

# Apple cultivars in Lithuania in 1820–1914

---

Rimvydas Laužikas

Faculty of Communication,  
Vilnius University,  
9-206 Saulėtekio Street,  
01222 Vilnius, Lithuania  
Email: rimvydas.lauzikas@kf.vu.lt

The oldest mentioned gardens in Lithuania are from the Middle Ages. However, the oldest lists of fruit tree cultivars were compiled only in the 19th century. The article presents systematised information on apple (*Malus domestica* Borkh.) cultivars recommended for cultivation and cultivated in Lithuania from 1820 to 1914. A total of 22 written sources in Polish, Russian and Lithuanian from the period that mention specific apple cultivars were analysed. A list of 165 old apple cultivars was compiled during the study. The apple cultivars mentioned in historical sources have been identified as contemporary apple cultivars or those described in other historical pomology sources. The original names of the old apple cultivars recorded in written sources are also provided. The compiled list of apple cultivars reveals characteristics of the development of apple orchards in the cultural context of this period.

**Keywords:** orchards, historical apple cultivars, J. Strumiłło, A. Hrebnicki, W. Montwiłł

---

## INTRODUCTION

The oldest evidence of apple-eating in the territory of Lithuania is from the Neolithic period. During archaeological excavations of the ancient settlement of Nida, stocks of dried crab apple (*Malus sylvestris* (L.) Mill) split into two parts were found in one of the buildings (Rimantienė, 1999). This settlement dates back to 3500–2400 cal BC (according to Piličiauskas (2016), predominant findings from 2700–2500 cal BC). Traces of apple-eating from a similar period have been found throughout the Baltic Sea region (Kirleis, 2019).

One of the first references to cultural gardens in Lithuania dates back to 1387, the King of Poland's and the Grand Duke of Lithuania Jagiełło's (Lith. Jogaila) donation to the Bishop of Vilnius (Fijalek, Semkowicz, 1932). From this period, there are historical documents about consumption of apples in the manors of Jagiełło and the Grand Duke

of Lithuania Vytautas (Piekosiński, 1896; Čapaitė, 2005). Documents from the 15th and 16th centuries record a dual tradition of apples consumption: some were used as ingredients in dishes, and others for dessert. The sale of the former was measured in volume units (e.g. baskets), while the latter were sold apiece. For example, Sigismund Augustus, for the period 6–20 September, 1546, bought 20.5 baskets of apples for the kitchen and 1,140 apples for the table, among other food products (Antanavičius, Narbutas, 2012).

In medieval and early modern Lithuania, large gardens in manors were grown quite rarely. Through the so-called 'little ice age' of the 14th to 18th centuries (Grove, 2012), the climatic conditions for orchards in Lithuania were not optimal. However, a large garden is mentioned in Paistrys Manor (Upytė County) in 1585; it contains as many as 100 grafted apple trees (Jablonskis, 1934). Orchards were also mentioned in other Lithuanian

manors in the 16th century (Dambrauskaitė, 2017). The rarity of orchards is also indicated by their late entry into legal documents as objects of property. They are mentioned in the Second and Third Statute of Lithuania in 1566 and 1588. At that time grafted fruit trees were costly. The statutory compensation for the destruction of non-grafted fruit trees amounted to 300 groschens and for that of grafted fruit trees it was 1,200 groschens. For comparison, in the same Third Statute, a working ox was priced at 120 groschens, a cow at 100 groschens, and a barrel of rye grain at 24 groschens (Litskevich, 2002).

In the 17th and 18th centuries, orchards began to become popular in Lithuania. This trend is related to the cultural development of manor parks. By the end of the 18th century, gardens were abundant, even in Lithuania's peasant homesteads (Parent, 2014).

However, there is little information on the particular cultivars of fruit trees grown in these old orchards. In the 16th and 17th centuries, several pears are mentioned: 'uryantówka' (glockenbirne, poire clochée), 'muskatelki', 'dula', 'bonkrystianki' (bon chrétien, malvasierbirner) and 'pasowki' (Radzivil, 1601; Szrywid, 1642; Dumanowski, Jankowski, 2011). The Radziwill family's interest in gardening is revealed in a notable document, entitled 'Catalogue des arbres fruitier, de France que le Sieur de la Riuiere jardinier fleuriste établi a Strasbourg peur liurer dans ce pays Sauoir...'. Based on other documents stored in the same collection, this manuscript dates back to the 18th century. The document mentions as many as 33 cultivars of apple trees as well as several dozen cultivars of pears, peaches, apricots, cherries and plums (*Catalogue des arbres...*, s.a.). Many of them are repeated in 19th-century sources. We can suppose that the catalogue aims for the order of fruit trees for the Radziwill's gardens.

Knowledge of historical apple (*Malus domestica* Borkh.) cultivars (as well as other fruit trees) grown in Lithuania has been investigated by scientists in different but related contexts: pomology (Kriauciūnas, 1969; 1977; Tuinyla et al., 1990; Dziubiak, 2006; Kask, 2010; Kozlovskaya, 2015), biodiversity (Blažytė, 2008), reconstruction horticulture (Hodun, Hodun, 2013; 2016; Przybyła, 2017), cultural tourism (Kviklys et al., 2018), conservation of historical gardens and parks (Janonienė, 2018) and personal history (Petreikis, 2011). How-

ever, research on this subject is not systematic. In old written sources, fixed apple cultivars are mentioned only as a related topic in various, usually non-historical research contexts.

This study aims to systematise information on all apple cultivars recommended for cultivation and cultivated in Lithuania in 1820–1914. In the study, Lithuania is considered part of the former territory of the Grand Duchy of Lithuania (the former Vilnius and Trakai Voivodeships and the Duchy of Samogitia), occupied by the Russian Empire, and, in the period under review, the northwest part of the Vilnius Governorate, full Kaunas Governorate and northern part of the Suwalki Governorate. This informational study examines the development of apple orchards of that period in the general cultural context. Such a study is necessary due to the mentioned lack of systematic research. The apple-growing history of Lithuania reveals the cultivars that have succeeded localisation (in the particular climatic conditions) and those that have not.

## MATERIALS AND METHODS

The research object is to collect and to identify apple (*Malus domestica* Borkh.) cultivars mentioned in historical sources recommended for cultivation and cultivated in Lithuania in the period from 1820 to 1914. The 19th century through the first half of the 20th century in Lithuania could be called the great gardeners' age. Józef Strumiłło (1774–1847), Wincenty Montwiłł (1846–1903), Adam Hrebnicki (1857–1941), Edward Janczewski (1846–1918), Povilas Vidugiris (1837–1923), Leonard Iwanowski (1845–1919), Aleksander Girdwoyń (1852–1922) and others not only created pomological and commercial orchards but also conducted research and disseminated information in this field. From this period, there are several manuscripts and printed sources mentioning specific apple cultivars. The following data sources were used: 8 editions of J. Strumiłło's book 'Ogrody północne': Strumiłło (1820; 1823; 1834; 1844; 1850; 1862); Strumiłło and Tyniecki (1880; 1890), a list of fruit trees in the manor gardens (*Panemunės...*, 1826; *Vaismedžių...*, 1891; *Posyła się...*, 1912); descriptions of pomological parts of exhibitions held in Šiauliai in 1879, in Kaunas in 1897 and in Vilnius in 1891 and

1899 (Zaleski, Girdwojń, 1879; Jankowski, 1891; Montwiłł, 1897; Muchowicz, 1899), a description of the Blindstrubiškės Manor Garden (Janczewski, 1879), the 1891 'black list' of cultivars for Lithuania (Montwiłł, 1891), the 1900 sample list of cultivars of the Vilnius Horticultural Society published in two slightly different versions (Janczewski, 1900; Montwiłł, 1900), a list of seedlings sold by Montwiłł (1901), remarks on horticulture and the apple trade in Lithuania (Šerkšnas, 1901), the probable first list of recommended cultivars in the Lithuanian language (Martišius, 1910), a description of P. Vidugiris' Garden in Ustronė (Martišius, 1911), A. Hrebnicki's 1912 observations on the pomological part of the St. Petersburg exhibition (Grebnitskiy, 1912) and the Annual reports of the Head Directorate of Land Management and Agriculture of Russian Empire (Ocherk..., 1914).

