# Johan Linder (Lindestolpe) (1676–1724), Eponym of the Generic Name *Lindera* Thunberg (Plantae: Lauraceae)

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#### ABSTRACT

Johan Linder (1676–1724), Swedish botanist and physician, is the eponym of the plant generic name *Lindera* (Lauraceae), dedicated to him in 1783 by Carl Peter Thunberg. The present account of Linder includes biographical data, comments on his position in the development of Swedish floristic botany, and discussion of his best-known botanical work, *Flora Wiksbergensis* (1716), the fourth printed account of Swedish local flora.

## INTRODUCTION

The genus *Lindera* was described by the Swedish botanist Karl Peter Thunberg (Thunberg 1783) for a species of far eastern Asia. In the original place of publication, the source of the name is not explained, but later, in his *Flora japonica*, Thunberg (1784) dedicated the genus to "Dn. Linder," a Swedish botanist and physician who preceded him, as follows:

*"Nomen* dedi huic in memoriam Dn. Linder, postea Lindestolpe, Medic. et Botanic. suo tempore celebris in Svecia, et Florae Wiksbergensis Auctoris."

["Name dedicated to the memory of Dn. [Johan] Linder, later Lindestolpe, doctor and botanist, celebrated in his time in Sweden and author of Flora Wiksbergensis."]

We cannot say why Thunberg chose to memorialize a Swede in the name of a genus then known only from eastern Asia. No connection between Linder and that part of the world has come to our notice. We suggest that because other genera had been named for Thunberg's European predecessors—a select group among whom eponymized non-Swedish botanists outnumbered the Swedes—he simply chose to add another of his countrymen to the list.

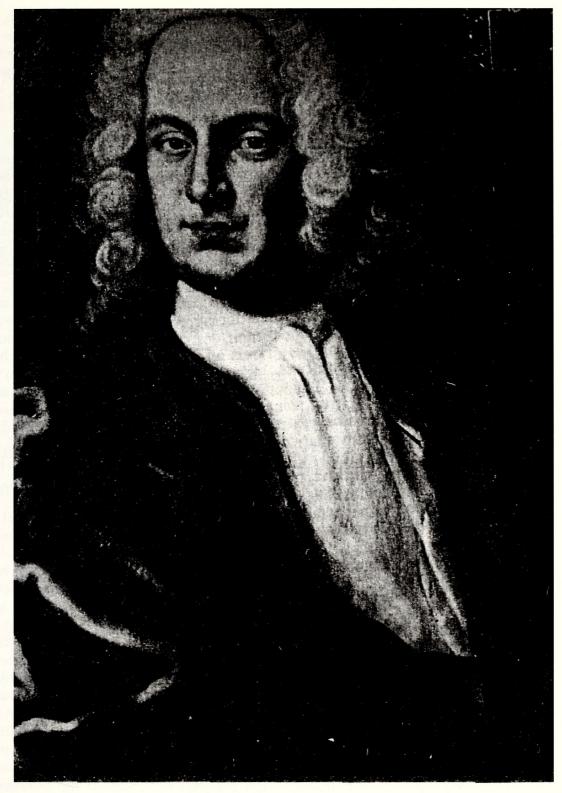
Lindera now encompasses ca. 100 species, three of which are North American, the rest eastern Asian. The most common North America species, spicebush (*Lindera benzoin*), is an easily recognized shrub or small tree found in forests over much of eastern United States.

We became interested in Johan Linder after one of our students elected to do a paper on spicebush and asked us about the dedicatee. Knowing little about Linder (Figure 1), we decided to learn more; this paper is the result. Our initial searching for information on Linder—we used the term "linder"—yielded almost nothing, but later, when we used the term "lindestolpe," his post-enoblement name, we found more data.

## LINDER'S LIFE

The biographical data in some accounts of Linder are at best skeletal and sometimes contradictory (e.g., Quattrochi 2000; Sprengel 1808; Winckler 1854; Wittstein 1856). Sachs's (1906) History of botany (1530-1860) does not mention him. And, most surprising of all, Linder is not even represented in Fries's (1950) A short history of botany in Sweden. In contrast, other such works are excellent sources of data on him (e.g., Clemedson 1972; Eriksson 1969; Fries 1909; Wikland 1980-1981). The English-language accounts of Linder we have seen are terse in the extreme, citing birth/death dates and sometimes mentioning Flora Wiksbergensis. The biographical account of Linder below is based mostly upon Clemedson (1972).

