

PAU'S TAXA FROM MOROCCO: SUMMARY AND TYPES

INTRODUCTION

Carlos Pau (1857-1937) was one of the first Spanish botanists interested in the flora of Northern Morocco (González-Bueno & Gomis, 2005). He began to study it in 1908, thanks to some plants supplied by other naturalists. In spite that he only visited Morocco two times, during the next 28 years he described about 400 taxa from this area. Although there is an exhaustive list of Pau's taxa (Carrasco, 1975), it is not complete and the typification of the majority of the names is still to be considered.

The main source of original Pau's names is the personal collection of the author (c. 100,000 specimens), included in the MA Herbarium of the "Real Jardín Botánico de Madrid" (Mateo, 1995). Original material can also be found in the BC Herbarium of the Botanical Institute of Barcelona due the close relationship between Pau and Pius Font Quer, the curator of this herbarium at that time.



Carlos Pau (left) and Pius Font Quer

SUMMARY

- TAXA:** Pau published 410 taxa, most of them of infraspecific rank (65,1%), and authored by Pau (55,6%) or Pau & Font Quer (39,3%). 42 of them may be considered *nomina nuda*.
- TYPES:** specimen types for the 95,6 % of the taxa have been found, principally in MA (429 specimens) and BC (269 specimens) herbaria.
- ITER MAROCCANUM:** more than a half of the taxa were published by Font Quer in his exsiccata *Iter maroccanum* collected between 1927 and 1930 (table 2, figure 1) and distributed to other herbaria like BCN, BM, G, GDA, JEPS, LAU and MPU (González Bueno *et al.*, 1988).
- PAU'S TRIPS TO MOROCCO:** Pau visited Morocco for the first time in 1910 when he spent a few days in the Melilla region. In 1921, he explored exhaustively the north of Yebala Kabile and later published 69 novelties (table 2, figures 1, 3).
- COLLECTORS:** many specimens used by Pau for new taxa descriptions were supplied by Font Quer or other naturalists such as Manuel Vidal, who published different articles about his expeditions in Morocco (table 2).
- FAMILIES:** Pau described taxa belonging to 57 different families, the most represented Fabaceae, Asteraceae and Lamiaceae (figure 4), very widespread and frequent in this zone.

Table 1. Number of taxa among authors and rank

Author(s)	Species	Ssp.	Var.	Form	TOTAL
Pau	82	.	104	42	228
Pau & Font Quer	56	.	97	8	161
Pau & Sennen	2	2	5	.	9
Other	3	2	5	2	12
TOTAL	143	4	211	52	410

Table 2. Principal publications of Pau's taxa

Publication	Taxa
Font Quer, F. (1928-1932). <i>Iter maroccanum</i> . Barcelona	225
Pau, C. (1924). Plantas del norte de Yebala (Marruecos). <i>Mem. Real Soc. Esp. Hist. Nat.</i> 12: 263-401	69
Vidal, M. (1921-1926). Materiales para la flora marroquí. <i>Bol. Soc. Esp. Hist. Nat.</i> 21-26	18
Vidal, M. (1928). Exploraciones botánicas en Marruecos. <i>Asoc. Esp. Progr. Cien.</i> 6: 131-163	13
Pau, C. (1911). Una visita botánica al Riff (Abril, Mayo 1910). <i>Ann. Acad. Polytechn. Porto</i> 6: 96-99	8
Sennen, F. (1936). <i>Diagnoses des nouveautés parues dans les exsiccata Plantes d'Espagne et du Maroc de 1928 à 1935</i> . Vic.	6

