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Lars Johan Laurentius Johannes Prytz, Demonstator in Botany at Imperial Åbo Academy

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Lars Johan Prytz was the Demonstrator in Botany (1813–1820) at the Imperial Academy of Åbo, Russia (Finland today). His main duty was to instruct medical students on the subject of medicinal plants. In his own thesis *De Styrace* supervised by Professor Carl Peter Thunberg presented known species of *Styrax*. Prytz supervised 15 doctoral theses, of which eleven have botanical content and three provided important historical information of Åbo Akademi Botanical Gardens. He aimed to complete a brief Flora Fennica, but it was never finished. In six published parts 277 species in 123 genera are characterized. Later one unpublished manuscript was edited by Hj. Hjelt. Consequently, the total number of species presented is 314 in 136 genera. Monocotyledons and ferns were not included. All in all, Prytz announced ca. 15 new plants to Finland.

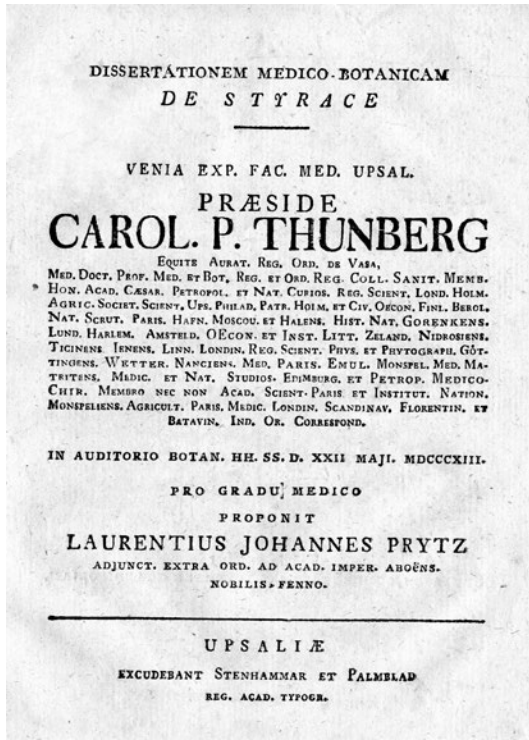
Introduction

Lars Johan (Laurentius Johannes) Prytz, Ph.D., was born in Tarvasjoki, on 9 April 1789. His parents were Captain Anders Johan Pryss (after ennoblement Prytz) and Hedvig Maria von Mell. In 1814 Prytz married Anna Karolina af Tengström, daughter of Jacob Tengström, Archbishop of Finland. Prytz died in typhoid in Åbo on the 23 June 1823.

On 27 April 1805 Prytz graduated from Åbo secondary school. He studied natural sciences and medicine 1805–1810 at the Åbo Akademi [for historical names of the Academy, see footnote in Väre (2014), this volume], with history, botany, zoology and medicine as his major subjects. He specialised first in history under the supervision Johannes Henricus Avellan (1773–1832), Assistant of Natural rights and History in 1809, Professor of History 1812–1827 and defended his Pro Exercitio -thesis ”Tracking the rules of the laws of ancient Swedes” on 13 May 1809 (Avellan & Prytz 1809). On 27 June 1810 he defended his Pro Gradu -thesis ”On Chinese white copper” (Gadolin & Prytz 1810) under the supervision of Johan Gadolin (1760–1852), Professor of Chemistry 1797–1822. This subject consisted of three theses, Prytz defended the second one. He obtained his Phil. Cand. degree on 25 May 1810, Phil. Mag. degree on 25 May 1810, and his right to act as Docent in natural history on 8 May 1811, after having had supervised three theses on the black-headed gull (*Larus ridibundus*). Those theses were defended by Laurentius Adolphus Prytz (1792–1863), Fredericus Adolphus Holm (1789–1855) and David Immanuel Kriander (1791–1822) (Prytz & Prytz 1811, Prytz & Holm 1811, Prytz & Kriander 1811). Prytz is considered to have been a talented bird researcher (Lehikoinen et al. 2004).

