

# Collectors of Estonian Folk Botanical Knowledge

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**Abstract:** *This article discusses the approaches to collecting plant lore in the territory of Estonia since the beginning of the 18<sup>th</sup> century. The authors have divided the collection activities into two periods according to the collectors' ethnic background. Baltic Germans, such as Anton Thor Helle, Johann Willem Ludwig von Luce, and Johann Heinrich Rosenplänter, dominated the early period. Their collections were constrained primarily by linguistic and botanical concern. Native Estonians such as Jakob Hurt, Mihkel Ostrov, Gustav Vilbaste, and Richard Viidalepp, who strived to preserve rich folk heritage, dominated the later period. Although only two of the collections discussed in the article are reliable from an ethnobotanical point of view, the importance of such plant knowledge cannot be overestimated.*

**Keywords:** *archival data, data collection methods, Estonian plant lore, historical ethnobotany*

## Introduction

Research into local plant knowledge has attracted growing international interest for many centuries, although the discipline—ethnobotany—was formulated relatively recently. The term ‘ethnobotany’ was introduced by the American botanist John William Harshberger in 1895 to designate the use of plants by indigenous people. Ethnobotanical research in the modern sense was introduced in Europe by a few local scholars even earlier.<sup>1</sup> Up to the present time, most

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<sup>1</sup> For a review on the history of European ethnobiology see Svanberg *et al.*, 2011.

researches in the field of ethnobotany are conducted in Americas (Waldstein & Adams, 2006) and preferably among indigenous people (Logan & Dixon, 1994). Old cultures, including those in Europe, have been left aside as unpromising in terms of new medicines because of their long literary tradition and the possible influence of the latter on popular plant use (Heinrich, Pieroni & Bremner, 2005); moreover, they may rely, to a great extent, on old herbals (Leonti *et al.*, 2010) or recipe books and scholarly medical tradition. On the other hand, studies about the influence of ethnobotanical or ethnopharmacological research on the medicinal use of plants have not introduced any drug to Northern pharmacopoeias during the past half a century (Reyes-Garcia, 2010). So ethnobotanical research in which anthropological methods are applied should focus on understanding the cultural importance of plants (Vandebroek, 2010; Tardío & Pardo-de-Santayana, 2008) or on the healing practices of a given society (Reyes-Garcia, 2010). In this respect the novelty of plant use loses its importance and the plant lore of the Old World will become an important source for research.

Still, the outcome of the research depends on the methods selected. Linguistics has been the ‘official’ channel for ethnobotany in Russia and other post-communist countries (Svanberg *et al.*, 2011). After all, it was language that “enabled people to share and pass on experiences of plant properties and their effects against disease” (Waldstein & Adams, 2006). For the rest of the world, medical ethnobotany is a discipline that lies at the intersection of botany, pharmacology and anthropology, and specialized literature in this field has followed the structure of scientific papers, based on large amounts of quantitative data. Nowadays, ethnobotanical research is carried out in accordance with agreed international standards, employing detailed interviews, observations, specimen collection and identification, statistical methods of data analysis, etc. This does not apply to research into historical data on local plant lore, which is often collected applying uneven methodology, across different periods of time and for different purposes. Large collections of plant lore are held in many European folklore archives, but their contents have been very little studied (Tillhagen, 1963; Babulka, 1993; Łuczaj & Szymanski, 2007; Łuczaj, 2010a; Sõukand & Kalle, 2010a, b; De Natale, 2009). The historical data on the use of medicinal plants is often too important to be rejected because of insufficient documentation or lack of details; thus several methods for its analysis have already been proposed (Łuczaj, 2010b; Sõukand & Kalle, 2011).

Estonian archives hold a large body of erratically analyzed traditional knowledge, collected since 1888, when the wide-scale activity for collecting folklore materials began. Some of the data was collected even earlier. This material includes a quantity of data on the traditional medicinal use of plants. Moreover, the few booklets with popular remedies that were published before 1920 and

are clearly distinguishable from oral folklore, make the early collections a particularly valuable source, even for the discovery of a new plant use. As serfs bound to an estate and using parish-specific plant names, Estonian-speaking peasants followed the advice on plant use that was printed in pamphlets very randomly, because the plant names given in these differed from what they used.

