

RAMUNĖLĖ JANKEVIČIENĖ

## Jurgis Ambraziejus Pabrėža—a Pioneer in the Lithuanian Science of Botany

The first descriptions of the Lithuanian flora appeared at the turn of the 18<sup>th</sup> and 19<sup>th</sup> centuries. They were written in Latin and Polish and intended for the academic community.

“Taislius” (*A System of Plants*) by J. Pabrėža was the first work in botany written in the native language (the Samogitian [Lowland] dialect of Lithuanian) that was intended for all the inhabitants of the country. The author wanted to make them acquainted with plants of the close environment as well as presented knowledge related to useful plants brought from far-away lands.

Being a clergyman, J. Pabrėža managed to match clergy-related activities with research of the country’s flora. He devoted much attention to the work and was prepared well to perform that kind of activity. He researched different biotopes of numerous locations, collected herbarial samples and used to visit manor places having flower gardens and hothouses. As he received seeds from botanical gardens and collectors, he used to grow many species in the garden of Kretinga Monastery. He would send part of the collected materials to specialists of Vilnius University for inspection. Also, he had collected useful literary resources.

J. Pabrėža finished preparation of a huge manuscript in 1843, yet the work remained unpublished due to shortage of financial resources. Yet it should be mentioned that a book called “Botanika arba Taislius Augyminis parašyta kun. Ambrazejaus Pabriežos” (*Botany, or a System of Plants Written by Ambraziejus Pabrieža*) was published in the United States of America in 1900 where an expurgated version of the initial section of the manuscript and a list of plant names was included in an altered form of spelling. Lithuanian botany researchers would usually refer to this book.

The aforementioned work is the first attempt to present botany-related knowledge in the language that no other work in natural sciences had yet been written in. It was necessary to create terminology and the style of writing. J. Pabrėža coped with this task successfully and coined numerous terms for description of plant morphology. In the course of language changes, part of them had to be modified, yet part of them entrenched in the Lithuanian language and has been used until the present period. A task of no lesser importance was to name the taxa described in the work and translate their Latin names. It was especially significant to arrange the corpus of the names of plant genera.

J. Pabrėža applied the Linnaean system for classification of plant genera described in “Taislius”. He knew perfectly that the system was artificial and looked unnatural, and that isolated random features had been used to distinguish taxa. The first half of the 19<sup>th</sup> century had already experienced appearance of natural systems where sets of different features were used for classification. Yet J. Pabrėža had mastered the Linnaean system since the times of his studies and believed that it would be easier to describe plants for the readers of “Taislius” on the basis of this system.

For evaluation of the lasting importance of “Taislius”, the significance of the system used for grouping taxa is low. The utmost importance lies in the very descriptions of taxa and their names as well as the entire inventory of plants made by J. Pabrėža.

In some instances, the scopes of taxa presented by the author do not coincide with the interpretation by later authors. Yet we should remember that issues related to taxon scopes are still an object of research. More modern methods are constantly applied, and new fields of research are appearing. Varying interpretations of taxon scopes reduce the significance of various statistical comparisons.

Being a man of keen observation, J. Pabrėža devoted much attention to morphological diversity. On the basis of the differences he had noticed, he used to describe new varieties and even species. Herbarial samples have not survived, the descriptions of species are not very accurate and not presented in Latin. Nevertheless, some of the Latin names of new species written by J. Pabrėža have been included in the International Plant Names Index (*Index Kewensis*) as synonyms with the author’s name indicated.

The work consists of the Introduction (“Prajows Weykała”), the System and the following indices: the index of Samogitian vernacular names of plants (“Rodiikle”), the index of Prussian (East Prussian Lithuanian) plant names (“Sórinkyms”), the index of Latvian plant names (“Sóraašzýms”), the index of the names of plant genera and species used by the author (“Sryje”), the index of Latin names of plant genera and species (“Riinda”) and the index of Polish names of plant genera (“Rejestr”). In the introductory part, the author describes the goal of the work, expresses thanks to his patrons and helpers, presents the process of collecting materials (herbaria and literary sources) and explains the spelling peculiarities. He also presents the entire Linnaean system (corrected by K. Sprengel) on whose basis plant taxa are laid out in the work. An overview of plant morphology presented in the form of a terminological vocabulary makes a considerable part of the Introduction. This chapter was written following the manual of botanical fundamentals by B. S. Jundził.