At Uppsala

Prytz continued his studies at Uppsala, Sweden and graduated from Uppsala secondary school on 22 October 1811. He studied natural sciences and medicine at Uppsala University 1810–1813. Prytz defended to Professor of Medicine Carl Peter Thunberg (1743–1828) doctoral thesis *De Styrace* (Fig. 1) (Thunberg & Prytz 1813). Genus *Styrax* was early known to include powerful medicinal species, e.g. *S. officinalis* by Dioscorides in the first century. In this thesis characters are given to six species of *Styrax*, and *S. occidentalis* Sw. ex Thunb. is described as new to science. However, that name is nomen superfluous, as *Styrax glabrum* Swartz is given as a synonym. That name pre-date *S. glabrum* Cav. (Stafleu 2014). Nicolson & Steyskal (1976) discussed the gender of the generic name *Styrax* and recommended masculine one, viz. *S. glaber*. Five other species were *S. officinalis* L., *S. grandifolius* Aiton, *S. benzoin* Dryand., *S. laevigatus* Willd.[Aiton] and *S. pulverulentus* Michx. Species were distributed in North America, Sumatra, West Indies and in Near East. Prytz obtained his B.M. and Lic. Med. degrees in 1813 at Uppsala and was promoted Doctor in Medicine on 22 May 1813.



DISSERTATIONEM MEDICO-BOTANICAM
DE STYRACE

VENIA EXP. FAC. MED. UPSAL.
PRÆSIDE
CAROL. P. THUNBERG
EQUITE AURAT. REG. ORD. DE VASA,
MED. DOCT. PROF. MED. ET BOT. REG. ET ORD. REG. COLL. SANIT. MEMB.
HON. ACAD. CÆSAR. PETROPOL. ET NAT. CURIOS. REG. SCIENT. LOND. HOLM.
AGRIC. SOCIET. SCIENT. UPS. PHILAD. PATR. HOLM. ET CIV. OECON. FINL. BEROL.
NAT. SCRUT. PARIS. HAFN. MOSCOU. ET HALENS. HIST. NAT. GORENKENS.
LUND. HARLEM. AMSTELD. OECON. ET INST. LITT. ZELAND. NIDROSIENS.
TICINENS. IENENS. LINN. LONDIN. REG. SCIENT. PHYS. ET PHYTOGRAPH. GÖTTINGENS. WETTER. NANCIENS. MED. PARIS. EMUL. MONSPEL. MED. MATRITENS. MEDIC. ET NAT. STUDIOS. EDIMBURG. ET PETROP. MEDICO-CHIR. MEMBRO NEC NON ACAD. SCIENT. PARIS ET INSTITUT. NATION. MONSPELIENS. AGRICULT. PARIS. MEDIC. LONDIN. SCANDINAV. FLORENTIN. ET BATAVIN. IND. OR. CORRESPOND.

IN AUDITORIO BOTAN. HH. SS. D. XXII MAJI. MDCCCXIII.

PRO GRADU MEDICO
PROPONIT
LAURENTIUS JOHANNES PRYTZ
ADJUNCT. EXTRA ORD. AD ACAD. IMPER. ABOËNS.
NOBILIS FENNO.

UPSALIÆ
EXCUDEBANT STENHAMMAR ET PALMBLAD
REG. ACAD. TYPOGR.

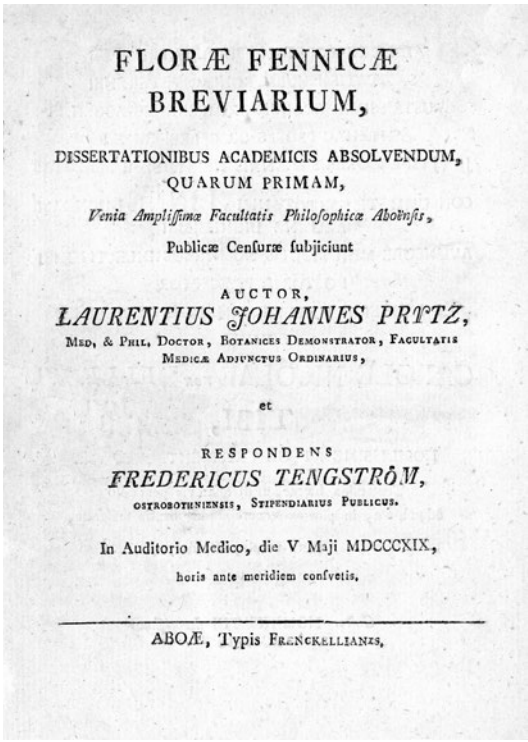
Fig. 1. Title page of *De Styrace*, a thesis defended by L. J. Prytz.