Johan Linder was born in Karlstad, Sweden, in 1676. His father, Johan Lind, was a coast guard officer. Linder began his schooling in his hometown, continuing his education first in Åbo (present-day Finnish city of Turku, which in Linder's time was part of Sweden) where he took his diploma in 1700. Thereafter, he pursued his undergraduate studies in Uppsala, Sweden, until 1703. In Åbo, inspired by Professor Johan Gottschalk Wallerius, he developed an interest in medical research. On 17 May 1702 Linder defended his thesis, *De* 



Johan Linder Oljemålning av J. H. Scheffel Tillhör Socialstyrelsens porträttsamling

Figure 1. Johan Linder (1676–1724). Portrait by J. H. Scheffel in the collection of the Swedish National Board of Health and Welfare (Socialstyrelsen), Stockholm. Reproduced from Clemedson (1972).

pomis hesperidum ("On the Apple of the Hesperides"), with Professor T. Rudeens as the presiding thesis chairman. While in Uppsala, Linder held a royal scholarship from the crown and worked under the guidance of Olof Rudbeck the Younger. He was also active in the University Council during this time. In 1705, he defended a thesis, De foeda lue venerea dicta, with Professor Lars Robergs as the presiding thesis chairman. It was not until 1713 that this thesis was translated into Linder's native Swedish under the title of Tankar om then smittosamma sjukdom franzoser ("Thoughts about the very infectious French disease [syphilis]"). This was the first detailed account of this venereal disease in Swedish history. In 1706 Linder received a stipend from the royal family to study abroad for his doctor of medicine; this level of education was not yet available in Sweden. For these studies, he traveled to the little town of Harderwijk, Netherlands, where there was a university with medical school faculty. The university itself was in existence from 1648 to 1811, and the medical faculty was supported between 1700 and 1735. In addition to Linder, twentysome Swedes completed their medical studies at Harderwijk then. Among these were Carl Linnaeus's teacher in Växjö, Johan Stensson Rothman (in 1713); Nils Rosén (in 1730), later ennobled to Rosenstein and professor and colleague of Linnaeus in Uppsala; and even Carl Linnaeus himself (in 1735), later ennobled to von Linné. Linder received his medical degree in 1706 and continued with additional studies over the next year in Leyden (Leiden), Netherlands.

In 1708, Linder returned to Sweden where he held several medical appointments including service to the Royal Navy in the Gulf of Finland and as a doctor at Viksberg, a health spa. Eventually, he opened his own practice in Stockholm. In 1719, he was appointed as a member of the Medical College, and in that same year was ennobled with the name of Lindestolpe.

Linder was first married to Anna Öhrner and later, in 1720, to Eva Christina Cronhielm. He died on 24 Mar 1724 in Stockholm. His death ended his family line. (Some sources give 1723 as the date of his death. We follow the several Swedish accounts that give 1724.) The historian Johan Fredrick Sacklén, in his 1822 biographical work *Sveriges läkare-historia* ("Sweden's History of Medical Doctors"), described Johan Linder as highly respected, good at Latin and at Swedish prose, and a learned and skilled doctor (Clemedson 1972).

## FLORA WIKSBERGENSIS

Viksberg is located in Salem Municipality in Stockholm County, Sweden, about 30 km southwest of Stockholm. In the early 18th century, it was the estate of one Anders Ehrenfelt, who was the commissioner/superintendent of the Riksens Ständers Banco. It had a desirably located and popular health spa/spring. The grounds boasted a beautiful meadow bordered by many large oak trees on one side and by the "Korperberget," a large hill, with rock outcrops, on the other side. A mixed woodland was located at the base of the Korperberget; close by was a large lake, Mälaren, from which a cove extended into the estate. Long considered of botanical interest, the Salem area has been the site of various botanical field trips, such as those by the Svenska Botaniska Föreningen (Clemedson 1972; Froman 1931; Halden 1950; Segerström 1918; Wikland 1980-1981).

