reads “Herb. v Royen [Breyneus]”, probably in Adriaan or David van Royen's handwriting (see box). Because of the lack of an original Breyne label, we cannot be completely sure this specimen was collected or owned by Breyne.

With 41 specimens, a place name was mentioned on the label. In 36 such instances, this was Montpellier, while other place names included Narbonne, Marseille and the Provence region, all located in the Mediterranean region in the south-east of France. None of the specimens had labels

that mentioned Prussia or Poland, making it unlikely they were derived from Breyne's Prussian book herbaria in the Naturalis collection, which focus on the region around Gdańsk. With a specimen of *Pedicularis comosa* L. (Orobanchaceae), Breyne wrote “ex Dei Paradyso”, likely referring to the Cevennes mountains north of Montpellier (Lergé 1899, p. 180), as we learn from the Flemish botanist Mathias de l'Obel or Lobelius (1571, p. 51). The latter had studied medicine at the University of Montpellier around 1565 and spent some years botanizing in the region (Morren 1875).

Breyne did not travel often or far (Fleischer 2020), and he most likely did not visit Montpellier himself. However, Breyne did have many foreign contacts. All specimens in the Van Royen collection considered here are small, and so could very well have fitted in with a letter. Montpellier and its university were a known centre of botany mostly thanks to Guillaume Rondelet (1507–1566), and attracted many students who later became famous botanists, besides De l'Obel also as Carolus Clusius, Jacques Daléchamps, Felix Platter, Johann Bauhin, Caspar Ratzenberger, Leonhard Rauwolf, Pierre Magnol and others. Breyne's contemporary Ernst Gottfried Heyse (1657–1692), also from Danzig, studied at the universities of Leiden and Montpellier and became professor of physics and medicine in the city's academic gymnasium as well as supervising Danzig's botanic gardens between 1688 and 1692 (Hirsch 1837). He may have obtained specimens from his French alma mater, and shared them with Breyne. Breyne is also known to have corresponded and exchanged specimens with the French botanist Joseph Pitton de Tournefort (1656–1708) at the Jardin des Plantes in Paris (Fleischer 2019).

In his *Centuria*, Breyne mentions several other contacts with ties to Montpellier (Breyne 1674–1678). The apothecary Karl Schweickert (1605–1667) and the physician Johannes Schmiedt (1623–1690) both supplied him with exsiccates, and hence may have also provided (part of) the specimens now in the Leiden

collection. However, as their names, as well as those of Heyse and Tournefort, are not mentioned on any of the specimens, we cannot be sure of their origin.

Other than place names and plant names published earlier by diverse authors such as Johann (1541–1613) and Caspar Bauhin (1560–1624), Mathias de l'Obel (1538–1616), Carolus Clusius (1526–1609) and Pierre Magnol (1638–1715), Breyne mentioned little else on his labels. These few other remarks on the labels included the origin of an unidentified specimen of a Brassicaceae in a garden.

It is unlikely that any of the Breyne specimens in the Van Royen collection were originally taken from Breyne's book herbaria. The species missing from these bound herbaria, as indicated by remains of labels and other written text (De Jong et al. 2021), do not seem to match any of the species found in the Van Royen herbarium. Moreover, Breyne's book herbaria focused on plants from his native Prussia, making it unlikely he would have included specimens from the Mediterranean. This means that it is still a mystery who took the specimens from the Leiden book herbaria, when, and where they are now.

It also remains unknown how Breyne's specimens ended up in the Van Royen herbarium at the Leiden botanical garden. Breyne died in 1697, years before the birth of Adriaan and David Van Royen, which means that direct communication between these botanists was impossible. Breyne may have sent his specimens to a previous prefect of the Leiden garden, although the form of his specimens (pieces of paper containing the specimen cut out and attached to larger sheets) suggests that the specimens were once part of another (book) herbarium, which was cut up in order to add it to the Van Royen collection. Handwriting on these pieces of paper containing the specimens suggests that the specimens were already separated when they entered the Van Royen collection, meaning they were cut by either Adriaan or David van Royen, or someone before them. Jacob Breyne's son Johann Philipp is known to have sent specimens collected by his father to other scholars (Pękacka-Falkowska 2018). He may have sent (pieces of) a book herbarium or loose specimens to Leiden, although we cannot be sure. The name "Breynius" is mentioned on several of the specimens, this could refer to either Jacob or Johann Philipp Breyne.

