

Mediterranean Botany

ISSN e 2603-9109

<https://doi.org/10.5209/mbot.75315>

EDICIONES
COMPLUTENSE

Josep Cuatrecasas. A secretis redactor [Cavanillesia 1928–1938]

Antonio González Bueno¹

Received: 17 November 2020 / Accepted: 2 July 2021 / Published online: 21 February 2022

Abstract. We analyze the activity of Josep Cuatrecasas Arumí (1903–1996) as editorial secretary of the magazine *Cavanillesia*, published between 1928 and 1938. We value his participation from four fronts: secretary, author, reviewer and re-rated. The study allows specifying the date of publication of the articles in the journal, the influence of Emili Huguet del Villar on the geobotanical methodology followed by Josep Cuatrecasas and his effort to disseminate the new botanical publications, from the pages of the journal, together with Pius Font i Quer.

Keywords: José Cuatrecasas, Cavanillesia, Carlos Pau, Pius Font i Quer, botany journal.

How to cite: González Bueno, A. 2022. Josep Cuatrecasas. A secretis redactor [Cavanillesia, 1928–1938]. *Mediterr. Bot.* 43, e75315. <https://doi.org/10.5209/mbot.75315>

Introduction

On February 29, 1928, the first issue of the *Cavanillesia. Rerum botanicarum acta* came out. It was published under the direction of Carlos Pau (1857–1937). Pius Font i Quer (1888–1964) assumed responsibility for the writing, and Josep Cuatrecasas (1903–1996) accepted the secretariat's work. Three different generations, united by the ties of botanical training.

The idea of publishing a botanical magazine was made explicit in a letter Pius Font sent to ask Carlos Pau, from Barcelona, dated 1927.11.26. Among other considerations, he commented on finding a publishing house for a budget for printing. At the same time, he proposed Pau to be the journal director, assuming himself the tasks of editor and Josep Cuatrecasas, editorial secretary (Mateo, 1996: 162). The publication of *Cavanillesia* would run like wildfire among Spanish botanists: Salustio Alvarado will congratulate Carlos Pau for the initiative, in a letter dated in Zaragoza, in December 1927.12.12 (Mateo, 1996: 162),

Josep Cuatrecasas himself would publicize the magazine among the readers of the *Butlletí de l'Institució Catalana d'Història Natural*. In the volume corresponding to October 1928, he will print this review:

“Cavanillesia, Rerum Botanicarum Acta. Revista de botànica que acaba de veure la llum a nostra Ciutat dedicada a fomentar la fitografia sistemàtica i morfològica, la fitogeografia, la geobotànica i la fisiologia vegetal, i que tractarà especialment quant tingui relació amb les terres occidentals de la Mediterrània. Portarà referències bibliogràfiques completes i noticiari de quantes novetats s'hi relacionin. Publicarà deu fascicles a l'any de setze pàgines cada un i seran llengües de redacció

les Ilatines exclusivament. El Preu de subscripció es de 12 pessetes anyals.

Es director de la Revista l'eminent botànic segorbi Dr. Carlos Pan, redactor en cap i ànima de la mateixa el Dr. Font Quer i secretari de redacció el Dr. J. Cuatrecasas. Han sortit ja 6 números en dos fascicles, havent-se publicat treballs del Sr. Lacaita [...], de P. Font Quer [...], de J. Cuatrecasas [...], R. González Fragoso [...], de Jacques Maheu [...], de C. Pau [...]. Abundant bibliografia firmada per Font Quer, Fernández Riofrío i Cuatrecasas completa els números, principalment els del segon fascicle. Felicitem als autors i desitjem molta prosperitat a aqueixa nova publicació que fa honor a la tradicional cultura del nostre poble, congratulant-nos que sigui a Barcelona ahont hagi nascut la primera revista exclusivament botànica apareguda a Espanya” (Cuatrecasas, 1928a).

Josep Cuatrecasas: editorial secretary

Josep Cuatrecasas was a 25-year-old young man. Hired as a ‘temporary assistant’ in the department of Botany, at the Faculty of Pharmacy of the University of Barcelona (1924). He has just returned from his first postdoctoral stay abroad, paid by the Faculty of Pharmacy of Barcelona, to study Alpine Biology in Bourg Saint-Pierre (Switzerland) with Robert Chodat. He had not achieved his PhD title yet, but he would get it a couple of months later, in April of this 1928, at the Central University (Madrid), with a rehearsal titled *Estudios sobre la Flora y Vegetación del Macizo de Mágina*, directed by Pius Font i Quer, rated with an excellent.

Cavanillesia came to fill a gap in Spanish scientific production. But the exception of *Resumen de la Sociedad Linneana Matritense* (1879–1882), Spanish botanists did

¹ Department of Pharmaceutical and Food Technology, Complutense University. E-28040 Madrid, Spain. Email: agbueno@ucm.es

not have a publication to disseminate the results of their research. *Cavanillesia* proclaims itself as the connecting link among this professional team and those interested in the study of the flora of the western Mediterranean. The editors point out, poetically, in the magazine presentation: “Hortum dilectum a CAVANILLESIA obeuntis solis parts Mediterranei erint ex iis quae trans montem Atlanteum vast solitudines Africæ usque ad Pyrenai cacumina, nive candida, spectant, et ab occasu usque ad orientem solis, former Lusitaniae oris Atlantico mare affusis, litora tenuis Provinciae splendida” (*Cavanillesia*, 1 (1/3): 5. 1928).

The topic limits are delimited by their absence: “Caeteris in botanicae partibus CAVANILLESIA margines non habebit, nobis simul loquetur de morphologia, phisiologia, cryptogamia, phanerogamia, geobotanica, et, ubi decet, de editionibus ad occidental vel botanicus quo vis praecipue in pertinent index, ex omnibus rebus maximi momenti quae, aut ex cultu disciplinee nostræ pendunt, aut animos ignavos incidunt” (*Cavanillesia*, 1 (1/3): 5. 1928). Every botanical contribution has its space in the journal. *Cavanillesia* incorporated two sections: ‘Bibliography’, ‘Hac in parte breves caesuras operum omnium botanicae sistematicae, phytogeographiaeque, ad mediterráneam regiones obeuntis solis pertinentium (...) Cum editio nostra se ducem a botanicis hispanis adbiberi optet, hac bibliographica pars, ómnibus, etiam non satis sermonis latinae peritis, scripta, lingua hispana qua plerique in Península utuntur, prolata erit” (*Cavanillesia*, 1 (1/3): 45, 1928); and ‘News and comments’, ‘Haec para iisdem rebua quibus bibliographien, latine scripta erit’ (*Cavanillesia*, 1 (1/3): 46. 1928). Both sections were written in Spanish, mainly due to Josep Cuatrecasas and Pius Font i Quer.

Cavanillesia accepted original papers in Latin and other Mediterranean languages with Latin origin. The ‘Lectoribus salutem!’, with which the journal is presented, is written in Latin, as well as its first articles, due to Charles-Carmichael Lacaita (1853–1933); Pius Font i Quer will publish the second of the contributions in Catalan and Josep Cuatrecasas will have his ‘Nota sobre el *Leucanthemum arundanum* (Boiss.) Cuatr.’ printed in Spanish.

This first number was printed in Manresa, at the Imprenta de San José. The volumes until December 1936 were printed at the same place. From then on, and until January 1938, the magazine was printed at the Imprenta Torra, also located in Manresa.

The *Cavanillesia* publishers had the idea of distributing ten fascicles a year, with an average of 16 pages, grouped in blocks of two or three fascicles, which would suppose deliveries of 160 pages per year. The regularity of the magazine suffered up and down in its distribution. Table 1 shows the effective dates of distribution. The editors took good care of printing them in each delivery to validate the taxonomic news published on their pages. An imprecision is found in *Cavanillesia*, 6 (4/9); the editors note: “Las primeras páginas de este número de *Cavanillesia* fueron publicadas en el mes de abril. No así el resto, que no ha visto la luz hasta el 20

de octubre de 1934” (*Cavanillesia*, 6 (4/9): 144). It is difficult to point where the interruption occurred, but it seems clear that the monograph by Emili Huguet del Villar on the taxa of the genus *Thymus* in the south-east of the peninsula (Huguet del Villar, 1934 [1933]) should be included in the second time block, given its allusion to *Thymus hirtus* Wild. [sic]. var. *gadorensis* (Pau) Maire, Cat. Pl. Maroc 3: 654. 1934 (cf. Huguet del Villar, 1934 [1933]: 121). At least the final pages of *Cavanillesia*, 6 (11/10), were distributed after the annotated date “12/20/1934”; in it Pius Font i Quer incorporates the obituary of Joaquim Codina i Vinyes (1868–1934), who died on the afternoon of December 26, 1934 (Font Quer, 1933 [1934]), so it must be after this date. It must have gone out of the press in early 1935, before March, the date attributed to the first delivery of the following volume (*Cavanillesia*, 7(1/5)).

