Aegyptus et Pannonia VII.

Acta Symposii anno 2021

BUDAPEST

Aegyptus et Pannonia VII.

Acta Symposii anno 2021

Editor: Hedvig Győry

Sponsored by

On the cover: Relief of Horus and Sobek, Kom Ombo
(Photo by Hedvig Győry)
On the back: *Bupleurum lancifolium* Hornem. Lectotype,
Herbarium C., number C10008355.
(Reproduced with permission
of the Natural History Museum of Denmark)
Cover design: András Barkó
Realisation: Aquila Design
Print in Pauker Nyomda

ISBN: 978-615-6571-01-4

Aegyptus et Pannonia VII.

Acta Symposii anno 2021

Budapest – 2022

Contents

Plants and Health Conference 2021, and the Proceedings

Dr. Hedvig Győry PhD

HEFT AEC president

In 2021, the HEFS Ancient Egyptian Committee, in partnership with the HNM Semmelweis Museum of Medical History, organised an international conference entitled "*Plants and Health from Ancient Egypt to the Present Day*". The three-day conference focused on topics related to the application of plant material in medicine, but also included other topics connected to the use of plants in any practical or theoretical area of human life. We planned four sections with the following keywords:

History of healing and nutrition from the time of ancient Egypt to the present day
Which plants were used for healing, how, where, by whom and when, which plants were used to maintain health, or prevent disease in different parts of the world; what did people eat in everyday life, what were the festive foods/drinks, what were the expected results; and what are the related issues raised by ethnographic research.

Medicines and pharmaceutical science in historical periods in the light of sources
Who, how and why recorded knowledge of medicine in each period; what principles were used to treat patients or maintain health; what were/are the popular explanations of these issues or principles.

Herbal medicine and contemporary medicine
According to our current knowledge, what can we assess about the active ingredients of a given plant, the mechanism of action and its intensity, and what biochemical relationships can be discerned from their interactions.

Religious views and beliefs about plants
By whom, where, when, and what special magical properties have been attributed to plants, what is the role of plants in the social context, how is it explained, and how have plants been incorporated into everyday life/celebrations or healing practices

The conference was held between 14 and 16 October 2021 with 40 presentations. Due to the COVID pandemic, circumstances did not allow for a face-to-face meeting, so the event was entirely online. However, the possibilities offered by the Internet also allowed for smaller group discussions. The topics presented included the appearance and use of plants in different times and places, from ancient Egypt to contemporary Europe. They were divided into thematic and language (English and Hungarian) sessions, led by recognised scholars. After the lectures, it was possible to discuss the issues raised in front of the general public, and topics of narrower interest could be further discussed in separate rooms created within the Zoom system. Valuable contacts were made and new research ideas were generated. A small exhibition was also organised by the HNM Semmelweis Museum of Medical History for the occasion, as we had hoped until the last minute that the pandemic situation would change. However, it was only available to personal visitors.

During the conference it was possible to learn about new methods, we exchanged ideas and heard about research results and ongoing projects. A significant part of the presentations were given in English, the other part in Hungarian, but the papers included in the proceedings are all in English. The first part of the proceedings, as a result of the presentations and discussions, is published in this volume; the other part can be read in the next volume of the Aegyptus et Pannonia series.

Although not all the presentations are published, most of the aspects we covered are included in the volumes. The programme covered a wider range of topics: We were able to learn about plant finds from recent Egyptian archaeological excavations, the identification and use of plants in textual sources, religious connotations, and even the possibility of reconstructing perfumes. We could also look at the trade in plants between the Hittite Empire and Egypt, and learn which plants were used by the Copts in the Middle Ages. The latest research on Roman herbaria was discussed, and hitherto unknown ancient Egyptian texts were presented. Other presentations were devoted to the reproduction of some medicines based on ancient recipes. In one of the lectures we saw on video the process of preparation and examination of an ancient Egyptian medicine. Several papers dealt with temporal and spatial changes in the everyday and liturgical use and interpretation of a given plant, e.g. pomegranate in Greece. In India, Soma. In Hungary, thorn apple. In Estonia, pelargonium. In Finland and the Arctic, roseroot. And in the Arabian desert of Egypt, the apple of Sodom. The role of plants in religious ceremonies and concepts was also discussed, as well as the variety and significance of the scent they produce.

The lectures presented a wide range of the application of herbs in ancient and medieval medical methodology, with the help of Egyptian, Greek, Anatolian, and Hungarian herbariums. The conference participants were the first to hear that many ancient Egyptian medicines can still be found in the medieval Welsh medicinal knowledge. We also learned that a significant part of Dioscorides' usage of herbs could also be observed in Anatolian folk medicine. Lectures were given on the wide range of magical effects attributed to plants, spanning from antiquity to the Renaissance, in terms of iatromagic, iatromathematics, and iatromythology.

In separate sections, the participants were introduced to Hungarian ethnobotanical research, where, in addition to the methods of the way of collecting ethnobotanical data throughout Transylvania, the lecturers presented both the botanical aspects and the therapeutic potential of the plants included in the various Hungarian medicinal herbariums and pharmacopeias. In addition to the knowledge of plants preserved in the Hungarian witch-trial documents of the 15th to 19th centuries, the possibilities of historical and folk use against various diseases – such as tuberculosis and cholera – were also presented, and in connection with diabetes and surgery we also visited India and China. We got again an idea of how wound care has changed over the centuries, how plants have influenced the toolkit of surgeons, and which plants are still used in modern wound management. In connection with the Székesfehérvár Pharmacy Museum, an overview of the museum's extensive educational activities was presented in addition to its history. We have got acquanted also with the the most important medical tariff book of Hungary in the 18th century and the drawer labels of five apothecary furniture of the same period.

The approach to the flora of ancient Egypt is also diverse, and the study of the Ancient Near Eastern relations encompasses several scientific fields, such as Assyriology, Hittiteology and Biblical studies. The classical Greco-Roman world is also included in the next volume to facilitate comparison. In addition to history, interdisciplinarity also extends to other branches of the humanities, such as – among others – archaeology, history, linguistics, ethnography, philology, the history of religion and magic or iatromathematics.

In recent decades, the development of the sciences has moved in the direction of interdisciplinary cooperation, not only between related sciences, but also between seemingly distant branches of science. In addition to textual and material sources, the results and methods of the natural sciences are of fundamental importance for a more precise understanding of the past. The role of analyses and investigation of the various materials is thus becoming increasingly important, complementing traditional descriptive studies. As we also wanted to play a role in this process, several areas of natural science, such as archaeobotany, phytogenetics, types of data investigation and plant breeding, or various facets of medicine and medical history are also represented in the proceedings.

In this volume, we publish 11 studies that approach the world of plants from different perspectives within the broad framework of the conference. The focus is on ancient Egypt, but the articles also look at other areas. In addition to the data found in the articles and the results obtained, the methodological and theoretical approaches raise many new ideas, give exciting results and draw attention to various possibilities. For example, the multifaceted role of medicinal plants in the museum world or their application from the perspective of medical history and ethnomedicine.

With this volume, we hope to arouse interest in the unique world of the past, especially Egypt, to bring closer the world of nature and its possible effects on human life, and to encourage the birth of further results that will make the ancient Egyptian world better known and our own world better understood.

