

An Account on the History of the Spanish Pharmacopoeias

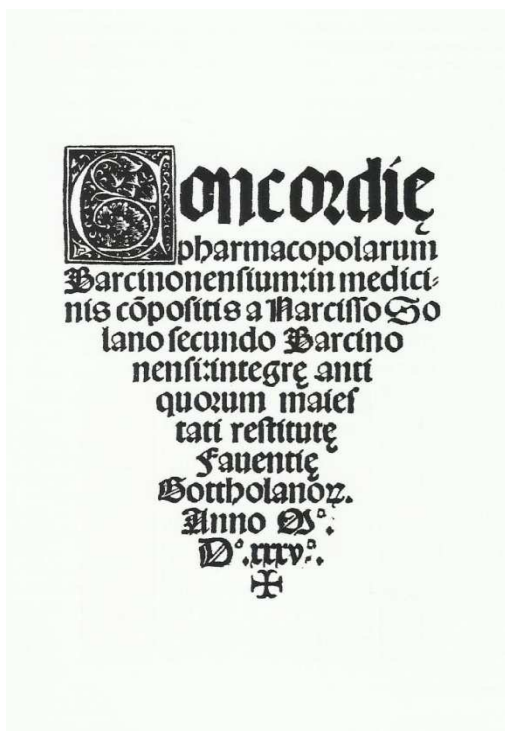
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The impact of the Florentine Pharmacopoeia on the Spanish Territory

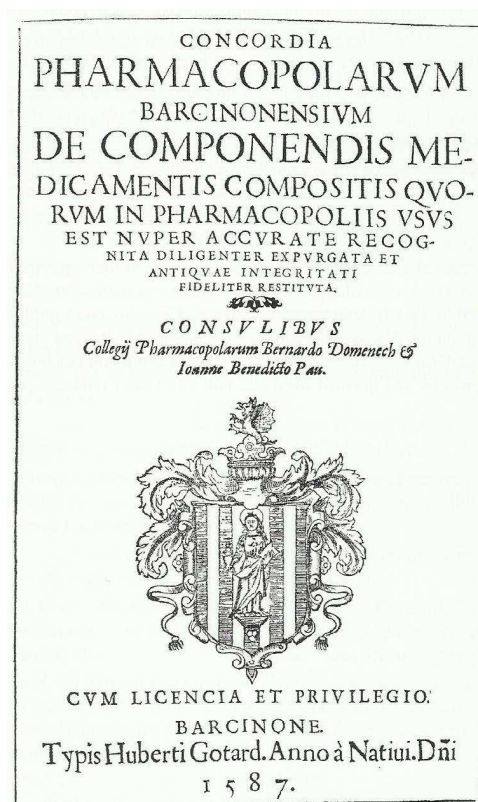
On 12 October 1511, thirteen years after the publication of the *Nuovo Receptario* (...) of the very well known *Chollegio degli Eximi Doctori della Arte et Medicina della inclita cipta di Firenze* (Florence: Dragho, 1499), was also published in Barcelona *Concordia Pharmacopolarum Barchinonensium*, a regional pharmacopoeia written by the Society of Apothecaries, with the consent and recommendation of the doctors from Barcelona. This overall agreement among all practitioners of the healing sciences of Barcelona was continued in a second edition, published in 1535, and still a third one, printed in 1587, in order that "... in all offices were sold well and exactly prepared medicines...".



Concordie apothecarioru[m] Barchin[one]... [Barchinone]: escapado p[er] Carolum Amorosu[m], stantib[os] consilibus [te] dicte collegij administratoribus Gabriele Stanyol [te] Michaelae Xanxo, viscesima ij me[n]seis Octobris ... 1511.



Concordie pharmacopolarum Barchinonensium... Favencia derl Gots [Barcelona]: [s.i.], 1535.



Concordia pharmacopolarum Barcinonensium... Barcinone: Typis Huberti Gotard, 1587.