Information on Lithuania's pomology was published in the journals 'Ogrodnik Polski' in Warsaw from 1879 to 1905, the 'Ogrodnictwo' in Krakow from 1898 to 1900 and the 'Plodovodstvo' in St. Petersburg from 1889. To better understand the establishment of some cultivars in Lithuania, the pre-war and interwar press was used as comparative material („Ūkiškos žinios“, „Žemaičių prietelius“).

A comparative historical research method was used for data analysis. The study's main limitation is the ability to accurately and without duplication identify historical apple cultivars and match them to contemporary cultivars. The cultivars presented in

the study were identified using modern pomological works (Rolff, 2001; Blažytė, 2008; Tuinya et al., 1990; Hodun, Hodun, 2016; Kviklys et al., 2018; Kołzowska, 2015), databases (*The National Fruit Collection*, 2020; *BUND...*, 2020; *SCUD...*, 2020; *Pometets æblenøgle*, 2020) and old works of pomology (*Catalogue...*, 1831; Lucas, 1867; Regel, 1868; Leroy, 1879; Oberdieck, 1881; Gibb, 1887; Engelbrecht, 1889; Jankowski, 1923; Anenkov, 1878; Grebnitskiy, 1906). Differences in current terminology (names) also hinder cultivar identification, even in neighbouring countries – Lithuania, Poland, Belarus and Latvia. Thus, some of the links between the old and current apple cultivars mentioned in the article are of an interpretative nature.

## RESULTS

Based on the above-mentioned historical sources and literature, a list of 165 identified apple cultivars recommended for cultivation or cultivated in Lithuania from 1820 to 1914 was compiled. While written sources mentioned another 19 cultivars, they could not be associated with contemporary apple cultivars or those mentioned in other sources. The main reasons for this non-identification are the following: (i) the abstract origin of the cultivar's names in the sources (e.g. 'sweet winter apple') and (ii) the local origins of cultivars that do not have well-established names (mentioned one time only). Such local cultivars are described in the Discussion Section. The identified cultivars are listed in Table.

Table. Apple cultivars recommended for growing and/or cultivated in Lithuania from 1820 to 1914

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Alant (NFC)	8, 13, 17, 23	Aland, Alant, Alantowe, Omanowe jabłko, Poziomkowe, Księźniczka, Ałantapfel, Princesse noble, Pomme d'Aleent, Pomme carre	1879–1912
Alexander (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 20, 22	Aportai, Aport, Aporta, Apporty, Apporty wielkie zimowe portugalskie, Jabłko funtowe, Funtowe, Opporto, Aportapfel, Kaiser Alexander, Alexander, Niezrównane Kirka, Kirkes incomparable, Kirkes sondergleichen, Grand Alexandre, Aport	1820–1914

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Alfriston (NFC)	17, 19	Alfrišton, Alfriston	1891–1911
Ananas Berżenicki Beržininkų ananasas (L)	18	Ananas” Berzhenitski	1912
Ananas Reinette (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 11, 19, 24	Ananasowe, Reneta ananasowa, Ananas Renette, Pomme d’Annanas, Ananasowa reneta	1820–1912
Anisovka (R)	18	Anis” Alyy	1912
Antonovka (NFC)	8, 9, 10, 12, 14, 15, 18, 20, 22, 24	Antaniniai, Antaninė, Antaniniai akmeniniai, Antonówka, Antonówki, Antonovka, Possarts Naliwia, Antonovka	1879–1914
Api (NFC)	1, 2, 3, 4, 5, 6, 7	Api mały, Pomme d’Api, Sternapi	1820–1880
Arapka (L)	18, 24	Arapka, Arabskoi	1891–1912
Autumn Pearmain (NFC)	7, 8, 12, 22	Parmena letnia, Parmena jesienna, Sommer Parmaine, Konigsparmane, Osenniy renet”	1879–1914
Avenarius (R)	3, 4, 5, 6	Cukrowe czerwone, Cukrowe czerwone letnie	1834–1862
Baumann’s Reinette (NFC)	7, 8, 10, 15, 18, 19, 20, 24	Baumano reneta, Reneta Baumania, Baumann’s reinette, Renet” Baumania	1880–1912
Belle de Boscoop (NFC)	9, 10	Belle de Boscop	1900–1910
Belle-Mousseuse (NFC)	8	Meszka piękna, Belle mousseuse	1890
Berliner Schafsnase (NFC)	1, 2	Berliner-apfel	1820–1823
Berner Rosen (NFC)	9	Nowe Bernenskie rozowe, Neuer Berner Rosenapfel	1900
Bismarck (NFC)	18	Bismark”	1912
Blenheim Orange (NFC)	3, 4, 5, 6, 7	Renety złote, Reneta złota z Blenhei, Gold-Renette von Blenheim, Blenheim Pepping	1834–1880
Blutapfel (NFC)	8	Krwawka, Jabłko krwiste, Bluttapfel, Sanguinole	1890
Bohnnapfel (NFC)	7, 8, 10, 15, 18	Grochówka, Bobowe duże, Grosser Bohnnapfel, Bohnnapfel, Bobovoye Bolshoye	1880–1912
Boiken (NFC)	8, 9, 10, 17, 18, 19, 20, 24	Boikenas, Boikeno, Boikina, Bojka, Bojkena, Boikenapfel, Złotka bremeńska, Boikenapfel, Boyken”	1890–1912
Calville Blanc d’Ete (NFC)	8, 9	Kalwila biala letnia	1890–1900
Calville Blanc d’Hiver (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 19	Kalwil biały zimowy, Kalwile biale, Kalwila zimowa, Kalwilla biała zimowa, Weisser winter kalvill, Calville d’hiver, Calville blanche a Côtes, Englischer weisser winter calvill	1820–1910
Calville de Saint-Sauveur (NFC)	19	Kalwila Zbwiciela, Calville St. Sauveur	1891
Calville rouge d’hiver (NFC)	1, 2, 3, 4, 5, 6, 8	Kalwille czerwone zimowe, Kalwille czerwone, Kalwila karminowa, Calville rouge d’hiver, Calville sanguinolle, Rother Winter-Caville Diel, Pomme sonnante	1820–1890