Some historical insights into the collection of this data have already been published (Sõukand & Raal, 2005; Sõukand, 2010). These studies, however, cover only the main collection stored in the Estonian Folklore Archives at the Estonian Literary Museum and leave out collectors prior to 1888.

The aim of this article is to give a compact overview of the most important collectors known to the authors to date, including a brief insight into the works of collectors who have already been discussed in the authors' previous works with a special emphasis on analyzing their methods of collection and the relevance of their results to fulfilling the tasks of present-day ethnobotany.

## **The early period: Baltic Germans**

The history of collecting materials of Estonian medical ethnobotany goes back as far as the beginning of the 18<sup>th</sup> century when local Baltic German Estophiles started to take interest in Estonian culture.<sup>2</sup> The following chapter will give an overview of the most important collectors of medical ethnobotanical data of the early period, which lasted until the middle of the 19<sup>th</sup> century, when the large-scale collecting of Estonian folklore was started.

### **Anton Thor Helle**

The first collector of Estonian plant and medical terminology was Anton Thor Helle (1683?–1748), pastor of the then Jüri parish, North Estonia. He studied theology at the University of Kiel and learned there the basics of medicine and

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<sup>2</sup> The term Estophile refers to people not of Estonian descent who were sympathetic to or interested in Estonian language, Estonian literature or Estonian culture, history of Estonia and Estonia in general. Their activities relate to the Estophile Movement of the late 18<sup>th</sup> to the early 19<sup>th</sup> century, when Baltic German scholars began documenting and promoting Estonian culture and language. This movement played a crucial role triggering the Estonian Age of Awakening almost 100 years later that eventually led to the Estonian Declaration of Independence in 1918, the Estonian War of Independence and the foundation of the Republic of Estonia (Wikipedia: 'Estophilia' at <http://en.wikipedia.org/wiki/Estophilia> [Accessed April 2011]).

the use of medicinal plants. As a spiritual leader of his church community, he often had to treat physical conditions as well. This gave him a chance to observe and document folk medical terminology and plant use among peasants. Helle's most important medical ethnobotanical works (a bilingual medicinal lexicon in Estonian and German, and a trilingual medicinal plant lexicon in Estonian, German and Latin) were published in 1732 in *Kurzgefasste Anweisung zur ehstnischen Sprache* (Short introduction into Estonian language), a collection of articles dedicated to the study of North-Estonian dialect. Although his main goal was to develop and provide the local Germans with tools for learning Estonian language, the result was the first attempt to develop medical terminology.

The medical lexicon listed and described folk disease categories using Latin terminology as an aid to German near equivalents. The list of medicinal plants, later used by almost all upcoming generations of botanists in Estonia (Kutsar, 2000), included also the names of some spices and flowers, altogether 200 names. Gustav Vilbaste, the first near-modern Estonian ethnobotanist, indicated that in addition to the data Helle collected personally, he may have used collaborators from other parts of Estonia to document plant names (most of the plant names in the list have been recorded in the northern part of Harjumaa, North Estonia).

Vilbaste considered Helle quite knowledgeable about plants and argued that he must have used as an aid an herbal (*Kräuterbuch*), published in the 16<sup>th</sup> to 18<sup>th</sup> century in Germany, as the list included names of plants that had not been found in Estonia (Vilbaste, 1993). Although Helle plagiarized *Lexicon Esthónico Germanicum*<sup>3</sup> (Dictionary of Estonian and German), when compiling his lexicon (Kask, 1955), the plant list can be considered largely original. This is mainly because the *Lexicon Esthónico Germanicum* contained a few plant names from southwestern Estonia, while Helle's list included mostly plant names from northern Estonia. Methods of this collecting work are unknown and the reliability of plant identification is also quite poor, as his naming of plants that were not growing in Estonia may point to other mistakes as well. Still, the work being the first and the only plant name registry from such an early period, its importance as a historical source cannot be overestimated.