Career

Extraordinary Assistant at Åbo Akademi in faculty of philosophy in 1813, Demonstrator in Botany at Åbo Akademi 1813–20, Assistant in Medicine 1818–20, secretary in Collegium Medicum 1814–18. District physician of Saarijärvi 1821–23. To be qualified for position of Prosector (a special task of preparing a dissection) in 1816, he supervised a thesis ”On Siamese twins” (Prytz & Tengström 1816). Although his father-in-law archbishop Jacob Tengström was a most influential nepotist (C. von Bonsdorff 1912:476), Prytz was not chosen.

Carl Reinhold Sahlberg (1779–1860) obtained Professor of Economy and Natural History in 1818. Prytz had persued that professorship by supervising two thesis ”On the classification of plants habitats, a chemico-physiological trial”. In these ca. 290 species were categorised as favoring wet, shady, damp or dry sites (Prytz & Fellman 1817). It was the first attempt to classify habitats of plants in Finland (Väre 2001). The first part was defended by forthcoming vicar Jcob Fellman (1793–1875), the second part by forthcoming treasurer Karl Aanton Sanmark (1800–1875). This latter thesis emphasised the importance nutrient content in soil to plants, as a regulating factor influencing species composition. Based on field studies and literature 83 species were successful on sand and 34 on clay. Number of plants favoring lime was 52, somewhat acidic humus 49 and rich soil 39. A total of 37 species were interpreted to be non-native to Finland. Based on literature the thesis explains the importance of potassium and different forms of nitrogen. In total 530 plant species are mentioned (Prytz & Sanmark 1817). *Bromus tectorum, Cassiope hypnoides, Echium vulgare, Jasione montana, Lithospermum officinale, Polygala amara, Silene noctiflora* and *Trifolium fragiferum* are reported here for the first time concerning Finnish flora.

As Prytz failed to get those Academy positions, he left academic career behind, and donat-



FLORÆ FENNICÆ
BREVIARIUM,

DISSERTATIONIBUS ACADEMICIS ABSOLVENDUM,
QUARUM PRIMAM,
Venia Amplissimæ Facultatis Philosophicæ Aboënsis,
Publicæ Censuræ subjiciunt

AUCTOR,
LAURENTIUS JOHANNES PRYTZ,
Med. & Phil. Doctor, Botanices Demonstrator, Facultatis Medicæ Adjunctus Ordinarius,

et

RESPONDENS
FREDERICUS TENGSTRÖM,
ostrobothniensis, Stipendiarius Publicus.

In Auditorio Medico, die V Maji MDCCCXIX,
horis ante meridiem consvetis.

ABOÆ, Typis Frenckellianis.

Fig. 2. Title page of *Breviarum*, a thesis defended by F. Tengström.

ed his collection to Åbo Akademi in 1820. He moved to small parish of Saarijärvi in central Finland. Few years later he died (Johansson 1928).

All in all Prytz supervised 15 doctoral theses, of which eleven have botanical content.

Florae Fennicae Breviarium

Most obviously Prytz wrote these above mentioned theses (Prytz & Fellman 1817, Prytz & Sanmark 1817) as an introduction to a short compilation of the *Flora Fennica* (Fig. 2). It was published in the form of theses, of which six parts appeared (Prytz & Tengström 1819, Prytz & Ringbom 1819, Prytz & Hartwall 1821, Prytz & Wegelius 1821, Prytz & Nordgren 1821, Prytz & Eneberg 1821). These theses were based on lectures Prytz kept at Åbo Akademi, and defended by forthcoming mining engineer Fredrik Tengström (Prytz & Tengström (1799–1871), Åbo district physician, Collegium Assessor Karl Henrik Ringbom (1798–1856), mining engineer Victor Erik Hartwall (1800–1857), vicar of Pirkkala Gustaf Adolf Wegelius (1800–1837), vicar of Vorms in Esthonia Vilhelm Alexander Nordgren (1799–1858) and vicar of Kokemäki Isak Reinhold Eneberg (1802–1863). One manuscript was left behind, which was published later (Hj. Hjelt 1869).