MAGYAR–EGYIPTOMI BARÁTI TÁRSASÁG
Ókori Egyiptomi Bizottság

HUNGARIAN–EGYPTIAN FRIENDSHIP SOCIETY
Ancient Egyptian Committee

MNM · S · O · M
MAGYAR NEMZETI MÚZEUM
SEMMELWEIS ORVOSTÖRTÉNETI MÚZEUM I KÖNYVTÁR I LEVÉLTÁR

Acknowledgment

We would like to thank the colleagues who participated in the work of the Scientific Committee: Dr. Victoria Asensi-Amoros, Csilla Balogh Ph.D., Prof. Dr. Anna Blázovics DsC, Prof. Dr. Rosalie David OBE FRSA, Dr. Szabolcs Dobson Ph.D., Prof. Dr. Judit Forrai DsC, Prof. Rim Hamdy, Erzsébet Kótyuk Ph.D., Prof. Ergün Lafli, Ildikó Marton, Krisztina Scheffer, Dr. Klára Szentmihályi Ph.D., Prof. Dr. Éva Szőke DsC, Paula Veiga, Assoc. Prof. Hana Vymazalová Ph.D., and the Secretary of the Conference, Hedvig Király. Special mention should be said to Krisztina Scheffer from the part of the HNM Semmelweis Museum for Medical History. We would also like to thank Gábor Ale, who took care of the technical issues during the conference.

We are also grateful for the work of our scientific and linguistic proofreaders, who donated their free time for these volumes, Prof. Dr. Anna Blázovics DsC, Prof. Dr. Rosalie David, Dr. Szabolcs Dobson Ph.D., Hilary Forest, Erzsébet Fráter, Péter Gaboda, Glynis Greaves, Dr. Edina Gradvohl PhD, Zoltán Horváth, Dr. Mária Höhn, Ursula Kulcsár, Dr. László András Magyar, Dr. Ágnes Simek Ph.D., Zsolt Simon PhD, Dr. Klára Szentmihályi PhD, Prof. Dr. Éva Szőke DsC, Prof. Dr. Károly Vig, Assoc. Prof. Hana Vymazalová, Ph.D., and Prof. Dr. Virginia Webb.

We are also indebted to the participants, who raised the standard of the conference with their high-quality work, and especially the contributors to the proceedings, whose work is published in the volumes, as well as to the session chairs, PhD, Dr habil Tamás Bács, Dóra Czégény, Dr. Szabolcs Dobson Ph.D., Prof. Dr. Judit Forrai DsC, Prof. Ergün Lafli, Krisztina Scheffer, Paula Veiga, Venice Ibrahim Attia, Assoc. Prof. Hana Vymazalová PhD.

We also greatly appreciate the help of our sponsors, without whose financial contribution the publication would not be possible, and to the support of Aquila Design, which helped to overcome technical difficulties.

https://doi.org/10.71067/AePVII-2022-319-338

The use of the *Datura stramonium* in Hungarian medicine

Ildikó Marton

Universidad Complutense de Madrid
(HNM Semmelweis Museum for Medical History)

Abstract

In my paper, I present the medical knowledge related to the thorn apple (*Datura stramonium* L.) spread in historical Hungary and how it was applied in healing activities starting from the 17th century to the beginning of the 20th century, by analysing medico-botanical works, medical theses, pharmacopoeias, press products and museum objects, and including ethno-medicinal sources. I discuss its application for skin problems, rabies, and asthma, as well as the plant's role in homeopathy and veterinary medicine.

Keywords: pharmacopoeia, Herbarium, gloss, healing, ethnomedicine, rabies, asthma, homeopathy, thorn apple.

Introduction

Datura stramonium, „csattanó maszlag" in Hungarian, can be found in both urban and rural environments in Hungary (Figure 1). It can easily settle and multiply along roads, around buildings, in areas with garbage and in pastures, meadows, and gardens. That it was well-known also in earlier times, is indicated by the fact that, depending on the historical period and landscape, we know more than a dozen of its names (some can be translated, others not – e.g. bariska, bull's grass, piggy, carrion-grass, white henbane, blower, maszlag, pot-belly grass, snapper, putyóka, folded petal, prickly pig, thorn apple, thorny pig, miracle tree).[1] This diversity can also be observed in medical literature, mainly up to the middle of the 19th century (Table 1). In addition,

1 Augustin et alii 1948, 264.

some of these names were also used for other plants,[2] so when examining the sources, I only took into account those occurrences where the plant's Latin name was also included.

Due to the plant's active ingredient content (mainly atropine and hyoscyamine), it is highly toxic, and it keeps this property even after drying. The main symptoms of poisoning are dry mouth, wide pupils, blurred vision, and various psychological symptoms such as sensory loss, restlessness, and confused behaviour. In case of more severe poisoning, loss of consciousness and even death may occur.[3]

Despite it being dangerous, the use of the *stramonium* was very varied during the past centuries. Both medicine and pharmacy, as well as folk herbal knowledge, held it in high esteem. Acquiring knowledge about it was a school subject at some places,[4] veterinary science dealt with it, livestock keepers regarded it both as a source of danger and as a medicine,[5] it was used to intoxicate birds and fish in folk game-hunting,[6] and its seed capsule could also serve as a children's toy.[7]

Figure 1. Thorn apple at the train station of Csillaghegy, suburb of Budapest, Hungary

2 The "*miracle tree*" name was for e.g. often used also for the ricin (*Ricinus communis L.*). Grynaeus – Papp 1977, 31.

3 Osváth et alii 2000, 134.

4 Ferenczy 1871, 24; Samu 1890, 57.

5 Sályi-Abonyi 1994, 658-662; Csiszár 1971.

6 Ecsedi 1933, 197; Kiss 1943, 26.

7 Kún 1859, 753; Ligeti 1901, 179.

The appearance of datura in medical and botanical works written in Hungarian

The word "*maszlag*" is known in Hungarian writings from 1544-46, but originally it had the meaning of "*poison*". This meaning was expanded only later in such a way that it began to be understood for different poisonous plants. Its use as thorn apple is attested first in the book "*Posoni kert*" [Posoni Garden], written by János Lippay, and published in 1664.[8] The book described the archbishop's flower garden in Pozsony, now Bratislava. Since numerous printed medico-botanical works in Hungarian language preceded his writing in the 16th and 17th centuries, it is worth reviewing them briefly in order to put Lippay's work in context.

The first printed medical and botanical works in Hungarian appeared in the last third of the 16th century. The Herbarium of Péter Mélius Juhász was first published in Kolozsvár, now Cluj-Napoca, in 1578 (6 years after the author's death).[9] The painstakingly compiled oeuvre gives the description and medicinal uses of nearly 600 plant species, of which approximately 450 taxonomic units have been identified, although much more, all together 1236 Hungarian plant names are mentioned there.[10] This pioneering botanical work was still regarded as a model by herbarium writers two centuries later, and it influenced directly or indirectly the medico-botanical knowledge of the peasantry even in the twentieth century.[11] Gergely Frankovith's "*Useful and Above Necessary Book*" followed the work of Melius, which contains the Hungarian names of about one hundred sixty medicinal herbs grown in Hungary.[12] Carolus Clusius compiled the first printed list of plants in Hungarian, the *Stirpium Nomenclator Pannonicus* (1583) in the same period, where he listed 348 plant names.[13] Much less, a total of 20 plants are described together with their medicinal uses in Lukács Pécsi's religious moral work, entitled "*A keresztény szűzeknek koszorúja"* [Wreath for Christian Virgins] (1591).[14] András Beythe's "*Fives Könüv*" [Herbarium], published in 1595,[15] presents the medicinal uses of 275 plants, of which at least two-thirds were taken from the work of Melius.[16] By the end of the 16th century, several comprehensive works dealt with Hungarian

8 Vörös 2008, 283.

9 Meliius 1578.

10 Szlatky 1985, 91.

11 For example, a manuscript home medicine book collected in the 1970s contains more than a dozen plant descriptions, which are very similar to the Herbarium. Varró 2011.

12 Frankovith 1588.

13 Clusius 1583.

14 Pécsi 1591.

15 Beythe 1595.

16 Szlatky 1985, 94.

herbs and their uses, so it is remarkable that these writings do not even mention the thorn apple (or any of its synonyms or its equivalent in Latin).