The ‘Lectoribus salutem!’ of the magazine, with which its first issue began, ended with this sentence: “Utinam Cavanillesia extentum vitae spatium habeat, atque omnes in posterum vigere videamus” (*Cavanillesia* 1(1/3): 5, 1928); without any doubt, the magazine fulfilled the mission with which it had been founded.

Josep Cuatrecasas: author

The note on *Leucanthemum arundanum* (Boiss.) Cuatr., the first of the articles published by Josep Cuatrecasas in *Cavanillesia* (Cuatrecasas, 1928b), is a paradigmatic example of the way of working followed by Pius Font i Quer and his group. First, they verified the floristic rarity, then the type was studied and the literary history of the plant was analyzed. The author works on a heterogeneous population group sufficient to know the morphological diversity of the taxon. The collected sample, 200 specimens, allows to approximate its description to the polymorphism variable of the plant, thus completing the description provided by the first descriptor.

The taxonomic study implies the analysis of the geographical distribution of the group. “Nos encontramos pues en presencia de un interesante grupo específico hispano-atlántico de plantas orófilas, raras en las cumbres calizas de pocas montañas andaluzas y del Atlas”, which leads him to compare the taxon with the next ones, which allows him to offer a scheme in which the taxonomic novelty is interrelated with its relatives.

It is not the discovery of an isolated event. It is the process of integrating the observed variability within a new taxonomic scheme. This integrating vision of the known forms, analyzed in the field, in the herbaria and the bibliography, is quite far from the single description of the plant individual that does not adapt to the description of the type or the observation of a cotype. The author affirms: “Es precisamente el polimorfismo de este último [*Leucanthemum arundanum* (Boiss.) Cuatr.] observado en el copioso material traído el que nos permite aproximar en el grado taxonómico las tres especies en discusión [*L. atlanticum* (Ball) Maire y *L. Mairei* Humbert]”.

Table 1. *Cavanillesia* effective publication dates (1928-1938)

Magazine	Pages	Publication
<i>Cavanillesia</i> , 1(1/3)	[1]-48	29/02/1928
<i>Cavanillesia</i> , 1(4/6)	[49]-96	10/04/1928
<i>Cavanillesia</i> , 1(7/8)	[97]-128	01/12/1928
<i>Cavanillesia</i> , 1(9/10)	[129]-[161]	31/01/1929
<i>Cavanillesia</i> , 2(1/4)	[1]-64	30/04/1929
<i>Cavanillesia</i> , 2(5/6)	[65]-96	20/08/1929
<i>Cavanillesia</i> , 2(7/10)	[97]-158	20/12/1929
<i>Cavanillesia</i> , 2(11/12)	[159]-[192]	31/03/1930
<i>Cavanillesia</i> , 3(1/5)	[5]-7	10/05/1930
<i>Cavanillesia</i> , 3(1/5)	[1]-4, [8]-80	10/07/1930
<i>Cavanillesia</i> , 3(6)	[81]-96	15/10/1930
<i>Cavanillesia</i> , 3(7/12)	[97]-[200]	25/02/1931
<i>Cavanillesia</i> , 4(1/3)	[1]-48	10/05/1931
<i>Cavanillesia</i> , 4(4/5)	[49]-80	30/06/1931
<i>Cavanillesia</i> , 4(6/7)	[81]-112	10/09/1931
<i>Cavanillesia</i> , 4(8/9)	[113]-[144]	31/10/1931
<i>Cavanillesia</i> , 4(10)	[145]-[164]	20/12/1931
<i>Cavanillesia</i> , 5(1/4)	[1]-64	20/03/1932
<i>Cavanillesia</i> , 5(5/12)	[65]-[196]	31/12/1932
<i>Cavanillesia</i> , 6(1/3)	[1]-48	10/12/1933
<i>Cavanillesia</i> , 6(4/9)	[49]-144	15/04/1934
		20/10/1934
<i>Cavanillesia</i> , 6(10/11)	[145]-[184]	20/12/1934
		[01/02/1935]
<i>Cavanillesia</i> , 7(1/5)	[1]-88	20/03/1935
<i>Cavanillesia</i> , 7(6/9)	[89]-[152]	25/07/1935
<i>Cavanillesia</i> , 7(10/12)	[152]-191 [192]	25/01/1936
<i>Cavanillesia</i> , 8(1/7)	[1]-104	15/12/1936
<i>Cavanillesia</i> , 8(8)	[105]-132	15/05/1937
<i>Cavanillesia</i> , 8(9/10)	[133]-172	25/01/1938

His second botanical article published in *Cavanillesia* is a review of some aspects, especially edaphic and geobotanical, published also in his PhD thesis (Cuatrecasas, 1929a), which had a favorable criticism by Emilio Huguet del Villar [Emili Huguet i Serratocó, 1871–1951], in the pages of *Cavanillesia* (Huguet, 1930a), where it was depicted as “una obra sintética de altos vuelos, que en este país no había realizado nadie todavía [...] en el sentido de haber tenido en cuenta el mayor número de puntos de vista; pues asuntos agotados no existe probablemente ninguno en el campo de las ciencias naturales”.

These “Adiciones y correcciones a mis estudios sobre Magina” (Cuatrecasas, 1930) aim to “resolver algunas dudas y puntos oscuros de mi trabajo (...) encontrar algunas especies tardías, entonces no mencionadas, y tomar notas y observaciones pedológicas, siguiendo las enseñanzas recibidas del Sr. Villar en unas excursiones rápidas por Cataluña, las cuales avaladas por los ensayos hechos por dicho señor de unas 30 muestras de tierra que traje en 1926, me permitirán dar una idea sucinta, pero expresiva, de los suelos de Mágina y de su relación con la vegetación, datos que reforzarán aquellas nociones ecológicas”. (Cuatrecasas, 1930: 8).

The stamp of Emili Huguet del Villar is evident in this work; it follows his scientific terminology for the qualification of soils (Huguet, 1930b), to which he dedicates the first part of the work, and it also uses his geobotanical terms to define the landscape. The last decisions on the determination of the conflictive plants continue to correspond to Carlos Pau, with whom he maintains abundant correspondence and a specialist, such as the Swiss Svante-Samuel Murbeck (1859–1946) for the *Verbascum L.* specimens.

This ecological vision of vegetation, promoted by Emili Huguet del Villar, leads over his approach to the “Cliserie del Valle de Ordesa” to which he dedicates his third botanical article published in *Cavanillesia* (Cuatrecasas, 1931a), where he uses the theoretical framework and the annotations described by this naturalist in his *Geobotánica* (Villar, 1929), advanced a few years ago (Huguet, 1925). In this scheme, which Cuatrecasas will maintain in his works on Colombian vegetation, the groupings of plants are mere “cohabitaciones” [consortia] that define a landscape, not “associations” as the phytosociological school will defend (Casado, 2000). In his proposal, the biotype of the plants takes on as much importance as the floristic composition itself

and the description of the plant formations moves away from the hierarchical classificatory models, pleasant to the Braun-Blanquetist phytosociologists.

In the summer of 1935, *Cavanillesia* publishes his study on *Viola cazorlensis* Gand. made in collaboration with Hans Melchior (1894–1984), during one of the catalan's stays at the Botanischer Garten und Botanisches Museum Berlin-Dahlem (Melchior, Cuatrecasas, 1935). This is a holistic study on this taxon, where the taxonomic treatment, already present in previous contributions (Cuatrecasas, 1928b), joins to a phylogenetic approach, learned from previous contributions of Hans Melchior (1925).

In the study of this taxon, the authors address its literary history, its morphological characteristics, its floral biology, its geographical dispersion and, completing the information available with the morphology and distribution of other related taxa, its character as an archaic-Mediterranean element, following the ideas about unconformities and orogeny in the Mediterranean by Wilfried von Seidlitz (1931): “Ello no quiere decir que la *Viola cazorlensis* haya vivido miles de siglos en las mismas localidades actuales, sino que nuestra viola, lo mismo que es conocido de otras especies, habrá experimentado migraciones, cambios continuos de residencia y las actuales más bien representan estaciones de refugio de unas reliquias florales” (Melchior, Cuatrecasas, 1935: 144).

Josep Cuatrecasas incorporates to this work the analysis of the soils on which *Viola cazorlensis* Gand grows and the “cortejo variable de plantas, es decir que forma parte de muy diferentes sinecias, que carece de constancia social” (Melchior, Cuatrecasas, 1935: 135). He provides some data on these ‘supercomplejo sinecial’ using the nomenclature created by Emili Huguet del Villar. His observations would be collected, years later, by Pierre-Ambrunaz Quézel (1926–2015), who gave phytosociological validity to his *Saxifragion campoi* Cuatr. ex Quézel 1953 (Quézel, 1953), by Javier Fernández Casas. The latter did the same with his *Violetum cazorlensis* Cuatr. ex Fern. Casas (Fernández Casas, 1972) and by José María Martínez Parras and Manuel Peinado Lorca with their *Saxifragetum camposii* Cuatr. ex Mart. Parras & Peinado (Martínez Parras & Peinado, 1990), typifiers of a work that had been conceived with a different mentality from the one that these authors, bound by nomenclatural norms, had to accept; something that Vernon H. Heywood had already pointed out: “...así que dentro de la ‘asociación’ de Cuatrecasas hav varias unidades, y la *Viola* independientemente tiene su microhabitat más o menos fresco [...] dentro de una comunidad falsa, que es superficialmente xerófila a causa de la predominancia de especies xerófilas o heliófilas” (Heywood, 1953: 476). It is that the methodological conception on vegetation of Emili Huguet del Villar –and therefore of Josep Cuatrecasas– and of the phytosociological school are not coincident, so their conclusions are hardly exportable from one system to another.