In Prytz's *Flora Fennica* 277 species in 123 genera are characterised. Habitats are given also. He was the first in Finland who used natural classification of plants developed by De Candolle. Previous arrangements were based on Linnaeus. Including Hj. Hjelt (1869), the total number of species presented is 314 in 136 genera. Monocotyledons and ferns were not included.

To prepare his *Flora Fennica* Prytz made a long exploration in 1819 to Lapland which extended from Torniojoki river valley to Nordcap in Norway. He was accompanied by physician Fredrik Gabriel Sanmark (1798–1886) and regional physician Jakob Fredrik Blank (1808–1860) (Fr. Elfving 1928, Lappalainen 1959). This was the first excursion into Lapland by Finnish scientists. The travelogue was published in magazine *Mnemosyme*. The title indicates that continuation would follow, but it never did. Many interesting species are mentioned, *Limodorum boreale* = *Calypso bulbosa* at Aavasaksa, Ylitornio. That locality was the second known in Finland. The well-known site at Keminmaa had become threatened due to extensive collecting by vicar by Keminmaa, Matias Castrén (1764–1845). *Astragalus alpinus, Cerastium alpinum, Ranunculus lapponicus* and *Trollius europaeus* were discovered at Muonio. According to travelogue, 20 261 specimens, mainly plants and insects, were collected. *Carex* and *Salix* were problematic to identify, so the famous botanist Göran Wahlenberg (1780–1851) at Uppsala, author of *Flora Lapponica*, was asked for help (Fr. Elfving 1928).

Sistens Hortum Academiae

Prytz supervised three last part of a series of theses entitled *Sistens hortum Academiae Aboensis* ("Academy Botanical Gardens") (see Väre 2014, this volume). The sixth part (Prytz & Bonsdorff 1814) was defended (Fig. 3) by forthcoming Professor of Chemistry Pehr Adolf Bonsdorff (1791–

1839). The history of Åbo Academy and its Botanical Gardens are introduced. Professor of Practical Philosophy and History Johannes Bilmark (1728–1801) had donated 600 silver thaler to support the activity in the Gardens. In 1809 Finland became a part of Russia. Under the leaderships of Åbo Akademi Chancellor, Secretary of State Mikhail Mikhailovich Speransky (1772–1839) the Academy received a new statute. He and his follower Gustaf Mauritz Armfelt (1757–1814) as Chancellor in 1812, strongly influenced that the position of Academy was improved and operating budget was increased. Åbo Akademi received new posts already in 1811, and C. R. Sahlberg was appointed in 1813 Inspector of Museum and Natural history. That same year he visited St. Petersburg as Speransky had recommended. The purpose was to obtain new plant material to Botanical Gardens (Prytz & Bonsdorff 1814). Sahlberg had intended to visit St. Petersburg and Moscow already in 1812, but due to Napoleon's invasions of Russia it became impossible to implement (Saalas 1956).

Sahlberg's request on getting seedlings and seeds to Åbo Akademi Botanical Gardens were supported by the by counts Alexei Razumovski (1748–1822) and Grigory Orlov (1777–1826). Razumovski patroned Gorenki Garden near Moscow and Orlov was the owner of a remarkable garden at Elagin Island in the river Neva at St. Petersburg. Friedrich Ernst Ludwig von Fischer (1782–1854) worked on that time at Moscow, being director of Gorenki Garden. He had sent wanted material to Åbo Akademi, to Professor in Economic and Natural History Carl Niclas Hellenius (1745–1820). In catalogue of Gorenki plant collections is listed 7500 items (Fischer 1812, Prytz & Bonsdorff 1814). Very likely that catalogue was used to point out wanted taxa. Fischer was later the director of the St Petersburg botanical garden 1823–1850.

