

WALLROTH'S COLLECTION OF VASCULAR PLANTS IN THE HERBARIUM OF THE NATIONAL MUSEUM, PRAGUE

BLANKA SKOČDOPOLOVÁ

National Museum, Prague, Department of Botany, CZ - 252 43 Průhonice, Czech Republic, e-mail: skocdopolova@ibot.cas.cz

JINDŘICH CHRTEK sen.

Mimoňská 639, CZ - 190 00 Praha 9, Czech Republic



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Abstract. The National Museum in Prague in the past bought a large part of the botanical inheritance of German botanist K. F. W. Wallroth (1792-1857) - about 8 000 specimens of phanerogams including Wallroth's own type material. In this present article sixty three new names of taxa are discussed including some remarks relating to the original diagnoses, descriptions of herbarium specimens and typification. Wallroth's life and the history of his phanerogamic collection, preserved in Prague, are also briefly considered.

■ Botany, Wallroth's herbarium, phanerogams, type collection, lectotypification

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Introduction

The preservation of Wallroth's collection in the herbarium of the Botany Department of the National Museum in Prague (PR) is a fact not very well-known in botanical circles. The collection includes especially the material from Central Germany, which was mainly used in the elaboration of his two main works: *Schedulae criticae* (1822) and *Erster Beitrag zur Flora Hercynica* (1840). From his herbarium collection sixty three type specimens, mostly at species level, were selected and reported on. The article may also serve as a short survey of Wallroth's life and work, including the history of his collection deposited in Prague.

The aim of the present paper is to contribute to the fund of knowledge on the museum's herbarium and to point out the value of Wallroth's materials.

Life and work of K. F. W. Wallroth

German botanist Karl Friedrich Wilhelm Wallroth was born on March 13 1792 in Breitenstein (South Harz Region), as the son of a vicar. From youth he was interested in botany. During his study at the monastery school in Rossleben (1805-1810) he investigated the flora in the vicinity of the town. In 1810 Wallroth started to study medicine under the influence of Kurt Sprengel, Chief of Medicine and Botany at the University of Halle. He finished his medical study in Göttingen in 1815. In the same year he began serving as a military surgeon in the army. Wallroth worked one year, 1816, as a practicing physician and from 1817 he was employed as a regional physician in

Heringen, later as district doctor in Nordhausen (1825-1855). He died on March 22 1857 in Nordhausen.

His renowned work "*Schedulae Criticae de Plantis Florae Halensis selectis*" appeared in 1822. This publication was intended as an addition to Sprengel's *Florae Halensis* (1806). In his interesting floristic and taxonomic work, Wallroth listed 419 species of phanerogams with more or less detailed descriptions and in addition described 292 new taxa. Further new taxa of phanerogams he described in *Erster Beitrag zur Flora Hercynica* (1840), which was possibly preprinted or reprinted from Schlechtendal's *Linnaea* in 1840 (Stafleu et Cowan 1988:45). In this paper we quote from *Linnaea* (*Linnaea* 14:1-158, 529-704, 1840), where Wallroth's text appeared with the title „Scholion zu Hampe's Prodrumus Florae Hercyniae" and the subtitle "Ein Sendschreiben an den Apotheker Herrn Ernst Hampe zu Blankenburg". Originally a mutual work on the flora of the Harz Region with a pharmacist Ernst Hampe was proposed, but Hampe already published *Prodrumus Florae Hercyniae* in 1836. This publication annoyed Wallroth, who responded with his own detailed revision of Hampe's previously mentioned work.

Wallroth's best work was said to be *Flora cryptogamica Germaniae*, in which he described *Filices*, *Lichenes* and *Musci* (1831), *Algae* and *Fungi* (1833). In his last published work *Beiträge zur Botanik* (1842-1844) eight complicated taxa of phanerogams were discussed.

Wallroth became a well-known European botanist, specialized in floristic research in the South Harz Region and he combined this work with taxonomic and nomenclatural

studies. He proposed many new names, but there were not many taxa which remain accepted nowadays.

History of Wallroth's estate

After Wallroth's death, his numerous collections were offered for sale (Anonymus 1858): herbarium of phanerogams, collections of lichens and other cryptogams, a collection of the genus *Rosa* and a collection of native woody plants. Many of the plants which were for sale originated from the T. P. Ekart collection which Wallroth bought in 1846. The cryptogams were bought by Swiss botanist J. E. Duby (1798–1885), lichens by G. L. Rabenhorst (1806–1881) from Dresden and Ekart's material was bought by another German botanist J. F. T. Irmisch (1816–1879) from Sondershausen. In the above mentioned sale details from July 1858 Wallroth's collection of phanerogams including ferns and the fern allies (*Lycopodium*, *Equisetum*) were still offered for sale. According to this reference Wallroth's material was placed in blue thick folders and packed in 157 packets (originally fascicles), with many specimens in each taxon.

A further article published in Oesterreichische Botanische Zeitschrift (Anonymus 1859) already detailed the purchase of Wallroth's phanerogams herbarium by the Museum in Prague in April 1859. But in our acquisitions catalogue of the Botany Department about 8 000 specimens from Wallroth's collection were first recorded in 1861. Obviously the new custodian, Ladislav Čelakovský, who served in the museum from 1861 till 1902, was the first to register Wallroth's collection, with some inevitable delay. The price of the herbarium was 80 thalers. According to the previously mentioned article from 1859, the heiress handed over Wallroth's manuscripts in addition to the herbarium material.

The largest part of the phanerogamic herbarium was sold partly to Prague and partly to St. Petersburg (LE). According to information from J. Štěpánek, Wallroth's very large collection of vascular plants preserved in LE originated from the herbarium of his contemporary, German botanist F. C. Mertens (1764–1831).

Stafleu et Cowan in Taxonomic Literature (1988) stated that more of Wallroth's material is preserved in the following European herbaria: Bruxelles, Genève – also in Herbarium de Candolle, Göttingen, Halle, Jena, Kiel, Moscow and Warsaw. The cryptogams are deposited in Strassbourg. In Berlin and Leipzig the material was mainly destroyed during the war.

One of us (B. S.) has seen Wallroth's material in the Herbarium of Martin Luther's University in Halle – Wittenberg (HAL) – e. g. original material of *Agrimonia gryposepala*, *Crepis polymorpha*, *Erythraea angustifolia*, *Halimus pedunculatus*, *Rosa marginata*, *Vicia multicaulis*, *Rumex sylvestris* and *Orobanche rubens*, and also in Haussknecht Herbarium in Jena (JE), e. g. original material of *Agrimonia procera*, *Artemisia seriphium* and *Armeria halleri*. The labels had the same characteristic features, often without locality or date, as labels in Wallroth's collection in Prague.

To the purchase of the herbarium material, Wallroth's manuscripts were added. This literary estate was placed separately in the archives of the Botany Department of the

National Museum in Prague. The main part consisted of his literature searches e. g. Koch's *Additiones Kochianae zur Flora Teutschland's* (*Synopsis florae germanicae et helveticae*) and excerpts concerning descriptions of various taxa. Also the manuscripts with descriptions of Wallroth's either published and unpublished taxa were present (Text-fig. 1). Further there is the manuscript of a monograph, dated 1822, on roses – *Symbolae de Rosis germanicis* (Text-fig. 2). The second part of this manuscript contained an incomplete text, published in 1828 as *Rosae plantarum generis historia succincta*. There is also a small number of papers dealing with lichens and fungi.

Wallroth's herbarium in Prague

In the second half of the 19th century, during the curatorship of Čelakovský, all herbarium material was gradually classified according to Endlicher's system including Wallroth's collection. His herbarium was in those days sorted into individual species (exceptionally genera) and placed in the common herbarium cover at the end of each taxon, where it has from that time always been kept in the general herbarium of PR. Simultaneously the majority of Wallroth's specimens were identified either by handwritten labels: Wallr., Wallroth, Herbar. Wallroth or with oval-shaped stamps with an embossed inscription (without ink): MUS. BOH. COLL. WALLROTH. But also a rather large number of unmarked sheets existed, which it was not difficult to recognize either by Wallroth's typical handwriting or by the special common cover placed at the back of each taxon.

Wallroth's herbarium in the National Museum in Prague contained material mostly from Thuringia, with many specimens from the environs of Halle and from Harz. A fair number of plants came from collections of other German botanists, e. g. of his contemporaries E. G. Hornung, F. T. Kützing, P. Salzmann, A. Spitzel and L. E. Schaerer from Switzerland. Some specimens originated also from abroad, because Wallroth received or exchanged them with renowned European botanists. It is still possible to find a few of his original thick bluish folders in the herbarium PR.

Wallroth's herbarium had one special peculiarity – the labels. Some of them were inaccurate and often without any localities. Date, rather the year or month of collecting was published occasionally. The labels were mostly written in Wallroth's characteristic somewhat illegible handwriting in pen, less frequently in pencil. According to the above mentioned botanist Kützing (1857), Wallroth kept the localities especially of his new and rare species secret, so that nobody could find them. Therefore the exact localities had not been always cited, neither in his work, nor on the herbarium sheets. On the labels often only abbreviations were mentioned, e. g. Thg., Thr., Thrg., Thurg., Thuring. [Thuringia] or Fl. hal., agr. Hal. [Region of Halle]. Not even his name was always indicated. But he had usually never forgotten to add m. (most labels), mihi, mei, W., Wallr. or exceptionally Wallroth behind each name of his new taxon. The original labels are also missing when there was too much material of some individual species in the original cover. Then the material has been divided or rearranged on several sheets with only one original label. The labels were exceptionally absent.

Symbotae

et

Rosis Germanicis

quibus proclufionis loco cõitis

Rosae generis monographiam

auguratur

Symbola

et
Rosae monographiam.
Pars prima
de quibus specie, Rosae fuffofitiae fensibus raris
naturalibus et finge primitivis secundis

Fredericus Gulielmus Wallroth.

Armat spina Rosae
Claud.

1822.

Historie

Rosae generis.

in qua omnes species h. tunc quæ tan in hæc ordine fuffofitiae commentis, Rosae et
fensibus raris naturalibus ad ftingentem Rosae hanc generis raris

Text-fig. 2. Title page of Wallroth's unpublished work on roses.

According to the conventions of the 19th century, Wallroth was an economical man, he used for the labels and envelopes, the overleaves of official requests and letters, connected with his post as regional physician. These pieces of letters documented that sometimes the labels were written much later than the names of new taxa were published. This is e. g. the case with *Pinguicula gypsophila*, published in 1822, but provided with a label made from a letter from 1830. The secrecy of localities was probably the reason why Wallroth wrote some of the labels later.

In the past only a few original specimens were selected and placed in the special type collection of PR, the majority of Wallroth's types remained in the general herbarium. Not until a few years ago, more than one hundred type specimens of various taxonomical levels were selected and incorporated into a separate collection of types in PR.

Wallroth's material from Thuringia and Harz Region contained rather frequently his new, but never published names, which appeared only on the labels, not to mention many, not validly published names of varieties.

In Wallroth's collection there were specimens from all over Europe and also a small number from overseas. For some of them Wallroth suggested new names, which were mentioned directly on the labels, but they were never published. Thus he named e. g. a few new species of genus *Plantago* – some of them originating from Russia (*P. taurica*), Greenland (*P. gronidda*), Italy (*P. marginata*), Cape Town Region (*P. hians*), North America (*P. longifolia*), Brazil (*P. curvirostris*), Australia (*P. polyphylla*) or from Juan Fernandes (*P. berteroi*).

Only the species *Plantago uniglumis* WALLR. ex WALP., collected by W. S. J. G. Besser, is mentioned in R. K. F. Pilger's monograph on *Plantago*: „Hochgebirge von Chile: Walpers l. c. gibt an: in uniglumis Wallr. Monogr. Plant. ined.! Besser, Pl. Chil. 105!... (Engler Das Pflanzenreich, 1937, IV. 269/102 Heft: 113)“. The specimen of *Plantago uniglumis*, mounted on the sheet PR 3952 contained one small leafy plant (1,5 cm) with two flowers. The label was very brief: „*Plantago uniglumis* m. / Chili. Besser“.

A large number of Wallroth's type specimens, including many varieties, are not presented in our article below, but they had been already selected and placed in the separate collection of types. Digitalised images of further Wallroth's taxa as e. g. *Agrimonia gryposepala*, *Agrimonia platycarpa* (two fruits only), *Agrimonia serrifolia*, *Anthemis heterophylla*, *Anthemis* × *sulphurea*, *Armeria halleri*, *Avena* × *villis* (only seeds exist, the material was sent before World War II. as a loan to German botanist Kurt Wein and it was not returned), *Cerastium gracile*, *Conopodium platantherum*, *Crepis capillaris*, *Crepis polymorpha*, *Dictamnus sessilis*, *Dictamnus suffultus*, *Erysimum divaricatum*, *Hieracium pedunculatum*, *Hieracium versicolor*, *Lapsana sylvatica*, *Lathyrus viciaeformis*, *Nasturtium tentaculatum*, *Onobrychis decumbens*, *Polygonum nervosum*, *Reseda tenuifolia*, *Rumex cristatus*, *Rumex sylvestris*, *Sonchus fallax*, *Xanthium pungens* will be presented in the near future on Internet.

In spite of the fact that a great number of Wallroth's types originating from Thuringia or the Harz Region have been deposited in the herbarium PR, there remain many type specimens which have had not been found there, e. g.

Orobanche reticulata, *Sparganium minimum* and some species of the genus *Potamogeton*.

Explanatory note

The following list of Wallroth's type specimens preserved in the herbarium of the National Museum in Prague is arranged alphabetically.

Every taxon is treated according to the following pattern:

- 1/ Name of Wallroth's taxon, the original publication with quotation – part, page and year of publication (if possible the number of table with illustration) and the number of type collection in PR herbarium. If there existed more sheets of the same species, they were designated A, B, C etc.
- 2/ Original diagnosis. From Wallroth's literary work only the most important diacritical features are mentioned, because the original text was very detailed and often it did not help to distinguish individual species.
- 3/ Locality cited from Wallroth's work. In fact, they were not always stated.
- 4/ Brief notes on the herbarium specimen. A very short description of plants on the sheets, including the presence or not of Wallroth's original envelope with remains of flowers or fruits.