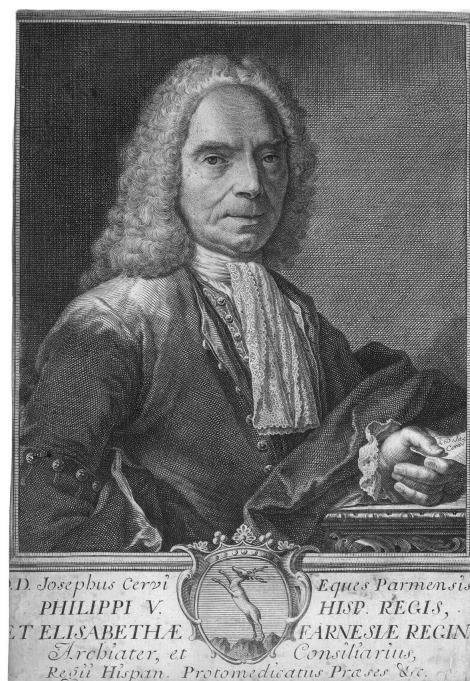
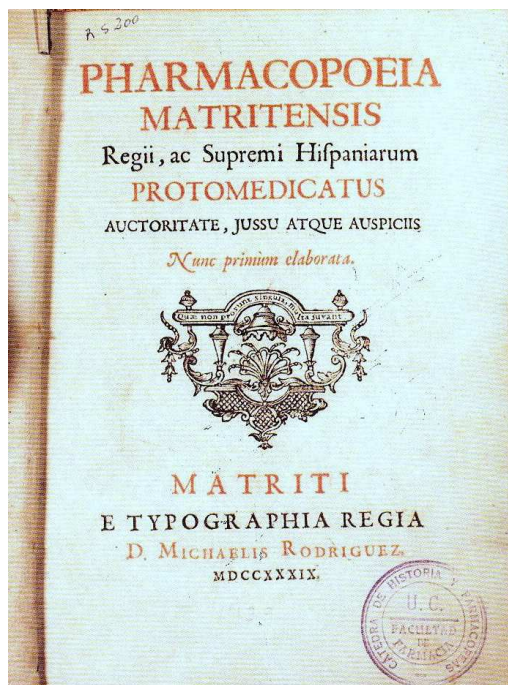


Concordia Aromatariorum Civitatis Cesaraugustae... Çaragoça: por Pedro Bernuz y Bartholomé de Nagera, 1546.

In 1546 the group of apothecaries from Saragossa published a *Concordia Aromatariorum Civitatis Caesar-Augustae* and, a few years later, in 1553, a new expanded edition of the text added a fee, under the title of *Concordia Aromatariorum Caesar-augustanensium*.

The title of these abstracts is not 'pharmacopoeia' but 'concordia [harmony]', which responds to the consent or the binding agreement reached by the physicians of the cities listed. The appearance of these texts reveals both the Italian influence on Catalan and Aragonese apothecaries as well as the economic strength gained during the Renaissance by these territories, which lie on the Mediterranean area.

approved by us and considered very convenient to be practised and implemented in all provinces, and kingdoms which are optionally subjects to this our Court (...) being warned, from now on, that Visits to their respective pharmacies have to follow what is ordered in this Pharmacopoeia, which the above listed pharmacies must have, being precisely its lack an Article of Residence..."



Pharmacopoeia matritensis. Regii, ac Supremi Hispaniarum Protomedicatus auctoritate, jussu atque auspiciis... Nunc primum elaborata. Matriti: e Typographia Regia D. Michaelis Rodriguez, 1739