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<sup>3</sup> *Lexicon Esthónico Germanicum* was written by Salomo Heinrich Vestring (1663–1749), a pastor in Pernau (now Pärnu, southwest Estonia) and later provost.

## Johann Wilhelm Ludwig von Luce

The most important Baltic German in the history of Estonian ethnobotany is the pastor and doctor Johann Wilhelm Ludwig von Luce (1750–1842). Von Luce was born in Hasselfelde, Electorate of Brunswick-Lüneburg, where he also completed preliminary theological education. In 1781, he came to the island of Ösel (also Oesel, now Saaremaa) and already in 1783 became a pastor in Püha parish, but found the position unsuitable and left after one year. Von Luce aspired to study medicine probably because of the illness and the following premature death of his wife, which was caused by the lack of access to medical care in Ösel at that time. He returned to Germany and from 1787 to 1792 studied medicine at the universities of Göttingen and Erfurt. In 1793, von Luce returned to Ösel and in 1801 took his license examination in St Petersburg, working for a short time after that as a pharmacist in Arensburg (now Kuressaare), administrative centre of Saaremaa.

During the years 1799–1810 he worked as an overseer and doctor in the hospital built on the Tori islet in Arensburg and suggested many innovative techniques for improving the medical and economic conditions of peasants, using his experience from working at manors. Von Luce was also keenly interested in the topography, flora, ethnography, history and language of Saaremaa and did extensive research in these areas. He published the results of these studies in over fifty works, some more extensive than others. In his studies published in Estonian, von Luce promoted the cultivation and use of native and alien plants among peasants to diversify the range of foods and disperse economic risks associated with the cultivation of monocultures. Many of his books, in which he advises the peasants to take care of their health, are the first of their kind in Estonia, although they follow the ideological and scientific framework of his contemporaries in Europe (EEVA 1).

His most important ethnobotany-related books that were published in Estonian were *Terwise katekismusse ramat* (Health catechism; von Luce, 1816), describing local diseases and other problems related to health and their treatment, and *Nou ja abbi, kui waesus ja nälg käe on* (Advice and help for when poverty and famine strike; von Luce, 1818), in which Luce taught peasants the use of twelve wild plant taxa. In the history of Estonian ethnobotany, von Luce is remembered by his two profound publications on the medicinal plant use in Saaremaa. The first, *Topographische Nachrichten von der Insel Oesel, in medicinischer und ökonomischer Hinsicht* (Medical and economic aspects of the topographical outlines from the Ösel island; von Luce, 1823), provides a full systematized list of plants growing on Ösel with vernacular names for many plants and use for

some. The second, *Heilmittel der Ehsten auf der Insel Oesel* (Remedies of the Estonians on the Ösel Island; von Luce, 1829) gave the botanical description and provided local medical uses of 59 locally growing and 13 imported plant taxa, and 14 pharmacy drugs.

Unfortunately, all we know about his methods of collection is that, as the local doctor familiar with the local conditions, he questioned peasants personally and carried out some observations. As von Luce collected and published folk plant names and was one of the best-learned botanists, his identification of plants can be considered reliable. He also helped his contemporary Baltic Germans, among them Johann Heinrich Rosenplänter, to identify plants.

### Johann Heinrich Rosenplänter

Pastor and Estophile Johann Heinrich Rosenplänter (1782–1846) was a theologian. He was educated at the University of Dorpat (now Tartu) from 1803 to 1806, served church in Torgel (now Tori) for some years after graduation, and in 1809 became pastor at Pernau St Elisabeth Church, where he served for the rest of his life. Rosenplänter was actively interested in Estonian culture and began to publish an academic periodical about Estonian language and culture, *Beiträge zur genauern Kenntniss der ehstnischen Sprache* (Towards a more precise knowledge of the Estonian language; EEVA 2). Only twenty issues of the periodical were issued between 1813 and 1832, before it was closed down due to financial difficulties. Many well-known intellectuals contributed to the journal with a goal of bridging the language barrier between Estonians and Germans. Among the authors was also von Luce who wrote about Estonian plant names and uses.