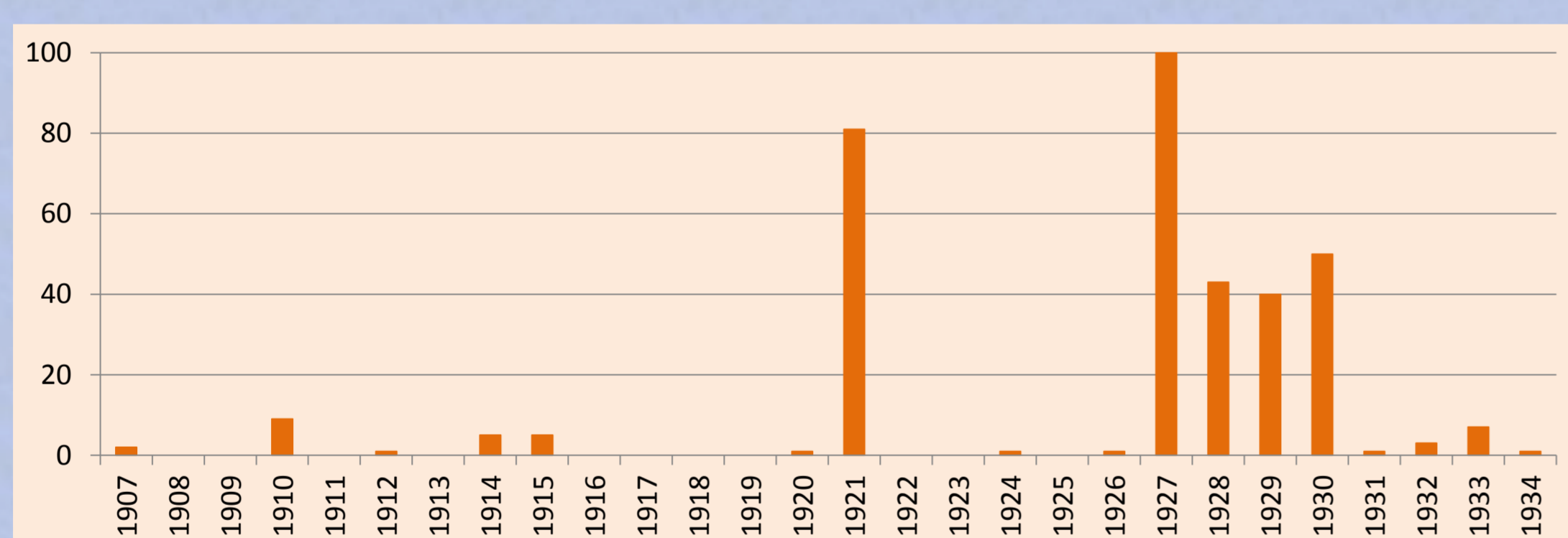


Figure 1. Collection year