The quantity of plants on the sheets often present some problems. The specimens in the herbarium cover have usually only one of Wallroth's original labels. The plants were sometimes so numerous, that it was necessary to divide them, either previously or during this study. The duplicate sheets were designated with letters (A, B, C etc.). In this case the lectotype was usually selected on the basis of the presence of an original label on the sheet. A further important factor for designation of the lectotype was the condition of plant.

- 5/ Label. The text on the labels has been transcribed between quotation marks („ „), complying as far as possible, with the original writing. If more than one label had been attached to the same sheet, each of them is numbered. The labels contained the transcription of the name of the taxon (not printed in italics according to botanical convention), the locality and the date of collection (when present) including full stop, exclamation and question marks.

From the text on the labels we suggest the place of occurrence with contemporary orthography or more detailed geographical location, added in brackets [].

Further symbols were used for a new line (/) and for untranscribed text because of illegibility (...).

Morphological features and literary data written on the labels have not been transcribed in most cases, because they were often identical with the text in the original publication.

The text was mostly written in Wallroth's own hand, when not, it is mentioned.

- 6/ Selection of type specimens has been also indicated by some specialists, who had seen Wallroth's material.
- 7/ Identification of material is based on recent taxonomic research.

Wallroth's selected type specimens preserved in herbarium PR

Aconitum bernhardianum WALLROTH

Sched. Crit.: 250-252, Tab. II, 1822. – PR 11761.

Original diagnosis: Cuculli calcare brevi spirali, labio ovato-lanceolato bifido recto, galea conica longe unguiculata antrorsum in rostrum protracta a petalis lateralibus subspathulatis obliquis retracta, petalis inferioribus lanceolatis obtusis deflexis

Locality: In nemore Loderslebensi [Lodersleben, SW of Querfurt] passim

Brief notes on the specimen: Upper part of plant (ca 32 cm) with flowers and leaves. The herbarium plant fully corresponds with the plant on the picture published in *Schedulae criticae*.

Label: „Aconitum Bernhardianum mihi / four synonyms followed / Fl. Har.“ [Harz].

The sheet PR 11761 is selected here as a lectotype. This plant corresponds to *Aconitum variegatum* L.

Note: In Wallroth's material there is one specimen obviously originating from Sprengel's collection. The text on the label: „Aconitum neomontanum Lodersleb.“ is written probably by Sprengel, who used this name for plants collected near Lodersleben (see Wallroth Sched. Crit.: 251, 1822).

Adonis anomala WALLROTH

Sched. Crit.: 273-276, 1822. – PR 11782 A, B.

Original diagnosis: Floribus tripetalis, petalis oblongis planis obtusiusculis patentibus ungue concoloribus, calycibus ovatis acutiusculis extus pilosis...

Locality: Auf dem Schachtberge inter Bottendorf et Rossleben, Freyburg [NW of Naumburg], Querfurt et similibus locis minus frequens. Extra fines inter Tilledam [Tilleda] et Borksleben [Borxleben, NW of Artern]: in arvis juxta collem Mittelberg dictum [a hill NE of Nordhausen], prope Auleben [Kyffhäuser].

Brief notes on the specimens: On the first sheet A, there are five complete plants (10–22 cm), three of them flowering and two plants with more or less ripened fruits.

Label: „Adonis anomala mihi“.

Three flowering plants are on sheet B. The original label is absent.

The specimen PR 11782 A is selected here as a lectotype.

The plants correspond to the species *Adonis flammea* JACQ.

Adonis maculata WALLROTH

Sched. Crit.: 270–273, 1822. – PR 11781 A, B.

Original diagnosis: Petalis suboctonis obovato-oblongis planis basi maculatis calycibusque glabris obtusis, carpellis quinquefariis conoideo-prismaticis stylo recto concolori rostratis supra commissuram marginato-circumscissis...

Wallroth divided this species into three varieties α . *miniata* (floribus miniato-phoeniceis), β . *ochroleuca* and γ . *pal-*

lens, but these names of infraspecific taxa are not present in the herbarium PR. For plants placed on sheets A and B, Wallroth used different, unpublished names of varieties – α . *phoenicea* and γ . *leucantha*.

Locality for varieties α , β : Inter segetes hyernas ad Rossleben, Querfurt, Lodersleben [SW of Querfurt].

Brief notes on the specimens: On the first sheet A three complete plants are mounted – the first (52 cm long), with ripened achenes, the second (63 cm) with achenes and flowers and the third one (22 cm) in full flower.

Label: „Adonis maculata / α . *phoenicea* / mihi“. Two labels with some morphological features were added. Locality is not given.

Two small simple plants (13 and 19 cm long) are on the second sheet B, one of them with a flower, the second damaged plant had a brokenoff flower.

Label: „Adonis maculata / γ . *leucantha* / fl. hal.“. The precise locality is not indicated.

It is not appropriate to select the lectotype from Wallroth's material as it was published as a new name (*nomen novum*).

All plants correspond to *Adonis aestivalis* L.

Alchemilla glaucescens WALLROTH

Linnaea 14: 134, 1840. – PR 4400.

Text-fig. 3.

Original diagnosis: Hätten Sie, wie ich in Willdenow's Sammlung die Reihenfolge der verschiedenartigsten Exemplare von *Alchemilla montana* gesehen: so würden Sie die am Harz vorkommende und von mir zuerst in meinem Annus bot. als *A. montana* beschriebene Art nimmermehr als *A. montana* Willd. n. 225 aufgestellt haben. Ueber dieselbe werde ich mich aber anderwärts erklären und bemerke nur noch, dass ich dieselbe längst als *A. glaucescens* aufbewahrt und ausgegeben habe.

Wallroth's above mentioned diagnosis as *A. montana* from Annus botanicus (1815: 26) is the following: Foliis reniformibus, novemlobis subtus caule petiolisque pilosis sericeis, floribus fastigiatis glomeratis sessilibus.

Locality was not given.

Brief notes on the specimen: Two rosettes of leaves with 2 and 6 flowering stems.

Label: „Alchemilla glaucescens m.“ / some differences followed / „Inter Leimbach et Steigenthal [E of Nordhausen] in pascuo, / den Plan dicto / Juni 46“.

In 1937, W. Rothmaler designated this specimen on the revision label as a type of *Alchemilla glaucescens* WALLROTH, identical with the species *Alchemilla hybrida* MILL. Now the species *A. glaucescens* is considered as an independent one.

The specimen PR 4400 is selected here as a neotype.

Alchemilla glaucescens var. β . *alpestris* WALLROTH

Linnaea 14: 549, 1840. – PR 4398 and PR 4399.

Original diagnosis: Caulibus adscendentibus petiolisque villosis, foliis glaucescentibus utrinque subsericeis calycibus e basi obtusa rotundatis estriatis laciniis ovatas aequantibus pedicellis lanatis.



Text.-fig. 3. Lectotype specimen of *Alchemilla glaucescens* WALLROTH.

Locality: In Laubwäldern des südöstlichen Harzes.
Brief notes on the specimens: One complete plant with two flowering stems are on the sheet PR 4398.

Two labels: 1. „*Alchemilla glaucescens* m. / var. *alpestris* / *A. montana* Willd. pr. p. / Breitenstein [NE of Nordhausen] 1812“ and 2. „*Quid vero!* Harz / in *coryletis* ad Breitenstein Hercyn / legi“.

Two complete plants with flowers and one flowering stem separately are on the sheet PR 4399.

Label: 1. „*Alchemilla montana* / In nemoribus pr. Lauterberg [Bad Lauterberg im Harz] / Majo med.“ and 2. „*Alchemilla glaucescens* m. / var. *alpestris* / Lauterberg 1826“.

The sheet PR 4398 is designated here as a lectotype.

According to Rothmaler's revision label (1937), specimens on both sheets are *Alchemilla hybrida* MILL.

Alectorolophus parviflorus WALLROTH

Sched. Crit.: 318-320, 1822. – PR 11790 A, B.

Original diagnosis: Caule immaculato, corollae tubo recto laciniis ovatis brevioribus, labio superiore obsolete bidentato, dentibus, pistillo incluso bracteisque concoloribus.

Locality: In pratis editoribus ad Lodersleben, Ziegelrode [SW of Querfurt], ad Nietleben, Doelau [Nietleben and Dölau on W outskirts of Halle-Neustadt].

Brief notes on the specimens: On sheet A there are four complete plants (25–44 cm) with fruits and flowers, further one fructiferous plant without lower parts (45 cm). The original envelope, made from a letter, containing fruits was added.

Label: „*Alect. parviflorus* / var. *speciosa* / hybrida ex utros. consortio / Koenigshütte bei Lauterb. [S periphery of Bad Lauterberg] / i. Flussbette“.

On sheet B five flowering leafy plants (23–33 cm) and one lower part of a plant (50 cm) without inflorescence were mounted. The original envelope containing fruits was added.

Label: „*Al. parviflorus*“.

The specimen PR 11790 A is selected here as a lectotype.

All specimens correspond to *Rhinanthus minor* EHRH.

Arabis brassicaeformis WALLROTH

Sched. Crit.: 359-361, 1822. – PR 2330.

Original diagnosis: Caulinis cordato-sagittatis amplexicaulibus integerrimis subtus cauleque stricto glaucescentibus, siliquis erectis obsolete quadrangulis stigmatibus brevissimo coronatis.

Locality: In aggeribus sylvaticis montosis ad Schmon [SW of Querfurt] et ad Biebram [Bad Bibra, NW of Naumburg] ad Sondershusam [Sondershausen] am Straussberge [Straussberg W of Sondershausen], supra Haynrodam [Hainrode NW of Sondershausen].

Brief notes on the specimens: Four leafy plants with fruits (23, 29, 38, and 40 cm), one lower part of a stem without any flower or fruit and one broken stem with one leaf.

Label: „*Arabis brassicaeformis* m. / *Erysimum alpinum* Baumg. DC. / ex loco Thalii / Sondershausen Thurg.“

The specimen on sheet PR 2330 is selected here as a lectotype.

According to J. Štěpánek (in Kubát 2002) the correct name of this species is *Arabis pauciflora* (GRIMM) GARCKE.

Artemisia mertensiana WALLROTH

Sched. Crit.: 466, Tab. V, 1822. – PR 11785 A, B.

Original diagnosis: Foliis demum glabriusculis eglandulosis, inferioribus bipinnatifidis caulinis subsimplicibus linearibus, floribus globosis racemosis brevissime pedunculatis nutantibus, receptaculo nudo, caule simplicissimo.

Locality: Prope Borksleben [Borxleben], pagum ab oppido Artern [Kyffhäuser].

Brief notes on the specimens: Wallroth's abundant material was mounted on two sheets, the locality was not mentioned on the labels.

On sheet A there are five plants with 1–2 flowering stems (7–15 cm) and one rosette of leaves. The original envelope with remains of inflorescences is attached.

Label: „*Artemisia mertensiana* m. schd. cr. / *A. laciniata* Koch et auct. fl. germ. nec Willd. / *A. laciniata* γ. *Mertensiana* DC. prodr.V. 111 (recte VI. 111) / Bertero in lit.“ Further some distinguishing features from *A. laciniata* are added.

On sheet B there are eight flowering plants with rosettes of leaves and with flowering stems (6–16 cm long) in various states of damage.

Label: „*A. Mertensiana* / mihi“.

The sheet PR 11785 A is selected here as a lectotype.

The plants correspond to *Artemisia laciniata* WILLD.

According to information from J. Štěpánek, a further large quantity of Wallroth's original material of *Artemisia mertensiana* is preserved in the herbarium in St. Petersburg (LE).

Atriplex ruderalis WALLROTH

Sched. Crit.: 115-116, 1822. – PR 427.

Original diagnosis: Foliis hastato-deltoidibus dentatis oppositis omnibus subconformibus, summis sensim minoribus, valvulis ovatis integerrimis semen aequantibus in paniculam subramosam congestis.

Locality: In rudibus prope Lodersleben [SW of Querfurt]. Extra fines ad fossas circa Goersbach [Görsbach, SE of Nordhausen].

Brief notes on the specimen: One leafy plant broken into three pieces (30, 20 and 13 cm) with fruits.

Two labels are present: 1. „*Atr. ruderalis* mihi“ and 2. „*Atriplex ruderalis* m. / *A. microsperma* W. et K. / potius *Atr. patulae* var. / *microtheca* / Goersbach“.

The specimen on the sheet PR 427 is selected here as a lectotype.

According to personal communication with B. Mandák, a specialist on the genus *Atriplex*, the plants correspond to

Atriplex prostrata DC. subsp. *latifolia* (WAHLENB.) RAUSCHERT.

***Camelina sylvestris* WALLROTH**

Sched. Crit.: 347, 1822. – PR 11788 A, B.

Text-fig. 4.

Original diagnosis: Siliculis ovato-rotundatis umbonatis in basin attenuatis margine compressiusculis, caule foliisque sagittatis subintegris hirsutis.

Locality: In tectorum, murorum grumis, collibus apricis vicinisque agris sterilibus ad Bennstaedt [Bennstedt near Halle], Schmon and Lodersleben [SW of Querfurt], Rossleben et alii circa urbem locis.

Brief notes on specimens: The plants originally placed in one common cover were later divided onto two sheets with Wallroth's label placed on sheet A.

On sheet A is one well-developed plant (60 cm long) without basal part, with ripened fruits and two whole small plants (25 and 30 cm) with leaves, fruits and roots.

Five upper parts of fruiting stems (19–22 cm long) with empty capsules were on sheet B.

Label: „*Camelina sylvestris* Wallr.“ A few morphological features and six synonyms followed according to the text in *Schedulae criticae*. The locality was not mentioned.

In 1968 M. Smejkal on the revision label designated the sheet 11788 A as „verisimiliter holotypus of *C. sylvestris* WALLR.“ and he classified this species as *Camelina microcarpa* ANDRZ. subsp. *sylvestris* (WALLR.) HIIT.