Let us add a work, not signed, but whose authorship seems undoubted: the edition of the work written by Antonio Blanco (fl. 1834–m. 1873), “Appendix

exhibens diagnosis specierum novarum quas in Hispaniae province Giennensi (Reyno de Jaen) anno 1849 detexit cl. Antonio Blanco. (Parisiis, Jul. 1880)”, preserved in Geneva, in the ‘Herbarium Boissier.’ The attribution in the magazine is not obvious: “Cavanillesia gaudet illustratur typis cudendo hanc translationem, a socio a Secretis actam, manuscripti Webb et Heldreich Genevae in Bibliotheca ‘Herbier Boissier’ prostantis” (*Cavanillesia*, 2(1/4): 5), but it is difficult to imagine another person, attached to the magazine’s secretariat, with a specific interest in the flora of Jaén and who would have studied, in Ginebra, the materials of the ‘Herbario Boissier’; J. Cuatrecasas himself indicates in his doctoral report: “Hacia la mitad del siglo pasado [XIX] fué ANTONIO BLANCO, (...) quien herborizó activamente por la provincia, visitando algunas montañas de la misma y especialmente la Sierra de Jaén, descubriendo algunas especies, siendo resumen de su labor el catálogo que en 1850 publicaron los ingleses Webb y Heldrich, trabajo manuscrito del que sólo se hicieron tres ejemplares, siendo por lo tanto difícilmente asequible. Un apéndice a este catálogo (...), también muy raro, que contiene las descripciones originales de las formas descubiertas por Blanco en 1849 y publicado en 1880, estuvo a nuestro alcance en la rica biblioteca del ‘Herbier Boissier’, en Ginebra, en donde lo copiamos íntegramente para nuestro uso” (Cuatrecasas, 1929a: 9).

Josep Cuatrecasas published five obituaries in *Cavanillesia*. The first three were leading figures of European Botany: the Frenchman Léon Guignard (1852–1928) (Cuatrecasas, 1928e), the Germans Adolf Engler (1844–1930) (Cuatrecasas, 1931c) and Richard Wettstein (Cuatrecasas, 1931d). They were defenders of the natural method of classification for plants. The other two were botanists, also outstanding, who were especially close to him: Charles Lacaita (1853–1933) (Cuatrecasas 1934b) and Robert Chodat (Cuatrecasas, 1934c). While for the three first, he presents a positivist biographical vision, in the latter two, he adds some personal memories. For Charles Lacaita he will recall “que durante el viaje, que hicimos juntos le dije una vez, refiriéndome a su pasión por la Botánica, que parecía un Don Quijote; aceptó la semejanza con un entusiasmo grande. Desde entonces en casi todas las cartas se firmaba «Dn. Quixote del Tera», haciendo referencia a una noche ingrata por el frío y desabrigado, que, por habernos perdido, tuvimos que pasar en un barranco de la Sierra Secundera, y a mí me llamaba «Sancho Panza» (!)” (Cuatrecasas, 1934b: 138). From Robert Chodat he remembers his stay at ‘La Liineana’: “Los días que pasé en Bourg Saint Pierre, en 1927, sus lecciones en el campo y en el laboratorio repletas de su espíritu poligráfico y especializado al mismo tiempo, son para mí imborrables. Había recorrido España varias veces y conocía también su literatura; de ambas hablaba con frecuencia y siempre con alabanza cuando no con entusiasmo...” (Cuatrecasas, 1934c: 139).

The presence of Josep Cuatrecasas becomes effective, in the pages of *Cavanillesia*, due to the high number of authors who make use of his herbalizations; Pius Font i Quer will use his materials from Sierra de Mágina to propose *Biarum carratracense* (Haens.) Font Quer (Font Quer, 1928: 23) and to describe the hybrid X *Saxifraga Cuatrecasasii* Font Quer (Font Quer, 1928: 39), the varieties *Sideritis ochloroleuca* De Noe var. *hispanica* F.Q. (Font Quer, 1928: 39–40) and *Sideritis Paulii* Pau var. *castellana* Font Quer et Pau (Font Quer, 1935: 77) and the species *Astragalus Cuatrecasasii* Font Quer et Rothm. (Font Quer, 1935: 64). In his herbs in the Alcaraz and Riopar mountains, Font Quer finds materials to clarify the concept of *Geranium cataractarum* Coss. ssp. *Pitardii* Maire (Font Quer, 1931c: 90). And from the herbal in the central Pyrenees, he used the materials by Josep Cuatrecasas to verify the presence of *Bartschia spicata* Ram. (Font Quer, 1925: 34) and *Erica cinerea* L. (Font Quer, 1931c: 94) in Catalan lands. In his honor, he also named *Silene cuatrecasasii* Pau & Font Quer, from the Rif, made them public in the *Iter Maroccanum* distributed in 1927 (Font Quer, 1931b: 63).

On materials herbalized by Cuatrecasas in Sierra Morena, Carlos Pau described *Muscari marianicum* Pau (Pau, 1938: 14). Emili Huguet del Villar used Josep Cuatrecasas' collections from Almería, ‘mon éminent confrère dans la Botanique’, in the diagnosis of his *Thymus glandulosus* Lag. ex Villar (nom. illeg.) (Villar, 1934: 107–108); *Thymus orospedanus* Villar (Villar, 1934: 119) and *Th. orospedanus* Villar var. *longifolia* Villar (Villar, 1934: 120). Besides confirming some of his geographical references, Pius Font i Quer and Werner Rothmaler did the same in their partial revision of the Spanish taxa of the genus *Helianthemum* and, in addition, their. *Helianthemum canum* (L.) Baumg f. *glandulosum* Font Quer et Rothm (Font Quer, Rothmaler, 1934: 157), *Helianthemum pannosum* Boiss. ssp. *frigidulum* (Cuatrecasas) Font Quer et Rothm f. *Cuatrecasasii* Font Quer et Rothm. (Font Quer, Rothmaler, 1934: 163) were described on materials herbalized by Cuatrecasas and *Helianthemum pannosum* Boiss ssp. *frigidulum* (Cuatrecasas) Font Quer. et Rothm. was recombined (Font Quer, Rothmaler, 1934: 163). Werner Rothmaler used his collections, especially from the Catalan geographical area, in his revision of the genus *Euphorbia* L. (Rothmaler, 1935a). On samples from Sanabria, herbalized by Josep Cuatrecasas and Charles Lacaita, he built his *Potentilla asturica* Rothm. (Rothmaler, 1935c: 114).

The Italian Orazio Gavioli (1871–1944) used his sheets of *Vicia argentea* Lapeyr., from the Pyrenees (Gavioli, 1929: 82) and *Silene colorata* Poir. collected in Mágina (Gavioli, 1931: 135) to assess the similarities between the Hispanic flora and the Lucania region [Basilicata]. Also of Pyrenean origin, from Coll de la Marrana, located between the valleys of Ter and Freser, will be the sheets of *Salix herbacea* L. that the German Rudolf Görz (1879–1935), which were used to support the presence of this taxon in

Catalonia (Görz, 1929: 125). The type of *Teucrium charidemi* Sandwith comes from the herbalizations carried out by lands of Almería, together with Charles-Carmichael Lacaita, whose description was published in an article by C. Lacaita that appeared in *Cavanillesia* (Lacaita, 1930: 38). And its collections were present in the work of the German Otto-Karl-Anton Schwarz (1900–1983) on the Catalan *Quercus* of the subgen. *Lepidobalanus* Oerst. (Schwarz, 1935).

His field work also provided collections of seeds that grew in the Botanical Garden of Barcelona: *Scilla paui* Lacaita, collected in the Alcaraz mountains (Font Quer, 1931a: 27), *Iris serotina* Willk., from Sierra de Mágina (Font Quer, 1932a: 47) and even a garden hybrid: x *Atropa Martiana* Font Quer, the result of the cross between *Atropa baetica* Willk. and *Atropa belladonna* L.: “Sera difícil retrobar a la natura aquest híbrid, car alla on viu *Atropa baetica*, Andalusia i Marroc, no sol fer-s’hi l’altre parent.” (Font Quer, 1932b: 156).

And not only phanerogams; Pedro González Guerrero published two new freshwater cyanophytes based on materials collected by Josep Cuatrecasas: *Dichothrix catalaunica* González Guerrero, present on the walls of the University of Barcelona (González Guerrero, 1930: 55) and *Scytonema Cuatrecasasii* González Guerrero, from irrigated rocks from Molí de Sau, in Les Guilleries Girona (González Guerrero, 1930: 56).