In the first half of the 17th century, there was a general cultural stagnation, because of which not a single medico-botanical work was published. This was also typical in the second half of the century; so that medico-botanical aspects appeared as part of writings belonging to other science fields.[17] The book of János Lippay, published in 1664, is a horticultural work too. He gives a detailed description of the flower garden of his brother, the Archbishop György Lippay in Pozsony. The three-volume "*Poson Garden*" discusses in separate volumes the information about the flower garden, the vegetable garden and the fruit garden.[18] The author discusses the medical aspects of some plants in different extents. In the first volume, on the flower garden, this information is only scattered occasionally and irregularly, in the other two volumes consciously and systematically.[19] "*Stramonium*" is listed among the plants of the flower garden in the first book, and Lippay gave as its Hungarian counterpart the "*kerti maszlag virág*" (with the meaning of "poison garden flower at that time). The author describes the appearance of the flower and information concerning its sowing, but does not mention any other property or medico-botanical aspect.[20] However, the inclusion of the plant in the "*Poson Garden*" is still of great importance, because the work gained unusual popularity in the period, and within a few years it spread among landowning nobility throughout the country. [21]

The Hungarian equivalent of *Datura stramonium* could also be found in a 17th century handwritten marginalia. A copy of the herbarium of Leonhardus Fuchsius printed in 1542 was kept in the Franciscan monastery in Szeged-Alsóváros, and originally contained the name of the plants in Latin and German, accompanied by uncoloured drawings. Unknown persons, presumably Franciscan monks, subsequently supplemented these entries with the Hungarian names. The notes came from different people, from three different eras: the end of the 16th century, the first half of the 17th century, and the second half of the 17th century.[22] In this volume, next to the drawing of the plant labelled "*Stramonia*", the word "*Csuda fa*" [miracle tree] could be read.[23] These marginalias were published in 1935, but later on the herbarium was lost. By studying another specimen, Tamás Grynaeus and József Papp were able to prove that the plant, next to the image of which the word *csudafa*

17 Szlatky 1979, 80.
18 Lippay 1664.
19 Szlatky 1979, 85-87.
20 Lippay 1664, 96.
21 Takáts 1927, 421.
22 Iványi 1935, 172.
23 Iványi 1935, 184.

was written, can be clearly identified with *Datura stramonium*. In addition to Fuchsius's plant collection, the authors also examined six other illustrated works and their marginalias from the 15-17th century in order to identify various old Hungarian medicinal plant names. Of the seven sources they investigated, only the Fuchsius collection contained the thorn apple.[24]

At the end of the 17th century, another influential medical work appeared. Ferenc Pápai Páriz' work, entitled *Pax Corporis* (Piece of the body). It is divided into 8 units with 70 chapters, where he presents 100 types of diseases and their remedies. These medicines are mainly made of medicinal plants, with a smaller proportion of animal or mineral materials. Among the medicinal plants used by Ferenc Pápai Páriz, the thorn apple still does not appear. Thus, even this work, reprinted in multiple editions during the 18th century, and of outstanding importance for Hungarian medicine, did not help the spread of knowledge on *Datura stramonium*.[25]

From the first half of the 18th century, the little book published by Dániel János Perliczi in Buda under the title "*Medicina pauperum*" (Medicine of the Poors) proved to be a unique enterprise. He intended his work specifically for common folk, so he mainly recommended materials that were easily obtainable and that could be collected from the domestic flora and fauna. Among the 128 plants in his book, the *Datura* has not yet found a place.[26]

From the rarity of the occurrence of the plant in the sources, we can conclude that – although the plant was known in Hungarian-speaking areas in the 17th century – its use as a medicinal material was not typical during this century or at the beginning of the 18th century.

Spreading the medical use of thorn apple

The first serious evidence for the use of the plant in healing, similar to Lippay's description, also comes from Pozsony. János Justus Torkos compiled a drug price list, *Taxa Pharmaceutica Posoniensis*, on behalf of the Regional Council there, in which we can already clearly identify the plant, since its name is found there in four languages: Latin, Hungarian, German and Slovak. The *Taxa Pharmaceutica Posoniensis* lists the medicines and other wares used in

24 Starting with recognisable images of plants in illustrated works, Tamás Grynaeus and József Papp identified plants from the 15th-17th century sources. They worked on the basis of images with related names and, where available, they studied associated detailed morphological descriptions. According to their research, the first reliable data on the presence of the thorn apple in Hungarian etnobotanical knowledge date from the 17th century. Grynaeus – Papp 1977.

25 Halmai 1961.

26 Perliczi avoided listing dangerous drugs; it could explain the omission of *Datura stramonium*, but he was not always consistent in this, and the inulin (*Hyoscianus niger*) or antimony are still included in the home pharmacy he recommended. Grabarits 2005, 32.

Table 1. Denominations of the *Datura Stramonium* in the different sources (1664-1835)		
Source	**Year of publication**	**Name in Hungarian**
Lippay, János: Posoni Kert	1664	Kerti maszlag virág
Torkos, Justus János: Taxa Posoniensis	1745	Bolondító mag
Váli, Mihály: Házi orvos szótárotska	1759 (1792)	–
Csapó, József: Új füves és virágos magyar kert	1775 (1792)	Maszlag, tsuda-fű
Benkő, József: Nomenclatura botanica	1783	Tsuda-fa, maszlag, tsattanó
Kolbányi, Pál: Ungarische Giftpflanzen	1791	Maszlag, tsuda-fü
Veszelszki, Antal: Házi orvosságok...	1795	–
Veszelszki, Antal: A növény-plánták országából való erdei és mezei gyűjtemény	1798	Maszlag, tsattano, tsuda-fa, puttyantó
Diószegi, Sámuel: Orvosi füvészkönyv	1813	Redőszirom
Bugát, Pál – Schedel, Ferenc: Orvosi Tár -Orvosi Szókönyv[27]	1833	Maszlagos redőszirom, redőszirom
Kováts, Mihály: Magyar patika	1835	Csudafa, maszlag, csattanó

the period, so due to the nature of the work, the author does not discuss the medicinal use of substances. The thorn apple is listed as *Daturae* in Latin, and as "*bolonditó mag*" (fooling seed) in Hungarian. Regarding its use, it turns out that the seeds were sold, from which we can conclude that it was used for healing. [28]

27 Bugát – Schedel 1833, 66, 81 and 128.

28 Torkos 1745, 11.

The Hungarian "*fooling seed*" expression differs from the ones used later. The author of the book himself gives a possible explanation for this in the introduction. János Justus Torkos complains that finding the right Hungarian names caused him many headaches due to the lack of a unified Hungarian nomenclature. "Finding Hungarian names meant a lot of work, because the nomenclature is not yet permanent and complete; on the contrary, there are incorrect names in various books and herbariums. I thought that I would investigate it with great enthusiasm, to the praise of our country's language. To help my plan, I used various lexicons and herbariums, but primarily the Hungarian Herbal by Péter Melius – which was published in Kolozsvár in 1578 and is very rare – and other medical books and my own manuscript; I complied the latter one with great diligence while staying in Komárom from 1726 to 1741, acting as the physicist-ordinary officer of the renowned Counties of Komárom and Esztergom."[29]

Since *Datura stramonium* is not present in the Herbal of Melius Juhász, which was Torkos's main source, it is possible that the author used the name "*fooling seed*" based on his own collections. The name "fooling" was frequently used to denote the henbane (*Hyosciamus niger*), but it was also registered as a secondary meaning for *Datura stramonium* decades later*,* as we can read in József Márton's 1816 trilingual school dictionary.[30]