## Conclusions

Of the 89 specimens in the Van Royen herbarium attributed to Jacob Breyne by the Naturalis Bioportal, 54 contain a label in Breyne's handwriting, and hence are true Breyne specimens. Other (but not all) specimens occasionally contain references to Breyne, but we cannot be sure whether he collected them himself, although he may have owned them. The 89 specimens represent 75 species, belonging to 29 families. Most

specimens were collected in south-eastern France, around Montpellier, Narbonne and Marseille. Breyne most likely did not visit this region himself; the specimens were very likely sent to him via letters from one of several contacts with ties to Montpellier. Breyne's labels contain little information besides the names and collection location of the specimen. It is unknown how Breyne's specimens ended up in the Van Royen herbarium; they may have been sent to a previous garden director, perhaps by Jacob Breyne's son Johann Philipp, or were part of an earlier herbarium. The Breyne specimens in the Van Royen herbarium do not match any of the missing species from the Breyne book herbaria. It remains unknown where those missing specimens are, and why they were removed. Still, Breyne's specimens in the Van Royen collection give us an insight into the state of botany in the 17<sup>th</sup> and 18<sup>th</sup> centuries, help us in understanding the past of botanical nomenclature, and show changes in the flora of Mediterranean France over the last 300 years.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## Author contributions

TvA drafted and supervised this study. MdJ and AS identified the specimens. MdJ further designed the study and wrote the paper. All authors read and commented on drafts.

## Data availability statement

The authors confirm that the data supporting the findings of this study are available within the article and its appendix. Digital images of the herbarium specimens this study was based on will soon be publicly available through Naturalis Bioportal ([biportal.naturalis.nl](http://biportal.naturalis.nl)).

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## Appendix: Species list of specimens attributed to Breyne in the Van Royen herbarium

List of taxa identified from the Breyne specimens within the Van Royen herbarium collection. Photographs of these specimens can be found by searching for their barcode in the Naturalis Bioportal ([www.bioportal.naturalis.nl](http://www.bioportal.naturalis.nl)).