Josep Cuatrecasas: reviewer

“Hac in parte breves caesuras operum omnium botanicae sistematicae, phytogeographiaeque, ad mediterráneas regiones obeuntis solis pertinentium, edemus, nec non eorum quae in morphologia plantarum, physiologia, genetica, geobotánica, et caetera, cum nobis argumentum satis grave videatur, id ab operibus editis ex januario 1928, iis exceptis quac nobis ut reprehendamus traduntur, etiam antea vulgatis.

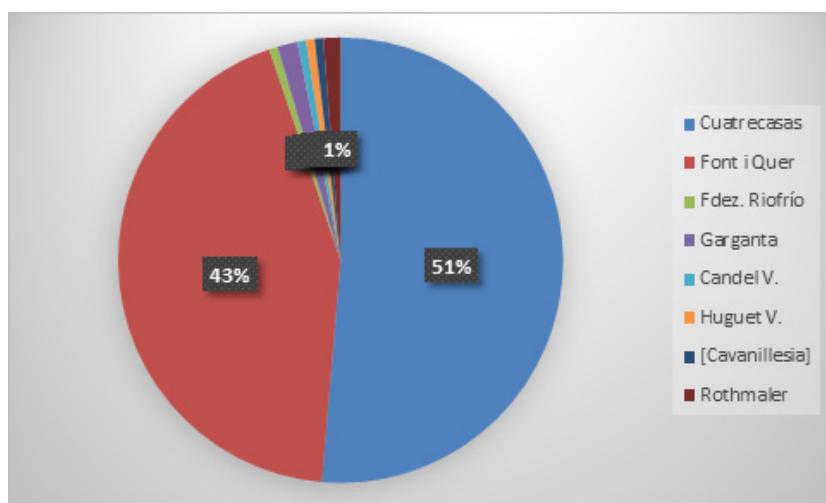
Cum editio nostra se ducem a botanicis hispanis adhiberi optet, hac bibliographica pars, omnibus, etiam non satis sermonis latinae peritis, scripta, lingua hispana que plerique in Península utuntur, prolata erit.” (*Cavanillesia*, 1(1/3): 45).

With these words is introduced the bibliographic section in the *Cavanillesia* magazine; a block of special importance for the editors of the publication, with which they want to bring the reader, in Spanish and through brief comments, all the recent information related to western Mediterranean plants: from systematics and phytogeography to morphology, physiology, genetics, geobotany, etc.

In the eight volumes published by *Cavanillesia* appeared up to 481 reviews (Table 2), a couple of them in a double way. The topics are as wide and varied as announced in the introductory note that we left transcribed in previous lines. The sources come from the editions, mainly magazines, that the editors had at their disposal in Barcelona.

Table 2. Reviews published in *Cavanillesia*.

Author / year	1928	1929	1930	1931	1932	1933	1934	1935	1936	Totals
Cuatrecasas	24	29	57	80	16	14	12	5	10	247
Font i Quer	11	12	8	54	48	33	30	3	10	209
Fdez. Riofrío	3	-	-	-	-	-	-	-	-	3
Garganta	1	-	2	2	-	2	-	-	-	7
Candel V.	-	-	1	2	-	-	-	-	-	3
Huguet V.	-	-	3	-	-	-	-	-	-	3
[Cavanillesia]	-	-	1	-	-	1	-	1	-	3
Rothmaler	-	-	-	-	-	-	-	2	4	6
Total	39	41	72	138	64	50	42	11	24	481

Figure 1. Authors of bibliographic review in *Cavanillesia*.

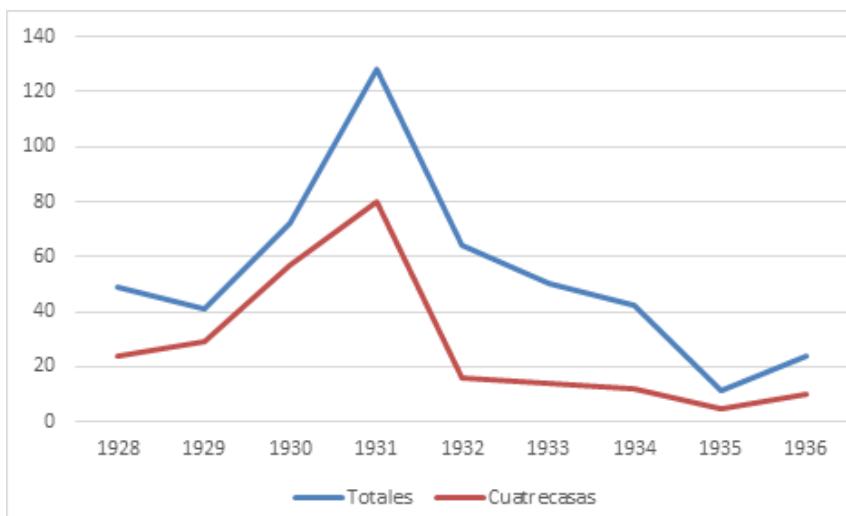
An analysis of the contributions incorporated into this section (Figure 1) shows that, except for some isolated contributions, the work was carried out by Pius Font i Quer and Josep Cuatrecasas.

As shown in graph 2, the number of annual reviews published in *Cavanillesia* increased over the years until reaching a maximum in 1931, decreasing notably after 1932 since 1937 this section is absent from the pages of the magazine.

It is evident that, in view of the available data (Table 2, Figure 2), the move of Josep Cuatrecasas to

Madrid, at the beginning of 1932 and after obtaining the Chair of Botany at the Faculty of Pharmacy of the Central University, influenced substantially, stopping, in a forceful way, the development that this section was acquiring.

Since 1935, the role as reviewer played by Josep Cuatrecasas began to be completed by the work of Werner Rothmaler, but the sad events that shook Spain after July 18, 1936, make it difficult to know if this option would have been possible.

Figure 2. Temporal evolution in the number of bibliographic reviews in *Cavanillesia*.

Josep Cuatrecasas's work as a reviewer goes through two temporally different stages, coinciding with his stay in Barcelona (1928–1931), the first, and his establishment in Madrid (1932–1936), the second.

During the years that Josep Cuatrecasas lived in Barcelona, the available information to write his reviews came from his own bibliographic collections, from which he reached in the library of the Museu de Ciències Naturals de Barcelona. In general, these are short lines that describe the most outstanding achievements of the work; we rarely find a critical opinion.

Initially, he was in charge of publicizing the works published by his mentors, Pius Font i Quer and Carlos Pau Español and of disseminating the French versions that V. Dhers made, on the contributions of Pius Font i Quer and on the works of Joaquín Mas Guindal and Adriano Panadero Marugán in the *Bulletin des Sciences Pharmacologiques*. The availability of the *Bulletin des Sciences Pharmacologiques* corresponding to 1928 made him to comment on other pharmacological contributions published in the journal by Paul Gillot, Emile André, Daniel Joutte E. Maurin or Léon Crouy.

Josep Cuatrecasas was a member of the Sociedad Española de Historia Natural since October 1925 (10/07), when he was presented by Pius Font i Quer and Romualdo González Fragoso (*Boletín de la Sociedad Española de Historia Natural* 25: 353). He had access, therefore, to the publications of the Society and, in *Cavanillesia*, a special echo of the cryptogamic contributions published, throughout these years, by Pierre Allorge, Rafael Ciferri, Romulado González Fragoso, Carlos E. Chardon, Gontran Hamel, Luis M. Unamuno, Arturo Caballero, B. Fernández Riofrío, Justo Ruiz de Azúa, Rodríguez Rosillo, Sergio Caballero Villaldea, Faustino Miranda, F. Beltrán, Elena Paunero, Emilio Guinea, Florentino Azpeitia, José AB Nolla was noticed. Becoming later interested in the contributions to phanerogamy published by Mariano Losa, Manuel Vidal y López, E. González Vázquez, Ángel Cabrera, Luis Crespí, Luis Iglesias, José Rodríguez Bouzo, Gustavo Nieto, Orestes Cendrero, Luis Ceballos and Miguel Martínez Martínez. And for the studies on plant physiology carried out by Florencio Bustinza Lachiondo, Antonio García Varela, J. Maynar and even for the first quantifications of foliar and floral biometrics realized by Julián Alonso Rodríguez and Abilio Rodríguez Rosillo.

Occasionally, he deals with some works presented by these same botanists in the congresses of the Asociación Española para el Progreso de las Ciencias, such as those of Father Luis M. Unamuno and Manuel Vidal y López in the one held in Cádiz (1927) or by Feliciano Luna Arenes and Luis M. Unamuno in the one in Barcelona (1930); or the public through the botanical series of the *Trabajos del Museo Nacional de Ciencias Naturales*, as it happens with the Spanish eufilicíneas and euequisetíneas published by Justo Ruiz de Azúa (1928).