Being a sociable person, Rosenplänter talked to local peasants and wrote down local plant knowledge. In addition, he collected plant specimens growing in the surroundings of Pernau. His impact on the development of Estonian medical ethnobotany is comparable with von Luce's; unfortunately, his writings on the subject remained mostly unpublished. He had an ambitious project to collect the herbarium of all the plants of Estonia and to systematize them according to Carl Linnaeus' system.<sup>4</sup> A collection of 1,000 voucher specimens is still preserved in

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<sup>4</sup> Such a capacious work would assume profound botanical knowledge, which Rosenplänter did not possess. That was the main reason why he did not finish this work. Only in 1882 the first systematic book on plants was published by schoolteacher Juhan Kunder (1852–1888). Estonia adopted the new system in 1918, when the first list of official plant names was published. This was the beginning of the end of the multiplicity of vernacular names.

the University of Tartu Herbarium. The collection contains 11 maps, of which only one is systematized and identified to the species level according to German and Latin name. On the remaining ten maps the data is incomplete or missed. The identification notes on the first map were probably made by von Luce. From a botanical point of view Rosenplänter's collection is worthless, because it lacks information about the provenance of specimens. From an ethnobotanical point of view this is the oldest collection in Estonia where the folk names can be unmistakably related to plant species. Of particular importance from a folk medicinal point of view is his draft manuscript written on the paper on which he dried his plant specimens. The manuscript, on loose pages, contains about 70 reports on the plant use, mostly describing their medicinal purpose, and about 60 voucher specimens. The year 1831 is marked on the first pages of the manuscript; the same date features on the title page of another manuscript, *Õppetuse katse maa Rohtudest ja pudest* (An attempt to teach about herbs and trees), covering the first hundred specimens of the above mentioned herbarium. The manuscript's introduction is written in German and the chapters on plants, describing mostly their use, in Estonian. In the introduction, Rosenplänter (1831) concedes: "I can call my work a mere experiment, as it is the first attempt at describing plants and trees with the words and thoughts that are peculiar to Estonians, as I have heard from them and written down".

Rosenplänter was the first to use and preserve dried plant specimens for ethnobotanical purpose in Estonia and the first to attempt to write a book on plant use in Estonian. The book was never published, probably owing to the limited appeal of botanical literature among peasantry at the time. Gustav Vilbaste published some of Rosenplänter's ethnobotanical data in his book on Estonian plant names (Vilbaste, 1993), and some in a separate article describing and analyzing the manuscript (Vilberg [Vilbaste], 1932a).

### **Johann Georg Noël Dragendorff**

A German-born professor of pharmacy, Johann Georg Noël Dragendorff (1836–1898) worked as the head of the Institute of Pharmacy at the University of Dorpat (Tartu) from 1864 to 1894 and invented a new alkaloid analysis method (now known as Dragendorff reagent and used by phytochemists until the present day). In 1898, Dragendorff compiled his *Die Heilpflanzen der Verschiedenen Völker und Zeiten* (Medicinal plants of different peoples and times) in which he described 12,700 plants. He believed that Estonian plant lore may be of great value and wanted to present this knowledge in one book; thus, in 1877, he asked Mihkel Veske (the first doctor of Finno-Ugric languages of Estonian

origin) to address the members of the Estonian Writers' Society with an appeal to collect information about the use of plants (Niggol, 1877, p. 85, a translation of Dragendorff's questionnaire is published in Sõukand & Raal, 2005, pp. 177–178). Unfortunately there are no extant records about the outcome of this appeal (Vilbaste, 1993).

## **The later period: Estonian collectors**

The ethnobotanical collections of the later period, lasting from 1888 until now, are compiled by native Estonians with a purpose of preserving the folk heritage. In the following we introduce these researchers who had developed specific methods for collecting ethnobotanical data and have left a considerable mark on the ethnobotanical history of Estonia.