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Calville Rouge d'Automne (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 14, 15, 18, 23	Poziomkowe, Kalwila czerwona jesienna, Kalwilla czerwona, Kalwilla czerwona, Kalwil czerwony jesienny, Jabłko malinowe, Calvile rouge d'automne, Rother Himbeerapfel, Calville rouge, Edelkonig, Erdbeere-apfel, Rother Herbster Calvill, Calville rouge, Granatnoye, Malinovka Liflyandskaya, Rozovka Shvedskaya, Krasnyy Kal'vil'	1820–1912
Calville Rouge d'Ete (NFC)	3, 4, 5, 6, 7, 8, 9	Smužka letnia, Kalwila czerwona letnia, Kalwila różowa prążkowana, Różowe jabłka, Rozmarynowe czerwone, Rother Rosmarinapfel, Calville rouge d'Ete, Rother Strichapfel, Rother Sommer Strichapfel, Passe pomme rouge	1834–1900
Catshead (NFC)	12	Grosser Katzenkopf	1879
Cellini (NFC)	8, 17, 19, 20, 24	Čelini, Cellini, Celini	1890–1911
Champagne Pipka (R)	8	Szampańsko-rossyjskie	1890
Cludius Herbstapfel (NFC)	7, 8, 18, 19, 24	Kludiusza jesienne, Kludyuszowe jesienne, Cludius Herbstapfel, Kludyusz, Kludjusz	1880–1912
Court Pendu Plat (NFC)	7, 8, 19, 21	Krótkonóżka Królewska, Królewskie, Königlicher Kurzstiel, Courtpendu royal	1880–1899
Cox's Pomona (NFC)	9	Cox Pomona	1900
Cox's Orange Pippin (NFC)	9	ReINETTE Cox Orange	1900
Cukrówka Litewska Lietuvos cukrinis (L)	3, 4, 5, 6, 8, 9, 11, 14, 15, 18, 24	Cukrowe białe, Białe słodkie, Cukrowe litewskie, Słodkie letnie, Cukrowe, Żółte cukrowe, Żółte słodkie, Czornoje dieriewo, Chernoye derevo, Sakharnoye Litovskoye	1826–1912
Czarnoguzy Černoguzas (L)	18, 21, 22	Czarnoguzy, Chernoguz"	1899–1914
Danziger Kantapfel (NFC)	3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 20, 24	Dansko kantuotieji, Kantówka Gdańska, Kantak Gdańsk, Kantówka, Calwila Gdańska, Calleville de Danzig, Rapa czerwona, Rożanka z Bentleber, Ruski Grawensztajn, Różanka, Grafsztynek Rossyjski, Rother Winter-Rambour, Kantapfel Danziger, Danziger Kantapfel, Kant-apfel, Kantapfel, Calleville de Danzig, Bentlebener Rosenapfel	1834–1910
Deutscher Gold-Pepping (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 12	Peping niemieckie zimowe, Reneta hanowerska, Peping niemiecki złoty, Pepping, Peping d'Alllemagne, Deutscher Goldpepping, Germanien Apfel, Hoyaische Goldreinette	1820–1890
Dietzer Mandelreinette (NFC)	7	Reneta migdałowa, Mandel Renette	1880
Domnesc (NFC)	1, 2	Hernapfel	1820–1823
Downton Pippin (NFC)	8	Peping Dauntona, Downton Pippin, Dowtons Pepping	1890
Drap d'Or (NFC)	7, 8, 19	Złotogłówka, Goldzeugapfel, Drap d'or	1880–1891
Duchess of Oldenburg (NFC)	7, 8, 9, 10, 14, 18, 22	Barovinka, Karlamoviniai, Borowinka, Borowinka biała, Charłamowski, Jesienna papierówka, Charłamowskie jabłko, Charlamowsky, Borovitsky, Borovinka	1880–1914
Dzeltenais Dzidrais (L)	8	Cytrynowe letnie	1890

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Edelborsdorfer (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 11, 24	Bursztówki, Bursztuwiki, Borsztówka szlachetna, Bursztówka prawdziwa, Borstorfer, Edelborsdorfer, Maschansker, Bursztówka czeska, Bursztówki płaskie zimowe, Bursztówki płaskie, Gestreifter bohmischer borsdorfer	1820–1891
Fameuse (NFC)	9, 15	Fameuse	1900–1901
Faros (NFC)	1, 2	Faros Grand	1820–1823
Filippa (NFC)	10, 23	Fillippa's aeble, Daniškoji veislé, Filip-Abla	1910–1912
Fraas Sommerkalvill (NFC)	8	Kalwiła Fraasa	1890
Framboise (NFC)	1, 2, 8, 10, 14, 22, 24	Oderlandiškieji, Malinowe oberlandzke, Malinowka Oberlandzka, Himbeerapfel Oberlander, Himbeerapfel Oberlände, Himber Apfel, Himber-Apfel, Malinoskoye oberlandskoye	1820–1914
Friandise (NFC)	8	Przysmaczek, Leckerbeetic, Leckerbissen	1890
Gaesdonker Reinette (NFC)	7, 8	Reneta gezdońska, Gaesdonker Gold-Renette, Gaesdonker Reinette	1880–1890
Geflampter Weisser Cardinal (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 17, 21	Baltieji kardinolai, Baltasai kardinolas, Włoskie jabłka, Kardynał płomienisty, Kalwila Olgierda, Pleissner Rambour, Geflampter Cardinal, Kaiser apfel, Cardinal blanc, Carskie, Italienische	1820–1911
Gelber Richard (NFC)	7, 12	Ryszard żółty, Gelber Richard, Grand Richard, Richard Gelber	1879–1880
Gelber Winter-Stettiner (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 20	Sztetyny, Sztetyna żółta, Geller Stettiner, Stetiner Apfel, Gelber Winter-Stettiner	1820–1891
Gelber Winter-Stettiner (NFC)	3, 4, 5, 6, 11	Sztetyny zielone zimowe, Sztetyny zielone	1826–1862
Glogerovka (NFC)	3, 4, 5, 6, 8, 9, 10, 14, 15, 16, 17, 18, 20, 22, 24	Glogieriniai, Lietuvos pepinas, Lietviškieji pepinai, Lietviškoji pepina, Papinkiniai, Pepinka Litewska, Glogierowskie, Glogierówka jeżewska, Gołąbek rewelski, Peping angielskie, Pepinki Angielskie, Peping d'Angleterre, Pippin nglisches, Pepinka Litovskaya	1834–1914
Goldapfel von Kew (NFC)	8	Złote z Kiu, Kews Golden, Goldapfel von Kew	1890
Golden Arcad (R)	8	Arkad	1890
Golden Noble (NFC)	8, 10	Aukso gerieji, Złote szlachetne, Golden-Noble	1890–1910
Golden Pippin (NFC)	1, 2, 3, 4, 5, 6	Renety angielskie, Reinette d'Angleterre	1820–1862
Gold-Gulderling (NFC)	12	Gulderling Gold	1879
Gravenstein (NFC)	7, 8, 18, 22, 23	Gravenšteino, Grawensztainskie, Grawsztyńskie, Grafesztynek, Gravensteiner, Grawenstainer, Grafstein szlachetne, "Granshteyn", Gravenshteyn"	1880–1914
Gros-Pigeonnet (NFC)	8	Gołąbek wielki, Grosser Täubling, Pigeonnet rouge	1890
Grosse Casseler Reinette (NFC)	7, 8, 9, 10, 14, 15, 17, 18, 19, 20, 24	Kaselio reneta, Reneta kasselska duża, Reneta Kaselska, Grosser casseler Reinette, Grosse Cassele Renette, Reinette Casseler Grose, Bol'shoy Kassel'skiy renet	1880–1912

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Gros-Vert (NFC)	8, 12	Rambury zielone, Rambury białe, Rapa zielona, Grosser, Grüner-Rambour	1879–1890
Gruner Furstenapfel (NFC)	7, 8	Zielonka, Rzepka książęca, Grüner Fürstenapfel	1880–1890
Harberts Reinette (NFC)	7, 8, 9, 10, 14, 15, 18, 20, 21	Herberto reneta, Reneta Harberta, Harberts Renette, Herbert's reinette, Renet Garbera	1880–1912
Hawthornden (NFC)	10	Erškétiné, Hawthornden	1910
Hoary Morning (NFC)	8, 19	Woń poranna, Hoary Morning, Brouillard, Morgenduftapfel	1890–1891
Jansen von Welten (NFC)	7	Jansen von Welten	1880
Jefferis (NFC)	15	Jefferis	1901
Kaiser Wilhelm (NFC)	1, 2, 3, 4, 5, 6, 9	Cesarz Wilhelm, Renety czerwone, Reinette rouge	1820–1900
Kandil Sinap (NFC)	18	Kandil'-sinap"	1912
Kew Admirable (NFC)	8	Wyśmienite z Kiu, Kews Admirable, Köstlicher von Kew	1890
King of the Pippins (NFC)	1, 2, 3, 4, 5, 6, 7, 10, 18, 19, 21, 24	Aukso reneta, Królowa renet, Renety złote, Złota reneta, Złota parmena, Parmena złota zimowa angielska, King of the Pippins, Queen of the Pippins, Reine des Reinettes, Winter Goldparmane, Reinette d'or, Röthliche Reinette, Renette Golden Parmane, Englische Winter Goldparmaine, Zimniy zolotoy parmen"	1820–1912
Kleiner Langstiell (NFC)	8	Siwoogonek, Kleiner Langstiell, Blauschwanz	1890
Korichnoe (NFC)	22	Korichnevoye polosatoye	1914
Korobovka (NFC)	18	Korobovka	1912
Kosztela / Koštél (L)	8, 10, 18	Koštél, Kosztela, Koshtelya	1890–1912
Krauter-Reinette (NFC)	7	Reneta ziołowa, Krauter Renette	1880
Kunzes Königsapfel (BUND)	9	Kunzes Königsapfel, Kunzen's Königsapfel	1900
Kursk Reinette (R)	21	Reneta Kurska	1899
Lady Henniker (NFC)	12	Lady Henniker	1879
Landsberger Reinette (NFC)	7, 8, 9, 10, 14, 15, 17, 18, 24	Liandzbergo renetai, Landsbergo renetas, Lansbergo reneta, Reneta Landsbergska, Reneta Lancberska, Reneta Londsbergska, Landsberger Renette, Landsberger rainette, Rane-ta Lansberga, Reneta Lansberga, Renet" Landsbergskiy	1880–1912
Langer Gruner Gulderling (NFC)	1, 2, 8	Złocistka zielona, Gulderling, Der groenartige Gulderling, Langer Grüner Gulderling, Weinapfel	1820–1890
London Pippin (NFC)	7, 8, 10, 17, 19, 24	Londono pepinas, Cytrynówka zimowa, Cytrynowe zimowe, Citrynowe, Londono pepina, Peping Londyński, London pepping, Winter Citronenapfel	1880–1911