Barcode	Current ID	Family	Place of collection	Label text
<u>L 0076018</u>	<i>Dactylorhiza viridis</i> (L.) R.M. Bateman, Pridgeon & M. W. Chase	Orchidaceae		(no Breyne label)
<u>L 0077817</u>	<i>Mercurialis tomentosa</i> L. (2 specimens)	Euphorbiaceae	Montpellier	Phyllon spicatum Caspari Bauhini. Phyllon theligonon Joh. Bauh. Tem. 2/Phyllon testiculatum Casp. Bauh. Phyllon Arrhenogon folio incano monspessulanum Joh. Bauh. T.2.
<u>L 0100070</u>	<i>Ajuga iva</i> (L.) Schreb.	Lamiaceae	Montpellier	Chamaepitys sive Isa moschata Monspeliensium Joh. Bauh. Tom. 3. Chamaepitys moschata, foliis sarratis: an prima Diose. Casp. Bauh.
<u>L 0100156</u>	<i>Trifolium aureum</i> Pollich	Fabaceae		Trifolium montanum lupulinum Caspari Bauhini in Pinace et Prodrum.
<u>L 0100221</u>	<i>Linum strictum</i> L.	Linaceae	Montpellier	Passerina Lobelii Joh. Bauh. T.3. Lithospermum Linariae folio monspeliacum, Casp. B. Pin.
<u>L 0101014</u>	<i>Alkanna tinctoria</i> (L.) Tausch.	Boraginaceae	Montpellier	Onosma et Anchusa puniceis floribus, Casp. Bauh. Anchusa Monspeliensis, Joh. B. T. 3.
<u>L 0101292</u>	<i>Allium moschatum</i> L.	Amaryllidaceae		Moly moschatum capillaceo folio Casp. Bauh. Prod. Allium sylvestre perpusillum juncifolium moschatum Joh. Bauh. T. 2
<u>L 0101371</u>	<i>Medicago marina</i> L.	Fabaceae		Trifolium cochleatum marinum sive Medica marina, Joh. Bauh. T.2. Trifolium cochleatum maritimum tomentosum, C.B.
<u>L 0101679</u>	<i>Frankenia hirsuta</i> L.	Frankeniaceae		Polygonum pusillo vermiculato Serpilli folio, Joh. Bauhini T.3. Polygonum maritimum minus foliolis serpilli Casp. Bauh.
<u>L 0140762</u>	<i>Fumana procumbens</i> (Dunal) Gren. & Godr.	Cistaceae		(no Breyne label)
<u>L 0141110</u>	Apiaceae sp. (cf. <i>Ferula</i> )	Apiaceae		(no Breyne label)
<u>L 0141617</u>	<i>Gentianopsis ciliata</i> (L.) Ma	Gentianaceae		(no Breyne label)
<u>L 0143264</u>	<i>Phyteuma orbiculare</i> L.	Campanulaceae		(no Breyne label)
<u>L 0143522</u>	<i>Leucanthemum vulgare</i> Lam.	Asteraceae		(no Breyne label)
<u>L 0143861</u>	<i>Inula hirta</i> L.	Asteraceae		(no Breyne label)
<u>L 0144204</u>	<i>Mibora minima</i> (L.) Desv.	Poaceae		Gramen minimum, Joh. Bauhini T.3. Gramen minimum, paniculis elegantissimis, Caspari Bauh. Pinace (Breyneius)/Agrostis minima
<u>L 0144205</u>	<i>Cherleria laricifolia</i> (L.) Iamónico	Caryophyllaceae	Montpellier	Caryophyllus saxifragus foliis tenuissimis, pulchro flore albo, magnoli qui transmisit. Ab Auricula munris pulchro flore albo folio tenuissimo Johan. Bauhini autem differt.