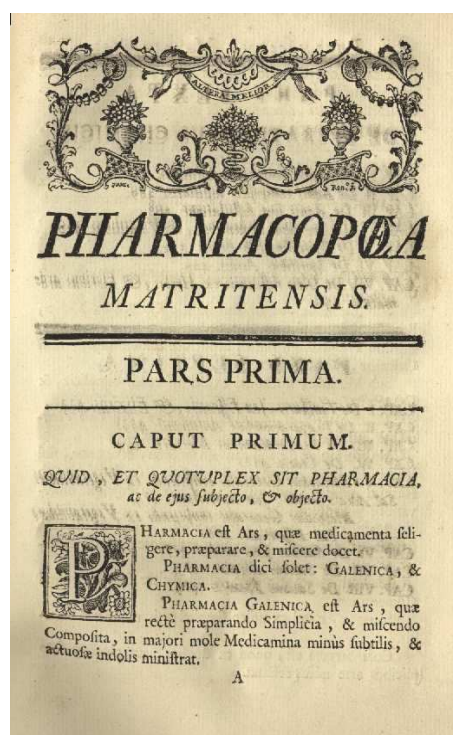
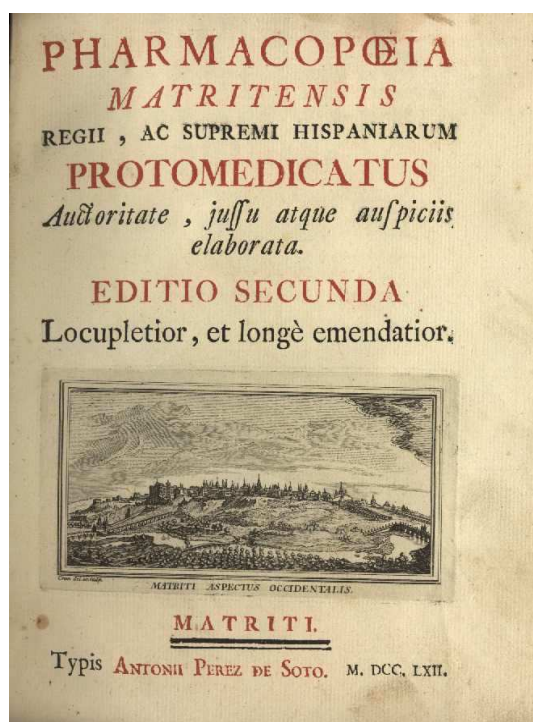
Consequently, the provision given by King Philip II for the formation of that general pharmacopoeia was not fulfilled until about a century and a half later. The reasons why the Royal College of Apothecaries of Madrid became responsible for the edition of this first Hispanic Pharmacopoeia and its publication in 1739 is part of the new centralist policy imposed by the Bourbon dynasty after they assumed power, which coincides with the beginning of the XVIII century.

The title of *Pharmacopoeia Matritensis*... did not limit the territorial scope of its application, the choice of the term '*matritensis*' is also due to a clearly centralized attitude of the new ruling elite to the ancient custom of naming the pharmacopoeia with the adjective of the city of origin. So, despite this name, the *Pharmacopoeia Matritensis*... was destined to rule, as an official pharmacopoeia throughout the Spanish territory.

Prior to the description of the simple elements and substitutes, the text includes some common elements, such as weights and officinal measures, apparatus and instruments for use in the professional practice and general operations. Then, it adds the rules for drug development, ranked according to the pharmaceutical form: infusions, wines, oils, decocts, potions, extracts, syrups, pills, powders, etc, generally, simple drugs, but also some complex preparations are inserted, such as the '*theriaca magna*' and a panacea of an even more complex formula: the '*aqua polychresta*', which stand out from others.

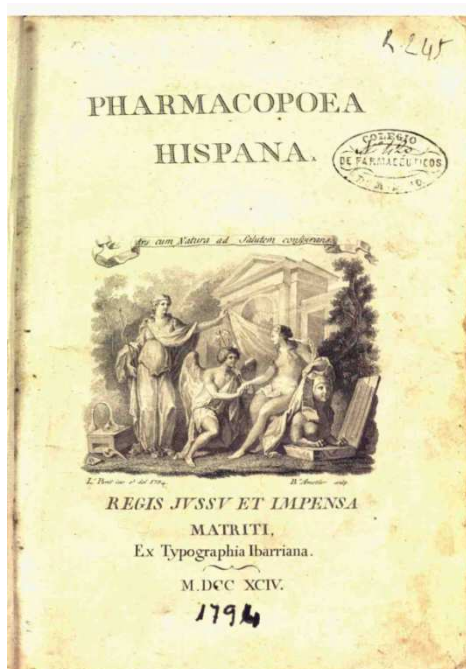
The publication of the *Pharmacopoeia Matritensis...* is not an exception of the European Enlightenment. There are no few the countries of our environment that, during the second half of the XVIII century, turned their regional pharmacopoeias into national ones, in a parallel with the formation of their respective nations. *Pharmacopoeias* became then another sign of national identity.