The designation of the specimen PR 11788 A as the holotype is not correct. We consider it as a lectotype.

***Campanula thaliana* WALLROTH**

Sched. Crit.: 86, 1822. – PR 11763 A, B.

Original diagnosis: Caule simplici folioso basi foliisque subtus incano-pubescentibus inaequaliter dentatis pedunculis in racemum longissimum digestis, dentibus calycinis linearibus brevibus denticulatis.

Locality: In collibus herbidis ad Lettin [NW of Halle], Rossleben, an der Steinklippe [near Wendelstein, SE of Rossleben], et aliis agri hal., thuring. et hercyn. locis rarius.

Brief notes on the specimens: On sheet A one well-developed leafy plant (78 cm long) with inflorescence is present. One leaf is mounted separately.

Label: „*Campanula Thaliana* m.“

One fertile leafy plant (74 cm long) with ripened capsules is mounted on sheet B.

Label: „*Eadem fructifera* / *Ex eodem loco*, in collis / aprici vicini vepretis lata.“

The plant PR 11763 A is selected here as a lectotype.

The plants correspond to the species *Campanula bononiensis* L.

***Centaurea phaeocephala* WALLROTH**

Linnaea 14: 640, 1840. – PR 11794.

Original diagnosis: Caule erecto anguloso rigido foliisque arachnoideo-lanoso, radicalibus caulinisque

inferioribus supra basin petioliformen sublyratis lanceolatis achaeniis ovato-oblongis striatis subcalvescentibus

Locality: Auf unfruchtbaren Grasplätzen, in verfallenen Steinbrüchen des südwestlichen Harzes stellenweise im Spätherbst.

Brief notes on the specimens: Two branched leafy plants (42 and 50 cm) with cauline leaves linear or lanceolate, lower leaves pinnately lobed, involucre ovoid-globose.

Label: 1. „*Centaurea phaeocephala* m. / achaeniis pappo brevis coronatis / striatis. / *Ad vias publ. der Scherns*“ [Schern, SW of Nordhausen] and 2. „*Achaenia pappo coronata* / *Centaureae* m. *phaeocephalae*“. The text of the second label is written on a small label, where two achenes are also stuck. On the original envelope with achenes and the remains of florets is the following legend: „*Centaurea* / *Achaenia striata*, pappo brevi / Schern bey Northus.“

The specimen PR 11794 is selected here as a lectotype.

In 1970, Czech specialist on the genus *Centaurea*, J. Dostál identified these plants as *Jacea pannonica* (HEUFL.) SOJÁK ssp. *pannonica*.

***Chenopodium microspermum* WALLROTH**

Sched. Crit.: 112 and 507, 1822. – PR 11784 A, B.

Original description: Foliis triangularibus in basin subrhomboideam attractis parce dentatis, racemis ramosi erectis subaphyllis folio brevioribus axillaribus terminalibusque, seminibus minutissimis fuscis.

Locality: In aggeribus campisque salsis circa Halam; ad Seeburg [W of Halle]; extra fines ad Artern [Kyffhäuser], auctumno. On p. 507 the following remark was added: folia carnosa: locum natalem: in pratorum salinorum aggeribus vor Langenbogen [W of Halle].

Brief notes on the specimens: One upper part of leafy plant (36 cm) in full flower is on sheet A.

Label: 1. „*Chenopodium microspermum* / for. carnosum / Cf. Schd. cr. 507 / Agr. hal.“ and 2. „*Ch. microspermum* m. / for. carnosum“.

A whole leafy plant (70 cm) with inflorescences and one small broken branch (10,5 cm) were mounted separately on sheet B.

Label: „*Chenopodium microspermum* / mei.“

The specimen PR 11784 A is selected here as a lectotype.

The plant corresponds to the species *Chenopodium urbicum* L.

***Dianthus schizopetalus* WALLROTH**

Linnaea 14: 570, 1840. – PR 11753.

Original diagnosis: Caulibus caespitosis elatis dentibus calycis linearibus cuspidatis, petalis ex ungue lineari in aream lanceolatam sensim abeuntibus in lacinulas angustissimas illa sexies longiores partitis

Locality: In trockenen Vorwäldungen des südlichen Harzes stellenweise sehr häufig.

Brief notes on the specimens: Two complete plants, about 60 cm long, in full flower.

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Text-fig. 4. Lectotype specimen of *Camelina sylvestris* WALLROTH.

Label: „*Dianthus schizopetalus* m.“ In addition, many synonyms follow according to the text in Linnaea. Down at the corner of the label „Thrg.“ is written.

The specimen PR 11753 is selected here as a lectotype. The plants are identical with *Dianthus superbus* L.

***Erigeron corymbosus* WALLROTH**

Linnaea 14: 642-643, 1840. – PR 11557 A – D.

Original diagnosis: Caule erecto corymboso folioso, foliis inferioribus e basi tenuata oblongis achaeniis oblongis adpresso-pilosis politis utrinque cartilagineo-costatis pappo exalbido triplo brevioribus.

Locality: An Vorbergen des südlichen Harzen

Brief notes on the specimens: On sheet A there are three fertile plants (62, 70 and 75 cm long) with rich inflorescences.

Label: „*Erigeron corymbosum* m. / caule simplici elato / Koenigskopf [near Stempeda, NE of Nordhausen] Thr.“ Two fertile plants (33 cm and 42 cm) are on sheet B.

Label: „*Erigeron corymbosum* m.“

On the further two sheets C and D, there are fertile plants (45–75 cm) with rich inflorescences, without any label.

Based on information on the labels, sheet PR 11557 A was selected by specialist O. Šída as a lectotype in 2002. The sheets PR 11557 B, C and D he designated as isolectotypes.

According to Šída the plants correspond to the species *Erigeron muralis* LAPEYR. (= *E. serotinus* WEIHE).

***Erysimum cheiriflorum* WALLROTH**

Sched. Crit.: 367, 1822. – PR 3931.

Original description: Foliis inferioribus oblongis obtusis remote-sinuatoque dentatis utrinque pube tripartita hirsutis, petalis subrotundis (speciosis) e basi obovata in unguis calycibus longiores abrupte attenuatis

Locality: In collibus gypsaceis unweit Neustadt infra arcem Hohnstein [the village and the castle N of Nordhausen].

Brief notes on the specimens: Two upper parts of leafy plants in full flower (28 and 37 cm).

Two labels are attached: 1. „*Erysimum cheiriflorum* m. / in sylvis pr. Neustadt“ and 2. „*Ex collibus apricis gypsaceis / des Hohnstein citra / Nordhusen et Neustadt*“.

In 1980, specialist A. Polatschek on the revision label designated this specimen as an isotype of *Erysimum cheiriflorum* WALLR. and identified the plant as *Erysimum odoratum* EHRH.

***Erysimum schaeerianum* WALLROTH**

Sched. Crit.: 365, 1822. – PR 11158.

Original diagnosis: Foliis radicalibus lanceolato-linearibus subintergerrimis cauleque subramoso pube bipartita hirsutiusculis, petalis ovato-subrotundis abrupte angustequae unguiculatis

Locality: olim ab amicissimo Schaeerero, Bernate, in monte Simplon Helvet.

Brief notes on the specimens: The lower part of a branched plant with root (9 cm), two fertile branches (ca 30 cm) with flowers and one broken branch (8 cm) with one leaf.

Label: Four labels were attached. One of them was probably written by Schaeerer: „*Cheiranthus pallens* Hall. fil. / Hall. hist. n. 450 / Simplon“. Three further, very similar labels were written by Wallroth: 1. „*Er. Schaeerianum mihi. / E. helvet. DC. / Simplon Helvet.*“; 2. „*Erysimum Schaeerianum / W. Schd. cr. 365 / Ex Helvetia*“ and 3. „*Erysimum Schaeerianum m. / W. Schd. cr. 365 / Ex Helv. m. Simplon / am. Schaeerer*“.

In 1974, A. Polatschek, a specialist on the genus *Erysimum*, on the revision label, designated this specimen as a lectotype and identified it as *Erysimum rhaeticum* (SCHLEICH. ex HORNEM.) DC.

***Fumana pinifolia* WALLROTH**

Linnaea 14: 583, 1840. – PR 11769 A, B.

Wallroth divided the species *Helianthemum fumana* MILL. into two new species *Fumana pinifolia* and *F. ericifolia*. In herbarium PR only specimens of *Fumana pinifolia* are preserved.

Original diagnosis: Suffruticosa, exstipulata pedunculis axillaribus solitariis, fructiferis reflexis folia superantibus, calycibus clausis ovato-rostratis convolutis, foliolis calycinis scabriusculis, externis linearibus acuminatis, internis ovatis acutis.

Locality: Wurde von mir vor 30 Jahren an sonnigen Gypsvorbergen, eine Stunde weit von der südlichen Harzgränze entdeckt. It was probably the locality of *Helianthemum fumana*, which Wallroth already mentioned in his work *Annus botanicus* (1815: 72): „in montibus calcareis inter arcem vetustam Rothenburg et Auleben [Kyffhäuser] Thuringiae“.

Brief notes on the specimens: Very rich collection – eight fertile dwarf shrubs, richly branched with leaves and capsules with 7–8 seeds. The plants originally lying together in one common cover are now divided onto two sheets A and B, with two of Wallroth's labels mounted on sheet A.

Five fertile shrubs are placed on sheet A. Two original small envelopes made from old newspapers with remains of capsules were added.

Label: 1. „*H. fumana* Auleben Thersdorf „, and 2. „*Fumana pinifolia* m.“ Further detailed description with diagnostic morphological features in Latin follows.

Three fertile shrubs and one small leafy shrub are mounted on sheet B.

Sheet PR 11769 A is selected here as a lectotype.

The plants are identical with *Fumana procumbens* (DUNAL) GREN. et GODR. [= *Helianthemum fumana* MILL.].

***Galium agreste* WALLROTH**

Sched. Crit.: 59, 1822. – PR 11766 A – E.

Original diagnosis: Foliis senis octonis lanceolatis mucronatis basi attenuatis supra scabris margine carinaque retrorsum hispidis germine minoribus, fructibus reniformibus laevibus hispidisve.

Locality is not indicated,

Wallroth divided this species into two infraspecific taxa: *α. echinospermon* (fructibus aculeolis aduncis parce obsitis) and *β. leiospermon* (fructibus laevissimis); later in Linnaea (Linnaea 14:548, 1840) he mentioned these varieties in reverse order (an orthographic variant *β. echinospermum* and *α. leiospermum*). Only the specimen *α. echinospermum* is present in the PR herbarium.

Brief notes on the specimens: A bunch of plants with leaves and echinaceous fruits are on sheet A. The original envelope containing seeds was added.

Label: „Galium agreste / var. echinosperma W.“

A further four duplicate sheets (B, C, D and E) are lying in one herbarium cover without any label. According to the stage of development they all originated from the same collection.

The sheet PR 11766 A is selected here as a lectotype of *Galium agreste* WALLROTH.

The plants correspond to *Galium spurium* L.

***Galium gracile* WALLROTH**

Sched. Crit.: 57 and 503, 1822. – PR 11765 A – E.

Original diagnosis: Foliis reflexis antrorsum hispidis, inferioribus ovatis subquaternis, superioribus senis lanceolatis duplo majoribus partialibus inaequalibus bifidis aphyllis fructu ruguloso duplo longioribus.

Locality: In agris bey der Windmühle inter Teutschen-Thal et Opphausen [Teutschenthal and Obhausen, SW of Halle], in arvis sterilibus inter Gleina et Lauchstaedt [Laucha, NW of Naumburg] passim. In Addenda (p. 503) a supplement is added: In arvis arenosis hinter dem Zorge abundat [Zorge, S Harz].

Brief notes on the specimens: Five sheets were originally placed together in one herbarium cover, but only two of them were provided with a label. All plants were collected in the same state of development.

On sheet A there is a bunch of stems with tiny leaves and fruits.

Label: „Galium gracile Wallr. / In arvis sterilibus / inter Kleina [Gleina] et Lauchstaedt / 1817“.

On a further sheet B there is also a mixture of fertile plants.

Label: „Galium gracile / Teutschen-Thal / 1812“.

It is interesting that both the above mentioned labels were cut-out from one letter dated 6. Oct. 1819, which proved the fact that labels were occasionally written much later than the plants were collected.

On sheet D there is the mixture of fruiting plants and a label with locality: „Hinter d. Zorge.“

Two remaining sheets (C and E) with a similar bunch of plants are without any label.

The specimen on the sheet PR 11765 A is selected here as a lectotype.

All these plants are identical with the species *Galium parisiense* L.

***Halimus pedunculatus* WALLROTH**

Sched. Crit.: 117, 1822. – PR 11789.

Original diagnosis: Foliis caulinis inferioribus ovatis obtusis in petiolum attractis, summis oblongis

sensim angustioribus, capsulis obverse cuneiformibus bicornibus complanatis longe pedicellatis.

Locality: Ad salinas Arterenses [Artern, Kyffhäuser] et Numburgenses [Naumburg] extra fines abundat.

Brief notes on the specimen: One complete leafy plant in full flower with roots (23 cm).

Label: „Halimus pedunculatus W. / Ad salinas Numburgenses“.

I have seen (B.S.) Wallroth's original specimen of the same species in the herbarium of Martin Luther University in Halle (HAL) in 2004. There is here one well preserved leafy plant with a few branches on the sheet with the following text on the label: „Halimus pedunculatus / mihi / Wallroth.“

The lectotype was not selected by us, because in this case it is only a combination; Wallroth quoted the name *Atriplex pedunculata* L. as a synonym.

The plant corresponds to *Atriplex pedunculata* L.

***Heracleum ursinum* WALLROTH**

Linnaea 14: 560, 1840. – PR 11759.

Original diagnosis: Foliis scabro-hirsutis pinnatis, pinnis lobatis, umbellis radiantibus, ovariis tenuiter pubescentibus, fructibus ovato-subrotundis apice emarginatis dorso umbonato hirsutiusculo tristriato vittas e basi tenuata subclavatas ultra mediam fructus partem propexas monstrantibus Further there is a note: „Steht zwischen H. sphondylium L und H. asperum M. Bieb.“ with very detailed description of the fruit.