<u>L 0144208</u>	<i>Herniaria latifolia</i> Lapeyr.	Caryophyllaceae		Polygonum Herniariae foliis et facie perampla radice, lobelii et Joh. Bauhini Tom.3. Herniaria fruticosa viticulis lignosis, foliolis oblongiusculis, brevis densissima, Casp. Bauhin
<u>L 0144209</u> Mixed collection	<i>Petrorhagia saxifraga</i> (L.) Link <i>Silene</i> sp.	Caryophyllaceae	Provence	Tunica minima Gallo-provinciae Saxifraga magna, Camerarii in Matthiol. Cylarmon/Saxifraga Antiquorum, lobelij. Caryophyllus saxifragus strigosior, Casp. Bauhini.
<u>L 0144210</u>	<i>Odontarrhena alpestris</i> (L.) Ledeb.	Brassicaceae		Thlaspi incanum luteum serpilli folio, Casp. B.
<u>L 0144211</u>	<i>Alyssum alyssoides</i> (L.) L.	Brassicaceae		Thlaspi capsulis hirsutis, Joh. Bauh. Tom. 2. Thlaspi villosum capsulis hirsutis, Casp. Bauh. Pin. et Prod.
<u>L 0144212</u>	<i>Draba aizoides</i> L.	Brassicaceae		Leucojum luteum aizoides montanum, Columnae. Phyllon thelygonon Dalechampio, Joh. Bauhini Tom. 3. Sedum Alpinum hirsutum, Casp. Bauh.
<u>L 0144213</u>	Brassicaceae sp.	Brassicaceae		Draba minima Alpina, Nobis. Thlaspi Alpinum minus capitulo rotundo, Casp. Bauh. foliis non crenatis
<u>L 0144214</u>	<i>Saxifraga cespitosa</i> L.	Saxifragaceae	Montpellier	Sedum tridactylites Alpinum minus, Casp. Bauh. Prod. An Sedum Alpinum Gergorij Regiensis 4, qui plantam sanc etiam Sedum Alpinum musiosum appellavit, Columnae
<u>L 0144215</u>	<i>Saxifraga hypnoides</i> L.	Saxifragaceae	Montpellier	Sedum Alpinum Ajugae folio, Clusij Pan. Sedum Alpinum trifido folio, Caspari Bauhini Pin. Sedis affinis trifulca Alpina, flore albo, Joh. Bauh. Tom. III
<u>L 0144216</u>	<i>Astragalus monspessulanus</i> L.	Fabaceae	Montpellier	Astragalus Monspesulanus, Joh. Bauhini T.2. Polygala Cam. in Matth. Astragalus Alpinus magno flore, Casp. Bauh. Anthyllis claviculata, Lugd.
<u>L 0144217</u>	<i>Lathyrus aphaca</i> L.	Fabaceae	Montpellier	Vicia Lutea foliis Convolvuli minoris, Casp. Bauh. Pin. Vicia, quae Pitine Anquillarae, lata siliqua flore luteo, Johan. Bauhini T.2.
<u>L 0144218</u>	<i>Lotus corniculatus</i> L.	Fabaceae	Montpellier	Lotus corniculata hirsuta minor, Joh. Bauhini Tom. 2.
<u>L 0144219</u>	<i>Trifolium aureum</i> Pollich	Fabaceae	Montpellier	Trifolium aliud parvum cum glomerulis, lignosum, Joh. Bauh. Tom.2.