Seeds of rare plants were also sent from Sweden, by C. P. Thunberg at Uppsala, from Bergius Botanic Gardens at Stockholm by Olof Swartz (1760–1818), by Justice Counsellor Johan Peter Billberg (1776–1850) at Stockholm and from Lund by Demonstrator in Botany Johan Wilhelm Zetterstedt (1785–1874). Plant material was also sent by Ludwig Heinrich von Nicolayn (1737–1820), owner of Mon Repos, a famous English landscape park in Vyborg, Russia. Member of the Governing Council, Professor in Medicine at Åbo Akademi, Gabriel Erik von Haartman (1757–1815) became acquainted with Christian Steven (1781–1863) in St. Petersburg in 1812. Steven was a sericulture inspector at Simferopol on the Crimean peninsula. He was a well-known botanist, alumnus and muse of Åbo Akademi. Steven sent seeds from southern Russia to its Botanical Gardens (Prytz & Bonsdorff 1814). In 1812 Steven was appointed Director of Nikita Garden on the Crimean peninsula, and possibly plant material was sent from there also. These relationships ensured that there was a lot of new plant material to be cultivated at Åbo Akademi Botanical Gardens. These new items are listed in *Sistens* (Prytz & Bonsdorff 1814, Prytz & Baeck 1814, Prytz & Hjertman 1814).

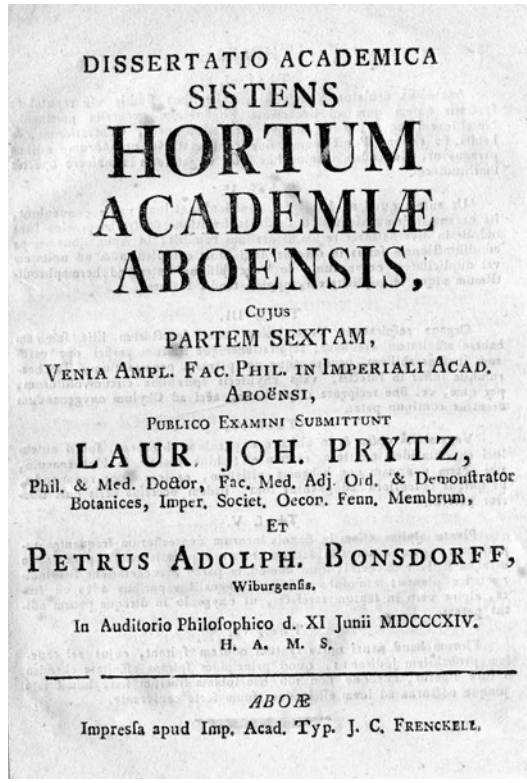
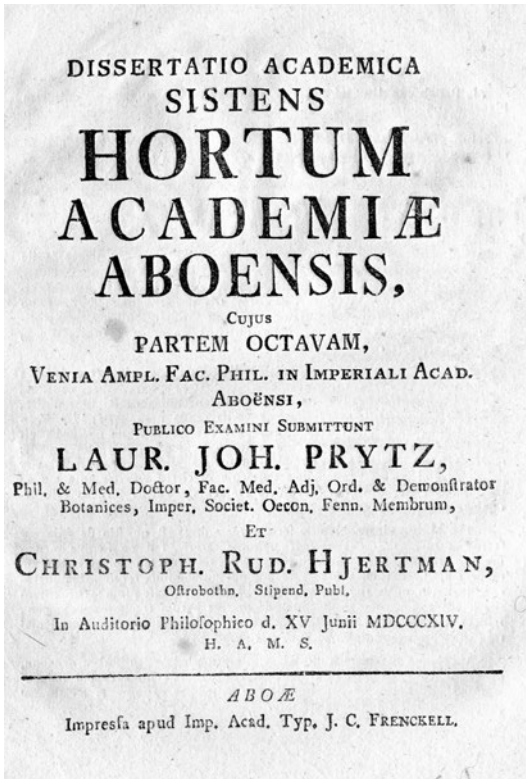