Locality: Auf Wiesen des südlichen Harzes stellenweise.

Brief notes on the specimens: The middle part of a hirsute stem (65 cm long) with only one incomplete leaf, one small part of a leafless stem (17 cm) and one small complete leaf are mounted separately. The original envelope full of fruits with Wallroth's inscription: „Heracleum ursinum W. / Heringen“ [Heringen, N of Sonderhausen] and further remarks concerning the synonyms were added.

Label: „Heracleum ursinum Wallr.“

The plant on the sheet PR 11759 is selected here as a lectotype.

The plant corresponds to *Heracleum sphondylium* L.

***Hieracium lactucella* WALLROTH**

Sched. Crit.: 408–410, 1822. – PR 5892 A, B.

Text-fig. 5.

Original diagnosis: Stoloniferum, foliis radicalibus lanceolatis acutis integris glabris glauco-viridibus, stolonum subspathulatis adscendentibus basi margineque parce pilosis pedicellis calyces subaequantibus, caule scapiformi inferne foliolo lineari aucto 1–4 floro.

Locality: ad Lodersleben [SW of Querfurt] haud longe ab ipso pago, ad Ziegelrode [near Rossleben].

Brief notes on the specimens: Seven flowering plants with rosette of leaves, flowering stems (10–25 cm) and stolons, inflorescence with 1–3 capitula, are on sheet A.



Text-fig. 5. Lectotype specimen of *Hieracium lactucella* WALLROTH.

Label: „Auricula L. Sp. pl. / Hieracium Lactucella m. / Thuring“.

On sheet B seventeen more or less rather small plants with rosette-leaves, flowering stems (3–12 cm) and 1–3 capitula in inflorescences are mounted.

Label: „H. auricula L. / Hieracium Lactucella m. / var. angustifolia. / In ericetis udior inter Gr. Wechsung [Großwechungen] et Kemstedt“ [SW of Nordhausen].

J. Chrtek jun., specialist on the genus *Hieracium*, in 2007, selected the plants on the sheet PR 5892 A as a lectotype.

The plants correspond to the present concept of this species.

Note: A further two sheets with Wallroth's authentic specimens of *H. lactucella* are preserved in the herbarium PR, and bear the following text on both labels: 1. „Hieracium lactucella / lusus Surcatus“ and 2. „Ad... H. lactucellam mei // praestat / Ex Alp. Salisb.“

Hieracium rothianum WALLROTH

Sched. Crit.: 417-419, 1822. – PR 5894.

Text-fig. 6.

Original diagnosis: Foliis lancolatis in basin attenuatis utrinque cauleque ramoso paucifloro pilis confertis rufescentibus hispidis, pedicellis unifloris repetito-dichotomis patentibus calyces pilosos

Locality: In pineto halensi vicinisque locis, in rupibus ad Kröllwitz [NW suburb of Halle] passim.

Brief notes on the specimens: Two bottom parts of plants with hairy leaves and stems (ca 23 cm) without flowers. Two broken stems with remains of capitula (only sepals preserved) are mounted separately.

Label: 1. „Hieracium echioides Lumn. / var. ramosa / H. rothianum Wallr. Schd. / Ex agro halensi.“ and 2. In a rather long text concerning names, probably written by A. W. Roth, the locality „Haide bay Halle“ [NW suburb of Halle] is mentioned. Wallroth added (by pencil) on the label: „H. rothianum mihi / cymosum Spr.“

Botanists L. Čelakovský, G. H. E. W. Hieronymus and P. Ascherson had written supplementary notes on further enclosed labels.

In 2007, J. Chrtek jun. selected the plants on the sheet PR 5894 as a lectotype. The plants correspond to the present concept of this species.

Lamium rubrum WALLROTH

Sched. Crit: 300, 1822. – PR 11760 A, B, C.

Original diagnosis: Calycibus patentibus in verticillos 10–12 floros laxe digestos, dentibus calycinis inaequalibus, superioribus majoribus, foliis cordatis irregulariter inciso-serratis, floralibus breviter petiolatis, imis remotis.

Locality: Ad sepes pomariorum, inter dumetorum vepreta ad Lodersleben [SW of Querfurt], Ziegelrode [Ziegelroda near Rossleben], Rossleben et alibi.

Brief notes on the specimens: On sheet A there is one well-developed plant with 5 flowering leafy stems (22–28 cm), two leafy stems and the remains of three lower parts of plants.

Label: „Lamium rubrum / Wallr. / Fl. Megap.“ [Flora Megapolitana = Flora of Mecklenburg].

On sheet B there are seven leafy stems with flowers (24–30 cm) and the lower part of one bunch with two flowering stems (18 and 27 cm). This is probably a mixture of plants with violet and white flowers.

Label: „Lamium rubrum m. / cum var. albiflora / m.“

On the third sheet C, five flowering plants (26–36 cm) are mounted. Wallroth's original label is absent.

The plant on the sheet PR 11760 A is selected here as a lectotype.

All plants correspond undoubtedly to the species *Lamium maculatum* L.

Malva adulterina WALLROTH

Linnaea 14: 611, 1840. – PR 11791.

Text-fig. 7.

Original diagnosis: Caule prostrato, foliis cordato-subrotundis 5–7 lobis, pedunculis aggregatis demum porrecto-declinatis petiolisque adpresso-pilosis, petalis calyce triplo longioribus, valvulis acute-marginatis reticulato-rugosis.

Locality: Am südlichen Harze hier und da.

Brief notes on the specimens: One leafy stem (27 cm) with flowers, fruits and four remnants of branches at the bottom, two upper parts of leafy stems (5 and 10 cm) with flowers and fruits.

Label: „Malva hybrida“ / and above this name is written: „adulterina m. / „pedunculis adpresso pilosis / / Thuring“. Some distinguishing features with *M. rotundifolia*, *M. neglecta* and *M. sylvestris* were added.

The specimen PR 11791 is selected here as a lectotype.

The plants correspond to the hybrid *Malva* × *adulterina* WALLROTH (*M. neglecta* × *M. pusilla*).

Malva equina BRUNFELS EX WALLROTH

Linnaea 14: 611-612, 1840. – PR 11793 A, B.

Original diagnosis: Foliis omnibus basi intacta cordatis stipatis conformibus, inferioribus leviter, superioribus profunde quinquelobis, lobis ovato-ellipticis obtusiusculis inaequaliter dentatis petalis cuneatis profunde emarginatis pedicello duplo brevioribus

Locality: ... am südlichen Harze stellenweise häufig.

Brief notes on the specimens: One leafy plant (ca 30 cm long) with roots, two branches with flowers and fruits are on sheet A.

Label: „peduncular pubes duplex! flore purpur. / Malva equina Brunf. / In locis lutosi pagi Nordhausen“.

On sheet B the branch of a leafy plant with fruits, broken into four parts is mounted.

The label is not present.

The original specimen PR 11793 A is selected here as a lectotype.

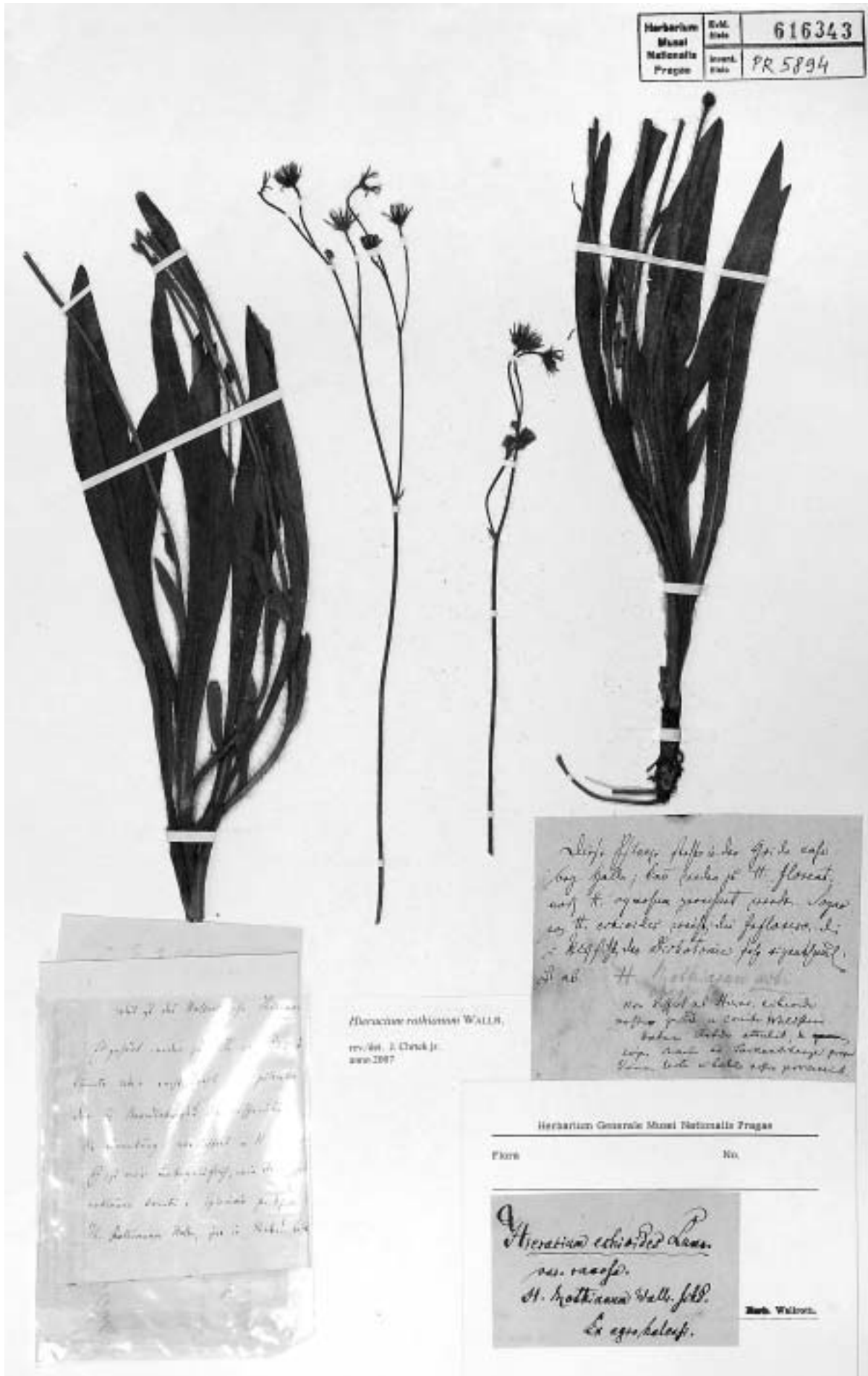
The plant corresponds to the species *Malva sylvestris* L.

Malva neglecta WALLROTH

Syll. Pl. Nov. 1: 140-141, 1824. – PR 11792 A, B, C.

Text-fig. 8.

Original diagnosis: M. seminum arillis



Text-fig. 6. Lectotype specimen of *Hieracium rothianum* WALLROTH.



Herbarium Muzei Nationalis Pragae	Det. date	616376
	Invent. date	PR 11991

Herbarium Generale Muzei Nationalis Pragae

Flora No.
 Malva x adulterina
 a. filio, calice, sepalis,
 b. sepalis, calice & sepalis, sepalibus
 c. sepalibus, calice & sepalibus
 d. sepalibus, calice & sepalibus
 e. sepalibus, calice & sepalibus
 f. sepalibus, calice & sepalibus
 g. sepalibus, calice & sepalibus
 h. sepalibus, calice & sepalibus
 i. sepalibus, calice & sepalibus
 j. sepalibus, calice & sepalibus
 k. sepalibus, calice & sepalibus
 l. sepalibus, calice & sepalibus
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 p. sepalibus, calice & sepalibus
 q. sepalibus, calice & sepalibus
 r. sepalibus, calice & sepalibus
 s. sepalibus, calice & sepalibus
 t. sepalibus, calice & sepalibus
 u. sepalibus, calice & sepalibus
 v. sepalibus, calice & sepalibus
 w. sepalibus, calice & sepalibus
 x. sepalibus, calice & sepalibus
 y. sepalibus, calice & sepalibus
 z. sepalibus, calice & sepalibus

Text-fig. 7. Lectotype specimen of *Malva x adulterina* WALLROTH.



Text-fig. 8. Lectotype specimen of *Malva neglecta* WALLROTH.

pubescentibus immarginatis dorso latusculisque laevigatis, calyculi foliolis linearibus, laciniis calycinis ovatis corolla duplo brevioribus receptaculum lenticulare attingentibus, pedunculis fructiferis declinatis

Locality is not given.

Brief notes on the specimens: One leafy, branched stem (ca 80 cm long) with fruits is on sheet A.

Label: „Malva neglecta W. / caulibus prostratis elongatis“.

One leafy stem with flowers and fruits (24 cm) is on sheet B.

Label: „Malva neglecta W. / var. leucantha W.“

On sheet C there is one branched plant (22 cm) with flowers and fruits, the petioles 7–11 cm long.

Label: „Malva neglecta W. / var. multiflora“.

The specimen PR 11792 A is selected here as a lectotype.

The plants correspond to the present concept of this species.

Medicago stipularis WALLROTH

Linnaea 14: 630, 1840. – PR 11768.

Original diagnosis: Foliolis late-obovatis subrhomboideisve a media inde parce crenatis apice rotundato-retusis leguminibus inermibus compressis reniformibus parce-venosis pilosis, stylo illius diametro duplo brevior coronatis.

Locality: Unter dem Sommergetreide auf steinigen Aeckern des östlichen Harzes stellenweise häufig, anderwärts gar nicht.

Brief notes on the specimens: One leafy plant (ca 65 cm long) with flowers and very young fruits, one broken part of stem (15 cm) with leaves and flowers. The fruit are practically glabrous.

Label: „Medicago stipularis Wallr. / Inter segetes pr. Biebram“ [Bad Bibra NW of Naumburg].

The plant on the sheet PR 11768 is selected here as a lectotype.