(Continued)



(Continued).

Barcode	Current ID	Family	Place of collection	Label text
<u>L 0144220</u>	<i>Helianthemum oelandicum</i> (L.) Dum.Cours.	Cistaceae		(no Breyne label)
<u>L 0144221</u>	<i>Astrantia minor</i> L.	Apiaceae	Montpellier	Helleborus niger Saniculae folio minor, Casp. Bauhini in Prodr.
<u>L 0144222</u>	<i>Laserpitium gallicum</i> L.	Apiaceae	Marseille	Laserpitium e Regione Massiliae allatum, Joh. Bauh. Tom.3. Laserpitium Gallicum, Casp. Bauhini. Folium sq in insulis Marsiliensibus collectum.
<u>L 0144223</u>	<i>Athamanta cretensis</i> L.	Apiaceae		Daucus creticus seminae hirsuto, Joh. Bauh. T.3. Daucus foliis Foeniculi tenuissimus, Casp. B.
<u>L 0144224</u>	<i>Androsace maxima</i> L.	Primulaceae	Montpellier	Androsace Matthioli altera, J. Bauh. Tom.3. Alsine affinis Androsace dicta major, C. Bauh. Pin.
<u>L 0144225</u>	<i>Coris monspeliensis</i> L.	Primulaceae	Montpellier	Coris Mospesulana purpurea, Joh. Bauhini T.3. cum flore et fructum. Coris coerulea maritima, Casp. Bauh. Pin.
<u>L 0144226</u>	<i>Blackstonia perfoliata</i> (L.) Huds.	Gentianaceae	Montpellier	Centaurium luteum perfoliatum, Joh. et Casp. Bauh.
<u>L 0144227</u>	<i>Gentianopsis ciliata</i> (L.) Ma	Gentianaceae	Montpellier	Gentiana angustifolia autumnalis minor floribus ad latera pilosis, Casp. B. Gentiana lanugine ad singulorum foliorum floris laciniis donata flore quadripartito, Joh. Bauh. T.3.
<u>L 0144228</u>	<i>Lamium amplexicaule</i> L.	Lamiaceae	Narbonne	Lamium floio caulem ambiente minus, flore albo Narbonense
<u>L 0144229</u>	<i>Prunella hyssopifolia</i> L.	Lamiaceae	Montpellier	Brunella Hyssopifolia, C. Bauh. Prunella angustifolia, Joh. Bauh. Tom.3.
<u>L 0144230</u>	<i>Plantago subulata</i> L.	Plantaginaceae		Coronopus serpentina minor maritima Scanica, sive Nortvagica, nobis.
<u>L 0144231</u>	<i>Plantago subulata</i> L.	Plantaginaceae	Montpellier	Coronopus serpentaria omnium minima, foliis longioribus, nobis. Coronopus serpentaria omnium minima, Joh. Bauh. T.3.
<u>L 0144232</u>	<i>Phyteuma orbiculare</i> L.	Campanulaceae	Montpellier	Rapunculus flore globoso purpureo, Joh. B. T.2. Rapunculus folia oblongo spica orbiculari, C.B. Pin.
<u>L 0144522</u>	<i>Pinguicula vulgaris</i> L.	Lentibulariaceae	Montpellier	Pinguicula Gesneri, Joh. Bauhino T.3. Sanicula montana, flore calcari donata, Casp. B. Pin.
<u>L 0220084</u>	<i>Gymnocarpium dryopteris</i> (L.) Newman	Aspleniaceae		(no Breyne label)
<u>L 0220504</u>	<i>Lycopodium clavatum</i> L.	Lycopodiaceae		(no Breyne label)
<u>L 0220594</u>	<i>Adiantum capillus-veneris</i> L.	Pteridaceae	Montpellier	Adiantum sive Capillus Veneris, Joh. Bauh. T.3. Adiantum foliis Coriandri, Caspati Bauhini.
<u>L 0220687</u>	<i>Polytrichum commune</i> Hedw.	Polytrichaceae		(no Breyne label)
<u>L 0220953</u>	<i>Botriochloa ischaemum</i> (L.) Keng	Poaceae		(no Breyne label)
<u>L 0221004</u>	<i>Calamagrostis epigejos</i> (L.) Roth.	Poaceae		(no Breyne label)
<u>L 0221166</u>	<i>Anthoxanthum nitens</i> (Weber) Y.Schouten & Veldkamp	Poaceae		(no Breyne label)
<u>L 0221241</u>	<i>Panicum miliaceum</i> L.	Poaceae		(no Breyne label)
<u>L 0221326</u>	<i>Sesleria caerulea</i> (L.) Ard.	Poaceae		(no Breyne label)
<u>L 0221570</u>	<i>Carex elata</i> All.	Cyperaceae		(no Breyne label)
<u>L 0221815</u>	<i>Oreojuncus trifidus</i> (L.) Záv. Drábek & Kirschner	Juncaceae		(no Breyne label)
<u>L 0222509</u>	<i>Cephalanthera longifolia</i> (L.) Fritsch	Orchidaceae		(no Breyne label)
<u>L 0222535</u>	<i>Goodyera repens</i> (L.) R.Br.	Orchidaceae		(no Breyne label)
<u>L 0222539</u>	<i>Habenaria alba</i> R.Br.	Orchidaceae		(no Breyne label)
<u>L 0222566</u>	<i>Ophrys apifera</i> Huds.	Orchidaceae		(no Breyne label)
<u>L 0222784</u>	<i>Thesium cf. bavarum</i> Schrank	Santalaceae		(no Breyne label)
<u>L 0223224</u>	<i>Eremogone saxatilis</i> (L.) Ikonn.	Caryophyllaceae		(no Breyne label)
<u>L 0223278</u>	<i>Dianthus alpinus</i> L.	Caryophyllaceae		(no Breyne label)
<u>L 0223284</u>	<i>Dianthus carthusianorum</i> L.	Caryophyllaceae		(no Breyne label)
<u>L 0223428</u>	<i>Silene acaulis</i> (L.) Jacq.	Caryophyllaceae		(no Breyne label)
<u>L 0223521</u>	<i>Heliosperma alpestre</i> (Jacq.) Griseb.	Caryophyllaceae		(no Breyne label)
<u>L 0223561</u>	<i>Stellaria aquatica</i> (L.) Scop.	Caryophyllaceae		(no Breyne label)
<u>L 0223587</u>	<i>Petrorhagia saxifraga</i> (L.) Link	Caryophyllaceae		(no Breyne label)
<u>L 0223970</u>	<i>Alyssum alyssoides</i> (L.) L.	Brassicaceae		(no Breyne label)
<u>L 0224055</u>	<i>Kernera saxatilis</i> (L.) Rchb.	Brassicaceae		(no Breyne label)
<u>L 0224115</u>	<i>Hornungia petraea</i> (L.) Rchb.	Brassicaceae		(no Breyne label)
<u>L 0224353</u>	<i>Saxifraga aspera</i> L.	Saxifragaceae		(no Breyne label)