of the type material

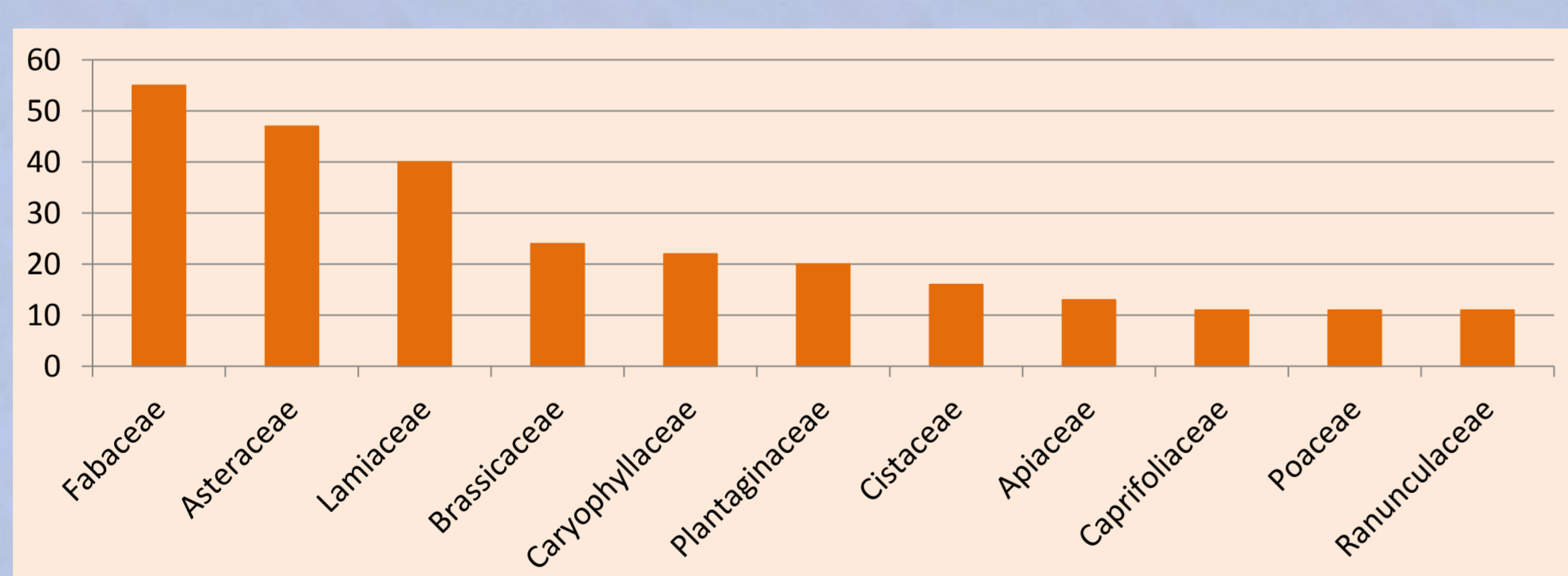