The medical books published in the second half of the 18th century discuss the properties and healing benefits of the thorn apple in more and more detailes. The important medical book of the period, Mihály Váli's "*Házi Orvos szótárocskája"* [Small Dictionary of the Home Physician], compiled in 1759, does not yet mention *Stramonium*, [31] but we can already learn from József Csapó's "*Új füves és virágos magyar kert*" [New Hungarian Herbal and Flower Garden] (1775), that the thorn apple grows in many places, especially in manors and in the fertilized soil of farms. The author also expounded on the poisonous effect of the plant; according to his report, some people made their enemies drink the seeds in order to harm them. With regard to its role in healing, he says that the leaves of the thorn apple are used externally in the same way as the leaves of the nightshade[32] (in this case "*Solanum scandens*"), and in the case of the nightshade, he practically reports an ethnographic observation that shepherds hung the leaves of the plant around the necks of cattle.[33] From then on, the descriptions unanimously state that *Datura stramonium* is a very poisonous plant that often causes accidents, especially among playing

29 Blázy 1965.
30 Márton 1816, 36.
31 Váli 1792.
32 Csapó 1775, 180-181.
33 Csapó 1775, 80.

children. Pál Kolbány mentions even specific cases in his German-language book on Hungarian poisonous plants, published in Pozsony in 1791,[34] as does Antal Veszelszki in his Hungarian-language medico-botanical work, published at the end of the 18th century, entitled "*A' növevény-plánták' országából való erdei, és mezei gyűjtemény"* [A forest and field collection from the country of plants]. [35]

Simultaneously with its appearance in Hungarian medical literature, the thorn apple was also included in the first official pharmacopoeia in Hungary. In the *Pharmacopoea Austriaco Provincialis* published by the Habsburg Empire in 1774, and in the *Pharmacopoea Austriaco Emmendata* published twenty years later, in 1794, the plant is found under the name *Herba daturae seu strammoni*, and its extract is also included in the list.[36] Regarding this extract, Mihály Kováts later notes that "even the extract is disgusting".[37] The substance mentioned in the pharmacopoeia also appeared on the shelves of pharmacies, it was taken into inventory in the Marosvásárhely pharmacy in 1789.[38]

At the beginning of the 19th century, *Stramonium* was removed from the *Pharmacopea Austriaca*, and it is also missing from the first, second and third editions.[39] It was not re-included until the fourth edition in 1834; its leaf and seed are mentioned as *Folia Stramonii* and *Semen Stramonii*.[40] It appears in the same way in the 5th edition, in 1855, supplemented with the tincture, the Latin recipe of which can be read there. [41]

The plant was included in the first Hungarian pharmacopoeia, official from 1872. According to the pharmacopoeia, the tincture produced from the crushed seeds (*Tinctura Stramonii*) was prepared in the same way as that of the helmet flower (*Tinctura Aconiti*). [42]

The use of the Datura strimoniensis in medicine

Gyula Magyary-Kossa, in his 1926 book on the effect and medical use of Hungarian medicinal plants, speaks about thorn apple as if it was hardly used for medicinal purposes anymore; occasionally people tried to use its leaves to alleviate breathing difficulties, which he said, was proven by more

34 Kolbány 1791, 44-47.

35 Veszelszki 1798, 419-420.

36 Störk et alii 1774, 34 and 174; Störk at alii 1794, 40 and 74-75.

37 Kováts 1835, 61.

38 Crisan 1996, 8 and 91.

39 Stifft et alii 1812; Stifft et alii 1814; Stifft et alii 1820.

40 Stifft et alii 1834, 38.

41 Ministerium 1855, 90, 179, 210.

42 Magyar Gyógyszerkönyv 1871, 466.

than a hundred-year experience.[43] Looking at the sources from the 19th century, however, we get a more colorful picture than the situation outlined by Magyary-Kossa. There were various experiments and proposals for the use of the plant, I will describe the most typical ones below.

Skin problems

One of the areas of use of thorn apple concerned various diseases of the skin. According to Antal Veszelszki, its leaves "*külsőképpen heves, tüzes dagadást oszlatnak, ha reá rakatnak*." [externally disperse a violent, fiery swelling when placed upon].[44] Kálmán Balogh in his Commentary of the Hungarian Pharmacopoeia published in 1879 recommended it for poultices for *pokolvar* [cancerous ulcers], rheumatoid or gouty swellings.[45] In homeopathy, it was used to treat "*csomócskák, hólyagok, fakadékok*" [nodules, blisters, boils].[46]

The use of *Datura stramonium* leaves on painful swellings and wounds is also found among folk remedies. According to the description of Gömör and Kishont counties in 1867, when treating *pokolvar*, in case of great pain, it was crushed and applied to the wound.[47] The author of the chapter, dr. János Török learned the cure from his priest father, and he explained the procedure three years earlier in Gyógyászat [Medicine] magazine.[48]

Rabies

According to some 19th century views, *Datura stramonium* was also effective in curing rabies. This was already mentioned by Mihály Kováts' *Hungarian Pharmacy* in 1835, referring to the experiments of "Báró Störck".[49] In homeopathy, it was recommended as an antidote to hydrophobia, often synonymous with rabies.[50]

In March 1859, the *Vasárnapi Újság* [Sunday Newspaper] reported on the effectiveness of the plant in curing rabies as a curiosity, based on a French report. According to the article, a missionary in East India learned the cure with which he has already cured more than sixty people of the disease. According to the recipe: "Put three handfuls of stramonium (with seeds, miracle tree,

43 Magyary-Kossa 1926, 34. However, in a book he edited a year earlier, he also provides information on its cultivation. Darvas 1925, 111.

44 Veszelszki 1798, 420.

45 Balogh 1879, 1040.

46 Argenti 1868, 435.

47 Hunfalvi 1867, 178.

48 Török 1864, 722.

49 Kováts 1835, 61. Anton Liber Baro de Störck, professor of the University of Viena

50 Argenti 1864, 435.

Stechapfel, *datura stramonium*) in one and a half cups of water and cook until half of the water evaporates. All the prepared juice is taken by the patient at once. After a short time, a violent fit of rage is followed by profuse sweating, and after 24 hours the patient is completely cured".[51] The formula was also published in the *Kalauz* [Guide] newspaper a month later, and even 14 years later, [52] the *Kecskemét Lapok* [Kecskemét Papers] reprinted it unchanged. [53]

Using the leaves of the plant, a very similar recipe was presented in 1860 by *Vadász- és Versenylap* [Hunting and Race Paper][54] and *Pesti Napló* [Diary of Pest],[55] and the following year by *Hölgyfutár* and *Sürgöny* [Lady's Courier and Telegram].[56]

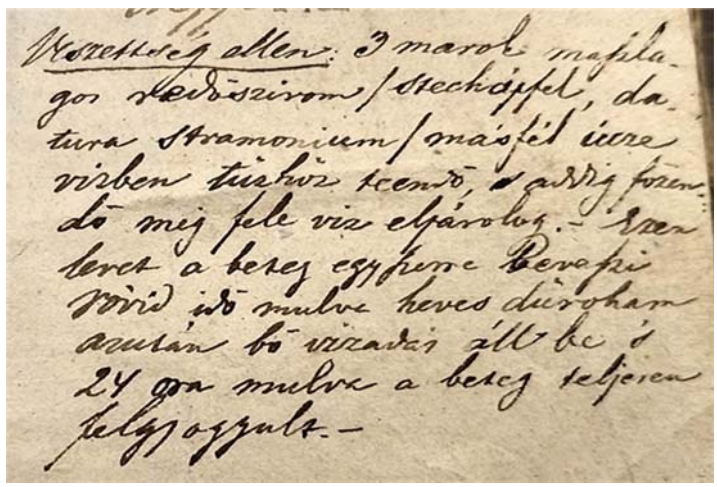

Figure 2. Manuscript of an anti-rabies formula written on the last page of the medical book of Antal Veszelszki

The prescription against rabies also survived in handwritten form on the back page of a medical book. The entry can be read on the last page of a copy of Antal Veszelszky's *Házi Orvosságok* [House Medicines] (Figure 2).[57] Comparing the text with the one in the *Vasárnapi Újság*, we can conclude that the two formulas are almost word by word identical. Since Antal Veszelszki's