Creation of plant names is a part of J. Pabrėža’s work having considerable importance and value. Having acknowledged the Linnaean system, J. Pabrėža also kept consistently to other Linnaean principles. Firstly, this applies to the binomial nomenclature, not only in Latin, but also in the native tongue. Naturally, all the species of plants had to acquire names. A separate manuscript by J. Pabrėža on creation of plant names has survived.

J. Pabrėža only managed to record the most widespread plant names and those used in everyday life from living language. There was a great lack of plant names, and the author had to think about coining them. J. Pabrėža’s creative thinking coincided with the Linnaean experience described in the work “Philosophia botanica”. C. Linnaeus used to create names of plant genera that would define the features and characteristics of species belonging to the genus described, collect names of different plants in literary sources from antiquity and apply names of rulers, deities or famous characters. J. Pabrėža translated the majority of the names of genera from Latin and some other languages. These are names characterising features of plants, e.g., *auksačiuprė* (Lat. *Chrysocoma*, Eng. *Goldilocks*)<sup>1</sup>, *balnadantė* (Lat. *Leucodon*)<sup>2</sup>, *dvynutė* (Lat. *Mirabilis*, Eng. *The Four O’clocks*)<sup>3</sup>, etc. He would especially emphasise the medical properties of plants, e.g., *akšvita* (Lat. *Euphrasia*, Eng. *Eyebright*)<sup>4</sup>, *levdega širdgloba* (Lat. *Leonurus cardiaca*, Eng. *Motherwort*)<sup>5</sup>, *vėžtrama* (Lat. *Onopordon*)<sup>6</sup>, etc.

<sup>1</sup> Literal translation from Lithuanian is also “goldilocks”.

<sup>2</sup> The name of this moss genus literally translates from Lithuanian as “whitetooth”.

<sup>3</sup> The literal translation is “twinnie”.

<sup>4</sup> Literally this means “eyebright” or “eye cleaner”.

<sup>5</sup> The literal translation is “liontail heartsaver”.

<sup>6</sup> The literal translation is “tumour tamer”.

A considerable number of genera were named by J. Pabrėža using names of characters from Lithuanian mythology, e.g., *austėja* (Lat. *Jasione*, Eng. *Sheep's Bit*)<sup>7</sup>, *eraičinas* (Lat. *Festuca*, Eng. *Fescue*)<sup>8</sup>, *gardūnytis* (Lat. *Anthoxanthum*)<sup>9</sup>, *poklius* (Lat. *Sisymbrium*)<sup>10</sup>, *ratainyčia* (Lat. *Shoenus*)<sup>11</sup>, etc. Latin names were left for some genera, e.g., *begonija* (Lat. *Begonia*), *karlina* (Lat. *Carlina*), *kasija* (Lat. *Cassia*), *lobelija* (Lat. *Lobelia*), etc.

In description of every genus, J. Pabrėža indicates its Polish name, and in description of its species, he almost always presents the German name of the genus as well as the Polish names of the genus and the species. He also very often indicates what the species is called by Samogitians, Latvians, East Prussian Lithuanians and Russians (the latter case is indicated by the abbreviation *mask.*; the names are presented in a Latinised way).

J. Pabrėža presents interesting information related to plant-growing (an overview of fruit-tree varieties). In order to indicate the usefulness or harmfulness of plants, the author quotes works of his own whose preparation is, unfortunately, not finished: “Weykałs Augimiu sógadniuju” (*Useful Plants*); “Rodiikle Augimiu woodyjėtiu” (*Plants Harmful to Health*) and “Iraķis Weysynas” (*A Manual of Plant Breeding*).

“Taislius” by J. Pabrėža is a work of special significance in the history of Lithuanian science and research that laid foundations for further development in the science of botany in Lithuania.

<sup>7</sup> Austėja is the Lithuanian goddess of bees and beekeeping.

<sup>8</sup> Eraičinas is the Lithuanian mythological patron of lambs (cf. *ėraitis* ‘lamb’).

<sup>9</sup> Gardūnytis is also the Lithuanian patron of lambs (cf. *gardas* ‘cattle-pen’).

<sup>10</sup> Poklius is the Lithuanian patron spirit of underground and death.

<sup>11</sup> Ratainyčia is the Lithuanian goddess of horses (the word *ratainyčia* (*ratinė*) means a cart wheel storehouse).