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Lord Suffield (NFC)	21	Lord Suffield	1899
Luiken (NFC)	7, 8	Luikeńskie, Moręga Luikena, Luika, Luikenapfel	1880–1890
Malinówka Berżenicka / Beržininkų avietinis (L)	16, 18	Vyniniai, Serengei, Malinovka Berženicka	1901–1912
Margil (NFC)	7, 12	Reneta muszkatowa, Muskatka, Muscat Renette, Pomme Margile	1879–1880
Marmorierter Sommer-pepping (NFC)	8	Pepping marmurkowy	1890
Mere de Menage (NFC)	8	Sawłuki, Hansmütterchen	1890
Monk's Favourite (NFC)	8	Mnichy, Mönchsapfel	1890
Montwiłłówka / Montwiłlinis (L)	9, 14, 15, 18, 21	Montwiłłówka, Graf Nostitz, Graft "Nostits"	1897–1912
Neuer Englischer Pigeon (BUND)	8	Gołąbek angielski koralowy, Pigeon anglais, Neuer englischer Pigeon	1890
Ničnera Zemeňu / Ničnerio žemuoginis (L)	22	Zemlyanichnoye Nichnera	1914
Nonsuch (NFC)	7, 8, 19	Niezrównane Langtona, Langtona niezrównane, Nonpareil Langtona, Langtons none such, Langton's sondergleichen	1880–1891
Norwegische Wachs Reinette (NFC)	18	Renet" Norvezhskiy Voskovoy	1912
Oberdiecks Reinette (NFC)	18	Renet" Oberdika	1912
Oelkofer Pepping (BUND)	8, 10	Elkopo pepinai, Peping Elkofeński, Oelkofer Pepping, Oelkoffer Pepping	1890–1910
Okabena (R)	10	Okabena	1910
Ontario (NFC)	9	Ontario	1900
Orleans Reinette (NFC)	1, 2, 3, 4, 5, 6, 7, 19, 22	Reneta orleańska, Renety Orleańskie, Orleans Renette, Reinette d'Orleans, Renet" orleanskiy	1820–1914
Osennee Polosatoe (NFC)	8, 14, 18, 22	Rudens dryžieji, Pręgowane wielkie jesienne, Rossyjski Gravenstein, Jesienne prązkowane, Angnota-apfel, Bentleberne Rosenapfel Polosatoye Osenneye, Osennyyaya Polosatka	1890–1914
Parker's Pippin (NFC)	7, 8, 19	Peping Parkera, Parkera peping, Parker Pippin, Parker's Pepping	1880–1891
Patte de Loup (NFC)	8	Wilczek, Pate de loup	1890
Pigeon Rouge (NFC)	7, 8, 10, 13, 17, 19	Raudonasai karvelis, Raudonas karvelis, Gołąbek czerwony, Gołąbek czerwony zimowy, Rother Winter Taubenapfel, Pigeon rouge, Pigeon rouge d'hiver, Rother-winter Taubenapfel, Pigeonnet commun	1879–1911
Pigeonnet (NFC)	7, 8	Cynamonowe letnie, Sommer Zimmtapfel	1880–1890

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Primate (NFC)	9, 10, 15, 17	Ankstyviausieji, Primatė, Primate	1900–1911
Prinzen Apfel (NFC)	7, 8, 16	Princo, Ružuočiai, Książęce, Melonowe jesienne, Prinzenapfel, Melonenapfel	1880–1901
Purpurroter Cousinot (NFC)	1, 2, 7, 8, 10, 23	Kuzinai, Kuzynek, Coushot purpurowy, Kuchenne purpurowe, Buraczek, Purpurrother Cousinot, Jungfernnapfel, Kalwin Badenski	1820–1912
Putim (R)	18	Putimka Vitebskaya	1912
Rajewskie (L)	8, 14, 20	Rajewskie	1890–1897
Rambour Franc (NFC)	8	Sztetyna Koralowa, Rambour de France, Rambour gros, Lotharinger Rambour	1890
Red Astrachan (NFC)	7, 8, 10, 13, 20	Raudonieji alyviniai, Astrachańskie czerwone, Malinówka letnia, Oliwne zielone, Oliwnie szare, Astrachan rother, Red Astrachan, Rother Astrakan, Pomme d'Astracan rouge, Rother Clarapfel	1879–1910
ReINETTE Blanche (NFC)	1, 2, 3, 4, 5, 6	Renety białe, Reinette blanche	1820–1862
ReINETTE Coulon (NFC)	7, 10	Kuliono reneta, Reneta Kulona, Coulons Renette, Coulon's reinette	1880–1910
ReINETTE de Bretagne (NFC)	8	Reneta bretońska, Reinette de Bretagne, Reinette von Bretagne, Forellenapfel	1890
ReINETTE de Champagne (NFC)	3, 4, 5, 6, 7, 8, 10, 21, 22, 24	Šampano reneta, Renety szampańskie, Reneta szampańska, Rzepka zimowa, Champagner Renette, Reinette de Champagne, Champagner Loskrieger-Reinette, Szampanskie, Renet" shampanskij	1834–1914
ReINETTE de Macon (NFC)	19	Krótkonóżka szara, Carpentin	1891
ReINETTE des Carmes (NFC)	8	Reneta karmelicka, Reinette des carmes, Reinette rousse, Carmeliter reinette, Lange roth-gestreifte grüne Reinette, französische Reinette	1890
ReINETTE Diel (NFC)	13	Reneta Diela, Reinette de Diel, Diel's grosse englische Reinette	1879
ReINETTE du Canada (NFC)	7, 10, 12, 19	Kanados reneta, Reneta kanadyjska, Reneta Paryska ramburowa, Reneta ramburowa francuzka, Canada Renette, Pariser Rambour Renette, Reinette de Canada, Englischer Konigsapfel	1879–1910
ReINETTE Franche (NFC)	1, 2, 3, 4, 5, 6	Renety zielone, Reinette Franche	1820–1862
ReINETTE Grise (NFC)	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 16, 19	Mélynieji, Reneta szara, Renety szare, Reneta szara francuzka, Reinette grise, Grane französische Reinette, Lederapfel, Rambour verd-gris, Leder-apfel, Französische Apfel	1820–1901
ReINETTE Rouge Etoilee (NFC)	8, 10	Zvaigždė reneta, Reneta gwiazdkowa, Reinette étoilée, Rothe Sternreinette, Meuser's rothe Reinette	1890–1910
ReINETTE Verte (NFC)	3, 4, 5, 6	Renety zielone	1834–1862
Reneta Litewska / Lietuvos auksinės renetas (L)	8, 9, 14, 15, 18, 24	Reneta Litewska, Raneta Litewska, Renet" Litovskiy	1890–1912