51 Vasárnapi Újság 1859, 116: "*Három marok maszlagos redőszirom (maggal, csudafa, Stechapfel, datura stramonium) másfél itze vízben tűzhöz teendő és addig főzendő, mig a viznek fele elpárolog. Az igy készült levet a beteg egyszerre beveszi. Rövid idő mulva heves dühroham, azután bő izzadás áll be, és 24 óra mulva a beteg teljesen felgyógyult.*"

52 Kalauz 1859, 255.

53 Kecskeméti Lapok 1873, 3.

54 Vadász 1860, 408.

55 Pesti Napló 1860, 3.

56 Hölyfutár 1861, 642; Sürgöny 1861, 1.

57 This volume can be found in the Semmelweis Library for the History of Medicine Cat. Num. 2335.

book originally proposed a different kind of cure against rabies, this 19th century entry can be interpreted as a kind of addendum. [58]

The question arises whether the recipe spread in the informational press was also used in practice. For centuries, both doctors and laymen considered the Spanish fly (*Lytta vesicatoria*) to be an effective antidote to rabies.[59] From the collections of Aurél Vajkai, we know that even in the first half of the 20th century, a specialist in the treatment of rabies, the "rabies doctor", gave his patients the powder of the Spanish fly. In addition to this, there are data on throwing the patient into water, fumigating animals, and driving them across ditches. However, the use of thorn apple in curing rabies is not supported by ethnographic sources.[60] Based on these data, we can conclude that the recipe remained at the level of curiosity and did not spread widely.

Homeopathy

Homeopathy gained early popularity in Hungary thanks to the cultural relations maintained with the German-speaking region. Several of the members of the first generation of homeopaths personally knew Samuel Hahnemann, the developer of the system of homeopathy. [61] After Pál Bugát and József Horváth published the Hungarian translation of Hahnemann's *Organon* in 1830, there were no longer any language barriers for those interested in learning about the therapy. Hahnemann describes *Datura stramonium* in the Organon; it is translated as *redőszirom* [folded petals].[62]

The thorn apple was used in homeopathy in an extremely versatile way. The substance referred to by homeopaths as "*Stramonium*" was recommended in cases of psychosis, spasms, pains, dyspnea and seizures in various parts of the body. One of the most famous Hungarian homeopathic physicians, Dr. Döme Argenti, names approximately 20 areas of the problems, of which it is recommended: soul, body, skin, sleep, fever, dizziness, eyes, ears, face and teeth, dry mouth and tongue, bad taste in the mouth, stomach, abdomen, stool, urination, genitals, trachea and breast, back and sacrum, arms, legs in his book, the "*Hasonszenvi gyógymód és gyógyszertan"* [The Similarity Method of Medicine and Pharmacology].[63]

We can get a more detailed picture of the frequency of use of *Stramonium,* if, in addition to the manuals, we also examine the composition of the homeopathic medicine kits used in practice. An analysis of the medicine

58 Veszelszki 1795, 16.

59 Magyari-Kossa 1929, 359-363.

60 Wagenhuber (Vajkai) 1936; Vajkai (Wagenhuber) 1937.

61 Kóczián-Kölnei 2002, 76.

62 Hahnemann 1830, 42-43 and 118.

63 Argenti 1868, 435.

stock of these cases kept in the Semmelweis Museum for Medical History in Budapest reveals that *Stramonium* was included in the larger stocks containing 100-120 medicines. [64] All such hand apothecaries preserved in the collection come from Hungary, two of them from Gusztáv Jármay's pharmacy in Pest.[65] Jármay's *Oroszlán* [Lion] pharmacy was one of the most important centers of homeopathy, where small home-made homeopathic apothecaries were sold, put together based on Döme Argenti's suggestions. Argenti himself set up his clinic in one of the rooms of this pharmacy. [66]

Asthma

The thorn apple was most successfully used to relieve asthma symptoms in the form of cigarettes, tobacco or incense mixture.

As early as 1837, the *Honművész* [Home artist] reported that a French druggist made cigarettes from the leaves of the "*miracle tree*", which were successfully used by doctors in cases of chest spasms and breathlessness.[67] The Hungarian medical society also dealt with the use of *Datura stramonium* in this way. In the early 1860s, articles published in several professional journals described the foreign examples where the leaves of the plant were rolled into cigars and cigarettes and successfully used against breathlessness – with proper precautions and under controlled conditions. [68] At the same time, in his textbook "*A részletes kór-és gyógytudomány tankönyv*" [A Detailed Schoolbook of Pathology and Medicine], which was available in Hungarian from 1865, the German doctor Felix Niemeyer was not enthusiastic about the procedure, mainly because of its side effects. As he put it: "smoking *datura stramonium* leaves like tobacco seems less safe to me and leaves a very unpleasant headache". [69] The presentation of successful foreign examples continued in the 1870s. The successes achieved by John C. Thorowgood and his colleagues in alleviating the symptoms of asthma were described in the *Orvosi Hetilap* [Medical Weekly].[70] In 1878, in the *Gyógyászat* [Medicine] newspaper, we can already read a recipe for making a camphor-based incense, following the

64 Beáta Merza analized the composition of 10 homeopathic hand remedies of the collecion I/3.b of a Semmelweis Museum for the History of Medicine in her Master's Dissertation. Among them she found *Stramonium* in the boxes of inventory number 65.215.1, 65.224.1, 88.109.1.1-113 and 2019.2.1. Merza 2019, 99-100.

65 Merza 2019, 57 and 59; and the card catalogues of the items with inventory numbers 65.215.1 and 88.109.1.1-13. .

66 Borsa 1964, 141-142.

67 Honművész 1837, 1.

68 Kocsis 1861, 65; Gyógyászat 1862, 185; Koller 1865, 69-70.

69 Niemeyer 1865, 98.

70 β 1870, 321.

Figure 3. Advertisement of Espic cigars in the Budapesti Hírlap (14 April 1896)

instructions of doctor Studzieniecki of Tarnapol.[71] In the same year, Kálmán Balogh published the method of making cigars recommended for asthma in the commentary of the Hungarian Pharmacopoeia, and in case of convulsive cough, he also recommended the tincture of *Stramonium* seed (*Tinctura stramonii*) and the powder made from the leaves of the plant.[72]

The Espic asthma cigarette, developed in France and described in Orvosi Hetilap as early as 1865, was marketed by József Török's pharmacy (Figure 3) on Király Street for about two decades, from the end of the 19th century.[73] Despite the increase in medical experience, the anti-asthma smoking mixture only became approved medicine from 1934, when it was incorporated into the *IV. Hungarian Pharmacopoeia* under the name "Anti-asthma smoking mixture".[74]

Parallel with official medicine, the thorn apple was also used in folk medicine against asthma. The smoke of smoldering leaves was used either by inhaling directly or in cigarettes and pipes already at the beginning of the 20th century.[75] According to a 1993 ethnographic collection, it was known as "tobacco for asthma" in Hidegség belonging to the Gyimesközéplok,[76] while at other places, it was consumed in the form of tea against symptoms of bronchitis.[77]

Veterinary medicine

In homeopathy, *Stramonium* was recommended for dizzy horses, which is why it was also included in the 49-drug selection of the homeophatic apothecary specially compiled for the treatment of domestic animals.[78]

In some areas, wormy pigs were treated with the thorn apple. The procedure consisted of dripping the sap obtained from the leaves of the plant

71 Gyógyászat 1878, 71.
72 Balogh 1879, 1040 and 1084.
73 Budapesti Hirlap 1896, 18; Friss Újság 1914, 8.
74 Magyar Gyógyszerkönyv 1934, 300.
75 Vámossy 1907, 100-101.
76 Gergely 1993, 53.
77 Kóczián 1979, 156.
78 Böhme 1863, 206 and 217.

onto the navels of the pigs. The juice of the *stramonium* could also be an alternative or supplement to some pharmacy product: in Oláhlapád village it replaced turpentine, [79] in Bereg it was mixed with creolin or copper-sulphate. Some magical element may have been added to the treatment.[80]

According to a 1936 ethnographic collection, its seeds were used in the Highlands against "*hályog*" (probably cataract): nine seeds were tied in a rag and hung around the pig's neck.[81] This procedure was already mentioned in József Csapó's book "*Orvosló kis könyvecske*" [Small medicinal booklet] (1775), according to which the shepherds hung nightshade leaves around the necks of cattle "against some malady" and they might do the same with thorn apple. Since the author does not name the diseases exactly, it is not possible to determine whether they used the plant for the same problems as in the 18th century.[82]

Conclusion

According to the sources available to us, the *Datura stramonium* was certainly already known in Hungary in the 17th century, but at that time, it had no demonstrable importance in medical practice. The plant gradually appeared in 18th century medical books and pharmacopoeias; several authors in the second half of the 18th century discussed its medicinal effects. The data related to it began to multiply significantly at the beginning of the 19th century in the Hungarian medical literature, mainly based on the results of foreign research. The medical profession discussed the medicinal effects of the plant for decades, and its use was gradually introduced into medical practice.