This first edition of the *Hispanic pharmacopoeia* was followed by a second one, also under the title of *Pharmacopoeia Matritensis...* published in 1762, (Madrid: Antonio Pérez de Soto), which was also in charge of the Society of Apothecaries of Madrid and which shows few variations from the prince edition.

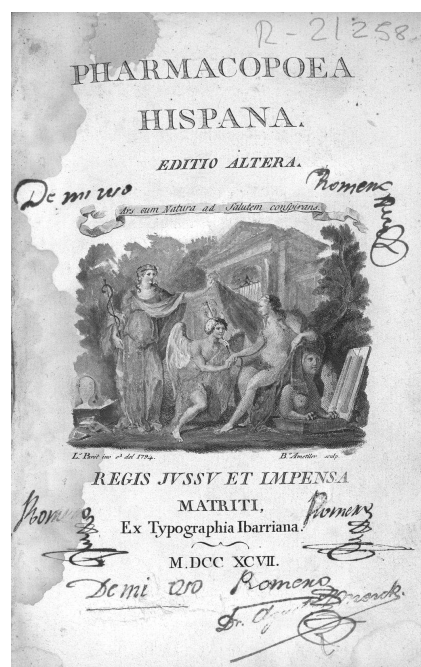


Pharmacopoeia matritensis, regii ac Supremi Hispaniarum Protomedicatus auctoritate, jussu atque auspiciis elaborata. Editio secunda locupletior, et longè emendatior... Matriti: typis Antonii Perez de Soto, 1762.

During the Spanish Enlightenment, the practice of Pharmacy plays an exceptional role, distancing its governmental leadership from the Medicine and Surgery ones. A royal decree, which was issued by Charles III, on April 13, 1780, establishing the self-government of the various health professions, led to the creation of an audience for the Pharmacy itself. In this way, the structure of the Royal Court Protomedicato [*Real Tribunal del Protomedicato*] was changed, it was divided into three: 'Protomedicato', 'Protofarmaceuticato' and 'Protocirujanato'. Under the direction of the 'Protofarmaceuticato', came into the world the first two pharmacopoeias, titled *Pharmacopoeae hispana...* the first edition in 1794 and the second in 1797.



Pharmacopoea hispana. Regis jussu et impensa.
Matriti: Ex Typographia Ibarriana, 1794



Pharmacopoea hispana. Editio altera.
Matriti: Ex Typographia Ibarriana, 1797

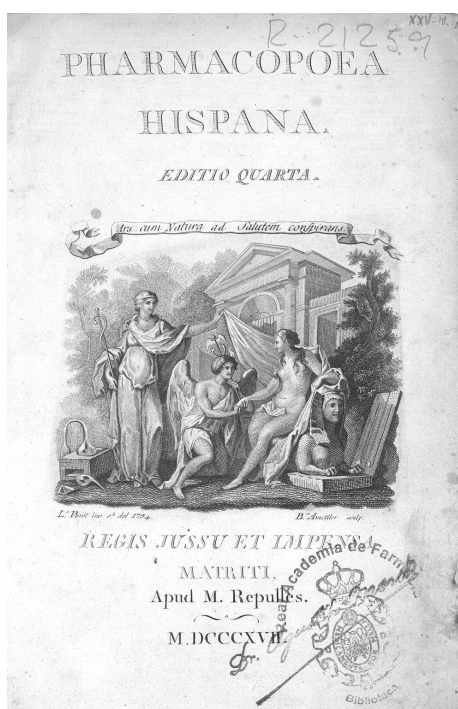
The *Pharmacopoea hispana*... responds not only to a new organization in the pharmaceutical professional leadership, but also to a more reasoned conception of the text, in which some of the complex -quasi-magical- formulations, presented in the 'matritensis' editions, disappear; the pharmaceuticals comments, which are unnecessary in this type of texts, are also omitted here but are present in the 'matritensis' editions. The work still retains an introductory general text about weights, measures, equipment and operations, which is stated in previous editions. Little new changes introduces the 1797 edition, which is practically a reissue.