Figure 2. Most represented families of Pau's taxa

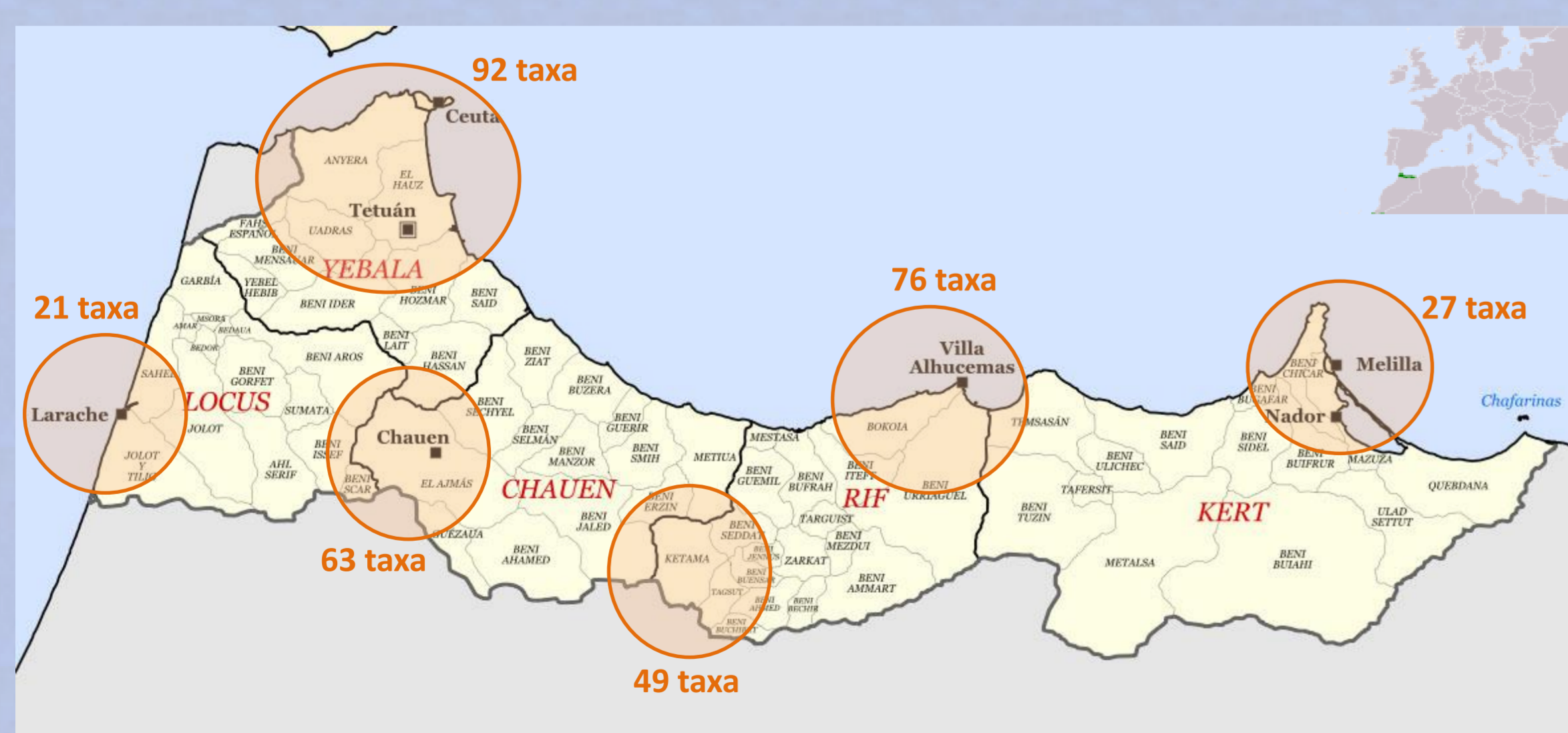
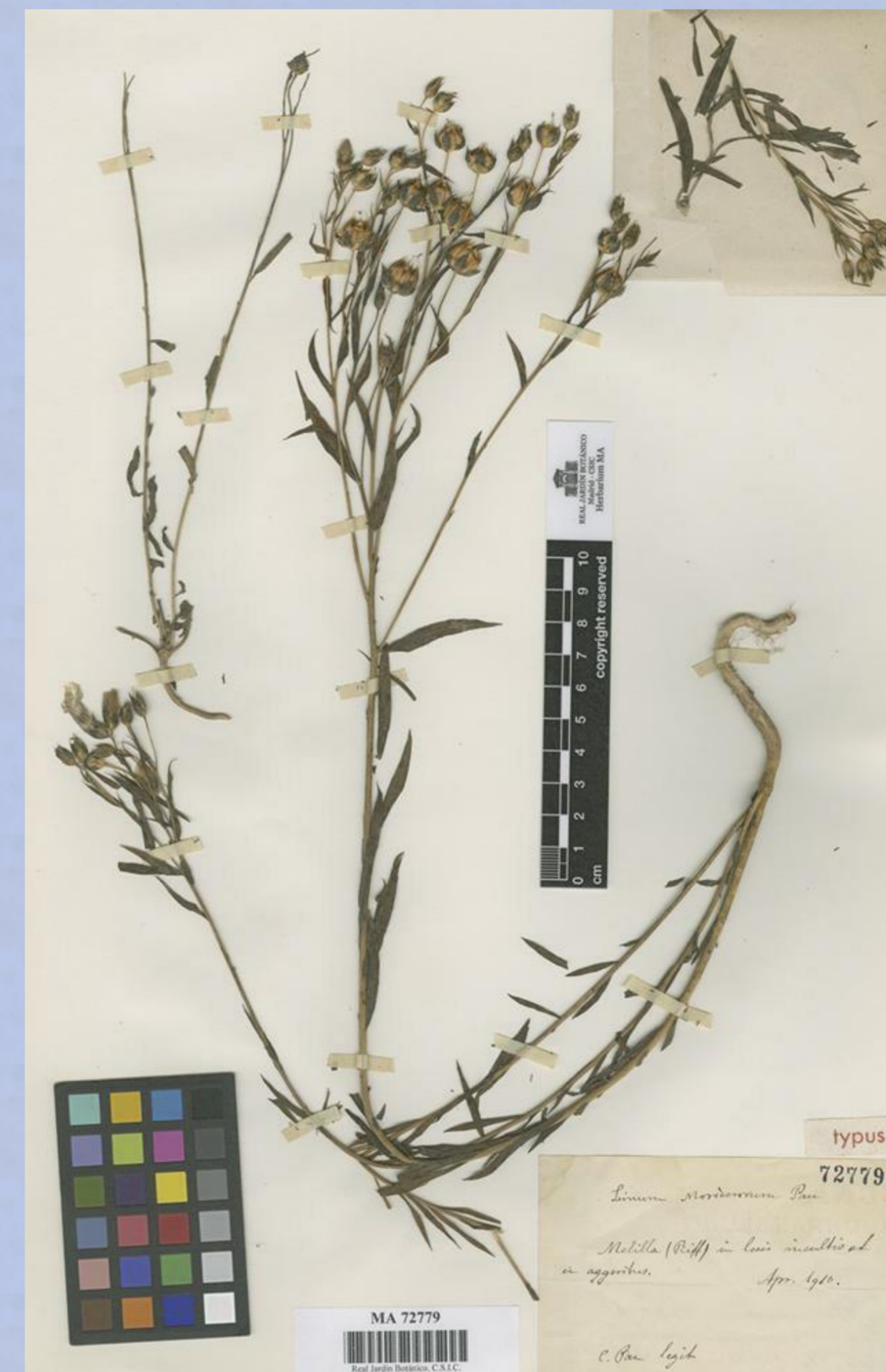