The most important field of use in the 19th century was to alleviate the symptoms of respiratory diseases, cough and asthma and we also find examples of curing other diseases, skin complaints and rabies. In addition to human medicine, veterinary medicine also used it.

Seeds and leaves were used in the form of extract, tincture, pressed juice, incense, cigarettes or cigars and tea.

Bibliography

Argenti 1868 = Argenti, Döme, *Hasonszenvi gyógymód és gyógyszertan kezdő h. orvosok és művelt nemorvosok használatára I.* [Homeopathic

79 Pávay 1907, 359.

80 Csiszár 1971, 494.

81 Vajkai-Wagenhuber 1937, 151. In the source it is not defined exactly what kind of eye-disease they refer to.

82 Csapó 1775, 80.

Treatment and Pharmacology for the Use of Beginner Home Physicians and Learned Non-physicians]. 6th expanded edition. Pest 1868.

Augustin et alii 1948 = Augustin, Béla – Jávorka, Sándor – Giovannini, Rudolf – Rom, Pál, *Magyar gyógynövények* [Hungarian Herbs]. Budapest: Földművelésügyi Minisztérium 1948.

β 187 = β, *Könyvismertetés. Notes on Asthma, its Nature, Form and Treatment. By John C. Thorowood, M.D. Lond, M.R.C.P. assistant Physician to the City of London Hospital for Diseases of the Chest etc.* [Book Review]. Orvosi Hetilap 14/19, 1870, 321.

Balogh 1879 = Balogh, Kálmán, *A Magyar Gyógyszerkönyv kommentárja* [Commentary of the Hungarian Pharmacopeaia]. Budapest: Magyar Orvosi Könyvkiadó Vállalat, 1879.

Beythe 1595 = Beythe, András, *Fves Könüv* [Herbarium]. Németújvár 1595.

Blázy 1965 = Blázy, Árpád, *Adatok a Taxa Pharmaceutica Posoniensisről* [Data on the Taxa Pharmaceutica Posoniensis]. Gyógyszerészet 9/12, 1965, 474-477.

Böhme 1863 = Böhme, Károly, *A háziállatok legfontosabb betegségei és ezek hasonszenvi orvoslása felől* [About the most important diseases of the domestic animals and their homeopathic treatment]. In Müller, Clotar, Hasonszenvi házi s családorvos [Homeopathic home and family doctor]. Pest: Lampel Róbert 1863, 201-217.

Borsa 1964 = Borsa, Gedeon, *Argenti Döme (1809-1893)*. In Palla, Ákos (ed), Az Országos Orvostörténeti Könyvtár Közleményei 30, 1964, 137-150.

Budapesti Hírlap 1896 = Budapesti Hírlap, *Aszthma és hurut (hirdetés)* [Asthma and catarrh (advertisement)] 16/103, 1896, 8.

Bugát – Schedel 1833 = Bugát, Pál – Schedel Ferenc, *Orvosi szókönyv* [Medical Dictionary]. Orvosi Tár 3/9, 1933.

Crişan 1996 = Crişan, Eva, *Materia Medica de Transylvaniae*. Biblioteca Musei Napocensis XIV. Cluj-Napoca: Muzeul National de Istorie a Transilvaniei, 1996.

Csapó 1775 = Csapó, József, *Új füves és virágos magyar kert, melyben mindenik fűnek és virágnak neve, neme, ábrázatja, természete és ezekhez képest különféle hasznai, értelmessen meg-jegyeztettek*. [New Hungarian Herbal and Flower Garden…]. Pozsony, 1775.

Csiszár 1971 = Csiszár, Árpád, *A beregi sertéstenyésztés* [Pig breeding in Bereg]. Ethnographia 82/4, 1971, 481-496.

Clusius 1583 = Clusius, Carolus, *Stirpium Nomenclator Pannonicus* [Pannonian nomenclature of Plants]. Németújvár, Antwepen 1583.

Darvas 1925 = Darvas, Ferenc, *Hazai gyógynövényeink ismertetése* [Review of inland herbs] In Darvas, Ferenc – Magyary-Kossa, Gyula, Hazai gyógynövények. Termelésük, értékesítésük, hatásuk és orvosi használatuk. Budapest: Atheneum 1925.

Ecsedi 1933 = Ecsedi, István, *Népies vadfogás és vadászat a decreceni határban és a Tiszántúlon* / Volkstümlicher Wildfang und Jagd im Debrecen Gebiet und jenseits der Theiss (Tiszántul). In Ecsedi, István – Sőregi, János (eds), Jelentés Debrecen szabad királyi város Déri-Múzeumának 1932. évi működéséről és állapotáról. [Report on the Déri Museum in the Free Royal City of Debrecen, 1932, its operation and status]. Debrecen Sz. Kir. Város Déri-Múzeumának Kiadványai XXVIII. Debrecen 1933.

Ferenczy 1871 = Ferenczy, Jakab, *Értesítvény a Pannonhegyi sz. Benedekrend esztergomi főgymasiumából az 1870/71 tanév végén* [Report of the of Benedictine Secondary School of Pannonhegy in Esztergom in the End of 1870/71 School Year]. Pest 1871.

Frankovith 1888 = Frankovith, Gergely, *Hasznos és fölötte szükséges könyv* [Useful and Above Necessary Book]. Monyorókerék: Manlius János 1588.

Friss Újság 1914 = *Aszthma (hirdetés)* [Asthma (advertisement)]. Friss Újság 19/18, 1914, 8.

Gergely 1993 = Gergely, Laura Kinga, *Gyógyításra használt növények a Hidegség völgyében,* [Plants used for healing in the valley of Hidegség]. Művelődés 42/8-9, 1993, 53.

Grabarits 2005 = Grabarits, István, *A „Szegények patikája" gyógyszerkincse* [The pharmaceutical materia of the "Medicina Pauperum"]. In Szegények patikája. Kiadta Periczi János Dániel Nógrád megye főorvosa 1740-ben. Adatok, források, és tanulmányok a Nógrád megyei Levéltárból 49. [Medicina Pauperum. Published by János Dániel Periczi, chief physician of Nógrád county in 1740. Data, sources and studies from the archives of Nógrád County 49.] Balassagyarmat: Nógrád Megyei Levéltár 2005.

Grynaeus – Papp = Grynaeus, Tamás – Papp, József, *Régi magyar (gyógy) növények, 15-17. század* [Old Hungarian (medicinal) herbs, 15-17th centuries]. In Antall, József (ed), *Historia Pharmaceutica.* Orvostörténeti Közlemények, Supplementum 9-10. Budapest: Medicina 1977, 31-49.

Gyógyászat 1862 = *A légrekedés (aszthma) gyógymódja* [The Therapy of brethlessness (asthma)] Gyógyászat 2/9, 1862, 185.