### **Jakob Hurt and Matthias Johann Eisen**

The beginning of the corpus of Estonian herbal lore can be traced back to 1888 when Estonian linguist, folklorist and pastor Jakob Hurt (1839–1907) launched his famous appeal to “active Estonian sons and daughters” to collect, among other folkloristic information, plant uses and beliefs about the plants. “The use of the plants for medicinal purposes has proven a solid ground and even learned doctors could benefit from folk wisdom,” Hurt (1989 [1888]) claimed. His collection of general folklore was accumulated with the help of 1,345 correspondents (Viidebaum, 1934, p. 241), and the information about folk medicinal practices, including healing with plants, in this collection amounts to at least 959 use reports collected by 188 correspondents (Sõukand & Kalle, 2008).

Hurt did not ask the questionnaire respondents to submit a plant specimen or make a detailed identification of the plant. He listed nearly 40 plants by their popular names (which referred to some diseases or the therapeutic qualities of the plants), providing also Latin equivalents for some of them. Since peasants were virtually illiterate in Latin, the impact of this questionnaire on the precise species reported can be considered minimal. Earlier in his questionnaire he had provided a list of human diseases and asked to send somewhat longer explanations about them. Hurt later gave recognition in nation-wide newspapers to every contribution he received, though he did not emphasize receiving information about plants separately but as part of the general data related to folk medicine.



Some of his correspondents provided also Latin names of the plants listed by vernacular names and many respondents gave plant description or region-specific plant names, so about 80 percent of the plant names provided in the use reports in Hurt's collections can be identified to the level of the plant species or family with high accuracy (Sõukand & Kalle, 2008; cf. Łuczaj, 2010b). In addition, Hurt himself collected on his expedition to Setu region in southeastern Estonia in 1903 at least 19 reports about plant use for popular treatment, which also lacked plant specimens but informed about plant name equivalents in Latin and/or German.

The pastor and folklorist Matthias Johann Eisen (1857–1934) was engaged in collecting Estonian folklore around the same time as Hurt. Eisen's correspondents also sent him some herbal lore, but the information that he received largely duplicates the material that was sent to Hurt, especially since Eisen did not collect herbal lore systematically.

### **Mihkel Ostrov**

The only collector of ethnobotanical material who focused solely on folk medicinal practices was the military doctor Mihkel Ostrov (1863–1940). He became fascinated with collecting folk knowledge about popular remedies as a university student, when he accompanied Jakob Hurt in folk song collection expeditions to Virumaa and Läänemaa with future folklorist and politician Oskar Kallas (1868–1946). Later Ostrov told: “While collecting old songs, I found everywhere that plant knowledge is widespread among the common people; they collect plants from pastures and meadows and use them against several diseases” (Ostrov, 1891a, b, c). In April 1891, he put out in Estonian newspapers *Postimees* (Ostrov, 1891a), *Olevik* (Ostrov, 1891b) and *Sakala* (Ostrov, 1891c) a call for collecting local medicinal plants; in the announcement he described in detail how to collect and dry plants, how to mark an herbal exemplar with vernacular name and exact use. Later the same year he published two reports, indicating that he received 17 deliveries from 13 respondents: altogether 192 voucher specimens with 53 medical uses indicated. Sending dried plants in boxes must have been quite expensive and inconvenient for the respondents. Ostrov repeated his call in spring 1892, again in three newspapers, but according to the report from 1892, he then received only four responses with 48 voucher specimens. The third call in spring 1893 gave no responses. Ostrov rewrote the texts sent by the respondents and added the plant names identified according to the sent specimen. He systematized his material according to plant family and Latin names (Kalle, 2008). Only part of Ostrov's autographical reports have

been preserved to date and all attempts to find the missing data and the voucher specimens have been unsuccessful. Ostrov can be considered the first Estonian who used dried specimens in identifying plants in reports about plant use.