DISSERTATIO ACADEMICA
SISTENS
HORTUM
ACADEMIÆ
ABOENSIS,
CUJUS
PARTEM SEXTAM,
VENIA AMPL. FAC. PHIL. IN IMPERIALI ACAD.
ABOËNSI,
PUBLICO EXAMINI SUBMITTUNT
LAUR. JOH. PRYTZ,
Phil. & Med. Doctor, Fac. Med. Adj. Ord. & Demonstrator
Botanices, Imper. Societ. Oecon. Fenn. Membrum,
ET
PETRUS ADOLPH. BONSDORFF,
Wiburgenſis.
In Auditorio Philoſophico d. XI Junii MDCCCXIV.
H. A. M. S.
ABOÆ
Impreſſa apud Imp. Acad. Typ. J. C. FRENCKELL.

Fig. 3. Title page of *Sistens hortum Academiae Aboensis*, a thesis defended by P. A. Bonsdorff.

First 50 seedlings are listed in the sixth thesis after presenting the historical background of origin (Prytz & Bonsdorff 1814). In the seventh are



DISSERTATIO ACADEMICA
SISTENS
HORTUM
ACADEMIÆ
ABOENSIS,
Cujus
PARTEM OCTAVAM,
VENIA AMPL. FAC. PHIL. IN IMPERIALI ACAD.
ABOËNSI,
PUBLICO EXAMINI SUBMITTUNT
LAUR. JOH. PRYTZ,
Phil. & Med. Doctor, Fac. Med. Adj. Ord. & Demonſtrator
Botanices, Imper. Societ. Oecon. Fenn. Membrum,
ET
CHRISTOPH. RUD. HJERTMAN,
Oſtrobothn. Stipend. Publ.
In Auditorio Philoſophico d. XV Junii MDCCCXIV.
H. A. M. S.
ABOÆ
Impreſſa apud Imp. Acad. Typ. J. C. FRENCKELL.

Fig. 4. Title page of *Sistens hortum Academiae Aboensis*, a thesis defended by C. R. Hjertman.

mentioned 190 seedlings and 683 seed lots (Prytz & Baeck 1814), and in the eighth 725 seed lots (Prytz & Hjertman 1814). All in all, Åbo Akademi Botanical Gardens received 1 500 seed lots, 240 rhizomes, seedlings or cuttings. The two last theses (Fig. 4) were defended by forthcoming military doctor Matthias Baeck (1792–1829) and the forthcoming Court of Appeals Justice Kristoffer Rudolf Hjertman (1794–1858).

Discussion

Prytz's impact on botany was ultimately quite limited. The most important work was the attempt to compile *Flora Fennica* arranged based on the system of De Candolle. The work is sometimes considered unreliable but in fact many of the errors were from previous literature. The first two parts of *Breviarium* include the detailed lists of the earlier literature that present the distribution of many plants in Finland. However, in theses presenting species, he does not refer to that literature. At that time, Professor on Economy and Natural History did not have any corresponding efforts. All in all, Prytz announced ca. 15 new plants to Finland.

References

Avellan, J. H. & Prytz, L. J. 1809: Sistens primordia juris comitorium priscis Sveciae incolis proprii I. – [3] + 18 s. Frenckellianis, Aboae.

von Bonsdorff, C. 1912: Åbo akademi och dess män 1808–1828. — Bidrag till Kännedom af Finlands Natur och Folk 69: 1–701.

Elfving, Fr. 1928: Luonnonhistoria. — Teoksessa Helsingin yliopiston alkuajoilta: 254–275. Werner Söderström Osakeyhtiön Kirjapainossa. Porvoo.

Fischer, F. 1812: Catalogue du Jardin des Plantes de son Excellence Monsieur Comte Alexis du Razoumoffsky à Gorenki. — 8 + 76 p. N.S. Vsevolojsky, Moscou.

Gadolin, J. & Prytz, L. J. 1810: De cupro albo sinensi. — [2] + 36–64 s. Frenckellianis, Aboae.

Johnsson, G. 1928: Suomen piirilääkärit 1749–1927. — Suomen Sukututkimusseuran Julkaisuja 6: 1–188.

Lappalainen, P. 1959: Aukusti Juhana Mela. Uranaukaisijan elämä. — 464 p. Vanamon kirjoja N:o 35. Vammalan Kirjapaino Oy. Vammala.