Gyógyászat 1878 = *Görcsös légrekedés gyógyítása* [Healing of convulsive brethlessness]. Gyógyászat 18/5, 1878, 71.

Friss Újság 1914 = Friss Újság 19/180, 1914, 8.

Hahnemann 1830 = Hahnemann, Samuel, *Sámuel Hannemann Organon-a (életműve) a'gyógyművészségnek, vagy Hahnemann Sámuel homeopathia-ja (hasonszenve)*. [Organon, Hungarian edition]. Pest: Wigand Ottó 1830.

Halmai 1961 = Halmai, János, *Pápai Páriz Ferenc gyógynövényei* [The herbs of Ferenc Pápai Páriz]. Gyógyszerészet 5/7, 1961, 263-266.

Honművész 1837 = *Uj czigarók* [New cigars]. Honművész 5/61, 1837, 1.

Hölgyfutár 1861 = *Gyógyszer, a veszettség ellen* [Medicine against rabies],. Hölgyfutár 12/84, 1861, 672.

Hunfalvi 1867 = Hunfalvi, János (ed), *Gömör és Kishont törvényesen*

egyesült vármegyének leírása II [Description of Hont and Gömör counties II.]. Pest 1867.

Iványi 1935 = Iványi, Béla, *Régi magyar gyógynövénynevek,* [Old Hungarian herb names]. Népünk és Nyelvünk 7, 1935, 172-186.

Kalauz 1859 = *A veszetségnek orvoslása*, [The cure of rabbies]. Kalauz 3/16, 1859, 255.

Kecskeméti Lapok 1873 = *A veszettség ellen* [Against rabies]. Kecskeméti Lapok 6/43, 1873, 3.

Kiss 1943 = Kiss, Lajos, *A Nyírség halászata* [Fishing in Nyírség]. Ethnograhpia 54/1 1943.

Kocsis 1861 = Kocsis, Alajos: Néhány adat a keh (fulladozás, légrekedés, asthma) gyógykezeléséhez [Some Data for the Treatment of Roaring (Shortness of Breath, Dyspnea, Asthma)]. Orvosi Hetilap 5/4, 1861, 64-67.

Kolbány 1791 = Kolbány, Pál, *Ungarische Giftpflanzen, zur Verhürtung tragischer Volfälle in der Haushaltungen, nach ihren botanischen Kennzeichen, nebst den Heilungsmitteln*. Pressburg: Landerer 1791.

Koller 1865 = Koller, Gyula: *A légrekedés (aszthma) gyógykezeléséről.* [The treatment of Dyspnea (asthma)]. Orvosi Hetilap 9/5, 1865, 69-71.

Kováts 1835 = Kováts, Mihály, *Magyar patika azaz Magyar- és Erdély-Országban termő patikai állatok, növények és ásványok orvosi hasznaikkal egyetemben…* [Hungarian Pharmacy or Animals, Plants and Minerals of Hungary and Transylvania in the Pharmacy and Their Medical Utility]. Pest 1835.

Kóczián 1979 = Kóczián, Géza, *Egyes Solanaceae-fajok pszichotomimetikumként való használata a népi gyógyászatban*. [Solanaceae species used as psychotomimetics in ethnomedicine]. In Antall, József – Buzinkay, Géza (eds.), *Népi Gyógyítás Magyarországon.* [Ethnomedicine in Hungary]. Orvostörténeti Közlemények Supplementum 11-12. Budapest: Medicina 1979, 155-160.

Kóczián – Kölnei 2002 = Kóczián, Mária – Kölnei, Lívia, *A homeopátia története Magyarországon* [History of homeopathy in Hungary]. In Magyar, László (ed.), Orvostörténeti Közlemények 178-181, 2002, 75-105.

Kún 1859 = Kún, Tamás, *Nevezetesebb kóresetek (1859 május, junius és julius)* [The Most significant cases (May, June and July of 1859)]. Orvosi Hetilap 3/47, 1859, 752-753.

Ligeti 1901 = Ligeti, Ármin, *Csoportos atropin-mérgezés esete a datura stramonium L (maszlagos redőszirom) magvaival* [The case of group intoxication by atropine with the seeds of *Datura stramonium*]. Orvosi Hetilap 45/11, 1901, 179.

Lippay 1664 = Lippay, János: *Posoni kert, kiben minden kerti munkák, rendelések, virágokkal, veteményekkel, fákkal, gyümölcsökkel és kerti csömötékkel való baimolódások, azoknak nemek, hasznok, bé-csinálások bövségessen magyar nyelven le-irattattanak, kivált-képpen azok, az kik esztergami érsek urúnk ö nagysága posoni kerteben talaltatnak* [The Poson

Garden, in which all garden works , orders, works with flowers, crops, treas, fruits and garden seedlings: their genders, uses and actions are abundantly written down in Hungarian, especially those that grow in the Poson Garden of our archbishop of Esztergom]. Nagyszombat, Wien 1664.

Magyar Gyógyszerkönyv 1871 = *Magyar Gyógyszerkönyv.* [*Pharmacopoea Hungarica*]. Pest: Pesti Könyvnyomda Részvény Társulat 1871.

Magyar Gyógyszerkönyv 1934 = *Magyar Gyógyszerkönyv.* [*Pharmacopoea Hungarica*]. 4th edition. Budapest: Állami Nyomda 1934.

Magyary-Kossa 1926 = Magyary-Kossa, Gyula: *A hazai gyógynövények hatása és orvosi használata* [The Effect of Inland Herbs and their Medical Use]. Budapest: Atheneum 1926.

Magyary-Kossa 1929 = Magyary-Kossa, Gyula, *Magyar orvosi emlékek I.* [Hungarian Medical Relics]. Budapest 1929.

Márton 1816 = Márton, József: *Három nyelvből készült oskolai lexicon, vagyis Szókönyv 2* [Trilingual *S*chool Lexikon or Texbook 2]. Wien 1816.

Melius 1578 = Mélius Juhász, Péter, *Herbarium az faknac füveknec nevekröl, természetekröl és hasznairól, Magyar nyelwre és ez rendre hoszta az doctoroc könyveiböl az / Horhi Melius Peter* [Herbarium or About the Name, Property and Utility of Trees and Plants, translated into Hungarian by Peter Melius from Horh, using the physicians' books]. Kolozsvár: Heltai Gáspárné 1578.

Merza 2019 = Merza, Beáta, Hasonszenvi úti patikák a XIX. században. Diplomamunka. [Homeopathist Traveller Medicines' Chest from the 19th century]. Manuscript. Budapest 2019. MNM SOM gy.sz.13763.

Ministerium 1855 = Ministerium de Inners. *Pharmacopoea Austriaca, Editio 5.* Wien: Imperii Typographia 1855.

Niemeyer 1865 = Niemeyer, Felix, *A részletes kór- és gyógytudomány tankönyve*. *Különös tekintettel az élettanra és kórboncztanra* / Lehrbuch der speciellen Pathologie und Therapie mit besonderer Rücksicht auf Physiologie und pathologische Anatomie. Buda: Magyar Orvosi Könyvkiadó Társulat 1865.

Oláh1986 = Oláh, Andor*: "Újhold, új király!" A magyar népi orvoslás életrajza*. ["New Moon, New King!" The Biography of the Hungarian Ethnomedicine]. Budapest: Gondolat 1986.

Osváth et alii 2000 = Osváth, Péter – Nagy, Anikó – Fekete, Sándor – Tényi, Tamás – Trixler, Mátyás – Radnai, Imre, *Csattanómaszlag mérgezés esete – a differenciáldiagnózis gyakori kérdései* [A case report of *Datura stramonium* intoxication – the general problems of differentialdiagnosis]. Orvosi Hetilap 141/3, 2000, 133-136.