The plant is identical with *Medicago lupulina* L. subsp. *lupulina*.

Note: Another of Wallroth's species – *Medicago mniocarpa* Wallr. ex Ser. is preserved in the herbarium PR and placed on two sheets. On the first sheet there are two fertile plants with the label: „Medicago mniocarpa Wallr. / M. lupulina γ . unguiculata DC. / Ex Belgio pr. Athum [Ath, SW of Belgium] 1814“. On the second sheet four plants are present and two labels with following text: „Medicago mniocarpa W. / Ex Thuring. pr. Hrgen [Heringen/Helme] / Medicago lupulina L. / monstrem unguiculatum“. De Candolle (Prodr. 1825, 2: 172) mentioned Wallroth's name: „Trigonella mniocarpa Wallr! in litt. Medicago mniocarpa Wallr! in litt. (v. v. et s.)“ within his taxon *M. lupulina* γ . *unguiculata* (Ser. mss.). In this case it was probably connected with the monstrosity of the fruit.

Melilotus arvensis WALLROTH

Sched. Crit.: 391-392, 1822. – PR 11752 A, B, C.

Original diagnosis: Leguminibus racemosis subdispermis ovatis acutis transverse-rugosis nudis demum helvolia, alis vexilloque aequalibus carinam excedentibus,

foliolis obovatis irregulariter dentatis, caule basi ramosissimo adscendente.

Locality is not mentioned.

Brief notes on the specimens: On sheet A one branched plant (48 cm long) with yellow flowers and young fruits is mounted.

Label: „Melilotus arvensis Wallr.“

On sheet B there are two upper parts of fruiting stems (32 and 33 cm). Wallroth's original envelope made from a letter, containing seeds, and with the inscription: „Mel. arvensis“ was added.

Label: „Melilotus arvensis Wallr. / var. legum. apice productiori / ancipiti / Thuring“.

One flowering stem broken into three parts is on sheet C.

Label: „Melilotus arvensis m. / var. latifolia m. / stipules inciso-dentatis! / Kohnstein“ [a hill NW of Nordhausen]. The mentioned infraspecific name var. *latifolia* has not been published.

The specimen PR 11752 A is selected here as a lectotype.

The plants are identical with *Melilotus officinalis* (L.) PALLAS.

Melilotus tenella WALLROTH

Linnaea 14: 617, 1840. – PR 11751.

Original diagnosis: Caulibus erectis simplicibus, stipulis heteromorphis racemis laxis seminibus (helvolis), hilo punctiformi exilissimo.

Wallroth added the distinguishing features in German: „Unterscheidet sich jedoch durch einen einfachen, schlanken, nur oben in Blütenäste zertheilten Stengel; breitere Blättchen; doppelt kleinere Blüten, deren Fahne von ganz gleicher Länge mit den übrigen Blüthen theilen ist; zugerundete, sitzende Kapseln und mit einem sehr kleinen Nabel versehene Saamen.“

Locality: Auf fruchtbaren Gypsvorbergen des südlichen Harzes stellenweise.

Brief notes on the specimens: Six plants, with simple stems (30–38 cm long), with 3-4 inflorescences in different stages of flower are on the sheet. The flowers are small (ca 4 mm) and white.

Label: „Melilotus tenella m. / In promont. gypsaceis d. Kohnsteins“ [a hill NW of Nordhausen].

The specimen PR 11751 is selected here as a lectotype.

At present these plants are evaluated as small flowered plants within the variability of the species *Melilotus albus* MED.

Monotropa hypophegea WALLROTH

Sched. Crit.: 191, 1822. – PR 11750 A, B.

Text-fig. 9.

Original diagnosis: Racemo paucifloro, nubili conferto nutante, fructifero surrecto laxo, floribus ovatis eroso-laceris, staminibus styloque obconico tereti glabris, stigmatibus subinfundibuliformi sub4-gono capsulaque subrotunda glaberrimis.

Locality: in humo laxa faginetorum umbrosorum saltus Ziegelrodensis [Ziegelrode near Eisleben] et alibi.

Brief notes on the specimens: On sheet A there are ten glabrous plants in different stages of development – from flowering to fertile plants (13–25 cm long).

Label: „*Monotropa hypophegea* W.??“ After a short diagnosis, the isolated and conspicuously underlined word: „verte“ is written. Locality is not given, only biotope is mentioned: „Ad fagor. radices“. Furthermore, a few of Wallroth's morphological notes were added on the front side of the label. Some doubts concerning identification were written probably by L. Čelakovský on the back of this label.

Seven flowering plants (12–23 cm) and one rhizome in separate bags are mounted on sheet B.

Label: Text on label B was written by L. Čelakovský: „*Monotropa hypopitys* Lin. / var. *glabra* / *M. hypophegea* Wallr. / Ex herb. Wallrothii“. Wallroth's original label is absent.

The specimen PR 11750 A is selected here as a lectotype.

At present such glabrous plants are evaluated as *Monotropa hypophegea* WALLROTH or *Monotropa hypopitys* L. var. *glabra* ROTH.

***Montia arvensis* WALLROTH**

Linnaea 14: 547, 1840. – PR 11764.

Text-fig.10.

Original diagnosis: Seminibus subrotundis a margine obtusato inde convexis in basin abrupte breviterque tenuatam sensim declinatis, tuberculis verruciformibus hemisphaericis conformibus circa basin mole sensim decrescentibus iisque punctiformibus nigrorem opacum mentientibus scabris, umbilico fusco.

Locality: Auf feuchten Aeckern des südlichen Harzes stellenweise.

Brief notes on the specimens: The original sheet contained two different groups of plants. These plants were revised and divided by specialist O. Nilsson into two parts: 1. Three fertile bunches (2–4 cm long) were designated in 1967 by Nilsson as *Montia verna* NECKER and 2. One bunch of flowering and fertile plants (8–9 cm long) were designated as *Montia fontana* L. Two new envelopes with a few seeds, made probably during the revision, were added. They were provided with O. Nilsson's inscriptions: *M. minor* and *M. fontana*.

Label: „*Montia arvensis* m. / minor Gm.“ Locality was not given.

The first mentioned specimen (the bunch of plants) designated as *Montia fontana* by Nilsson, is selected here as a lectotype.

***Nasturtium aquaticum* WALLROTH**

Sched. Crit.: 371-372, 1822. – PR 11771 A – D.

Original diagnosis: Foliis variis, inferioribus submersis multifidis, emersis serratis lyratisve, superioribus sessilibus conformibus integrisve, siliquis siliculiformibus subglobosis stylo illis brevioribus coronatis pedicello multoties longiore suffultis, caulibus inflatus stoloniferus.

Locality: In sulcis pratorum inque aquis limpidi-oribus stagnatibus circa Halam [Halle], Rossleben et alibi passim.

Brief notes on the specimens: The plants mounted on sheets A and B were originally placed together probably as parts of one specimen with one common label. On sheet A there is one leafy plant (56 cm long) with many fruits. On sheet B there are three parts of sterile leafy ascending stems.

Label: „*Nasturtium aquaticum* m. / Ad lacum citra moleadivum“ [perhaps Mühlhausen /T.].

One fertile plant (ca 130 cm) with roots, broken into two parts is on sheet C, the leaves are mounted separately.

Label: „*Nasturtium aquaticum* / *α. integrifolium* W. schd. cr.“ The locality is not indicated.

On sheet D there is one lower leafy part of a plant (45 cm) and an upper branched part (27 cm) with fruits.

Label: „*N. aquaticum* mihi / *α. integrifolium*“.

The specimen PR 11771 A is selected here as a lectotype.

This species is identical with *Rorippa amphibia* (L.) BESSER.

***Nasturtium brachystylum* WALLROTH**

Linnaea 14: 606-607, 1840. – PR 11772.

Original diagnosis: Caulibus decumbentibus ramosissimis siliquis linearibus subcompressis pedicello declinato duplo fere brevioribus, stigmatibus sessilibus capitato diametrum siliquae aequante coronatis.

Locality: An Flussufer des südwestlichen Harzes.

Brief notes on the specimens: Two branched, well developed upper parts of plants (ca 25 and 30 cm long) with fruits and some flowers.

Label: Two of Wallroth's labels are present: 1. „*Nasturtium brachystylum* m.“ / some notes on synonymy and morphology follow / „Ex agro northus.“ [Nordhausen] and 2. „*Nasturtium brachystylum* m. / hybrida forsan progedies ex *N. palustri* / et *N. sylvestre*, saltem ex habitu / Ex agro heringensi“ [Heringen].

Due to the existence of two different localities on the two different labels it is not appropriate to select the lectotype here.

This taxon is now considered as a hybrid *Rorippa* × *brachystyla* (WALLR.) LAWALRÉE (*R. palustris* × *R. sylvestris*).

***Nasturtium riparium* WALLROTH**

Sched. Crit.: 373-374, 1822. – PR 11774 A, B.

Original diagnosis: Foliis variis, inferioribus pinnatis integrisve, caulibus superioribus ovato-oblongis inaequaliter serratis in basin cordato-amplexicaulem attenuatis, siliquis ovato-oblongis utrinque attenuatis compressis stylo duplo brevioribus.

Locality: Wallroth mentioned that the localities are the same as for the above mentioned species *Nasturtium aquaticum*.

Brief notes on the specimens: One leafy plant (32 cm long) and two small branches (14 and 18 cm) with flowers and fruits are mounted on sheet A.

Label: „*Nasturtium riparium* m. / *N. anceps* Wahlenb. et Reichb.“ The undated revision label is added: „*N. amphibium* × *silvestre* / *N. riparium* Wallr.“ According



Text-fig. 10. Lectotype specimen *Montia arvensis* WALLROTH.

to the written note by E. Bayer, curator of the herbarium during the period 1903–1927, the revision label was written by the German botanist Kurt Wein.

On the second sheet B there are three leafy plants (23, 25 and 33 cm) with flowers and fruits.

Label: „Nasturtium riparium / W. / anceps Wahlb.“ On the right top of the label is written and crossed out in unknown handwriting: „armoracioides Tausch?“

The specimen PR 11774 A is selected here as a lectotype.

The plant corresponds to *Rorippa amhibia* (L.) BESSER.

Nuphar systylum WALLROTH

Linnaea 14: 582, 1840. – PR 11754.

Original diagnosis: Rhizomate cicatrisato valido foliifero antheris linearibus elongatis, styli disco orbiculato integerrimo profunde umbilicato stigmatibus pulvinatis confluentibus adpressis breviter radiantibus praeter ambitum integerrimum oblitterato.

Locality: In einen langsam fliessenden Wiesen-graben, unmittelbar an der südöstlichen Gränze des Harzes.

Brief notes on the specimens: One young leaf, the blade with a short piece of petiole (13 cm) and one strongly damaged flower with peduncle 15 cm long.

Label: 1. „Nuphar systylum Wallr! / Ex agro hal. / legit 1846!“ (the date was written in pencil probably later) and 2. „Nuphar systylum W. / Thuring“. Some morphological features, also written in pencil, were added.

The specimen PR 11754 is designated here as a neotype owing to the date on the label, the year 1846.

We consider this Wallroth's species to be identical with the species *Nuphar luteum* L.

Orobanche comosa WALLROTH

Sched. Crit.: 314, 1822. – PR 11757.

Original diagnosis: Scapo simplicissimo, bracteis squamisque furfuraceo-hirsutis, floribus tubulosis medio constrictis in spicam oblongam condensatis tribra-cteatis, stigmatibus bilobo (flavescente) exserto, calyce connato 5-fido

Locality: Ad Genistae tinctoriae radices in colle herbido der Steinklippe [near Wendelstein, SE of Rossleben].

Brief notes on the specimen: One upper part of a fertile plant (23 cm) without basal part.

Two labels: 1. „Orobanche comosa m. / Thg“. The label is mounted directly on the plant and 2. „Orobanche comosa schd. cr. / Diask. 59. / Steinklippe pr. Wendels. [Wendelstein, SE of Rossleben] / 1808“. Seeds and flowers are attached in the original small envelope.

The specimen PR 11757 is selected here as a lectotype.

According to the January 2000 revision by German botanist J. Pusch this specimen corresponds to *Orobanche arenaria* BORKH.

Note: A further specimen *O. comosa* from Wallroth's collection, originating probably from the Mediterranean,

exists in the herbarium PR – it is a longitudinal section of the flowering plant and also a fruiting one. The label: „Orobanche coerulea / comosa“.

Orobanche nudiflora WALLROTH

Sched. Crit.: 310, 1822. – PR 11787.

Original diagnosis: Scapo simplicissimo inferne squamato, squamis bracteisque ovatis extus hirsuto, floribus ventricososubcampanulatis glaberrimis calyce profunde 4-fido, dentibus inaequalibus, superioribus majoribus e basi ovata lineari-setaceis.

Locality: Ad radices Pruni spinosae auf dem Schachtberge prope Rossleben.

Brief notes on the specimens: Four well-developed flowering plants (17–27 cm long) and the original envelope made from a letter with the remains of flowers.

Label: 1. „Orob. nudiflora / W.“ (the label is mounted directly on the left plant); 2. „Orobanche minor SUTT. / Ex agro Lausannensi / Gag!“ and 3. „Orobanche nudiflora / prope Lausanne / Gag. / (S. O. minori titulo“. The further illegible revision label by an unknown author, written in German was added.

The very left plant with label (no. 1) is selected here as a lectotype.

According to the revision label of Pusch from January 2000 these plants correspond to the species *Orobanche minor* SM.

Orobanche rubens WALLROTH

Sched. Crit.: 307, 1822. – PR 11756.

Text-fig. 11.

Original diagnosis: Scapo simplicissimo bracteisque colorato, floribus ventricosis in spicam oblongam congestis, staminibus intus hirsutiusculis, stylo parce glanduloso dentibus carinatis, superioribus obtusiusculis obsoletis tubi plicam attingentibus.

Locality: In collibus editoribus ad Biebram [Bad Bibra NW of Naumburg] – Extra fines ad Auleben [Kyffhäuser] et Sondershusam [Sondershausen].