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Revalecher Birnapfel (NFC)	8	Gruszkowe Rewelskie	1890
Revel Borsdorfer (R)	8, 24	Bursztówka rewelska, Borsdofer Livl.[andishe] Wint.[er]	1890–1891
Rheinischer Krummstiell (NFC)	8	Krzywonózka reńska, Rheinischer Krummstiell	1890
Ribston Pippin (NFC)	7, 8, 15, 18, 19, 20, 24	Ribstono pepinas, Peping Ribstona, Pepinka Ribstona, Ribston Pippin, Ribston's Pepping, Pepping Ribston, Ribston, Ribston Pepping, "Pepin" Ribstona	1880–1912
Riviere (NFC)	12	Riviére	1879
Rosmarina bianca (NFC)	3, 4, 5, 6, 7, 12, 18, 19	Jabłka rozmarynowe, Rozmarynowe jabłka białe, Tyrolskie, Rozmarynka, Weisser Rosmarinapfel, Mello di romarino, Krymka Belya	1834–1891
Ross Nonpareil (NFC)	1, 2, 3, 4, 5, 6	Peping francuzkie zimowe, Peping de France, Nonpareille	1820–1862
Roter Cardinal (NFC)	7	Kardynał czerwony, Cardinal rother	1880
Roter Eiserafpel (NFC)	1, 2, 7, 10, 15, 18	Geležiniai, Eiserskie czerwone, Želežniak, Rother eiserafpel, Pomme durable une année, Krasnyy zhelezniak"	1820–1912
Roter Sommerrambur (BUND)	1, 2, 3, 4, 5, 6, 10, 24	Raudonieji vasariniai ramburai, Rambour rouge d'été, Rambour rouge, Rambury	1820–1910
Roter Stettiner (NFC)	3, 4, 5, 6, 7, 8, 10, 11, 12, 20, 22	Raudonieji štetynai, Sztetyni czerwony, Stettiner rother, Stettiner Reinette, Rother Stettiner, shtetinskoye krasnoye	1826–1914
Safranapfel (NFC)	8	Reneta szafrańska, Safran-Apfel	1890
Saint-Baussan (NFC)	8	Pręgowane pańskie	1890
Salmon (NFC)	1, 2	Hechtapfel	1820–1823
Scarlet Pearmain (NFC)	7, 8, 15, 19, 24	Parmena szkarłatna, Scarlett pearmain, Englische Scharlachrotte Parmäne, Scharlachrothe Parmaine, Reinette Szkarlat.[ny]	1880–1901
Serinka (NFC)	8, 9, 10, 14, 15, 18, 22, 23, 24	Sierinka, Pilkieji, Sierenkije, Siereńka, Sierinki, Strumiłłówka, Szampańskie, Poziomkowe, Zajęcza główka, Serinka, Lehmapfel	1890–1914
Śmietankowe / Žemaičių grietininis (L)	8, 9, 10, 13, 14, 15, 17, 24	Smetoniniai, Smetoninė, Śmietankowe żmudzkie, Śmietankowe, Žmudzkie śmietankowe, Smietankowe, Crême du Samogitie	1879–1911
Sommer Rabau (NFC)	8	Brzeczkja, Sommer-Rabau	1890
Sulinger Grünling (BUND)	8	Zielonka hanowerska, Sulinger Grünling	1890
Summer Pear (R)	8, 21	Gruszkowe właściwe, Gruszewka	1890–1899
Sweet Greening (NFC)	8	Zielonka słodka	1890
Switzer (R)	9, 14, 18	Sujslepper, Łotewskie jabłko, Łotewska malinówka, Suyslepskoye	1897–1912
Syke House Russet (NFC)	7, 19, 24	Reneta angielska szpitalna, Reneta szpitalna angielska, Szpitalna reneta, Englische Spital Renette	1880–1891

Table. (Continued)

Official name*	Historical sources mentioning the cultivar**	Historical names of cultivar mentioned in the sources	Year of mentioning
Titovka (NFC)	8, 9, 10, 12, 14, 15, 18, 20, 24	Tulos obuoliai, Tūlos, Titówka, Titovka, Tit tul'skij, Tulskie, Titovka	1879–1912
Transparente de Cron-cels (NFC)	9	Kronzeliniai, Oliwka Kronselska, Kronselskie, Transparente de Cronsels	1900
Violette (NFC)	1, 2, 3, 4, 5, 6	Fioletowe zimowe, Fioletowe, Violette d'hiver, Violette	1820–1862
Virginischer Sommer-Rosenapfel (NFC)	7, 8, 9, 14, 18, 23, 24	Różanka Wirgińska, Virginischer Rosenapfel, Virginianka, Różanka z Wirginji, Virginskaya rozovka	1880–1912
Weisse Wachsreinette (NFC)	7, 8, 10	Vaško reneta, Reneta woskowa, Reinette d'ete blanche, Weisse Wachsreinette, Reinette winter wachs	1880–1910
Weißen Matapfel (BUND)	8	Matówka biała, Weisser Matapfel	1890
Weisser Sommer-Tau-benapfel (NFC)	8	Holenderskie podwójne, Doppelter Holländer	1890
Wenetka (L)	8	Wenetka	1890
White Astrachan (NFC)	3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 18, 24	Baltieji alyviniai, Alyviniai cukriniai, Baltieji Astrachanio, Oliwne białe, Oliwne, Białe transparentes, Oliwka, Oliwka biała, Astrachańskie białe, Szary oliwny, Papierówka, Transparentes, Astrachan weisser, Weisser Astrakan, Astrakan blanche, Weisser Artracan, Astrakaner weisser, Pomme d'Astracan blanche, Transparente de Moscovie, Astrakhanskoje Beloye	1826–1912
White Transparent (NFC)	1, 2, 3, 4, 5, 6, 8, 9, 12, 14, 15, 16, 18	Baltiniai, Baltieji alyviniai, Papierówka, Papierówka polska, Papierówka biała, Oliwne letnie, Reneta sułtana, Oliwne cytrynowe, Oliwka biala, Cytrynowe, Alabastrowe, Szkłanka, Oliwne żółte, Oliwne pomarańczowe, Oliwne żółte jesienne, Papierówka żółta, Klarapfel, Astrakhanskoye Beloye, "Belyi Nalyv" Pribaltijskiy, Russkiy Rozmarin", Nalivnoye Beloye, Nalivnoye zheltoye	1820–1912
Yellow Bellflower (NFC)	7, 8, 9, 10, 12, 17	Linéjaus pepinai, Peping Linneusza, Pepinka Lineusza, Linnaeus pippin, Linnaeus peping, Gelber Bellefleur, Belfler, Bellefleur, Bellefleur jeune	1879–1911
Zorza (L)	18	Zori	1912
Zwiebel Borsdorfer (NFC)	8, 16, 22	Saldinėliai, Cibulkos, Bursztówka cebulowa, Zwiebel-Bórsdorfer, Borsdorskoye lukovichnoye	1890–1914

\* Official name. Preferable: English by NFC (The National..., 2020); R (Ragan, 1905). In other cases: German (BUND..., 2020). For local cultivars: L (local origin, Polish, Lithuanian, Russian origin cultivar with local name).

\*\* Historical sources mentioning the cultivar: 1 (Strumiłło, 1820); 2 (Strumiłło, 1823); 3 (Strumiłło, 1834); 4 (Strumiłło, 1844); 5 (Strumiłło, 1850); 6 (Strumiłło, 1862); 7 (Strumiłło, Tyniecki, 1880); 8 (Strumiłło, Tyniecki, 1890); 9 (Janczewski, 1900; Montwiłł, 1900); 10 (Martišius, 1910); 11 (Panemunės..., 1826); 12 (Zaleski, Girdwojń, 1879); 13 (Janczewski, 1879); 14 (Montwiłł, 1897); 15 (Montwiłł, 1901); 16 (Šerkšnas, 1901); 17 (Martišius, 1911); 18 (Grebnickiy, 1912); 19 (Montwiłł, 1891); 20 (Jankowski, 1891); 21 (Muchowicz, 1899); 22 (Ocherk'..., 1914); 23 (Posyła się..., 1912); 24 (Vaismedžių..., 1891).