## Gustav Vilbaste

The greatest collector and researcher of Estonian plant lore was the botanist, journalist, school teacher and nature conservator Gustav Vilbaste (1885–1967, until 1935 Gustav Vilberg)<sup>5</sup>. The nation-wide campaign for collecting vernacular plant names, organized in 1907 by the Estonian Students' Society (*Üleskutse*, 1907), gave him the first impulse to collect plant lore. The goal of this campaign was to draw up a uniform list of plant names in Estonian. The list was finally published in 1918; Gustav Vilbaste is mentioned in the introduction of this publication as the one who sent highly important information (*Kodumaa taimed*, 1918). Being inspired by such activity Vilbaste started to collect plant vernacular names on his own initiative while studying Botany at the University of Tartu in 1919–1926. He graduated from the University of Vienna and defended there his Ph.D. dissertation in 1928.

His first call, published in several Estonian newspapers and journals was targeted at collecting plant names; for easier identification of the plant he also asked respondents to supply Latin, German or Russian equivalent (Vilberg, 1923a, b, c, d; 1928a, b, c). Since 1929 he had asked respondents to send information about the use of the plants as well as general knowledge about plants: What was the plant used for in the past (medicine, dyeing, magic, food, etc.); what kind of fairytales are known about plants, and what agricultural tasks had to be performed during the blooming or ripening of certain plants (e.g., Vilberg, 1929). This call also contained instructions for preparing plant specimens. As a result of Vilbaste's and his correspondents' enthusiasm, his collection grew quite quickly: in the following public call he indicates, that as of 20<sup>th</sup> January 1934, his collection contains 32,542 reports on plant names and 8,578 reports on plant use. He also mentions that many of his correspondents have sent material repeatedly (Vilberg, 1934a).

After Vilbaste's death in 1967, his archive collections were donated, as specified in his will, to the Estonian Literary Museum and are stored in the Estonian Folklore Archives in the fund bearing his name. The part of this archive collection related to ethnobotany consists of 11 volumes, the total of 8,319 pages, and contains, as Vilbaste himself pointed out in the first volume of his collection,

<sup>5</sup> For more information about Gustav Vilbaste as ethnobotanist see Kalle and Sõukand, in press.

16,891 records about plant use and 100,842 records on plant name (Vilbaste, TN: 1, 1205–1284). He had more than a thousand correspondents; also he had copied vernacular plant names from most of the botanical and pharmaceutical literature published in Estonian, and in Estonia, up to the middle of the 19<sup>th</sup> century. Vilbaste's last call for collecting folk botany was published after his death, in 1968, with the questionnaire addressed to the correspondents of the Estonian Literary Museum. Now it is impossible to tell how many responses it received.

During his lifetime Gustav Vilbaste published over 1,400 publications (mostly articles), among them 29 books and booklets. Still, among these there was only one article solely dedicated to the use of plants in folk medicine (Vilberg, 1932b), also a detailed analysis of popular use of plants was given in his book *Meie kodumaa taimi rahva käsithuses* (Popular views on plants native to Estonia; Vilberg, 1943b; 1935). Unfortunately, due to financial problems he published only two of the five planned volumes. Vilbaste also authored the botanical and folk medical sections of every plant chapter of the only herbal<sup>6</sup> published in Estonian in the Soviet period. His personal fund in Estonian Cultural History Archives (f 152) contains also handwritten drafts of lectures (composed probably after Second World War) about 15 medicinal plants.

Vilbaste was ahead of his time in Estonia: to preserve the disappearing folk knowledge about plants he collected it combining traditional and innovative research methods, using public calls, personal approach to collectors and fieldwork with identification of the plant with the dried specimen (most of them are still preserved in the herbarium of Estonian University of Life Sciences. His collection contains at least 6,519 use reports related to medicinal use of plants (Sõukand & Kalle, 2008).