Brief notes on the specimens: One well-developed plant (45 cm) with inflorescence and one upper part of rather small plant (12 cm). Wallroth's original envelope with the remains of flowers and seeds is attached.

Label: „O. rubens m. / Ex agro Sonderhu / sano [Sondershausen] 1820“.

The well-developed plant on the sheet PR 11756 is to be considered as a lectotype for this selection.

According to J. Zázvorka, specialist on the genus *Orobanche*, Wallroth's species named as *O. rubens* corresponds to *Orobanche lutea* BAUMG.

Wallroth's original specimen of *Orobanche rubens* in the herbarium of Martin Luther University in Halle-Wittenberg (No. HAL 90591) was already designated as type by H. Uhlich. The text on Wallroth's original label: „Orobanche rubens mihi Wallroth“ and on the revision label: „O. lutea Baumg. / Det. Rev. Confirm.: Holger Uhlich / Typus! 17. 9. 2000“



Text-fig. 11. Lectotype specimen *Orobanche rubens* WALLROTH.

Note: Wallroth's rich material of this species, originally placed in the same herbarium cover together with the chosen lectotype (PR 11756) and probably originating from the same locality Sondershausen, is mounted on five further sheets. The original labels are absent and only small pieces of paper with embossed stamps provided with the inscription: MUS. BOH. COLL. WALLROTH were added to every sheet.

***Orobanche sparsiflora* WALLROTH**

Sched. Crit.: 309, 1822. – PR 11785 A, B.

Original diagnosis: Scapo simplici, squamis bracteisque oblongo-lanceolatis concoloribus, floribus ventricosis hirsutis remotis in spicam elongatam laxè dispositis. In Wallroth's text only one variety was mentioned: „*β. pauciflora*, scapo humili paucifloro“ (without any other notes).

Locality: In collibus et promontoriis graminosis sylvaticis inter Bottendorf [near Rossleben] et Schweinsroda [Schönewerda, NW of Rossleben].

Brief notes on the specimens: On sheet A there is one flowering plant, 25 cm long.

Label: The label is mounted directly on the plant: „*Orob. caryophyllacea* / v. *sparsiflora* / Thg.“ Wallroth wrote by pencil on the top right of the label: „*O. sparsiflora*“. The original envelope, made from a letter, containing one young fruit was added.

On sheet B there are two flowering plants (28 and 17 cm).

Two labels: 1. „*Orobanche caryophyllacea* / *β. sparsiflora* Diask. 38. / *O. sparsiflora* schd. cr. / Thuring.“ and 2. „*sparsiflora*“ (the name is written in pencil on the label, mounted on the left plant).

The specimen PR 11758 A is selected here as a lectotype.

According to Zázvorka this specimen corresponds to *Orobanche caryophyllacea* SM.

Note: In Wallroth's collection there are more than 40 sheets of the genus *Orobanche*, named as *O. alba*, *O. arenaria*, *O. caryophyllacea*, *O. flava*, *O. gracilis*, *O. purpurea*, *O. ramosa*, *O. rubens*. Most of them originated from Thuringia. The specimens from other parts of Germany were not collected by Wallroth himself (e. g. by Angerstein from Hiddensee, by Gottl. (?) near Bonn, by Braun in Munich). In spite of the very rich material of *Orobanche*, further type specimens of species, described by Wallroth in *Schedulae criticae* (*O. apiculata*, *O. micrantha*) and in *Orobanches generis diaskene* (*O. cumana*, *O. reticulata*, *O. variegata*, *O. violacea*) have not yet been found in the herbarium PR.

***Papaver trilobum* WALLROTH**

Annus Botanicus p. 149, 1815; Sched. Crit. Tab. I, 1822.
– PR 2436 and PR 2437.

Original diagnosis: Capsulis obovatis cauleque ramoso glabris, calycibus petiolisque ciliatis, foliis trilobis obtusis integris glaucis basi cuneata in petiolum attenuatis.

Locality: Prope Osterhausen [S of Eisleben] inter Brassicam Napum ad Heringen. Aug.

Brief notes on the specimens: Three leafy plants (20, 30 and 32 cm) with a few capsules, two broken upper parts of plants are on the sheet PR 2436.

Label: Three labels are attached: 1. On the large original label the name „*Papaver trilobum* m.“ is written and some remarks concerning distinguishing features follow. The locality is not mentioned; 2. Wallroth wrote by pencil on the small label: „*Papaver trilobum* / Ann. bot.“ and 3. „Vide: Dr. Wallroth's Sendschreiben / an den Apotheker H. Ernst Hampe / zu Blankenburg in Linnaea / Bd. 14 (1840), pag. 81“ – this text was not written by Wallroth.

Three leafy plants in flower (ca 25 cm) are on the sheet PR 2437.

Label: The original Wallroth's label is absent, only the remark written probably by L. Čelakovský: „In der That ausgezeichnet. / Wird in DeCand. Prodr. I, p. 119 / als *Pap. trilobum* Spreng! fl. hal. / suppl. / angeführt.“ The same text: „*P. trilobum* (Spreng! fl. hal. suppl.)“ was given by De Candolle (Prodr. 1824,1:119).

The specimen on the sheet PR 2436 is selected here as a lectotype.

All specimens represent *Papaver rhoeas* L. var. *trilobum* (WALLR.).

***Pinguicula gypsophila* WALLROTH**

Linnaea 14: 533-534, 1840. – PR 11762 A – E.

Original diagnosis: Calycis (exigui) segmentis patentissimis, superioribus trilobis, lobis ovatis brevissimis patentibus porrectis obtusiusculis ab excisione corollae superioris retractis ... stigmatè emarginato (albo), capsula (exigua) ovata mucronata ventricosa calyce duplo breviorè, seminibus reticulato-cellulosis ...

Locality: Auf quelligen Moospläten zwischen Gypselfelsenklüften des südlichen und südwestlichen Harzes hier und da.

Brief notes on the specimens: On sheet A there are seven flowering plants (5–9 cm long) with 1–2 flowers.

Label: „*Pinguicula gypsophila* m. / Prope Stempedam. Juli“ [Stempeda, NE of Nordhausen].

Sheet B contains four complete fertile plants (8–14 cm), three of them with four and one with three fruiting stems.

Label: „fructif. *Pinguicula gypsophila*“. Some morphological features were added.

The inscription on Wallroth's original envelope containing seeds: „*Pinguicula gypsophila* m.“

Two fertile plants (6–8cm), each with two fruiting stems are mounted on sheet C. Broken remains of two plants are placed separately in a bag. All material was originally preserved in an enclosed envelope, made from a letter dated 20 February 1830. On this envelope Wallroth added: „*Pinguicula gypsophila* / Kohnstein“ [a hill NW of Nordhausen].

Eight small one-flowered plants (4 – 7 cm) are on sheet D without any label.

One fertile plant (ca 16 cm) with three fruiting stems is mounted on sheet E, also without any label. Two small orig-

inal envelopes with the remains of fruiting stems are present.

The plant on the sheet PR 11762 A is selected here as a lectotype.

To the sheet PR 11762 A and B, the revision label was attached: „*Pinguicula vulgaris* L. / rev. J. Schindler 1907“. All plants correspond to this species.

***Potentilla hybrida* WALLROTH**

Sched. Crit.: 247, 1822. – PR 11783 A, B.

Text-fig. 12.

Original diagnosis: Foliis radicalibus 3–4 natisve, foliolis obovato-oblongis apice infraque illum conniventi-serratis supra glabriusculis subtus glaucescentibus sericeis, laciniis calycinis ovatis acuminatis petala obcordata aequantibus.

Locality: Inter virgulta rechts von der Steigerthaelschen Mittelmühle [Steigerthal, NE of Nordhausen], extra agr. hal. fines.

Brief notes on the specimens: On the first sheet A there are four plants (ca 20–25 cm) with rather big leaves, one broken leaf and one flower are mounted separately.

Label: „*Potentilla hybrida* m. / Ex agro erford. [Erfurt?] – in hortis Bilzii mei culta et exhibita“.

On the second sheet B there are four small plants (5–15 cm), each of them with an individual label: 1. „*Potentilla hybrida* m. / attulit ex. fl. erfordana -?“; 2. „*P. hybrida* mea“; 3. „*Potentilla hybrida* Schd. cr. / 247. / *P. splendens* Ram.“ and 4. „specimen carpelophorum!“ Wallroth’s original envelope made from a letter and containing one seed is attached.

The specimens on the sheet PR 11783 B are selected here as a lectotype.

J. Soják, specialist on the genus *Potentilla*, considered all these plants as the hybrid *Potentilla alba* × *P. fragariastrum* with correct binomial name *Potentilla* × *hybrida* WALLR.

***Rhinanthus buccalis* WALLROTH**

Flora 25/II, Nro. 32: 504, 1842. – PR 10515 A, B, C.

Original diagnosis: Caule simplici superne in ramos floriferos patentes diviso, foliis lanceolato-linearibus, calyce e basi rotundata ad apicem usque aequaliter inflato molliter pubente

Locality was not mentioned.

Brief notes on the specimens: The plants were originally lying together in one herbarium cover; they were later divided into three sheets and Wallroth’s original label was placed on sheet A. Five fertile plants are mounted on sheet A, three fertile plants (29–60 cm) and one damaged sterile plant (30 cm) on sheet B.

Label: „*Rhinanthus buccalis* m. / Inter segetes hyaemales pr. Northusen [Nordhausen] / juxta viae ad Neosbodium“ [probably Neustadt].

On the third sheet C there are mounted two lower parts of plants (4–20 cm), six upper parts of leaves, fruits and seeds with inflorescences and a small envelope containing the remains of plants. All these remains of plants were originally placed in one large envelope (enclosed at the back of the cover) with the inscription: „*Rhinanthus buccalis* m.“

The specimen PR 10515 A is selected here as a lectotype.

All plants correspond to *Rhinanthus major* L.

***Senecio fluviatilis* WALLROTH**

Linnaea 14: 646, 1840. – PR 11803 A – E.

Original diagnosis: Foliis glaberrimis margine tenuiter cartilagineo dentibus inaequalibus squarrosis brevissime mucronatis serratis, infimis e basi longe protracta integerrima, involucri ovato foliolis filiformibus 4 illo duplo brevioribus succincto, ligulis 7–8 patentibus ungue pilosis, achaeniis glabris.

Locality: An den Ufern langsam fliessender Flüsse der südlichen Harzgränze.

Brief notes on the specimens: The plants, which were in all probability originally lying in one common herbarium cover, have been divided onto five sheets.

One upper part of a leafy plant with an inflorescence (57 cm long), broken into two parts is now on sheet A. On a further four sheets there are also leafy plants with inflorescences which are more or less withered – one plant (60 cm long) broken into two parts and one upper part (24 cm) are on sheet B, one plant (56 cm) is on sheet C and one plant (55 cm) broken into two parts is on sheet D. Two upper parts of leafy stems (32 cm) with early buds and two sterile shoots (33 and 16 cm) are on sheet E.

Label: Wallroth’s only original label is mounted on sheet A: „*Senecio fluviatilis* m. / *Senecio sarracenicus* Jacq. Reichb. et / auct. nec. L. / Ad ripas Viprae [Wipper] inter Wollers / leben et „Nohram“ [SW of Nordhausen].

At the turn of the year 1984–1985, J. Herborg had elected the specimen on the sheet PR 11803 A as a lectotype, the further four sheets (B, C, D and E) he designated as isolecotypes of *Senecio fluviatilis* WALLR. (Herborg 1987:184).

According to Herborg’s monograph on *Senecio nemorensis*-complex (1987: 187) these specimens correspond to the species *Senecio sarracenicus* L.

Note: A further two sheets with rather damaged plants of *Senecio fluviatilis* are preserved in Wallroth’s collection. For both of them, only one label exists: „*Senecio fluviatilis* m. S. sarracenicus auct. nec L. – Merse Julio ad ripas Helmae?? lecta arenosa“.

***Senecio fontanus* WALLROTH**

Linnaea 14: 647–648, 1840. – PR 11802 A, B, C.

Original diagnosis: Foliis inferioribus intermediisque hinc leviter decurrentibus, superioribus sessilibus, corymbo polycephalo effuso, bracteis linearibus hirsutiusculis, involucri foliola dorso hirsuta tricostata in apicem parce sphacelatum sensim excurrentia subaequantibus, radio 5–8 ligulata

Locality has not been indicated.

Brief notes on the specimens: On sheet A there is one leafy stem (55 cm) with inflorescence.

Two labels: 1. „*Senecio fontanus* W.“ (the species name had been originally written as „amplexicaulis“, than it



Text-fig. 12. Lectotype specimen of *Potentilla x hybrida* WALLROTH.

was crossed out) / „*α. pentaglossus* / Ex nemore Lodersleb. [Lodersleben, SW of Querfurt] / ad fontes. 1819“ and 2. „*Senecio amplexicaulis* W. / *α. pentaglossus* / Ex nemore Lodersleb.“

One leafy stem (52 cm) broken in two parts with inflorescence is on sheet B.

Two labels: 1. „*Senecio fontanus* W. / *β. octoglossus* / Ex palude Lodersleb. fl. / *halensis*. 1812“ and 2. „*Senecio octoglossus* DC / pr. VI. 354 / *S. germanici* var. *δ. W.* / Schd. cr.“

The upper part of a leafy stem with inflorescence (27 cm) is mounted on sheet C.

Two labels: 1. „*Senecio fontanus* W. / *α. pentaglossus* m. / Ex Sudetis Silesiae.“; and 2. „*Senecio Jacquini* REICH. / Sudetae. Wagner.“

Herborg (1987:104) considered the name *Senecio fontanus* WALLROTH as an illegitimate one (...nom. illeg., gibt u. a. *S. jacquinianus* RCHB. (1828) als synonym an).

According to Herborg's revision labels from 1985–1986 the specimens placed on these three sheets 11802 A, B and C correspond to the species *Senecio germanicus* WALLR.

Senecio germanicus WALLROTH

Sched. Crit.: 476-478, 1822.– PR 11800 A, B, C.

Text-fig. 13.