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Barcode	Current ID	Family	Place of collection	Label text
<u>L 0326798</u>	<i>Iberis umbellata</i> L.	Brassicaceae	Narbonne, Montpellier	Thlaspi umbellatum tenuiser diviso folio amarum Narbonense sylvestre J. Bauh. T.2 Thlaspi umbellatum Nastrutij folio Monspeliacum, Casp. B. Pin.
<u>L 0326799</u>	Brassicaceae spec.	Brassicaceae	Narbonne, in a garden	Thlaspi umbellatum tenuiser diviso folio amarum Narbonense in horto cultum, Joh. Bauh. T.2.
<u>L 0326824</u>	<i>Teucrium montanum</i> L.	Lamiaceae	Montpellier	Polium lavendulae folio, Casp. Bauhini. Polium septimum, Clusij.
<u>L 0328446</u>	<i>Polygonum maritimum</i> L.	Polygonaceae	Montpellier	Polygonum maritimum, Joh. Bauh. T.3. Polygonum maritimum latifolium Casp. Bauh.
<u>L 0367578</u>	<i>Thymus vulgaris</i> L.	Lamiaceae	Montpellier	Thymus vulgaris folio tenuiore candido, Caspari Bauhini, cum Epithymo
<u>L 0367675</u>	<i>Teucrium polium</i> L.	Lamiaceae	Montpellier	Polium montanum purpureum tenerius. Polium 5 Clusij. flore purpureo. Polium maritimum supinum alterum flos Caspari Bauhini. flore purpureo
<u>L 0367683</u>	<i>Teucrium polium</i> L.	Lamiaceae	Montpellier	Polium montanum luteum, Casp. Bauhini. Polium montanum 3, Clusij.
<u>L 0367684</u>	<i>Teucrium polium</i> L.	Lamiaceae	Montpellier	Polium montanum purpureum, Lobelij. Polium 4, Clusij. Polium maritimum supinum Venetum, Casp. Bauhini.
<u>L 0367685</u>	<i>Teucrium polium</i> L.	Lamiaceae	Montpellier	Polium montanum album, Casp. B. Polium montanum primum, Clusij
<u>L 0367904</u>	<i>Hippocrepis ciliata</i> Willd.	Fabaceae	Montpellier	Ferrum equinum siliqua multiplici, Casp. Bauh. Pin. Ferrum equinum alterum polyceraton, Columnae
<u>L 0420560</u>	<i>Pedicularis comosa</i> L.	Orobanchaceae	Montpellier	Pedicularis bulbosa, Joh. B. T.2. ubi folia none feliciter exsculpta Filipendula montana fl. pediculariae, C. Bauh. ex Dei Paradyso
<u>L 0421740</u>	<i>Nasturtium microphyllum</i> (Boenn.) Rchb.	Brassicaceae	Provence	Nasturtium pumilum latifolium Provinciale, Sweitzerij
<u>L 0421741</u>	<i>Nasturtium microphyllum</i> (Boenn.) Rchb.	Brassicaceae	Montpellier	Nasturtium pumilum supinum vernum, Magnolij, Bot. Monsp.
<u>L 0421742</u>	<i>Nasturtium microphyllum</i> (Boenn.) Rchb.	Brassicaceae	Montpellier	Nastrutium minimum vernum, foliis tantum circa radicem, Magnolij Bot. m.
<u>L 0422597</u>	<i>Oxytropis jacquinii</i> Bunge	Fabaceae	Montpellier	Onobrychis clypeata aspera minor, Casp. Bauhini Prod. Polygala Gesneri affine Caput gallinaceum, Joh. Bauhini. Tom.2.
<u>L 0422598</u>	<i>Astragalus monspessulanus</i> L.	Fabaceae	Montpellier	Onobrychis quarta, Clusij. Astragalus quidam montanus, vel Onobrychis aliis, Joh. Bauh. T.2. Onobrychis floribus Viciae majoribus coeruleo purpurascens, Casp. Bauh.
<u>L 0424987</u>	cf. <i>Ononis pusilla</i> L.	Fabaceae	Montpellier	Anonis pusilla glabra fruticans festucacea, sive aristata, Breyni Fase.r.pl. Spica trifolia, Alpini de pl. exot.