A couple of years before, in 1923, he had joined the Institució Catalana d'Historia Natural (Butlletí de la Institució Catalana d'Historia Natural, 23 (1/2): 153); it therefore received the *Butlletí*... and left some summaries on the contributions of plant cytology

published by J. Homedes Ranquini and paleobotany, due to Paul Lemoine.

Joining to these reviews some doctoral theses: the one of Ramón Adroher de Ciurana, on plant physiology; the one of Pedro González Guerrero on the freshwater algological flora, whose content praises: "Importante trabajo (...) realizado en el Laboratorio de Fitografía del Jardín Botánico de Madrid bajo la dirección del Prof. Caballero (...) una de las más brillantes contribuciones que nuestra Flora recibe en estos últimos años" (Cuatrecasas, 1928c: 112–113) and Mariano Losa's doctoral report on Burgos *Papilionaceae*. In addition some monograph, such as the one by Johannes (Jan) Theodoor Henrard on the genus *Aristida*, well valued as a whole, in which he takes the opportunity to slip an underground criticism of the lack of cooperation of the Madrid Botanical Garden:

"Las fuentes del trabajo son realmente completísimas, la bibliografía agotada, y en cuanto a material los museos más importantes le han prestado los tipos. Es sensible que (...) no pueda incluir entre ellos a los de España. «Desgraciadamente —escribe— los tipos de Cavanilles no pudieron estudiarse, pues nunca recibí contestación a mis demandas» (Cuatrecasas, 1928d: 114).

Progressively it is expanding its spectrum of reviewed publications. In 1929 he began to report on some works on the history of botany published by Father Agustín Barreiro in *Investigación y Progreso*, an informative magazine that had been launched at the market in 1927; also from what was published by Joaquín Mas Guindal and Rafael Candel Vila in *Iberica*, another magazine of a general nature, founded by the Jesuit fathers of the Ebro Observatory in 1913; and of the contributions to the Moroccan flora published by Joaquín Más Guindal in *Africa*, the magazine of colonial troops founded, in Ceuta, in January 1924, by General Gonzalo Queipo de Llano (1875–1951), together with the then Lieutenant Colonel Francisco Franco (1892–1975) and in which he also published Pius Font i Quer.

This interest in scientific dissemination leads *Cavanillesia* readers to know other local publications, such as the Spanish version by Jesús Maynar on Hugo Miche's classic, *Cytology and plant anatomy*, published by Labor (Barcelona, 1928); the guide on *Los Bosques* written by J. Maspons y Camarasa (Barcelona, 1928), or the pamphlet by Joaquín Mas Guindal on *Plantas Medicinales del Protectorado Español de Marruecos* (Ceuta, 1929). Even in magazines with a very short distribution, but which are close to him, such as *El Muntanyenc*, published in Camprodon, from which he will refer to a short article by Sever Perramon i Barnadas, about his countryman Isern.

His contact with Robert Chodat, after the summer course organized by him in 'La Linnaea' (Bourg Saint Pierre, Switzerland), in which he participated together with Cayetano Cortés, from mid-July 1927 to the beginning of September (CRAI Barcelona, 2019) led to the acquisition of some works by the Geneva botanist, published in the *Bulletin de la Société botanique de*

Genève, whose development was witnessed by himself, which he deals with in the pages of *Cavanillesia* that appeared in early 1929. The same route it must have been useful to know the work of Otto Jaag published by the *Société de Physique et d'Histoire Naturelle de Genève*. He did not lose contact with the publications of R. Chodat's group. In fact, it will follow in its wake through the Hispanic disciples who frequented these facilities, particularly Florencia Bustinza. Together with these he dealt with some other contributions published in Swiss magazines, such as the contributions of J. Briquet in the *Compte rendu des séances de la Société de physique et d'histoire naturelle de Genève* (1930) or Otto Jaag in the *Bulletin of the Société botanique de Genève* (1929).

His relationship with the Jesuit Jaime Pujiula Dilmé, led him to take care of part of his work that appeared in the *Boletín de la Sociedad Ibérica de Ciencias Naturales* and in *Broteria*. The same route led him to know that of Brother Sennen, published in the *Boletín de la Sociedad Ibérica de Ciencias Naturales*, in the *Memorias de la Real Academia de Ciencias y Artes de Barcelona*, in the *Bulletin of the Société Dendrologique de France*, in *Le Monde des Plantes*, in the *Federación Farmacéutica* and in the *Bulletin of the Société botanique de France*.

Also, between 1929 and 1931, he expanded his list of French publications with the *Annales de la Société Linnéenne de Lyon* (A. Pouchet), the *Comptes rendus de l'Académie des Sciences* (A. Guilliermond, Robert Lemesle, J. Beauverie, L. Treyve), the *Riviera Scientifique* (Aimée Camus, E.J. Gilbert), the *Archives de Botanique* (R. Litardiere) and, particularly, the *Bulletin de la Société botanique de France* (S. Buchet, Raoul de Soo, E. Martin-Sans, G. Deflandre, Henri Prat, Pierre Chouard, M. Fernand Moreau, Mme Moreau and Pierre Chouard). From the French bibliography he will pay special attention to the works of Pierre Allorge and Valia Allorge that appeared in *Revue Bryologique*, *Annales Bryologici*, *Revue Algologique*, always through reprinted that the authors send to *Cavanillesia*.

Simultaneously, Josep Cuatrecasas is dedicated to commenting on the news that is more interesting to him than those made public by Portuguese magazines. He reports news of the work of A.L. Machado Guimeraes, A.X. Pereira Coutinho and J.M. Miranda Lopes published in the *Boletim da Sociedade Broteriana*; of those published by the Jesuits J. Rick and A. Luisier, in the pages of *Broteria* and of the novelties of Emmanuele Sousa da Câmara published in *Agronomia Lusitana*.

The criticism of texts published in the German language is usually carried out, in the pages of *Cavanillesia*, by Pius Font i Quer. However, Josep Cuatrecasas owes a note on the *Anchusa* genus, published by Mihail Gusuleac, in *Repertorium Novarum Specierum Regni Vegetabilis* (1931), a summary of extensive work (68 p.) published two years ago (Czernowitz: FV Mühlendorf, 1928).

In these final years of the 1920s, he made contact with phytogeographic studies. In *Cavanillesia*, during the first months of 1929, he gives an account of the first Portuguese outlines of 'botanical sociology,' made

public by Joaquín José de Barros, in the *Boletim da Sociedade Broteriana* and of the research carried out in Switzerland, over a reported by Eduard Rubel in *Veröffentlichungen des Geobotanischen Institut Rubel*. But, above all, he will pay special attention to the work of Emili Huguet del Villar, for whose *Geobotánica* he will not spare praise:

"La obra está escrita con un rigorismo científico poco común; la perfecta separación y delimitación de los capítulos obedece a un criterio profundamente analítico que rinde muy clara la exposición. La moderna nomenclatura, tan copiosa en esta nueva ciencia, viene en la obra de H. del Villar, perfectamente sistematizada, espurgada de términos inútiles y aclarada en aquellos de significación confusa o de distinta acepción según los autores diversos, gracias al dominio que posee el autor, tanto del léxico etimológico griego y latino, como de los conceptos (...) La obra del Sr. Villar lleva el sello de una marcada originalidad en los conceptos y en el desarrollo; en Clements se ha basado para el desarrollo de sus ideas y método sucesional, principalmente en Braun-Blanquet y Pavillard en el estudio estático, analítico y sintético, de las sinecias, y en Clements y Warming funda su clasificación ecológica de las mismas. Pero, amplía y modifica, cuando no crea, según ideas originales y depura el tecnicismo siguiendo escrupulosamente el criterio indicado, para mayor precisión en su método inductivo. H. del Villar crea una verdadera escuela de Geobotánica..." (Cuatrecasas, 1929b: 61–62).

Since then, the reviews of the works published by Emili Huguet del Villar, in the most varied magazines and conferences, will find a positive review in *Cavanillesia*, always signed by Josep Cuatrecasas. About his work *El suelo* (Barcelona, 1931), he writes: "Es el libro que, resumiendo el estado actual de los conocimientos sobre el suelo y los modernos procedimientos para su estudio científico, hacía falta en España, sobre todo a aquellas personas que sin ser pedólogos necesitan de la edafología como auxiliar en sus estudios; y en este caso se encuentra el botánico..." (Cuatrecasas, 1931b). Probably for her influence, he will approach other publications that will deal with the importance of the edaphic factor in vegetation, such as those by Cecilio Susaeta in the *Boletín del Instituto Forestal de Investigaciones y Experiencias*.

As a result of his personal relationship with Charles Lacaita, especially after the long journey through the Iberian Peninsula, which we will later deal with, raise the reviews of his works published in 1929 in the *Bulletin de la Société botanique de Genève* and *The Journal of Botany* where, tangentially, are addressed aspects related to the Iberian flora.