## CONCLUSIONS

Analysing the list reveals that most apple cultivars, probably for purely natural reasons, did not adapt to Lithuanian climatic conditions. During the whole 94-year period, 66 (40%) of all 165 cultivars were mentioned only once. For a period of more than 50 years, only 28 cultivars are mentioned. The cultivars grown for the longest periods (practically during the whole period studied) are as follows: 'Alexander', 'Calville Blanc d'Hiver', 'Calville Rouge d'Automne', 'Framboise', 'Geflammt Weisser Cardinal', 'King of the Pippins', 'Orleans Reinette', 'Purpurroter Cousinot', 'Roter Eiserapfel', 'Roter Sommerrambur' and 'White Transparent'. The limited variety of apples with potential to grow in the Lithuanian climate were already understood during the studied period. In 1891, Montwiłł (1891), based on observations of his garden in Vaivadiškės, compiled a 'blacklist' of cultivars in Lithuanian provinces. This list includes the following apple cultivars: 'Alfriston', 'Ananas Reinette', 'Calville Blanc d'Hiver', 'Calville de Saint-Sauveur', 'Court Pendu Plat', 'Drap d'Or', 'Hoary Morning', 'King of the Pippins', 'London Pippin', 'Orleans Reinette', 'Parker's Pippin', 'Pigeon Rouge', 'Reinette de Macon', 'Reinette du Canada', 'Reinette Grise', 'Rosmarina Bianca' and 'Syke House Russet'.

## DISCUSSION

The systematization of information on apple cultivars recommended for cultivation and cultivated in 1820–1914 provides a background for broader interpretations and discussions on orchard culture of the 19th century in Lithuania. Notably, the choice of cultivars for gardens in the 19th century through the first decade of the 20th century was based not only on natural and economic reasons but also on the general cultural context. In this way, the list of cultivated apples, in pomological or economic terms, represents the gardener's persona, orchard, or manor and reflects the fashion of the time. During this period, the planting of orchards correlated with the general upward trend in park and orchard planting. The gardens' representative nature required having unique plants, such as those not available in neighbouring mansions. But there was a shift from gardening as

an exotic strange cultivar collection to gardening as a representation of local culture and a space for local cultural discovery due to romanticism's effects. This is clearly noticeable in the choice of cultivars.

While the lists from the beginning of the 19th century are dominated by exotic, new and imported, particularly French and German, cultivars, at the end of the 19th century, there is a clear return to apple cultivars of local origin that have been grown in the country for a long time. A peculiar 'rudiment of the past' can still be seen in the 1879 Šiauliai exhibition, in the collections presented by Bogdan Oginski from Rietavas and Henrik Page, a gardener from Verkiai Manor in Vilnius ('Catshead', 'Lady Henniker', 'Margil' and 'Riviere') (Zaleski, Girdwojń, 1879).

It is essential to understand that the hundreds of years of growth of imported, foreign apple cultivars in Lithuanian gardens created a specific genetic environment. There was a natural hybridisation between the local crab apple (*Malus sylvestris* (L.) Mill) and the various imported varieties in this environment. As a result, local apple cultivars were formed. These cultivars were later discovered by the manor gardeners and transferred to their gardens. However, there is evidence of new local cultivars discovered by manor gardeners and – most often – named after a local place or personal names ('Niemczynowiecza', 'Szymanowski', 'Rajewski' and 'Włodeckie'). In the second half of the 19th century, many local cultivars appeared, some of which were introduced via renaming known cultivars with local names, e.g. in the 1890 list, 'Pleissner Rambour' was synonymously called 'Kalwila Olgierda'; in 1900, 'Glogierówka' was called 'Pepinka Litewska', 'Graf Nostitz' – 'Montwiłłówka' and 'Sierinka' were derived from 'Strumiłłowka'. The case of 'Glogierówka' – 'Pepinka Litewska' engages a series of discussions in the journal 'Ogrodnik Polski' in 1888–1898.

However, other cultivars are local findings, germinated from local natural seedlings. In the period from 1820 to 1914, they include the 'Śmietankowe żmudzkie' (Lith. 'Žemaičių grietininis'), grown on Blindstrubiškės Manor in 1879 (Janczewski, 1879); in the same year, Władysław Lawrynowicz, the owner of Paturkšlis Manor, presented at an exhibition in Šiauliai a 'medium-sized, very good local

variety, not yet named' (Zaleski, Girdwojń, 1879). In 1890, there are mentions of the 'Dziedzińca głowa', 'Krzyśka', 'Slazy', 'Mińskie Wielkie jesienne', 'Mińskie zielone duże', 'Włodeckie' and 'Rajewskie' (Strumiłło, Tyniecki, 1890) as well as the 'Niemczynowiecza' from Tomasz Niemczynowicz's orchard in Vilnius in 1900 (Montwiłł, 1900). The 'Ananas Berżenicki' (Lith. 'Beržininkų ananasas'), 'Malinówka Berżenicka' (Lith. 'Beržininkų avietinis'), and 'Reneta Litewska' (Lith. 'Lietuvos auksinis renetas') grew in the orchard of A. Hrebnicki (Grebnitskiy, 1912), and the 'von Habdank' was grown on Žiežmariai Manor (Grebnitskiy, 1912). There were also the 'Jarzębinowka', grown in Blindstrubiškės Manor in 1879, the 'Grzechotka książęca', grown in the Didieji Grūžiai Manor (Zaleski, Girdwojń, 1879), the 'Purpurowe litewskie' shown at Kaunas exhibition (Montwiłł, 1897), the 'Rambur Antokolski' and 'Różanka Litewska', sold by W. Montwiłł (Montwiłł, 1901), and the 'Reneta szara Litewska' and 'Reneta zielona Litewska', grown in Florianowo (Bochwig, 1904) or apple tree 'without the name' grown in Joniškėlis Manor (Posyła się..., 1912).

There is also a kind of 'authorship' observed in the lists. Each author from the 19th century to the first decade of the 20th century declared an approach to the best cultivars based on his personal experience. This is clear in the last two editions of book 'Ogrody północne', which appeared after J. Strumiłło's death, by Władysław Tyniecki (Strumiłło, Tyniecki, 1880; 1890). The lists of W. Montwiłł and A. Hrebnicki, drawn up almost simultaneously, are also quite different.

During the period, Lithuania was as hub of the network of different pomology schools. Five different groups of pomologists were observed in Lithuania (some of pomologists belong to few different groups): (i) the Warsaw Horticultural Society (Towarzystwo Ogrodnicze Warszawskie, from 1884), whose members were L. Iwanowski, A. Girdwojń, E. Janczewski (also member of Krakow Horticultural Society) and W. Montwiłł; (ii) the Vilnius Horticultural Society (Towarzystwo Ogrodnicze w Wilnie, Vilenskoye sadovoye obshchestvo, from 1897): W. Montwiłł, J. Pawłowicz and A. Wasilewski; (iii) the Russian Imperial Horticultural society in St. Petersburg (Imperatorskogo Rossiyskogo obshchestva sadovodstva) included A. Hrebnicki; (iv) the Kaunas Horticultural Society

(Kovenskoye sadovoye obshchestvo, from 1879), which included E. Gecewicz, J. Korejwa, J. Czarnocki, E. Fryk and J. Horbaczewski; (v) the horticultural societies of Riga: the German origin owners of the manors of Northern part of Lithuania (Eg. baroness von Franck from Daunorava/Donnerhof; Vasiliauskas, 2017).