Figure 3. Northern Morocco map in the Spanish protectorate period (1912-1956) with the principal localities of the type material indicated.

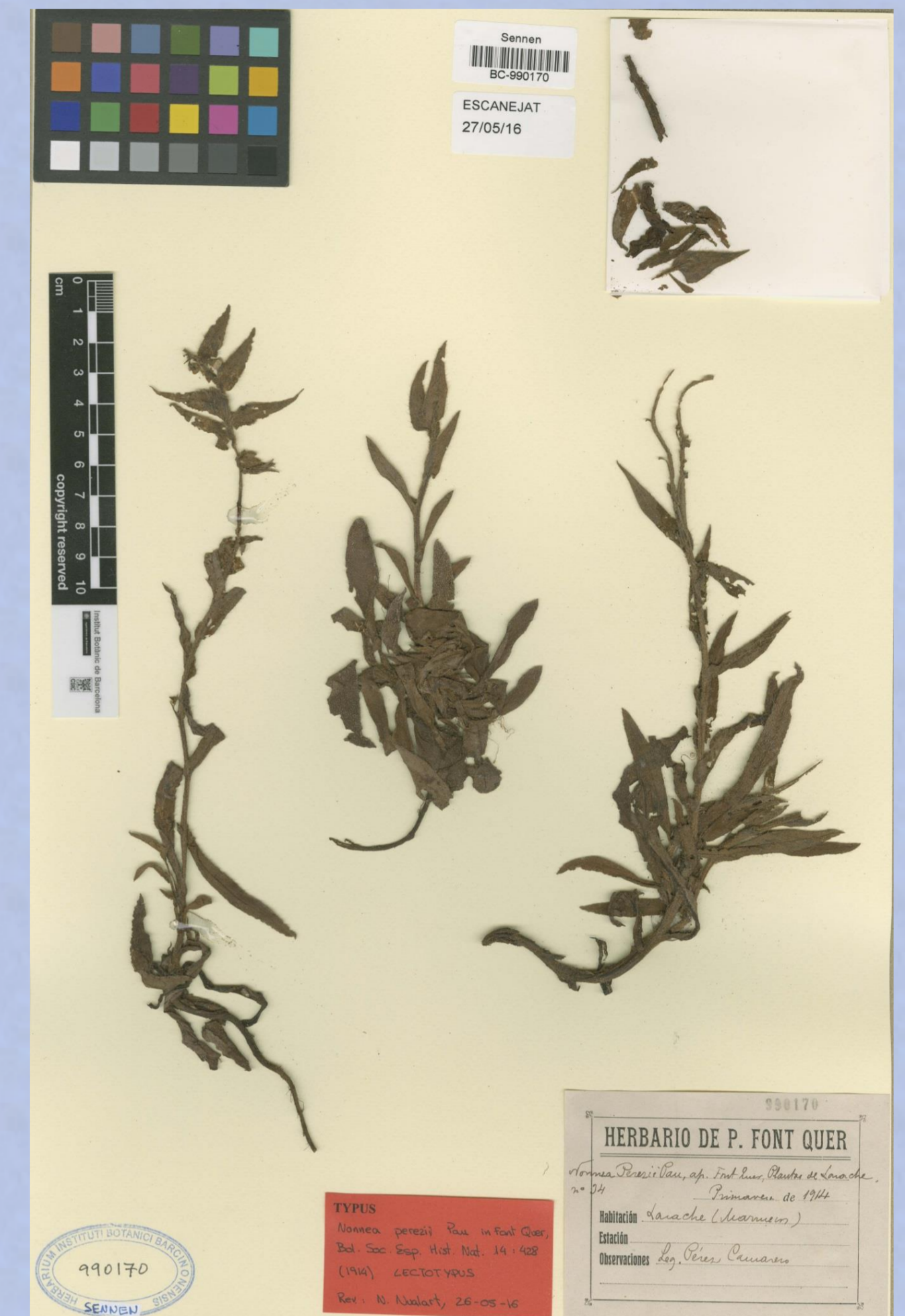
BIBLIOGRAPHY

- Carrasco, M. A. (1975). Contribución a la obra taxonómica de Carlos Pau. *Trab. Dep. Bot. (Madrid)* 8: 1-171.
- González-Bueno, A. & Gomis, A. (2005). Spanish naturalists and natural history societies in the process of colonisation in Morocco (1859-1912). *Arch. Nat. Hist.* 32(1): 80-91.
- González Bueno, A. *et al.* (1988). Les campanyes botàniques de Pius Font i Quer al Nord d'Àfrica. *Treb. Inst. Bot. Barcelona*, 12.
- Mateo, G. (1995). Carlos Pau Español. La botànica extracadèmica. In Camarasa, J. M. & Roca, A. (eds.). *Ciència i tècnica als Països Catalans: una aproximació biogràfica*. Fundació Catalana per a la Recerca. Barcelona.