In 1930 he was concerned with referencing the news published by the group of French botanists who worked on the flora and vegetation of North Africa: Louis Emberger, René Maire, Henri Humbert, Emile Jahandiez and, in addition, the studies of F. Fourment and Ch. Killian published in the *Bulletin de la Société*

d'histoire naturelle de l'Afrique du nord. Pius Font i Quer had usually taken care of them, but that year, the abundance of materials and the fact that P. Font himself signed some of them, diverted the work to Josep Cuatrecasas.

His first opinions of the phytopathology studies carried out by J. Rodríguez Sardina, Alfonso Osorio Rebellón and Guillermo Galmés also date from 1930, which appeared in the *Boletín de Patología vegetal y Entomología agrícola* and in the *Revista de Fitopatología*. He is in charge of reporting on other publications beginning in the Spanish publishing sphere, such as the *Anales del Comité Nacional de Plantas Medicinales*. Medicinal plants, in general, the improvements around their cultivation and commercialization, also became known from the summaries of Josef Cuatrecasas, either through the genetic improvements, advocated by Erwin Baur in *Broteria*, or the economic importance commended by F.J. Palomas Bons, from the *Memorias de la Real Academia de Ciencias y Artes de Barcelona* (1931), well through the studies on digitals published by Guido M. Piccinini in *Atti della Società dei Naturalisti e Matematici di Modena* (1928).

His interest in the history of botany is shown not only by the positively critical reading of Father Barreiro's works, including his reception speech at the Real Academia de Ciencias Exactas, Físicas y Naturales (1928). Also for those of Francisco de las Barras de Aragón, on the work of José Celestino Mutis, those of Juan Nacle Herrera around Mariano del Amo y Mora and for the biographical notes that were written in honor of some of his contemporaries, such as dedicated to Romuado González Fragoso by J. Rodríguez Sardina and Father Luis M. Unamuno, close to the one he published (Cuatrecasas, 1929c). The physical processes produced in the herbarium sheets during their conservation, especially the color changes of the plants, found their explanation in the studies of Marc Bridel, published in the *Comptes Rendus de l'Académie des Sciences* and Teresa M. Bottini in *Atti della Società Ligustica di Scienze e Lettere*, to which he dedicated two separate spaces in the reviews published in *Cavanillesia*. History, herbaria and taxonomy are found in L. Vergin's critical review of the *Festuca* described by Timbal-Lagrave, published in the *Bulletin de la Société d'histoire naturelle de Toulouse* and that he reviewed for *Cavanillesia*.

At the beginning of 1932, Josep Cuatrecasas moved to Madrid, after obtaining, on January 2, the Chair of Descriptive Botany at the Central University (Order of 01/13/1932. *Gaceta de Madrid*, 01/16/1932). The fact, widely commented on by the periodic press (*El Sol* [Madrid], 1/6/1932, p. 3; *La Vanguardia* [Barcelona], 02/20/1932, p. 29) and pharmaceutical press (*El Restaurador Farmacéutico*, 87(1): 25–26. 01/15/1932; *La Farmacia Moderna*, 43(2): XVI. 01/25/1932), and also covered by *Cavanillesia* (*Cavanillesia*, 4(1/3): 63. 10/05/1931) will entail substantial changes in his availability as editorial secretary.

This difficulty of temporary availability will be diminished with the commission conferred by the Spanish Government to participate in the commemorations,

organized in Colombia, of the bicentennial of the birth of José Celestino Mutis. A trip that takes him four months: from the beginning of March 1932 to the end of June, and which will culminate with his research stay at the Berlin-Dahlem Institute and Botanical Garden, during the summer months of this year. He will return to Berlin in December, this time with a pension from the Junta para Ampliación de Estudios, where he remained until 1933. Then he will go to Switzerland, back to Madrid, where he was already in February 1933. In the month of March of this 1933 he is in Elche (Alicante), where he prepares a report on the Palmeral. In mid-April, his first monograph is published on Neotropic plants: *Plantae Colombiana novae* (Cuatrecasas, 1933), a fact that coincides, in time, with his appointment as head of the new section of Tropical Flora established in the Botanical Garden of Madrid. His personal life will also change: on August 1 1933 he marries Martha Nowack in Hamburg.

This accumulation of vital and professional circumstances leads to a noticeable decrease in his work as a reviewer for *Cavanillesia* (Figure 2). His dedication to the Madrid Botanical Garden will allow him to know the work of his colleagues, whom he had previously reviewed: Florencio Bustinza, Luis M. Unamuno and, very particularly, Miguel Martínez Martínez.

Of course, he will always find time to review the work of his mentors and colleagues during his time in Barcelona: Pius Font i Quer, Carlos Pau, Emili Huguet del Villar, Joaquín Mas Guindal and Charles Lacaña will not be lacking in their reviews during his time in Madrid. Especially positive is the one dedicated to the work of P. Font i Quer, which allowed the finalization of the edition of *Flora de Catalunya* by Joan Cadevall: "Si la aparición de los primeros volúmenes fué saludada ya con tantos elogios, mayores deben ser para estos últimos, más completos y cuya publicación ha logrado por fin vencer todas las dificultades absurdas que se opusieron a ello. La «Institució Patxot» que sufraga los gastos y el Prof. Font Quer revisor de la obra merecen por ello la más entusiasta felicitación y la más sincera gratitud de los botánicos y amantes de la Botánica en nuestro País". (Cuatrecasas, 1934a).

And he continues to make known, through *Cavanillesia*, the botanical contributions that he considers most outstanding, published by the Real Sociedad de Historia Natural, both in its *Boletín...* and in its *Memorias...* or in its *Reseñas...*, therefore which continues to deal with articles by Faustino Miranda, Manuel Jordán de Urríes, Luis M. Unamuno, Pedro González Guerrero, Ángel Cabrera, Emili Huguet del Villar, Florencio Bustinza, J. Benito Martínez, J. González Albo, Luis Ceballos, Benito Vicioso, L. Eleizalde, M. Mezquita, A. Vich, Manuel Bordas, F. Galán, R.A. Toro, W. Rothmaler, Sergio Caballero Vilaldea and Elena Paunero. To the extreme of becoming the only magazine collection from which it extracts news to be sent to *Cavanillesia*.

It rarely includes reviews from other journals; the exception are some articles by Antonio Sosa, published in *Comptes rendus de l'Académie des Sciences* (1933),

the *Revista de la Academia de Ciencias Exactas, Físicas y Naturales* (1934); a note from Father Barreiro, published by the *Asociación Española para el Congreso de las Ciencias* (1932). An article by Faustino Miranda appeared in the *Revue algologique*, a pamphlet by J. Díaz Muñoz and P. Burgos printed by the Estación Agronómica Central (1933) and another by Ricardo Serrano López-Hermoso on the conference he gave at the IV International Congress of medicinal plants, celebrated in Paris (1931).

From Madrid he intensifies the diffusion of doctoral theses related to Botany, a gray literature not always well known or accessible. Through *Cavanillesia* he gives an account of those made by Agustín Anuarre García, Alfredo Moscardó Climent, Romero de la Cruz, José Bayona Sánchez and Salvador Rivas Goday, the latter not very positive: “Descripciones cortas de 21 géneros y 75 especies de orquídeas de la flora española, mencionando localidades que figuran en el herbario de la Facultad de Farmacia de Madrid y en la colección del autor. Al parecer no se consultaron tipos, ni se tuvieron en cuenta localidades clásicas, ni otros herbarios, ni los autores que se ocuparon de nuestra flora, pues no se comentan ni critican y no hay citas bibliográficas. Entonces, ¿qué entiende el autor por revisión?” (Cuatrecasas, 1932a). It was not the only one, from the one published by M.I. Vecin Llora affirms: “Artículo de recopilación, describiendo dicha especie de menispermácea usada en Filipinas como febrífuga y estomacal. Hay algunas referencias bibliográficas útiles pero el trabajo carece en absoluto de aportación personal”. (Cuatrecasas, 1932b)

Josep Cuatrecasas: reviewing

The work of Josep Cuatrecasas was also publicized from the pages of *Cavanillesia*; Emili Huguet del Villar (1930a) took care to assess his *Estudios sobre la flora y vegetación del Macizo de Mágina* (Cuatrecasas, 1929a):

“Aunque se trata de una memoria doctoral, su contenido no es un reflejo de la enseñanza universitaria española, sino, por el contrario, un aporte que, desde las alturas de la verdadera ciencia fitográfica y geobotánica moderna, hace el autor a la Universidad (...) Siguiendo en Fitografía la senda trazada por Pau y continuada por Font Quer, y colaborando con entusiasmo, en Geobotánica, en la creación de la escuela española, el autor comienza casi su labor científica por una obra sintética de altos vuelos, que en este país no había realizado nadie todavía. (...) En un país cuyo estudio botánico y sobre todo geobotánico se halla tan atrasado, lo más urgente, en materia de monografías comarciales, es lo que el autor ha hecho: un cuadro de los tipos de vegetación con el análisis principalmente cualitativo y clasificación de las sinecias; y un inventario floral, extensamente razonado en las formas críticas y rico en indicaciones geográficas y ecológicas...” (Huguet del Villar, 1930a: 180).