The third *Pharmacopoea hispana*... was published in 1803. It was released under a very different legal framework for the pharmaceutical profession. In 1799, king Charles IV issued the withdrawal of Hearings [*Audiencias*,] which had ruled, until then, the health professions, and a Superior Governing Board of Pharmacy [*Junta Superior Gubernativa de Farmacia*] was created for the management of the profession of pharmacist. A royal decree of September 28, 1801 reestablished the Protomedicato, but it left this Superior Governing Board, entrusting them, among other things, with the care of the texts related to professional practice, including the pharmacopoeia. The third *Pharmacopoea hispana*... was born under the rule of the Superior Governing Board of Pharmacy. It presents a more abundant medical knowledge, arranged according to the three traditional kingdoms of nature, in addition to a greater number of formulas, some of them of doubtful value. The type monographs is very similar to previous editions.

The fourth edition of the *Pharmacopoea hispana*... was released in December 1817, under the reign of King Fernando VII of Spain and the technical direction of the Superior Governing Board of Pharmacy, reinstated after a previous period of performance of the Protomedicato. The order of its content is akin to that of previous editions: medical knowledge, weights and measures, simple preparations, dosage forms and chemical preparations, which are still written in obsolete terms.

This edition, as the previous ones, maintains a motley of contents very typical of the Baroque text itself, which is away from the clarity and concession which also characterized the first edition of the *Hispanic Pharmacopoeia*.

The fifth Spanish pharmacopoeia came out of the printing press in 1865. The long time elapsed between this and the previous edition made flourish some texts whose titles recorded the name 'pharmacopoeia'. Since they do not respond to that name, we are not going to deal with them here. However, we do want to record its use as pharmacopeia, in the absence of a statute, which was exhausted. The printing of this text occurs after significant changes in the organization of the pharmaceutical profession took place, including: the removal of the Governing Board of Pharmacy [*Junta Superior Gubernativa de Farmacia*], in a similar process to the rest of the health professions, which occurred in the late 1840s; the creation of the Health Council [*Consejo de Sanidad*] in 1847, and enactment of the Health Act in 1850. The technical writing of this pharmacopoeia was entrusted to the Royal Academy of Medicine [*Real Academia de Medicina*], and its final approval to the Government.