Lehikoinen, E., Lemmetyinen, Vuorisalo, R. & Sari Kivistö, S. 2009: Suomen lintutieteen synty. Turun Akatemian aika. — 407 p. Faros-kustannus Oy, Turku.

Nicolson, D. H. & Steyskal, G. C. 1976: The masculine gender of the generic name Styrax Linnaeus (Styracaceae). — Taxon 25: 581–587.

Prytz, L. J. 1821: Anteckningar under en resa till Nord-Cap, genom Torneå Lappmark och Vestra Finmarken, år 1819. — Mnemosyne 3: 130–159, 178–191.

Prytz, L. J. & Baeck, M. 1814: Sistens hortum Academiae Aboensis VII. — [2] + 98–111. J. C. Frenckell, Aboae.

Prytz, L. J. & Bonsdorff, P. A. 1814: Sistens hortum Academiae Aboensis VI. — [2] + 82–97. J. C. Frenckell, Aboae.

Prytz, L. J. & Eneberg, I. R 1821: Florae Fennicae Breviarium VI. — [2] + 77–92. Frenckellianis, Aboae.

Prytz, L. J. & Fellman, J. 1817: De solo ex plantis eidem insitis dignoscendo, periculum chemico-oeconomicum I. — [2] + 1–20. Frenckellianis, Aboae.

Prytz, L. J. & Hartwall, V. E. 1821: Florae Fennicae Breviarium III. — [2] + 29–44. Frenckellianis, Aboae.

Prytz, L. J. & Hjertman, C. R. 1814: Sistens hortum Academiae Aboensis VIII. — [2] + 112–125. J. C. Frenckell, Aboae.

Prytz, L. J. & Holm, F. A. 1811: De Laro ridibundo periculum ornithologicum II. — [2] + 17–32. Frenckellianis, Aboae.

Prytz, L. J. & Kriander, D. I. 1811: De Laro ridibundo periculum ornithologicum III. — [2] + 33–50. Frenckellianis, Aboae.

Prytz, L. J. & Nordgren, W. A. 1821: Florae Fennicae Breviarium V. — [2] + 61–76. Frenckellianis, Aboae.

Prytz, L. J. & Prytz, L. A. 1811: De Laro ridibundo periculum ornithologicum I. — [2] + 1–16. Frenckellianis, Aboae.

Prytz, L. J. & Ringbom, C. H. 1819: Florae Fennicae Breviarium II. — [2] + 17–28. Frenckellianis, Aboae.

Prytz, L. J. & Sanmark, C. A. 1817: De solo ex plantis eidem insitis dignoscendo, periculum chemico-oeconomicum II. — [2] + 21 – 36. Frenckellianis, Aboae.

Prytz, L. J. & Tengström, C. 1816: De monstro humano bicipite et bicorpore, truncis ad anteriora coalitis artubusque dupplicatis. — [2] + 22 s. Frenckellianis, Aboae.

Prytz, L. J. & Tengström, F. 1819: Florae Fennicae Breviarium I. — [2] + 1–16. Frenckellianis, Aboae.

Prytz, L. J. & Wegelius, G. A. 1821: Florae Fennicae Breviarium IV. — [2] + 45–60. Frenckellianis, Aboae.

Saalas, U. 1956: Carl Reinhold Sahlberg. Luonnontutkija, yliopisto- ja maataloumies 1779–1860. — Historiallisia Tutkimuksia 47: 1–478 + 20 s.

Stafleu, F. A. (ed.) 2014: Taxonomic Literature II (TL-2). — http://www.sil.si.edu/digitalcollections/tl-2/index.cfm, 10.11.2014

Thunberg, C. P. & Prytz, L. J. 1813: De Styrace. — [1] + 14 s. Stenhammae et Palmblad. Upsaliae.

Väre, H. 2011: Jacob Fellman – the botanising priest. — Memoranda Societatis pro Fauna et Flora Fennica 87: 1–20.

Väre, H. 2014: Johan Fredrik Wallenius – Demonstrator in Botany at old Åbo Akademi. — Memoranda Societatis pro Fauna et Flora Fennica 90: 17–24.