J. Cuatrecasas himself will give a view, barely enumerative, of his “Notas micológicas” published

in the *Memorias de la Sociedad Española de Historia Natural*: “En la primera (Uredales), se citan diez y ocho especies em localidades nuevas de diversos puntos de España, con tres variedades nuevas (...) En la segunda se relliere una lista de 75 especies de hongos superiores de diversas localidades de Cataluña, algunos raros, otros nuevos para las localidades o para España. Hay cuatro figuras” (Cuatrecasas, 1931e).

Werner Rothmaler (1935b) reviewed his contribution on Iberian beech trees, published in the volume edited by Eduard August Rübel on European beech trees (Cuatrecasas, 1932c), in a fairly neutral way, as far as the author’s work is concerned: “El autor trata de la distribución del haya en la Península según la literatura y estudios propios, y describe hayedos de diferentes partes del país con sus especies asociadas. Siguen reflexiones sobre la influencia del clima y del suelo en la modelación del área actual de la especie...”

The magazine also echoed some of his peninsular explorations. The one carried out together with Charles Lacaita during May, June and July 1928 led them to herbalize through the steppe regions of Albacete, Hellín and Tobarra, up to the mountains of Cieza. The surroundings of Cartagena, the coasts of Almería to Cabo de Gata, the Sierra Alhamilla, through Huebro and the Sierra de Alcaraz, where he collected a good number of endemic species and critical plants. From Jaén they visited the Port of the Inquisition, Sierra Morena, the mountains of Jaén, the Sierra de Jódar and, repeatedly, the Serranía de Cazorla. On their way to the North-West, they were in the Guadarrama and collected in the eastern foothills of Sierra de Gredos. They then went to Salamanca and Portugal where they visited Porto and Braga, herbalizing in the mountains of Beira and especially in the Sierra de Jerez (Minho). Through Galicia they herbalized from Tuy to Santiago, Finisterre and La Coruña from where they passed, through Lugo, to the Cervantes valley, in search of classic species from Father Baltasar Merino. From Piedrafita they took the road to León, crossing the Bierzo valley. From here, they directed their steps to the Sierra de Sanabria, where they spent three days exploring it, starting from the Balneario de las Bouzas on the shores of the great lake. Then they went to Asturias, and in Covadonga they finished their campaign after various excursions to the mountains of the valley and the western peaks of Peñas de Europa. The Cantabrian undertook the return trip. The material collected during the three full months of the excursion included the collection of all *Echium* species described from the Peninsula, collected in their classic localities ([Cavanillesia], 1 (9/10): 159–160.1928 [1929]).

Together with the group of Catalan mycologists made up of Angela Ferrer, Joaquim Codina, Pius Font i Quer and Benito Fernández Riofrío, he accompanied René Maire in the campaign undertaken between October 5 and 24, 1931. He joined her after returning from Madrid, where –barely able to rest from his trip to Berlin– he handed over the documentation to access the competitive examinations of the Chair of Descriptive Botany at the Central University. He commissioned René Maire for the Museum of Natural Sciences in Catalonia. The towns visited were Valle de Aran, Serra de Prades

and Sant Guim, Berga, Sant Quirze de Besora, Vidra, Ripoll, Camprodón, Setcases, Montserrat, Tordera and Montseny, in an attempt to combine, in a single visit, the largest climatic and edaphic diversity (*Cavanillesia*, 4 (8/9): 144). The results of this expedition saw the light, years later, in the series of *Treballs at the Museu de Ciències Naturals de Barcelona* (Maire, 1933).

In the spring of 1931, the editors of *Cavanillesia* will inform their readers of Josep Cuatrecasas' trip to Colombia, to participate in the celebrations of the bicentennial of the birth of José Celestino Mutis, "asistirá como delegado de la Sociedad Española de Ciencias Naturales, Junta de Relaciones Culturales, Museo de Ciencias Naturales y Facultad de Farmacia de Madrid, Museo de Ciencias Naturales de Barcelona, etc. No hay que decir que lleva también la representación de esta revista, que se asocia cordialmente al homenaje" (*Cavanillesia*, 4 (1/3): 63. 1931). He will also report on his return to Spain, in the pages published in December 1932: "Cuatrecasas, que regresó encantado del trato recibido de los colombianos, pudo realizar excursiones botánicas en aquella república, entre las que debemos señalar de modo especial su ascensión al Tolima, en los Andes, de donde trajo a Europa copioso material de estudio. A su regreso desembarcó en Hamburgo y pasó a Berlín para empezar sus investigaciones sobre la flora andina" ([*Cavanillesia*], 5 (5/12): 193–194).

Of course, he could not miss the excursion of the Station Internationale de Géobotanique Méditerranéenne et Alpine de Montpellier that, directed by Josias Braun Blanquet, took place in Catalonia on the hinge between March 31 and April 10, 1934, and how much impact it would have on phytosociological studies and later historians (Camarasa, 1984, 1989: 194–195; Loidi, 2017). The *Cavanillesia* chronicler offers us the list of participants in the excursion and the list of towns visited, as well as a photograph of the group in the degraded *Quercetum ilicis* of the pseudo-steppe of Raimat (Lleida) (*Cavanillesia*, 6 (4/9): 142–143 [Plate V]. 1934), taken by Josep Cuatrecasas himself ((CRAI Barcelona, 2019)). Josias Braun-Blanquet (1935, 1936) would offer a phytosociological synthesis of the works carried out.

References

- Blanco, A. 1929. Appendix exhibens diagnosis specierum novarum quas in Hispaniae provincia Giennensi (Reyno de Jaen) anno 1849 detexit cl. Antonio Blanco. (Parisiis, Jul. 1880 [sic por 1850])", *Cavanillesia*, 2(1/4): 5–9.
- Braun-Blanquet, J. 1935. L'Excursion de la Sigma en Catalogne (Pâques 1934) (Communication de la Station Internationale de Géobotanique Méditerranéenne et Alpine N°. 38) [avec la collaboration dé P. Font Quer, G. Braun-Blanquet, Ed. Frey, P. Jansen, M. Moor]. *Cavanillesia*, 7(6/9): 89–110.
- Braun-Blanquet, J. 1936[1935]. L'Excursion de la Sigma en Catalogne (Pâques 1934). *Cavanillesia* 7(10/12): 153–167. (lám. V–VII).
- Camarasa, J.M. 1984. Història del coneixment de la vegetació. In: Folch i Guillén, R. (Dir.). Història Natural dels Països Catalans 7. Pp. 28–40. Encyclopédia Catalana, Barcelona.
- Camarasa, J.M. 1989. Botànica i botànics dels Països Catalans. Encyclopédia Catalana, Barcelona:
- Casado de Otaola, S. 2000. Los primeros pasos de la ecología en España. Ministerio de Medio Ambiente y Medio Rural y Marino, Organismo Autónomo de Parques Nacionales, Madrid.
- Cuatrecasas, J. 1928a. Cavanillesia, Rerum Botanicarum Acta. Butll. Inst. Catalana Hist. Nat. 28(7): 126–127.
- Cuatrecasas, J. 1928b. Nota sobre el Leucathemum arundinatum (Boiss.). Cuatr. *Cavanillesia* 1(1/3): 41–44, [1] lám.
- Cuatrecasas, J. 1928c. González Guerrero, Pedro. Contribución al estudio de las algas y esquizofitas de España. (Tesis doctoral, Trab. Mus. Nac. Cien.Nat. Madrid, 1927). *Cavanillesia* 1(7/8): 112–113.
- Cuatrecasas, J. 1928d. Henrard. J. Th. A Critical revisión of the genus Aristida, being a preliminary study and an introduction to the monograph. Mendedeelingen Van's Rijks Herbarium, Leiden, n° 54; I, 1926; II, 1927; III, 1928. *Cavanillesia* 1(7/8): 113–115.
- Cuatrecasas, Josep. 1928e. Léon Guignard. *Cavanillesia* 1(7/8): 118–119.
- Cuatrecasas, J. 1929a. Estudios sobre la flora y vegetación del macizo de Mágina. [Treb. Mus. Ci. Nat. Barcelona, 12]. Museo de Ciencias Naturales [Imp. Elzeviriana], Barcelona. 510 p., 8 lám., [1] map.
- Cuatrecasas, J. 1929b. Huguet del Villar, E. Geobotánica (Colección Labor; 339 pág. y 60 lám.; Barcelona 1929). *Cavanillesia* 2(1/4): 59–62.
- Cuatrecasas, J. 1929c. En Romualdo González Fragoso. Butll. Inst. Catalana Hist. Nat., 29: 49–51.
- Cuatrecasas, J. 1930. Adiciones y correcciones a mis estudios sobre Mágina. *Cavanillesia* 3: 8–19.
- Cuatrecasas, J. 1931a. De flora pyrenaica I. Ojeada a la cliserie del Valle de Ordesa. *Cavanillesia* 4(8/9): 113–127 [lám. III–VI].
- Cuatrecasas, J. 1931b. H. del Villar, Emilio. El Suelo (Biblioteca agrícola Salvat, un vol. en 8.º, de 238 págs. y 8 láminas; Barcelona, 1931). *Cavanillesia* 4(1/3): 39–40.
- Cuatrecasas, J. 1931c [1930]. Adolf Engler. *Cavanillesia* 3(7/12): 196–198 [lám. VI].
- Cuatrecasas, J. 1931d. Richard Wettstein. *Cavanillesia* 4(10): 161–162.
- Cuatrecasas, J. 1931e. José Cuatrecasas. Notas micológicas. (Mem. R. Soc. Esp. Hist. Nat., vol. XV, Pp. 23–30. Madrid, 1929). *Cavanillesia* 4(4/5): 72.
- Cuatrecasas, J. 1932a. Rivas Goday, Salvador. Revisión de las Orquídeas de España (Tesis doctoral. Boletín de la Universidad de Madrid, 1930; 36 págs.) *Cavanillesia* 5(5/12): 187.
- Cuatrecasas, J. 1932b. Vecín Llora, M. L. Estudio botánico e histológico de la *Tinospora Rumphii* Boerl. (Makabuhay) (Tesis del doctorado em Farmacia; Madrid, 1929). *Cavanillesia* 5(5/12): 189.
- Cuatrecasas, J. 1932c. Die Verbreitung von *Fagus sylvatica* auf der Iberischen Halbinsel. Veröff. Geobot. Inst. ETH Stiftung Rübel Zürich 8: 443–463.
- Cuatrecasas, J. 1933. Plantae Colombiana novae. [Trab. Mus. Nac. Ci. Nat. Ser. Bot., 26]. Junta para Ampliación