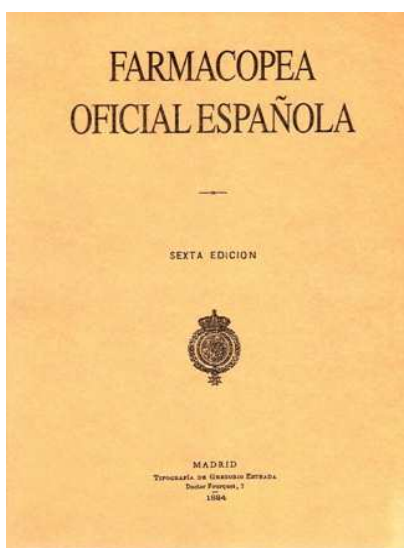


Pharmacopoeia hispana. Editio quarta
Matriti: apud M. Repullés, 1817



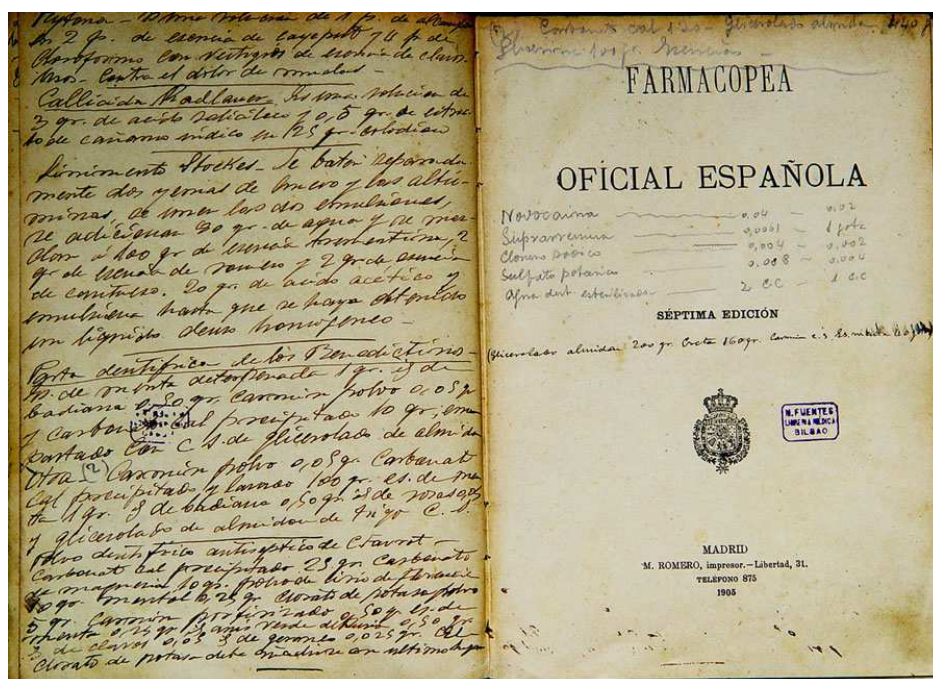
Farmacopea española. Quinta edición
Madrid: Imprenta Nacional, 1865

This text leads to the beginning of a new stage in the development of these official texts: it will change its structure, now shaped into two sections, the first devoted to the pharmacist and the second to the preparations. It will be written in Castilian, in opposition to the prevailing Latin used in the previous versions, and the metric system will be used, although this fifth edition still maintains the ancient medicinal weight. The text, which is certainly new, includes other useful tools to pharmacists, such as specific gravity tables of liquids, a correspondence between different thermometric scales, etc. The preparations are arranged alphabetically, without setting the old separation between chemical and pharmaceutical preparations.



Farmacopea oficial española. Sexta edición
Madrid: Tipografía de Gregorio Estrada, 1884

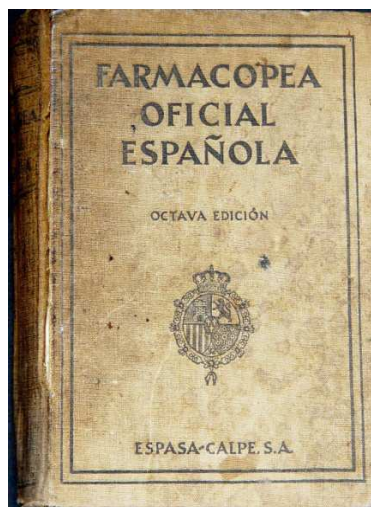
Also under the thumb of the Royal Academy of Medicine [*Real Academia de Medicina*] the sixth edition of the Spanish pharmacopoeia was released in 1889. This academy was entrusted to the wording under the provisions in a decree signed on November 24, 1876, in which the institution was not only in charge of its wording, but also of the updating, printing and selling. Their internal organization responds to the same criteria as the fifth edition, which updates the demanding scientific developments, perhaps in more sparingly way than the requested one.