Original diagnosis: Caule foliisque subtus margineque tenuiter pubescentibus pedunculis elongatis umbellato-corymbosis, bracteis linearibus, laciniis calycinis alternis latoribus costatis.

Locality: In dumetis collinis inque nemoribus ad Schmon [SW of Querfurt], Lodersleben [SW of Querfurt], Biebra [Bad Bibra NW of Naumburg]: in nemoribus des Alten-Stolberg's [a hill E of Nordhausen] extra fines abundat.

Brief notes on the specimens: Three sheets of species *Senecio germanicus* are present. On sheet A there is an upper leafy stem with inflorescence (45 cm long).

Three original labels: „1. *Senecio germanicus* mihi / *Senecio nemorensis* Linn. ex Syn.“ / some distinguishing features followed / „Ex dumetis apricis collis herbidi Bibraensis / M. Thr. 18“. The further two labels were stuck on the previous one: 2. „*Senecio germanicus* W. / *β. rigida* / Biebra“ and 3. „*Senecio nemorensis* L. ? / caulis flexuosis / *S. ovatus*.“

On sheet B there are two upper parts of leafy stems (32 and 58 cm) with achenes.

Label: „*Senecio germanicus* Wallr.“

Two leafy stems with inflorescences (52 and 55 cm) and one lower part of a leafy stem (45 cm) are on sheet C.

Label: „*Senecio germanicus* m. / *α. pentaglossus*“. The name of this variety has never been published neither in *Schedulae Criticae*, nor in *Linnaea*.

J. Herborg on the revision label in 1985 selected the sheet 11800 A as a lectotype of *Senecio germanicus* WALLROTH, it was later published (Herborg 1987:103).

All specimens correspond to this species.

Senecio salicifolius WALLROTH

Sched. Crit.: 478-481, 1822. – PR 11801.

Original diagnosis: Foliis petiolatis oblongo-lanceolatis acutis cartilagineo-dentatis, omnibus conformibus, summis sensim angustioribus, floribus radiantibus corymboso-umbellatis, pedunculorum bracteis linearifiliformibus glabris.

Locality: Ad Wiehe [S of Rossleben], proper ripas der Unstruth [Unstrut, river in Thuringia]. In agro thuring. et hercyn. infer. abundat.

Brief notes on the specimens: Two leafy stems with inflorescences (44 and 60 cm).

Two labels: 1. „*Senecio salicifolius* m. var. poly (6–8)-glossa. / Kohnstein [a hill NW of Nordhausen] e regione des / Kupferhamers. Aug.“ and 2. „var. angustif. / lusus 6–8 glossus / Kohnstein“.

The specimen PR 11801 is selected here as a lectotype.

According to Herborg's revision label (1985) these specimens correspond to the species *Senecio ovatus* (P. GAERTN., MEY. ET SCHERB.) WILLD.

Note: A further large sample of Wallroth's material of *Senecio sarracenicus α. latifolius* and *β. longifolius* (Linnaea 14: 645) existed in the herbarium PR, which J. Herborg also identified as *S. ovatus*.

Solidago chrysantha WALLROTH

Linnaea 14: 643, 1840. – PR 10635 A – D.

Original diagnosis: Caule striato racemoso-paniculato capitulis ovatis multifloris demum patulis, involucri foliolis linearibus omnibus conformibus, ligulis (10) ovato-ellipticis utrinque obtusatis obsolete striatis

Locality: An den sonnigen Gypsvorbergen des südwestlichen Harzes stellenweise häufig

Brief notes on the specimens: The plants were originally placed in one herbarium cover with only one label; later they were divided into four sheets and the original label was mounted on sheet A.

On sheet A there is one plant (64 cm) broken into two parts with rich, shortly branched inflorescences and the above mentioned label.

Label: „*Solidago chrysantha* m. / Kohnstein am Kalkbruche“ [a hill NW of Nordhausen].

One lower part of a leafy stem (50 cm) with a leafy rosette and a flowering branch and one leafy branch (58 cm) with dense inflorescences are mounted on sheet B.

One plant (135 cm long) without the base, broken into three parts is on sheet C.

One leafy rosette and one plant (56 cm) with leaves and many inflorescences is placed on sheet D.

The specimen on the sheet PR 10635 A is selected here as a lectotype.

We evaluated these plants with dense inflorescences as a variation within the variability of the species *Solidago virgaurea* L.

Thalictrum bauhianum WALLROTH

Sched. Crit.: 264, 1822. – PR 11755.

Original diagnosis: Caule stricto simplici angulato-striato, foliorum inferiorum petiolorum foliolis



Herbarium Museum Pegase	Ex num 190086
	Inv. num FR 11800 A

Lectotypus
Senecio germanicus Wallr.
 det. J. Hervey Geogen. V. 1845

HERBARIUM MUSEI HISTORICO-SCIEN-
 TIFICI GIESSENENSIS
 190086

Senecio germanicus Wallr.
Senecio nemorosus L. var. *serotinus*
 (A. N. S. Haller)
 qualem Hervey in 1777. abobstant. nemorosus
 latius, rigidum et bipate folio, tubulosis
 var. ex loco natali.

Die Senecio *laevigatus* (L.) (Laciniis laciniatis) foliorum retroa ite
 comit et parte florum inermis passivum et involucri spinescenti, apice
 multo brevioris hyalinoque florem non separati folio.

Senecio germanicus Wallr.
 f. *rigidus* Sieber

Senecio nemorosus L.?
 omnia florum et foliorum in fragmentis,
 nec quae florum abest.
 L. ovatus

Die Senecio *serotinus* Wallr. *Senecio*
 f. 7. 18.

Herb. Wallroth

Text-fig. 13. Lectotype specimen of *Senecio germanicus* WALLROTH.

lanceolato-linearibus, superiorum sessilium adpressorum foliolis lineari-filiformibus convolutis

Wallroth divided this species into three infraspecific taxa: *α. seselioides*, *β. cnidioides* and *γ. galioides*. Only one specimen *γ. galioides* is present in the PR herbarium.

Brief notes on the specimens: Two unbranched leafy plants (28 and 20 cm) with inflorescences.

Label: Two of Wallroth's labels with nearly the same text are attached: 1. „Th. bauhinianum / var. *γ.* / Th. galioides Nstl.“ and 2. „Th. Bauh. *γ.* galioides / Th. galioides Nestl.“.

The locality is not given – neither in his work *Schedulae criticae*, nor on the labels.

The plant on the sheet PR 11755 is selected here as a lectotype of *Thalictrum bauhinianum* WALLROTH.

R. Hand (2001) considered this name as a synonym of *Thalictrum simplex* L. subsp. *galioides* (DC. in LAM. et DC.) KORSH.

***Thalictrum collinum* WALLROTH**

Sched. Crit.: 259, 1822. – PR 2174.

Original diagnosis: Caule basi folioso internodiis approximatis intercepto, foliis utrinque viridibus glaberrimis, foliolis e basi ovata subcordatae subrotundis obtuse-trifidis, floribus paniculatis cernuis, carpellis ovatis aequaliter costatis concoloribus stigmatate recto coronatis.

Locality: In collibus editioribus circa Rossleben, Auleben [Kyffhäuser] et alibi.

Brief notes on the specimens: Three well developed plants (43, 45 and 49 cm) with leaves especially on the lower part of stem. Two plants have mostly fruitless inflorescences, the third one is with flowers.

Label: Three labels with Wallroth's original handwriting are present: 1. „Th. collinum mihi“; on a further two labels, some morphological features are mentioned. The locality is not given.

Specimen PR 2174 is selected here as a lectotype.

We consider this Wallroth's specimen to be *Thalictrum minus* L.

***Thalictrum montanum* WALLROTH**

Sched. Crit.: 255–259, 1822. – PR 2172 A, B.

Original diagnosis: Caule flexuoso supra basin vaginatam aphyllam folioso floribus umbellato-paniculatis cernuis, carpellis oblongis aequaliter costatis utrinque attractis, illis nervis foliolorum vaginisque coeruleo-pruinosis.

Wallroth divided this species into three infraspecific taxa: *α. virens*, *β. roridum* and *γ. glandulosum*, which differed especially in colour and indumentum of the leaves. In Wallroth's collection two names are present: 1. *α. virens* and 2. *γ. glandulosum*.

Hand (2001:148) considered Wallroth's name *Thalictrum montanum* as an illegitimate one, hence we are not selecting the lectotype from Wallroth's material.

***Thalictrum montanum α. virens* WALLROTH**

(PR 2172 A)

Locality: In vineis saxosis sterilissimis ad Bennstaedt [Bennstedt near Halle].

Brief notes on the specimens: Four leafy plants (30–58 cm long), mostly with basal parts of stems and fruitless inflorescences. Two original envelopes with fruits are present, each with a different inscription: 1. „Bennstaedt 21“ and 2. „Carpella Thalictri montani asperi“.

Two labels: 1. „Thalictrum minus L. / Ex vineis / Benstadiensis [Bennstedt] Aug. 20. / 21“ and 2. „Th. montanum / *α. virens* mihi“.

The specimen PR 2172 A is selected here as a lectotype of *Thalictrum montanum* WALLROTH (nom. illeg.) var. *virens* WALLROTH.

The plants correspond to the species *Thalictrum minus* L.

***Thalictrum montanum γ. glandulosum* WALLROTH**

(PR 2172 B)

Original diagnosis: Foliolis subrotundis leviter trifidis utrinque (magis minusve) glaucis, illis, vaginis, petiolis carpellisque glandulosis.

Locality: In collibus gypsaceis, calcareis ad Frankenhausen [Bad Frankenhausen], Sondershausen, Botten-dorf [NW of Rossleben] inque jugo meridionali arenoso der Rothenburg, infra arcem, ubi maxima hujus Th. luxuries et mutabilitas; in similibus locis der Steinklippe [SE of Rossleben].

Brief notes on the specimens: Two parts of well-developed plants (32 and 34 cm) with many leaves and only a few fruits.

Label: „Th. mont. *γ.* glandulos. / Ex collibus gypsaceis herbidis / Frankohusani [Bad Frankenhausen] Juni 21“.

A further two, more or less scraps of paper with some morphological remarks are attached.

The specimen PR 2172 B is selected here as a lectotype of *Thalictrum montanum* WALLROTH (nom. illeg.) var. *glandulosum* WALLROTH.

Hand (2001:170) considered it as *Thalictrum minus* L. subsp. *saxatile* DC. ex CESS. in CATTANEO.

***Thalictrum neglectum* WALLROTH**

Linnaea 14: 590, 1840. – PR 2175.

Original diagnosis: Caule e basi vaginata aphylla erecto striato, nodis foliiferis remotis intercepto foliisque epruinosis utrinque viridibus foliolis remotis ovato-subrotundis, obtuse tri- s. quinque fidis, carpellis ovato-subrotundis, costa externa prominula in stigma costae interiori gibbosae inclinatum excurrente.

Locality: Auf unfruchtbaren Aeckern und in den benachbarten Buschölzern des südöstlichen Harzes

Brief notes on the specimen: One plant (73 cm high) broken into two parts with leaves and fertile inflorescence, only a few fruits are present. One original envelope containing fruit was added.

Label: Two labels are attached. 1. „Th. neglectum m. / Th. elatum sched. cr. / nec Jacq. / Ex agro hal.“ and 2. „Th. elatum Murr. / *α.* mihi“.

The specimen PR 2175 is designated here as a lectotype.

We suppose that this plant corresponds to *Thalictrum minus* L. subsp. *minus*; Hand (2001:155) considered it as *Thalictrum minus* L. subsp. *elatum* (JACQ.) STOJ. ET STEF.

***Tormentilla parviflora* WALLROTH**

Linnaea 14: 580, 1840. – PR 11786 A, B.

Original diagnosis: Caulibus adscendentibus ramosis, foliis radicalibus longe-, caulinis brevius petiolatis s. subsessilibus alternis oppositisve ternatis pedunculis filiformibus elongatis, phyllis calycinis subconformibus ovatis acutiusculis, petalis obovatis calycem aequantibus

Locality: In Birkenwäldern des südwestlichen Harzes stellenweise.

Wallroth divided this species into two varieties: *α. sessilifolia* and *β. petiolata*. Both of them are deposited in the herbarium PR.

***Tormentilla parviflora* var. *α. sessilifolia* WALLROTH**

(PR 11786 A)

Original diagnosis: Caulibus decumbentibus tenuibus, foliis sessilibus, omnibus alternis, stipulis ovatis.

Brief notes on the specimens: Eight tufts with leaves and fruiting creeping stems (up to 14 cm long) with various degrees of damage, bearing only a few fruits.

Label: „*Tormentilla micrantha* m.“ – above this name is added: „*parviflora α. sessilifolia*“. Further some synonymical remarks follow. Down at the right bottom: „Ex agro heringensi“ [Heringen].

Specimen PR 11786 A is selected here as a lectotype of *Tormentilla parviflora* var. *α. sessilifolia* WALLROTH.

The plants correspond with the species *Potentilla erecta* (L.) RÄUSCHEL (Soják 1995).

***Tormentilla parviflora* var. *β. petiolata* WALLROTH**

(PR 11786 B)

Original diagnosis: caulibus erectis 1–2 pedalibus, foliis breviter petiolatis, intermediis oppositis, foliolis stipulisque oblongis duplo majoribus.

Brief notes on the specimens: Two creeping leafy stems (above 45 cm long) with long petioles (3–4 cm), bearing a head of achenes.

Label: Above the name „*Tormentilla micrantha* m. / var. *oppositifolia*“ there is written: „*parviflora β. petiolata* W. / *stipularia integritate varians* / In nemusculo hinter / u. über der Hirschteichen / pr. Salsam“ [stream Salza on W outskirts of Nordhausen].

The specimen PR 11786 B is selected here as a lectotype of *Tormentilla parviflora* WALLROTH.

Specialist on this genus, J. Soják, considered the specimens on sheet B to be *Potentilla erecta* (L.) RÄUSCHEL var. *dacica* (BORBÁS EX ZIMMETER).

***Triglochin salina* WALLROTH**

Linnaea 14: 567, 1840. – PR 11767.