Linder's Flora Wiksbergensis, first published in 1716 (second edition 1728), was the fourth printed account of Swedish local flora, each simply a listing of plants. It was preceded by Schroderus's list in Enkomion Uplandiae, published in 1633; Tillands's catalog of the Åbo flora, 1673; and Bromelius's catalog of the Gothenberg flora, 1694. In addition to Linder, two others of these four authors were later memorialized in generic names of plants: Tillandsia Linnaeus and Bromelia Linnaeus.

The full title of *Flora Wiksbergensis* as given on the title page of the work (Figure 2) is *Flora Wiksbergensis*, eller Ett Register uppä the Träd / Buskar / Örter och Gräs / som innom en fierdings wäg kring Suurbrunnen Wiksberg, antingen på åkrar sås / eller Wildt wäxa / med theras brukeligaste namn på Latin och på Swensko. We translate this as follows: "Flora Wiksbergensis, or a registry of the trees, shrubs, herbs, and grasses within walking distance of the Viksberg health spa/spring, in field or ridge or wild growth, with their names in Latin and in Swedish."

The flora (Figures 2, 3), an octavo book of



Stt Register uppå the Bråd/ Dustar / Örter och Grås/ som in= nom en sierdings wäg kring Suurbrunnen Wiksberg, antingen på Ukrar sås/ eller Bildt wera / med theras brukeli= gaste namn på Latin och på Swensto.



STOCZGOLMI Ernett hoos Gal. J.G. MATTHIÆ, Rongl. Ant. Archivi Boftryctarens Encfia/ 21f Joh. L.S. Horn, Fact. 21hr 1716,

Figure 2. Title page of Johan Linder's *Flora Wiksberg*ensis (1716). Reproduced from Clemedson (1972).

iv + 42 pages, is a rare item; a copy of the 1716 edition was recently offered—and apparently sold—on the internet (Löwendahl Rare Books, London) for  $\pounds 500$  (=\$902.25 as of 15 Oct 2004).

Flora Wiksbergensis appeared in a 'new' version in 1972 (Clemedson 1972). In that work only two pages of the 1716 edition are given in facsimile: the title page and the first page of the plant list. The complete list of 545 species is in modernized/annotated format, with the entries in the order that Linder gave them. Each entry has the scientific and Swed-ish names as used by Linder. To most entries, the modern editor has added the currently accepted binomial and various pre-Linnean synonyms from Dodoens, Rivinus, Rudbeck, Scheuchzer, Tabernaemontanus, Tournefort,



A.

BIES procera, ramis a radice caudicem profequentibus, folio crassiore, cortice subrubro, Går:Graan.

- Abies procera viminalis, ramis caudicem prolequentibus, reflexis, folio tenero, cortice subrubro, Graan med långe inbögde qwistar/ Sunnbindare-Graan.
- Abies candida elatior, ramis rarioribus, folio tenui, cortice subcinereo, Myr= Graan/ Thanar-Graan.
- Abies pyramidalis, ramis ad radicem crebris, fruticescens, Granbuffe.
- Absinthium, Mahlort.

Acer : Platanus, Lonn/ Lonntrad.

- Acetofamajor, pratenfis, Stor Engies Spra.
- Acetofa minor lanceolata, Berg-Spra med hmaffe blad.
- Acetola minima, non lanceolata, Bergspra/ med smale blad.
- Aconitum bacciferum racemolium : Christophoriana, S. Christophers ort / Willdruftwa.

Adiantum aureum majus: Polytrichum ma-A jus,

Figure 3. Portion of original text (*Abies–Adiantum* [pars]) of Johan Linder's *Flora Wiksbergensis* (1716). Reproduced from Clemedson (1972).

and others. A few of the entries represent variations of a single species, e.g., 3 for Alnus glutinosa, 10 for Corylus avellana, 4 for Picea abies, 4 for Pinus sylvestris, and 2 for Tilia cordata. Among the entries are algae, fungi, lichens, mosses, liverworts, lycosphens, and seed plants. In common with other pre-Linnean floristic productions, most of the names are polynomials, but some (ca. 20%) are binomials. (Not until Linnaeus's Species plan*tarum* [1753] were binomials used consistently in a floristic work.) Some of the binomials in the flora are in use for the same species today, e.g., Aquilegia vulgaris, Hyoscyamus niger, and Sorbus aucuparia. Some are closely similar to current names, e.g., Menthastrum arvense (=Mentha arvensis). Others would be

inexplicable to current readers without further study, e.g., Myrtus palustris (=Ledum palustre) and Trifolium aquaticum (=Menyanthes trifoliata). Some of the polynomials are impressively prolix, e.g., Geranium Robertianum montanum foliis incisis flore pleno purpureo pentapetalo (=Geranium robertianum) and Melilotus Sylvestris ramosus, flore albo globoso, foliis crenatis lanuginosis (=Melilotus alba).