Another trend was the democratization of horticulture. Gardens, which at the beginning of the 19th century were predominantly a cultural element of a manor or a city, were increasingly observed in peasant homesteads at the end of the 19th century (especially after the abolition of slavery in 1861). Despite the high scepticism of the peasants, some of them became adept gardeners. In the exhibition of Šiauliai in 1879, 'two peasants, Gružila from Raseiniai county and Grinius from Šiauliai county, presented several varieties of delicious apples' (Zaleski, Girdwojń, 1879) and 'beautiful but also practical' Povilas Vidugiris' collection mentioned in the description of Kaunas exhibition (Montwiłł, 1897).

However, the most significant breakthrough in the popularity of peasant gardens occurred in the interwar period when the state encouraged the creation of fruit gardens. But these actions of the government influenced the set of apple cultivars in the gardens of the Republic of Lithuania to the side of unification. However, only specific apple cultivars were encouraged for planting, and the prize was only granted if at least 60% of the orchard consisted of recommended cultivars (*Ūkiškos žinios*, 1935). Moreover, the connecting link between the old, Polish-Lithuanian Commonwealth's pomological tradition and the new Republic of Lithuania's pomology became Tadas Ivanauskas (Tadeusz Iwanowski), Leonard Iwanowski's son, who became a professor at interwar Lithuania's Kaunas Vytautas Magnus University and established a pomological garden near his house in Obelynė, Kaunas District.

## ACKNOWLEDGEMENTS

Special thanks to Marius Daraškevičius for reference to a list of fruit trees in the Panemunė Castle Garden in 1826 and Ernestas Vasiliauskas for reference to information about the Northern Lithuanian manors.

Received 12 April 2021  
Accepted 30 July 2021

## REFERENCES

1. Anenkov N. I. 1878. *Botanicheskiy slovar'*. Sankt-Peterburg: Tip. Imp. Akad. Hauk.
2. Antanavičius D., Narbutas S. 2012. *Lietuvos Didžiojo Kunigaikštio Žygimanto Augusto dvaro sąskaitos (1543–1548)*. T. 2. Vilnius: Pilių tyrimo centras „Lietuvos pilys“. P. 209–213.
3. Blažytė A. 2008. *Lietuvos augalų nacionaliniai genetiniai ištekliai. Senosios lietuviškos vaismedžių veislės*. Vilnius: Lietuvos Respublikos aplinkos ministerija, Augalų genų bankas [žiūrėta 2021-07-12]. Prieiga per internetą: <https://gamtosknyga.lt/leidinys/senosios-lietuviiskos-vaismedziu-veisles/>
4. Bochwic O. J. 1904. Jak zakładać i pielęgnować ogrody. *Ogrodnik Polski*. Nr. 15. P. 339.
5. BUND-Lemgo Obstsortendatenbank. 2020 [žiūrėta 2021-07-12]. Prieiga per internetą: <https://www.obstsortendatenbank.de/home.htm>
6. Catalogue des arbres fruitier, de france que le Sieur de la Ruiere jardinier fleuriste établi a Strasbourg peur liurer dans ce pays Sauoir. Belarussian National State Archive, F. 694, Ap. 1, b. 286.
7. Catalogue of the Fruits Cultivated in the Garden or the Horticultural Society of London. 1831. London.
8. Čapaitė R. 2005. The everyday life of Grand Duke Vytautas of Lithuania according to contemporary correspondence. *Lithuanian Historical Studies*. No. 8. P. 1–26.
9. Dambrauskaitė N. 2017. *Bajorų namų ūkis Lietuvos Didžiojoje Kunigaikštystėje XVI–XVII a. I pusėje*: disertacija. Vilnius: VU leidykla.
10. Dumanowski J., Jankowski R. 2011. *Moda bardzo dobra smażenia różnych konfektów i innych słodkości*. Warszawa: Muzeum Pałacu Króla Jana III w Wilanowie.
11. Dziubiak M. 2006. O dawnych odmianach uprawnych jabłoni i ich pochodzeniu. *Rocznik dendrologiczny*. Nr. 54. P. 51–66 [žiūrėta 2021-07-12]. Prieiga per internetą: <https://pbsociety.org.pl/ind/rd/artykuly/vol54/dziubiak.pdf>
12. Engelbrecht T. 1889. *Deutschlands Apfelsorten: illustrierte, systematische Darstellung der im Gebiete des Deutschen Pomologen-Vereins gebauten Apfelsorten*. Braunschweig: Vieweg.
13. Fijalek J., Semkowicz W. 1932. *Kodeks dyplomatyczny katedry i diecezji wileńskiej*. Kraków: Komisja Historyczna Polskiej Akademii Umiejętności.
14. Gibb C. 1887. *The Nomenclature of Our Russian Fruits Abbotsford* [cited 12-07-2021]. Available at: [https://upload.wikimedia.org/wikipedia/commons/5/51/The\\_nomenclature\\_of\\_our\\_Russian\\_fruits\\_%28IA\\_cu31924073243820%29.pdf](https://upload.wikimedia.org/wikipedia/commons/5/51/The_nomenclature_of_our_Russian_fruits_%28IA_cu31924073243820%29.pdf)
15. Grebnitskiy A. 1906. *Atlas plodov* (vyp. 1–4). Sankt-Peterburg.
16. Grebnitskiy A. 1912. *Otdel svezhykh plodov VI-i ocherednoy vystavki-yarmarki plodovodstva i ogorodnichestva 1910 g. v S.-Peterburge*. Sankt-Peterburg.
17. Grove J. M. 2012. *The Little Ice Age*. London: Routledge.
18. Hodun G., Hodun M. 2013. *Podręczny atlas dawnych odmian jabłoni*. Gruczno: Towarzystwo Przyjaciół Dolnej Wisły.
19. Hodun G., Hodun M. 2016. *Atlas dawnych odmian jabłoni*. Gruczno: Towarzystwo Przyjaciół Dolnej Wisły.
20. Jablonskis K. 1934. *XVI amžiaus Lietuvos inventoriai*. Kaunas: Vytauto Didžiojo universitetas.
21. Janczewski E. 1879. *Zapiski pomologiczne: wyniki doświadczeń z sadu blinstrubiskiego na Żmudzi*. Kraków: G. Gebethner.
22. Janczewski E. 1900. Dobór wzorowy wileńskiego Towarzystwa sadowniczego. *Ogrodnictwo*. Nr. II. P. 36–37.
23. Jankowski E. 1891. Wystawa wileńska. *Ogrodnik Polski*. Nr. 19. P. 447–450.
24. Jankowski E. 1923. *Dzieje ogrodnictwa w Polsce*. Warszawa: Nakładem banku dla handlu i przemysłu.
25. Janonienė R. 2018. Sodai: tradicijos, įvaizdžiai, simboliai Lietuvos kultūroje. *Acta Academiae Artium Vilnensis*. P. 88–89.
26. Kask K. 2010. *Puuviljandus Eestis*. Tartu: Eesti Maaülikool.
27. Kirleis W. 2019. Atlas of Neolithic plant remains from northern central Europe. *Advances in Archaeobotany*. Vol. 4. P. 243.
28. Kozlovskaya E. 2015. *Selektsiya yabloni v Belarusi*. Minsk: Belaruskaya navuka.
29. Kriauciūnas J. 1969. *Sodai ir jų vystymosi istorija Lietuvoje*. Vilnius: Mintis.
30. Kriauciūnas J. 1977. *Sodininkystės raida ir jos problemos Lietuvoje*. Vilnius: Mintis.
31. Kviklys D., Gelvonauskienė D., Karklelienė R., Juškevičienė D., Dambrauskienė E., Uselis N., Lanauška J., Ikase L., Lepse L., Kaufmane E., Feldmane D., Dėkena Dz., Zeipiņa S. 2018. *Paveldo sodai. Veislių katalogas / Vēsturiskie dārzi. Šķirņu catalogs / Heritage Gardens. Cultivar Catalogue*. Babtai: Lietuvos agrarinių ir miškų mokslų centro Sodininkystės ir daržininkystės institutas [žiūrėta 2021-07-12]. Prieiga per internetą: [https://latlit.eu/wp-content/uploads/2017/06/HG\\_cultivar-catalog.pdf](https://latlit.eu/wp-content/uploads/2017/06/HG_cultivar-catalog.pdf)
32. Leroy A. 1879. *Dictionnaire de Pomologie*. Paris.
33. Litskevich O. 2002. *Statut Vyalikaga knyastva Limoyskaga 1588*. Minsk.
34. Lucas E. 1867. *Pomologische Tafeln zum Bestimmen der Obstsorten...* Stuttgart.
35. Martišius P. 1910. *Apie sodą*. Kaunas. P. 103–107.
36. Martišius P. 1911. Povilo Vidugirio sodas. *Artojas*. Nr. 51. P. 401–404; Nr. 52. P. 409–413.
37. Montwiłł W. 1891. Czarna lista odmian owocowych. *Ogrodnik Polski*. Nr. 14. P. 319–321.
38. Montwiłł W. 1897. Z wystawy ogrodniczej w Kownie. *Ogrodnik Polski*. Nr. 20. P. 472–474.
39. Montwiłł W. 1900. Dobór owoców wileński. *Ogrodnik Polski*. Nr. 6. P. 162–165.