Original diagnosis: Rhizomate transversali tunicis fibrosis obducto, scapo basi adscendente foliorum vaginis ovato-rotundatis involuto bulboso superne laxe breviterque spicato, rhachi teretiuscula, capsulis 6 oblongo-linearibus triquetris dorso costato planis acute marginatis in apicem stigmatate reclinato coronatum sensim tenuatis, fruc-

tum oblongum e basi rotundata tenuatum laevigatum pedicello longiorem constituentibus

Locality: Auf salzhaltigen Triften der südlichen Salinen

Brief notes on the specimens: Eight fertile stems (7–18 cm) and one broken bottom part of a stem, three sterile leaves and a small rosette of leaves.

Label: Two labels are present: 1. „*Triglochin salina* Wallroth 1816 / *Triglochin intermedia* / Wallr. in lit. 1813 / Ad salinas Aerenser Thrg. [probably Artern, Kyffhäuser] 1812“ and 2. „*Triglochin salina intermedia* Wallr.“ (the former designation *intermedia* was crossed out) / „*salina* 1816 / a *Triglochine maritima*, affinis ubique differt“. A further seven different features follow.

The sheet PR 11767 is selected here as a lectotype.

The plants correspond to the species *Triglochin maritimum* L.

***Valeriana collina* WALLROTH**

Linnaea 14: 537-538, 1840. – PR 10118 A – F, PR 10122.

Original diagnosis: foliis multi(10–12)-jugis, omnibus subconformibus, foliolis approximatis linearilanceolatis subintegerrimis obtusiusculis basi juxta rhachin foliaceo-canaliculatam decurrentibus

Locality has not been mentioned.

Wallroth divided this species into three infraspecific taxa *α. simplex*, *β. stolonifera*, and *γ. monst. vesicarium*. He further divided the variety *V. collina β. stolonifera* into *a. leiocarpa* and *b. eriocarpa*, both of them are preserved in the herbarium PR. Wallroth's original remarks published in Linnaea did not correspond accurately with his labels.

Brief notes on the specimens: Two well-developed flowering plants (62 and 57 cm), with 6 cauline leaves and 22–24 linear entire leaflets are on the sheet PR 10118 A.

Label: „*Valeriana sylvestris* Dodon.“ The designation „*sylvestris*“ was crossed out and obviously later Wallroth rewrote it as: „*Valeriana collina* / var. *stolonifera* m.“. Below this inscription is written: „*Valeriana collina* m. / *γ. eriocarpa*“ and four synonyms identical with published text were added. The locality follows: „Possen“ [probably Possenheim near Naumburg].

Five further sheets (PR 10118 B – F) without any labels, evidently originated from the same locality. All plants are well collected and preserved. The small label, written on a typewriter with the text: „Herbarium Wallroth / sine scheda / verisimiliter isotypus/ *Valerianae collinae/ eriocarpace*“ was stuck on all these sheets. The label was probably added when the original material was divided and mounted in the second half of the 20th century.

One plant (ca 90 cm) with an unbranched stem, a few leaves and inflorescence and four upper parts of stems (24–30 cm high) with inflorescences are on the sheet PR 10122. The middle cauline leaves with ca 15 entire linear leaflets are sporadically dentate.

Label: „*Valeriana collina* m. / *α. leiocarpa* / Kohnstein“ [a hill NW of Nordhausen].

The specimen PR 10118 A is selected here as a lectotype of species *Valeriana collina* WALLROTH.

According to botanists J. Holub et J. Kirschner (1997) the name *V. collina* is illegitimate and they considered this taxon to be *Valeriana stolonifera* CZERN. subsp. *angustifolia* SOÓ.

Valeriana multiceps WALLROTH

Linnaea 14: 539-540, 1840. – PR 10119 A, B, C and PR 10121.

Original diagnosis: Radice praemorsa fibrosa multicipite stolonibus foliosis destituta, caule stricto simplici elato supra basin profunde sulcato, foliis pauci-(3-7)jugis impari obovato-oblongo apice profunde tridentato

Wallroth divided this species into two infraspecific taxa: *α. dentata* (fol. a basi inde dentatis) and *β. incisa* (fol. profunde acuteque incisi-dentatis), both of them are represented in Wallroth's material.

Valeriana multiceps α. dentata WALLROTH

(PR 10121)

Locality: An fruchtbaren Bergabhängen des südlichen Harzes

Brief notes on the specimen: One well-developed plant (105 cm high), divided into three parts. Basal part of stem with three pairs of leaves, middle part of stem with two pairs of leaves and an upper part with an inflorescence in full flower. Leaves with 5-7 pairs of leaflets.

Label: „Valeriana multiceps m. / var. dentata / Kohnstein [a hill NW of Nordhausen] Aug.“

The specimen PR 10121 is selected here as a lectotype of the species *Valeriana multiceps* WALLROTH.

Valeriana multiceps β. incisa WALLROTH

(PR 10119 A, B, C)

Locality is not given.

Brief notes on the specimens: Three original sheets of this variety are present. One plant (125 cm high) is divided onto two herbarium papers A and B, and the original label is mounted on sheet A

Two parts of a stem with three pairs of cauline leaves, 6-7 pairs of deeply dentate leaflets and the upper part of a stem with an inflorescence in full flower are on sheet A. On the second sheet B there is the basal part of stem with one incomplete leaf, three leaves are mounted separately.

Label: „Valeriana multiceps m.“ (the former designations „*sylvestris* DOD.“ and „*paludosa*“ were crossed out) / „var. *β. incisa* m. / Ad nemoris infra Petersdorf“ [near Nordhausen]. All these changes were written by Wallroth.

On the third sheet C there is one complete plant divided into three parts – the remains of large basal leaves with roots and bottom part of stem with one leaf, middle part of cauline stem with two pairs of leaves and upper part of stem with an inflorescence.

Label: „Valeriana multiceps m. / var. incisa / Petersdorf“.

The specimen PR 10119 A is selected here as a lectotype of the variety *Valeriana multiceps* WALLROTH var. *incisa* WALLROTH.

According to Holub et Kirschner (1997) the name *Valeriana multiceps* is a synonym for *Valeriana officinalis* L.

Valeriana procurrens WALLROTH

Linnaea 14: 540-541, 1840. – PR 10123 A, B.

Original diagnosis: Radice praemorsa fibras prolixas stolonisque plurimos longe procurrentes ex articulis radicantes in comam foliosam desinentes undique spargente, caule elato, foliis pauci-(4-6)jugis, foliolis radicalium innovationumque ovato-oblongis

Locality: In schattigen Hainen und auf feuchten Abhängen des südwestlichen H. [obviously Harzes] stellenweise.

Brief notes on the specimens: One plant (110 cm long) was divided and mounted onto two sheets A and B with one original label placed on sheet A. The upper part of the stem with inflorescence and a few cauline leaves and middle part with two pairs of leaves are on sheet A. On sheet B there is the lower part of the same plant with one well developed pair of leaves.

Label: Valeriana procurrens m. / Elfelder Thal“ [probably near Ilfeld, N of Nordhausen].

The specimen PR 10123 A is selected here as a lectotype.

Holub and Kirschner (1997) evaluated this taxon as *Valeriana excelsa* POIRET subsp. *procurrens* (WALLR.) HOLUB.

Vicia onusta WALLROTH

Linnaea 14: 623, 1840. – PR 11770.

Original diagnosis or description was not given. Wallroth mentioned only a comparison with related species: als eine schmallblättrige Form der *Vicia cracca*

Locality: Am südlichen Harzen nur stellenweise häufig

Brief notes on the specimen: One leafy plant (57 cm), with inflorescences.

Label: „onusta Wallr.“ (this is written on the very top above the name *tenuifolia*) / „*Vicia tenuifolia* Roth“ (the name Roth is crossed out and changed for DC. nec). The species name „onusta Wallr.“ had obviously been written above later. The locality is not mentioned.

The specimen PR 11770 is selected here as a lectotype.

This species is identical with *Vicia tenuifolia* ROTH with narrow leaflets.

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References

- Anonymus (1858): Wallroth's Sammlungen. – Bot. Zeitung 16/30: 224.
- Anonymus (1859): Sammlungen. – Oesterr. Bot. Z. 9/4:141.
- Barthel K.J. et Pusch J. (2005): Die Botaniker des Kyffhäusergebietes. – Jena.
- Hampe E. (1836): Prodrromus Florae Hercynicae. – Halle.
- Hand R. (2001): Revision der in Europe Vorkommenden Arten von *Thalictrum* subsectio *Thalictrum* (Ranunculaceae). – Bot. Naturschutz Hessen, 9: 1–358, Frankfurt a. M.
- Herborg J. (1987): Die Variabilität und Sippenabgrenzung in der *Senecio nemorensis*-Gruppe (Compositae) im europäischen Teilareal. – Dissert. Bot., 107, Berlin-Stuttgart.
- Holub J. et Kirschner J. (1997): *Valeriana*. – In: Slavík B. et al.: Květena České republiky 5. – Academia, Praha, p. 516–527.
- Kellner K. (1979): Die floristische Erforschung der Südhartzlandschaft um Nordhausen. – Beitr. Heimatk. Stadt Kreis Nordhausen, Heft 4: 50–61.
- Kison H. U. et Sacher P. (1995): Ernst Hampe Flora Hercynica. – Quedlinburg
- Kubát K. et al. (2002): Klíč ke květeně České republiky. – Academia, Praha.
- Kützing F. T. (1857): Dr. Carl Friedrich Wilhelm Wallroth. – *Bonplandia* 5/9: 147–148.
- Osswald L. (1896): Aus dem Leben Wallroth's. – Mitt. Thüring. Bot. Ver. N. F. 9: 14–27, Weimar.
- Schroeter W. (1991): Karl Fridrich Wilhelm Wallroth. Zur Wiederkehr seines 200. Geburtstages. – Beitr. zur Heimatkunde aus Stadt und Kreis Nordhausen, Heft 16: 89–112.
- Soják J. (1995): *Potentilla*. – In: Slavík B. et al. Květena České republiky 4. – Academia, Praha, p. 312.
- Sprengel K. (1806): *Florae Halensis tentamen novum*. – Halae saxonium.
- Stafleu F. A. et Cowan R. S. (1988): *Taxonomic literature*, 7: 43–45, Utrecht.
- Štěpánek J. (1992): *Arabis*. – In: Slavík B. et al. Květena České republiky 3. – Academia, Praha, p. 134.
- Rauschert S. (1965): Zur Flora Thüringens und der nordostlich angrenzenden Gebiete. 2. – *Wiss. Z. Univ. Halle math. nat. R.*, 14: 495–496.
- Wallroth F. G. (1815): *Annus botanicus, sive supplementum tertium ad Curtii Sprengelii Floram Halensem*. – Halae.
- Wallroth F. G. (1822): *Schedulae criticae de plantis florae Halensis selectis*. – Halae.
- Wallroth F. G. (1824): *Ad Hoppeum, virum in re herbaria peritissimum, de Malvis germanicis epistola Frederici Wallrothii*. – *Syll. Pl. Nov.* 1: 140–142, Ratisbonae.
- Wallroth F. G. (1825): *Orobanches Generis Diaskene*. – Francof.
- Wallroth F. G. (1828): *Rosae plantarum generis historia succincta*. – Nordhusae.
- Wallroth F. G. (1840): *Scholion zu Hampe's Prodrromus Flora Hercyniae*. – *Linnaea* 14: 1–158, 529–704.
- Wallroth F. W. (1842): Zur Naturgeschichte des *Rhinanthus Alectorolophus* der deutschen Floristen. – *Flora* 25/II, Nro. 32: 497–506.
- Wallroth F. W. (1842–1844): *Beiträge zur Botanik. Eine Sammlung monographischer Abhandlungen über besonders schwierige Gewächs-Gattungen der Flora Teuschlands*. – Leipzig.

The list of Wallroth's original material presented in this paper

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<i>Adonis anomala</i>	10	<i>Nasturtium aquaticum</i>	24
<i>Adonis maculata</i>	10	<i>Nasturtium brachystylum</i>	24
<i>Alchemilla glaucescens</i>	10	<i>Nasturtium riparium</i>	24
<i>Alchemilla glaucescens</i> var. β . <i>alpestris</i>	10	<i>Nuphar systylum</i>	26
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<i>Centaurea phaeocephala</i>	13	<i>Potentilla hybrida</i>	29
<i>Chenopodium microspermum</i>	13	<i>Rhinanthus buccalis</i>	29
<i>Dianthus schizopetalus</i>	13	<i>Senecio fluviatilis</i>	29
<i>Erigeron corymbosus</i>	15	<i>Senecio fontanus</i>	29
<i>Erysimum cheiriflorum</i>	15	<i>Senecio germanicus</i>	31
<i>Erysimum schaeerianum</i>	15	<i>Senecio salicifolius</i>	31
<i>Fumana pinifolia</i>	15	<i>Solidago chrysantha</i>	31
<i>Galium agreste</i>	15	<i>Thalictrum bauhinianum</i>	31
<i>Galium gracile</i>	16	<i>Thalictrum collinum</i>	33
<i>Halimus pedunculatus</i>	16	<i>Thalictrum montanum</i>	33
<i>Heracleum ursinum</i>	16	<i>Thalictrum montanum</i> γ . <i>glandulosum</i>	33
<i>Hieracium lactucella</i>	16	<i>Thalictrum neglectum</i>	33
<i>Hieracium rothianum</i>	18	<i>Tormentilla parviflora</i>	34
<i>Lamium rubrum</i>	18	<i>Tormentilla parviflora</i> var. α . <i>sessilifolia</i>	34
<i>Malva adulterina</i>	18	<i>Triglochin salina</i>	34
<i>Malva equina</i>	18	<i>Valeriana collina</i>	34
<i>Malva neglecta</i>	18	<i>Valeriana multiceps</i>	35
<i>Medicago stipularis</i>	22	<i>Valeriana multiceps</i> β . <i>incisa</i>	35
<i>Melilotus arvensis</i>	22	<i>Valeriana procurrens</i>	35
<i>Melilotus tenella</i>	22	<i>Vicia onusta</i>	35
<i>Monotropa hypophegea</i>	22		