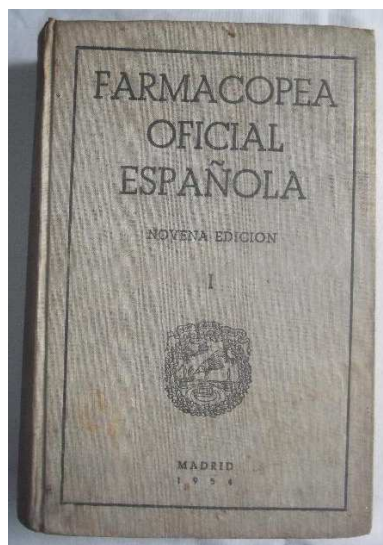
Farmacopea oficial española. Séptima edición. Madrid: M. Romero impresor, 1905
[Colección Aramburu]

In 1905 the Royal Academy of Medicine published the seventh edition of the Spanish pharmacopoeia with some new features in respect of its predecessors: it includes more than a few tables for pharmaceutical use; it also introduces some organo-therapeutic medicines and serums; pharmaceutical material items are sorted alphabetically, composing a single section and reflecting the changes occurring in the pharmacist exercise in the last century; the method of preparation excludes the majority of chemicals collected, assuming the impossibility of

developing them by a pharmacist or a modest laboratory, but does include means for its identification and its degree of purity, introducing some organic chemical drugs obtained by synthesis.

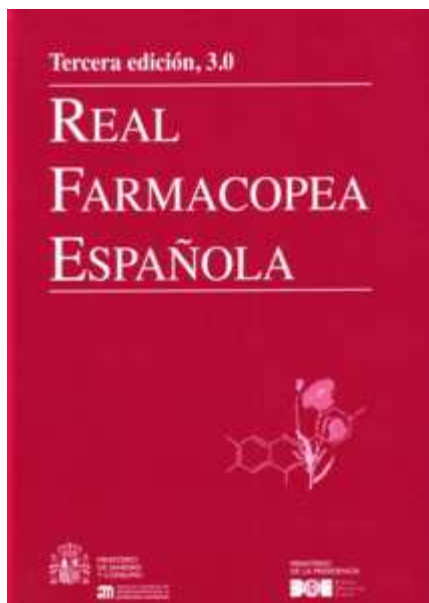


Farmacopea oficial española. Octava edición.
Madrid: Espasa-Calpe, 1930



Farmacopea oficial española. Novena edición.
Madrid: Estades, 1954. 2 vols.

In 1930 the Royal Academy of Medicine published the eighth edition of the Spanish pharmacopoeia, without significant changes, except for some technical innovations such as the inclusion of the atomic weights, international regulations on heroic medicines, the introduction of biological methods for assessments or the prominent space devoted to fluid therapy products and vaccines, with didactic intent, perhaps unnecessary in an official text. The ninth edition of the Spanish pharmacopoeia was printed in 1954, also under the technical direction of the National Academy of Medicine, and in fulfillment of the provisions of the new legal framework established during the first government of Francisco Franco: Health Law 25 November 1944. The text includes a number of new chemical products, their characteristics and also their physical and chemical constants as well as their valuation methods. It is stressed the need to verify the authenticity and purity of the materials used, many of them acquired in the pharmaceutical drugstore. In addition, it was necessary to determine the content of the active ingredient to allow its later use in the preparation of medicines with constant activity, for this reason, appropriate valuation methods, chemical or biological, were introduced. The work distinguishes two parts according to their requirement: a first part of mandatory compliance by all pharmaceutical professionals and a second one directed only to those who were working in a laboratory dedicated to the manufacture of drugs or other pharmaceutical products, recognizing thus the practical limitation of the traditional pharmacist of the pharmaceutical store. Another innovation is the inclusion of some fluid extracts used in extemporaneous preparations.



Real Farmacopea Española. Tercera edición. [Contiene íntegra la quinta edición de la Farmacopea Europea]. Madrid: Ministerio de Sanidad y Consumo, Agencia Española de Medicamentos y Productos Sanitarios, 2005.

The ninth edition was effective in the Spanish territory until the enactment of the Medicines Act in 1997. A few years before, in 1987, Spain gave its support to the Convention on the elaboration of an European Pharmacopoeia. A ministerial order of December 26, 1996 approved the text of the first edition of the Royal Spanish Pharmacopoeia [*Real Farmacopea Española*], covering entirely the monographs of the *European Pharmacopoeia*, plus those other peculiar Spanish monographs. The text of the *Real Farmacopea Española* has been repeatedly modified. At present, it is valid the fourth edition, approved by the ministerial order of November 3, 2010.

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