- de Estudios e Investigaciones Científicas, Madrid. 30 p., 2 lám., [1] h.
- Cuatrecasas, J. 1934a [1933]. Cadevall, J. i Font Quer, P. Flora de Catalunya (Vol. III, fasc. VI i vol. IV, 481 págs., Barcelona, Institut d'Estudis Catalans). *Cavanillesia* 6(4/9): 127–128.
- Cuatrecasas, J. 1934b [1933]. Necrología. Charles C. Lacaita. 1853–1933. *Cavanillesia* 6(4/9): 137–139. [lám. III].
- Cuatrecasas, J. 1934c [1933]. Necrología. Robert Chodat. *Cavanillesia* 6(4/9): 139–141. [lám. IV].
- Fernández Casas, J. 1972. Notas fitosociológicas breves, II. Trab. Dep. Bot. [Granada] 1: 21–57.
- Font i Quer, P. 1928. De flora occidentale adnotaciones, I–IV. *Cavanillesia* 1(1/3): 16–40.
- Font i Quer, P. 1931a. De flora occidentale adnotaciones VII. *Cavanillesia*, 4(1/3): 25–31 [lám. I, II].
- Font i Quer, P. 1931b. De flora occidentale adnotaciones. VIII. *Cavanillesia* 4(4/5): 63–67.
- Font i Quer, P. 1931c. De flora occidentale adnotaciones IX. *Cavanillesia* 4(6/7): 88–94.
- Font i Quer, P. 1932a. De flora occidentale adnotaciones. X. *Cavanillesia* 4(1/3): 45–49 (Láms. II, III).
- Font i Quer, P. 1932b. Una nova Atropa híbrida: x Atropa Martiana F. Q. *Cavanillesia* 5(5/12): 155–156. [lám. IV].
- Font i Quer, P. 1935. De flora occidentale adnotaciones. XII. *Cavanillesia* 7(1/5): 71–83 (láms. I–III).
- Font i Quer, P. & Rothmaler, W. 1934 [1933]. Generum plantarum ibericarum revisio critica I Helianthemum Adans. Subgen. Plectolobum Willk. – Sectio Chamaecistus ej. *Cavanillesia* 6(10/11): 148–174.
- Gavioli, O. 1929. Florae hispanicae et lucanae affinitates aliquae. I–III. *Cavanillesia* 2(5/6): 80–86. [lám. IV].
- Gavioli, O. 1931. Florae hispanicae et lucanae affinitates aliquae. IV–VII. *Cavanillesia* 4(8/9): 132–143.
- González Guerrero, P. 1930. Dos cianoficeas de agua dulce de Cataluña. *Cavanillesia*, 3(1/5): 55–56.
- Görz, R. 1929. Les saules de Catalogne. *Cavanillesia* 2(7/10): 97–158.
- Heywood, V.H. 1953. El concepto de asociación en las comunidades rupícolas. An. Inst. Bot. Cavanilles 11(2): 463–481.
- Huguet del Villar, E. 1925. Avance geobotánico sobre la pretendida estepa central de España. Ibérica 23(576): 281–283; 23(577): 297–302; 23(579): 328–333; 23(580): 344–350.
- Huguet del Villar, E. 1929. Geobotanica. Labor, Barcelona
- Huguet del Villar, E. 1930a [1929]. Bibliografía. J. Cuatrecasas. Estudios sobre la flora y vegetación del Macizo de Mágina. Memoria doctoral. Un vol. de 17 x 24'5 cm., de 512 págs., con 25 grabados, intercalados, más VIII láminas conteniendo 16 fototipias de paisaje vegetal y un mapa topográfico geobotánico a doble página. Publ. de la J. de C. Nat. de Barcelona, 1929. *Cavanillesia* 2(11/12): 180–182.
- Huguet del Villar, E. 1930b. Los Suelos. Enciclopedia Agrícola Salvat, Barcelona.
- Huguet-del-Villar, E. 1934 [1933]. Quelques Thymus du Sud-est Ibérique. *Cavanillesia* 6(4/9): 104–125.
- Loidi, J. 2017. The Introduction of Geobotany in the Iberian Countries. In: Loidi, J. (Ed.). *The Vegetation of the Iberian Peninsula, 1: V–XVI*. Springer, Cham. Doi: 10.1007/978-3-319-54784-8
- Lacaita, C. 1930. Novitia quaedam et notabilia hispánica. II. *Cavanillesia* 3(1/5): 20–47 [lám. I, II].
- Maire, R. 1933. Fungi catalaunici. Contributions à l'étude de la Flore Mycologique de la Catalogne [con la colaboración de Joaquim Codina y Pius Font i Quer]. [Treb. Mus. Ci. Nat. Barcelona, Sér. Bot., 15(2)]. Museu de Ciències Naturals. [Imp. Elzeviriana], Barcelona. 120 p., 1 lám., [3] map.
- Martinez Parras, J.M. & Peinado Lorca, M. 1990. Ensayo sobre la vegetación rupícola basófila de la clase Asplenietea trichomanis en la provincia corologica Bética. *Acta Bot. Malac.* 15: 193–202.
- Mateo Sanz, G. 1996. La correspondencia de Carlos Pau: medio siglo de historia de la Botánica española. Lloréns, Valencia.
- Melchior, H. 1925. Die phylogenetische Entwicklung der Violaceen und dienatürlichen Verwandtschaftsverhältnisse ihrer Gattungen. *Repert. Spec. Nov. Regni Veg. Beih.* 36: 83–125 [3 plat.], p. 104–107.
- Melchior, H. & Cuatrecasas, J. 1935. La Viola cazorlensis: su distribución, sistemática y biología. *Cavanillesia* 7: 135–148.
- Pau, C. 1937. Anotaciones sobre plantas hispano-marroquíes. *Cavanillesia* 8(8): 111–114.
- Quézel, P. 1953. Contribution a l'étude phytosociologique et geobotanique de la Sierra Nevada. *Mem. Soc. Brot.* 9: 5–77.
- Rothmaler, W. 1935a. Generum plantarum ibericarum revisio critica III. *Euphrasia* L. *Cavanillesia* 7(1/5): 5–28.
- Rothmaler, W. 1935b. Cuatrecasas, José. Die Verbreitung von *Fagus silvatica* auf der Iberischen Halbinsel (Rubel, Die Buchenwälder Europas, 1932, 21 págs., 1 mapa de distribución). *Cavanillesia* 7(1/5): 84–85.
- Rothmaler, W. 1935c. Plantae novae vel criticae Peninsulae Ibericae. *Cavanillesia* 7(6/9): 111–121 (lám. IV).
- Seidlitz, W. von. 1931. Diskordanz und Orogenèse der Gebirge am Mittelmeer. Gebr. Borntraeger, Berlin.
- Schwarz, O. 1936. Sobre los Quercus catalanes del subgén. *Lepidobalanus* Oerst. *Cavanillesia* 8(1/7): 65–100.

Websites

- CRAI (Centre de Documentació de Biodiversitat Vegetal. Universitat de Barcelona). 2019. Registre de fotografies de Josep Cuatrecasas sobre paisatges, espècies de plantes, persones i familiars realitzades en diferents viatges i excursions botàniques per Espanya, Europa i Amèrica durant els anys 1927 a 1937: transcripció de la còpia mecanografiada. Barcelona.