### Richard Viidalepp

The Estonian folklorist Richard Viidalepp (1904–1986, until 1935 Viidebaum), contemporary to Gustav Vilbaste, undertook parallel activities to collect plant folklore. Working during his entire career at the Estonian Folklore Archives (later Fr. R. Kreutzwald's Literary Museum) in Tartu, focusing on collecting

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<sup>6</sup> Only the first edition of this herbal was published in Vilbaste's lifetime (Kook & Vilbaste, 1962). While five editions altogether were published of the herbal, only the last edition (Tammeorg *et al.*, 1984) had an additional chapter on the medicinal plants that were not accepted by the official medicine; this chapter was prepared by Vilbaste already for the first edition, but due to unfavorable attitudes toward folk botanical use it was not published earlier.

and storing folk heritage, he published his call for collecting folklore in 1936. The questionnaire No. 3 of the Estonian Folklore Archives issued instructions for folklore collectors, and sought answers to questions about what types of plants are used for healing, magic, fortune telling, dyeing and playing. Viidalepp listed over 60 vernacular plant names, but unfortunately did not ask for voucher specimen. In another chapter, he asked also additional questions about folk healing methods, listing many well-known folk disease categories (Viidalepp, 1936). By this time, the Estonian Folklore Archives had developed their own network of correspondents who regularly collected folklore and were sent all questionnaires without charge. Although at this stage of research it is difficult to evaluate the exact influence of Viidalepp's questionnaire to the collected plant lore, it has definitely left its mark on the amount and quality of folk botanical heritage. The questionnaire was the most important of its kind in the history of Estonian Folklore Archives and was used also after the Second World War. Viidalepp himself also collected herbal lore during his numerous expeditions in 1927–1966, recording at least 165 use reports about the medical use of plants (Sõukand & Kalle, 2008).

After the foundation of the Estonian Folklore Archives in 1927 the collecting work was also carried out, next to amateur collectors, Gustav Vilbaste and Richard Viidalepp, by other professional folklorists like Rudolf Põldmäe, Herbert Tampere, and many others. The collection, accumulated after the Second World War, was intensively collected by mostly professional Estonian folklorists, although non-professionals still sent in large amounts of material. In addition to folklorists and non-professional collectors, herbal medical lore was also collected by some university students of botany: among them stood out Aimre Lindre who, in addition to extensive fieldwork conducted in western Virumaa, re-systematized and complemented the ethnobotany card files at the Estonian Literary Museum in 1969.

In the 1990s, new questionnaires including questions on plant use were compiled by Mall Hiimäe, Mare Kõiva, Ain Raal, and Anu Korb. Also, in 2005 and 2006 Hiie Tarto, host of a popular Estonian television program for the elderly, *Prillitoos*, carried out a collection of plant lore on specific plants. More recently, the authors of the present article developed a questionnaire to document not only the use and names of plants, but also people's attitudes toward plants and their use, literature used to find information about the plants, the use of these sources and ways of identifying the plants.

## **Conclusions**

The folk medicinal and folk botanical knowledge of the Estonians that has been gathered on a few enthusiasts' personal initiative over the last three centuries represents a valuable source for ethnographic as well as ethnomedicinal research. The early data was put together by Baltic Germans from linguistic concern (Helle), from the need for translation, or to pursue botanical interests (von Luce and Rosenplänter).

The collections created by native Estonians were first and foremost driven by the need to preserve the disappearing local plant knowledge. This is probably the reason why of the seven most important and outstanding collectors of herbal folk heritage discussed here only two—Rosenplänter and Vilbaste—left behind collections that could be analyzed according to modern ethnobotanical standards. Nevertheless, the significance of researchers collecting folk botanical knowledge without the aid of plant specimens (Helle, Hurt, and Viidalepp) and especially those using herbal specimens as a temporary aid to identify plants (von Luce and Ostrov) in the light of the cultural value of such plant knowledge, from the international perspective, cannot be overestimated.

When considering the possibility to determine the credibility of the collected data according to the plant taxa, knowledge about the background of the collector is of crucial importance. In the future, such insight may be gained also about the less known collectors of the entire corpus of Estonian medical ethnobotany for the purpose of assessing its identification credibility and collectors' impact on the quality and quantity of the collected data.

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