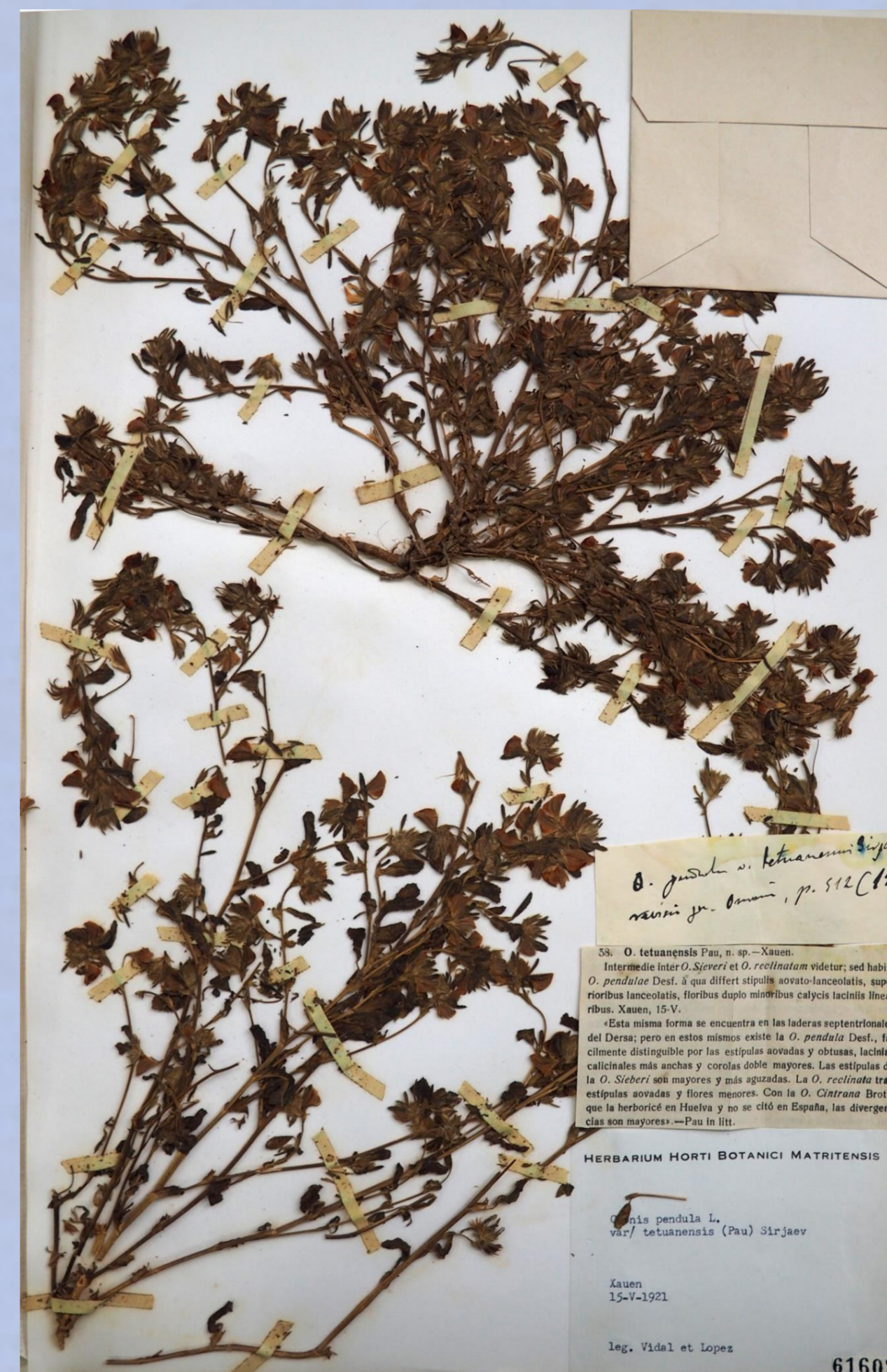
TYPES



MA-72779 – *Linum moroderorum* Pau, Ann. Acad. Polytechn. Porto 6: 98 (1911)



BC-Sennen-990170 – *Nonnea perezii* Pau in Font Quer, Bol. Soc. Esp. Hist. Nat. 14: 428 (1914)



MA-61602 – *Ononis tetuanensis* Pau, in Vidal, Bol. Soc. Esp. Hist. Nat. 21: 276 (1921)



MA-108921 (duplicates in BCN, MA and P) – *Celsia barnadesii* var. *mauritanica* Pau, Mem. Mus. Ci. Nat. Barcelona, Ser. Bot. 1(1): 59 (1922)



MA-102652 (duplicates in BC and FI) – *Lamium berenguieri* Pau, Mem. Real Soc. Esp. Hist. Nat. 12: 378 (1924)



BC-34093 (duplicates in BCN, GDA, MA and MPU) – *Carthamus rhiphaeus* Font Quer & Pau, Iter Maroc. 1927 n° 711 (1928), in sched.