Pávay 1907 = Pávay, V. Ferencz, *Oláhpaládi babonák és népies gyógymódok s földrajzi elterjedésük* [Superstitions and ethnotherapies of Oláhpalád and their geographical distribution]. Ethnographia 18/6, 1907, 354-359.

Pécsi 1591 = Pécsi, Lukács, *A keresztény szüzeknek koszorúja* [The Wreath

of Christian Virgins]. Nagyszombat 1591.

Pesti Napló 1860 = *Különfélék* [Miscellanea]. Pesti Napló 11/3177, 1860, 3.

Raitsits 1923 = Raitsits Emil, *A fulladozás elfojtása* [Moderating shortness of breath]. In Zimmermann, Ágoston (ed.), Közlemények az összehasonlító élet-és kórtan köréből [Communications from the field of comparative physiology and pathology] XVI. Budapest 1923, 31-94.

Sályi – Abonyi 1994 = Sályi, Gábor – Abonyi, Tamás, *A csattanó maszlag (Datura stramonium) magja okozta mérgezés lovakban* [Poisoning caused by seeds of *Datura Stramonium* in horses]. Magyar Állatorvosok Lapja 49/11, 1994, 658-662.

Samu 1890 = Samu, József (ed), *A Csáktornyai M. Kir. Állami Tanító-Képezde Emlékkönyve az 1879/80-1889/9 tanévig* [The Annual Report of the Training College of Csáktornya from 1879/1880 to 1889/1890 School Years]. Csáktornya 1890.

Stifft et alii 1812 = Stifft, Andreas Joseph et Alii, *Pharmacopoea Austriaca*, Editio 1. Wien: Kuppfer et Wimmer 1812.

Stifft et alii 1814 = Stifft, Andreas Joseph et Alii, *Pharmacopoea Austriaca*, Editio 2. Wien: Kuppfer et Wimmer 1814.

Stifft et alii1820 = Stifft, Andreas Joseph et Alii, *Pharmacopoea Austriaca*, Editio 3. Wien: Kuppfer et Wimmer 1820.

Stifft et alii1834 = Stifft, Andreas Joseph et Alii, *Pharmacopoea Austriaca*, Editio 4. Wien: Kuppfer et Wimmer 1834.

Störk et alii 1774 = Störk, Anton – Jacquin, Nicolaus Joseph – Well, Johann, Jakob, *Pharmacopoea Austriaco Provincialis*. Wien: Trattner 1774.

Störk et alii 1794 = Störk, Anton – Schosulan, Johann Michael – Jacquin, Nikolaus Joshep von, *Pharmacopoea Austriaco Provincialis Emendata.* Wien: Wappler 1774.

Sürgöny 1861 = *Sürgöny*. Tárcza. Napi újdonságok [Telegram. Column, Daily News] 1/197, 1861, 1.

Szlatky 1979 = Szlatky, Mária, *Lippay János Posoni-Kertjének (1664-1667) orvos-botanikai vonatkozásai* [Medical-Botanical references of János Lippay's work, "Posoni Garden" (1664-1667]. Orvostörténeti Közlemények 87-88, 1979.

Szlatky 1985 = Szlatky, Mária, *Magyar nyelvű természettudományos és orvosi irodalom a XVI. században* [Scientific and medical literature in the 16th century in Hungarian language]. Orvostörténeti Közlemények 109-112, 1985, 91-97.

Takáts 1927 = Takáts, Sándor: *Kertjeink a XVII. század első felében* [Our gardens in the first half of the 17th century]. In Szegény magyarok. Budapest: Genius 1927, 381-432.

Torkos 1745 = Torkos, Justi Johannis, *Taxa Pharmaneutica Posoniensis*. Pozsonii: Royer 1745.

Török 1864 = Török, János, *Észleletek a pokolvar és a fene néhány egyéb*

alakja felöl [Observations on some other aspect of cancerous ulcers and anthrax]. Gyógyászat 37, 1864, 721-727.

Vadász 1860 = Vadász- és Versenylap 4/25, 1860, 408.

Váli 1792 = Váli, Mihály, *Házi orvos szótárotska, az az Betű szerént magyarúl szólló orvos könyvetske* [Home doctors Dictionary or Physicians' Hungarian book in Alphabetic Order]. Győr: Streibig Nyomda 1792.

Vajkai (Wagenhuber) 1937 = Vajkai (Wagenhuber), Aurél, *Adatok a veszettség gyógyításához* [Data on the healing of rabies]. Ethnographia 48/1, 1937, 82-83.

Vajkai-Wagenhuber 1937 = Vajkai-Wagenhuber, Aurél, *Adatok a Felföldi népi orvosláshoz* [Data on the ethnomedicine of Felföld]. Ethnographia 48/2-3, 1937, 140-154.

Vámossy 1907 = Vámossy, Zoltán, *A mérgezésekről. Az egészség könyvtára 3.* [About Poisonings. The Library of Health 3]. Budapest: Franklin-Társulat 1907.

Varró 2011 = Varró, Ágnes, *Kéziratos házi orvosi könyv Zámolyról*. [Manuscript medical book from Zámoly]. Alba Regia, Székesfehérvár. Annales Musei Stephanis Regis 40, 2011, 305-317.

Vasárnapi Újság 1859 = *A veszettség vagyis víziszony ellen* [Against rabies or hydrophoby]. Vasárnapi Újság 10, 1859, 116.

Vörös 2008 = Vörös, Éva, *A magyar gyógynövények neveinek történeti-etimológiai szótára* [Historical-Etymologycal Dictionary of Hungarian Herbal Names]. Debrecen: Debreceni Egyetem Magyar Nyelvtudományi Intézet 2008.

Veszelszki 1795 = Veszelszki, Antal,: *Házi Orvosságok, mellyek az emberi testnek külömb-külömbféle nyavalyáinak meg-orvoslására ... egybe szerkesztve találtatnak*. [Home Remedies, which can be found to heal various ailments of the human body ... compiled into one]. Vác 1795. Semmelweis Library of the History of Medicine, Cat. Number 2335.

Veszelszki 1798 = Veszelszki, Antal: *A' növevény-plánták' országából való erdei, és mezei gyűjtemény, vagy-is Fa- és fűszeres könyv, mellyben azoknak deák, magyar, német, frantz, tseh, és oláh neveik, külső, belső, és köz hasznaikkal egyetemben Máthiolusból 's más több fa-, és fűvész-írókból a' köz-rendű hazafiak' kedvekért szálanként egybe-szedettek*, [A Forest and Field Collection from the Country of Plants, i.e. a wood and sopice book, in which they have their Latin, Hungarian, German, French, czech and Olah names, together with their extrenal, internal and public benefits, taken from Máthiolus and from several other writers (about wood and grass), they were collected together for the pleasures of the public patriots]. Pest: Trattner-Kiss 1798.

Wagenhuber (Vajkai) 1936 = Wagenhuber (Vajkai), Aurél, *A veszettség és az ijedezés gyógyítása az Alföldön* [Healing of rabies and fright on the Great Plane]. Ethnographia 47/3, 1936, 155-158.

Universitetets botaniske Museum.
Gothersgade 130. København K.

18/5 1949

These plants has been cultivated in Hort. Bot. in Copenhagen from seeds received from Paris in 1809. To Paris came these seeds from Egypte with the Label: „Bupleurum d'Egypte Nectoux O. S. sur Gh."
O. Hagerup.

Bupleurum d'Egypte Nectoux O. S. sur Gh. Original collection 1803

ОБРАБОТКА ДЛЯ „ФЛОРЫ СССР"
Bupleurum lancifolium Hornem.
Typus!
1949. Teste I. Linczevski

MUSEUM BOTANICUM HAUNIENSE

MUSEUM BOTANICUM HAUNIENSE

! Bupleurum lancifolium Hornem. LECTOTYPE Sven Snogerup Nov. 2000

Museum Botanicum Hauniense

Lectotype of Bupleurum lancifolium Hornem.
Susana S. Neves Jan. 2000