40. Montwiłł W. 1901. *Wiadomość o szkółkach drzew jabłoniowych w majątku Wojewodzki*. Warszawa.
41. Muchowicz J. 1899. Z wystawy w Wilnie. *Ogrodnik Polski*. Nr. 21. P. 489–490.
42. Oberdieck J. G. K. 1881. *Deutschlands beste Obstsorten*. Leipzig.
43. *Ocherk sovremennoego sostayanya plodovidstva, ogrodnichestva i vinogradstva s vinodielyem v Rossiu*. 1914. Sankt Peterburg: Glavnaya upravlenye zemleustroystva i zemledelya.
44. *Panemunės dvaro inventorius*. 1826. Vilnius County's Archive, F. 9. B. 101.
45. Parent A. 2014. Gydytojo botaniko Žano Emanuelio Žilibero pastebėjimai apie XVIII a. pabaigos Lietvių valstietijos gyvenimą. *Liaudies kultūra*. Nr. 3. P. 44–52.
46. Petreikis T. 2011. Žemaičių vyskupas Motiejus Valančius – sodininkas. *Lietuvių katalikų mokslo akademijos metraštis*. T. 35. P. 29–58.
47. Piekosiński F. 1896. *Rachunki dworu króla Władysława Jagiełły i królowej Jadwigi z lat 1388 do 1420*. Kraków: Akademia umiejętności.
48. Piličiauskas G. 2016. Lietuvos pajūris subneolite ir neolite. Žemės ūkio pradžia. *Lietuvos archeologija*. T. 42. P. 25–103.
49. *Pometets æblenøgle*. 2020 [žiūrėta 2021-07-12]. Prieiga per internetą: <https://www.nordgen.org/nak/index.php?view=start&fbclid=IwAR1E-oJ-8zEloxYD9meXdtEONUy577UgE3XW4o9rdfag-BUQFn8t7F3qlNCPw>
50. *Posyła się do Johaniszkiel i transport owoców*. 1912. Manuscript Department of Vilnius University Library, F8-950.
51. Przybyła A. A. 2017. *Dawne odmiany jabłoni uprawiane w Polsce. podręczny atlas*. Gruczno: Zespół Parków Krajobrazowych Chełmińskiego i Nadwiślańskiego.
52. Radziwil M. K. 1601. *Ierosolymitana peregrinatio...* Amsterdam. P. 37.
53. Regel' E. 1868. *Russkaya pomologya ili opisanye priznakov i sposobov razvedenya sortov plodovykh rasteniy, proizrastayushchikh v severnykh, srednikh i yugovostochnykh guberniyakh Rossii: Yablon'*, eya opisaniye. Chast' I-II. Moskva.
54. Rimantienė R. 1999. *Kuršių nerija archeologo žvilgsniu*. Vilnius: Mintis. 74 p.
55. Rolff J. H. 2001. *Der Apfel – Sortennamen und Synonyme*. Norderstedt: Books on Demand.
56. SCUD. 2020 [žiūrėta 2021-07-12]. Prieiga per internetą: <https://www.slu.se/en/Collaborative-Centres-and-Projects/swedish-utility-and-cultivated-plants-database-scud>
57. Szyrwid K. 1642. *Dictionarym Trivm Lingvarvm in vsuum Studiosae Iuuentutis*. Vilnae.
58. Strumiłło J. 1820. *Ogrody północne...* Wilno.
59. Strumiłło J. 1823. *Ogrody północne...* Wilno.
60. Strumiłło J. 1834. *Ogrody północne...* Wilno.
61. Strumiłło J. 1844. *Ogrody północne...* Wilno.
62. Strumiłło J. 1850. *Ogrody północne...* Wilno.
63. Strumiłło J. 1862. *Ogrody północne...* Wilno.
64. Strumiłło J., Tyniecki W. 1880. *Ogrody północne...* Wilno.
65. Strumiłło J., Tyniecki W. 1890. *Ogrody północne...* Wilno.
66. Šerkšnas. 1901. Apie sodininkystę. *Naujienos*. Nr. 6. P. 41–42.
67. *The National Fruit Collection*. 2020 [cited 12-07-2021]. Available at: <https://www.nationalfruitcollection.org.uk/index.php>
68. Tuinyla V., Lukoševičius A., Bandaravičius A. 1990. *Lietuvos pomologija. Obelys ir kriausės*. Vilnius: Mokslas. P. 52–227.
69. Ūkiškos žinios. 1935. *Žemaičių prietelius*. Nr. 34. P. 3.
70. *Vaismedžių sąrašai (Liberiškio dvaro)*. 1891. Manuscript Department of Vilnius University Library, F8-559.
71. Vasiliauskas E. 2017. *Joniškio krašto dvarai: Didžioji ir Mažoji Daunoravos, Bertaučiai, Satkūnai*. Klaipėda: Klaipėdos universiteto leidykla. P. 140.
72. Zaleski B., Girdwojny A. 1879. Wystawa w Szawłach. *Ogrodnik Polski*. Nr. 7. P. 145–150.

Rimvydas Laužikas

## NAMINĖS OBELS VEISLĖS LIETUVOJE 1820–1914 METAIS

*S a n t r a u k a*

Anksčiausios užuominos apie sodus Lietuvoje mus pasiekė dar iš viduramžių, tačiau vaismedžių veislių sąrašai buvo sudaryti tik XIX amžiuje. Tyrimo metu buvo susisteminta informacija apie 1820–1914 m. Lietuvoje augintų obelų veisles. Panaudoti 22 rašytiniai šaltiniai. Analizuojant duomenis tai-kytas kritinis lyginamasis istorinio tyrimo metodas.

Sudarytas 165 identifikuotų naminės obels (*Malus domestica* Borkh.) veislių, rekomenduotų auginti ir / ar augintą Lietuvoje, sąrašas. Nustatytos tendencijos: (i) dauguma obels veislių dėl gamtinių priežasčių nepasiteisino Lietuvos klimato sąlygomis; (ii) veislių pasirinkimas sodams grindžiamas ne tik gamtiniais ar ekonominiais, bet ir kultūriniais motyvais (vaismedžiai – asmens, sodo, dvaro reprezentavimo priemonė, sekant laikmečio madą); (iii) vaismedžių sodų įveisimas koreliavo su bendra parkų įrengimo tendencija (poslinkis nuo sodo kaip egzotikos rinkinio link sodo kaip vietas kultūros atradimo erdvės); (iv) XIX a. pabaigoje stebimas veislių pavadinimų vienodėjimas, rodantis profesionalios Lietuvos pomologijos formavimąsi; (v) ryškus sąrašų autoriškumas (rašantys pomologijos tema deklaravo ir savo subjektyvų požiūrij); (vi) stebimas sodininkystės demokratėjimas (XIX a. II pusėje sodai vis dažniau įveisiami ne tik dvaruose, miestuose, bet ir valstiečių sodybose).

**Raktažodžiai:** sodai, istorinės obelų veislės, J. Strumila, A. Hrebnickis, V. Montvila