To see how often Flora Wiksbergensis is noted in Swedish floristic publications, we checked, in the Lloyd Library, Cincinnati, 60 such works published in the period 1755 to 1920. Linder's flora is cited in Linnaeus's Flora Svecica (1755) (under "Opera Svecica"); Nathorst (1903); and Nyman (1868), under "Svenska och andra skandinaviska botaniser e.a., hvilkas arbeten ellen upptäkter omtalas i denna bok." The work is missing from Wikstrom's comprehensive Stockholms flora (Wikstrom 1840). Nordstedt (1920) pointed out that six of Linder's plants are the first records of those species in the flora of Sweden: Athyrium alpestre, Campanula latifolia, Crepis tectorum, Lathyrus palustris, Trifolium agrarium, and Vicia angustifolia. Among the fungi, Lagerheim (1909) cited five names of fungi from Flora Wiksbergensis, suggesting modern names for but two of them: Fungus juniperinus (=Gymnosporangium) and Ustilago secalina (=Tilletia secalis, a questioned determination).

Linder's flora is cited in a few bibliographic works, e.g., Krok's *Bibliotheca botanica suecana* (1925); Linnaeus' *Bibliotheca botanica* (1736); Pritzel's *Thesaurus literaturae botanicae* (1972), and Sallander's *Bibliotheca Walleriana* (1955) but is missing from others in which one might reasonably expect it to be a part: Burdet's *Ouvrages botaniques anciens* (Burdet 1985); Hartman's *Handbok i skandinaviens flora* (Hartman 1820, 1849), both editions of which have many pages, small print, of literature citations; and Jackson's wellknown *Guide to the literature of botany* (Jackson 1881).

#### LINDER'S OTHER PUBLICATIONS

Publications by Johan Linder cover a wide range of topics. In addition to his Viksberg opus, his writings include, among other subjects, the Apple of the Hesperides; the medicinal efficacy of spring (mineral) water; the French disease (syphilis), malaria and China bark (quinine bark), scurvy, and the occurrence of the Black Plague in northern Europe in 1711; parasites in the human body; scorpions; dyeing with Swedish plants; poisons, narcotics, tobacco, and opium; and love potions and sleep and dreams. Although we have found no complete bibliography of his works, listings of many of them can be found at the websites of the Swedish National Library (Kungliga Biblioteket: Libris webbsok); at WorldCat; and at Perbos Farmacihistoriska Sidor.

#### AFTERWORD

In company with the seldom consulted or cited floristic works of other pre-Linnean writers, *Flora Wiksbergensis* and its author, Johan Linder, are of little concern today except for their place in the early development of floristics in Sweden. But Linder's surname, memorialized in the genus *Lindera*, will last into the far future.

We close this account with Áskell Löve's 1953 tribute to the Pre-Linneans (Löve 2004).

The common man's hobby often becomes the uncommon man's sole interest. For centuries, the man in the street in Sweden has been a lover and student of plant life. His children and his children's children profited by—and extended—his floristic knowledge. And so it is not surprising that, out of the ranks of the common folk of Sweden, came the earliest botanists, some of them recognized throughout the world as not only the first in time but also the first in rank. Their prominence is but the natural outgrowth of the nation's interest—a folk interest—in the field of botany.

It has often been said that Linnaeus must have been the creator of the Swedish interest in plant life, since he published the first scientific flora of his country as early as 1745. But actually this was by no means the first scientific account of the plants of Sweden. Almost a century before the birth of Linnaeus, Swedish vegetation was investigated by real botanists, still unforgotten scientists like Frankenius, Tillands, Måsson, the two Rudbecks, Palmberg, Linder, Bromelius, Celsius, and others, [who] produced manuals good enough to infect the Swedish people with an interest in plants where, even then, every garden in this long country was a bit of Paradise to its owner. Even then, two hundred and fifty years ago, the Swedish landscape in all its variations, had already become the Garden of Eden to all who needed rest from the pressure of daily work.

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