

Type specimens of the Brassicaceae in the Herbarium of the Martin-Luther-University Halle Wittenberg (HAL)

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Abstract: Hoffmann, M.H. 2000: Type specimens of the Brassicaceae in the Herbarium of the Martin-Luther-University Halle-Wittenberg. *Schlechtendalia* 4: 35-40.

A checklist of type specimens belonging to the Brassicaceae deposited in the herbarium of the Martin-Luther-University Halle-Wittenberg (HAL) is presented. The binominals are arranged alphabetically. Beside the names listed commentaries dealing with type locality, typifications, previous annotations, and synonymy are added. As far as they could be ascertained, currently adopted names are furnished at the end of each paragraph. Forty entries concern type material. Nine of the specimens cited are holotypes, two collections are isotypes, two collection are lectotypes, two are isolectotypes, and six are recognized as syntypes. Nineteen collections are types of unknown status. 37 collections comprise original material, which are listed separately.

Zusammenfassung: Hoffmann, M.H. 2000: Type specimens of the Brassicaceae in the Herbarium of the Martin-Luther-University Halle-Wittenberg (HAL). *Schlechtendalia* 4: 35-40.

Die Typus-Belege der Brassicaceae des Herbariums der Martin-Luther-Universität Halle-Wittenberg (HAL) sind alphabetisch in einer Liste zusammengefaßt. Für jeden Beleg werden Herkunft, Typisierung, Aufschriften auf den Herbaretiketten sowie Bemerkungen anderer Autoren wiedergegeben. Der gültige Name der jeweiligen Sippe wird, sofern er zweifelsfrei bekannt ist, aufgeführt. Vierzig Belege gehören zu Typusaufsammlungen, darunter befinden sich 9 Holotypen, 2 Isotypen, 2 Lectotypen, 2 Isolectotypen, 6 Syntypen und 19 weitere Typen. In einem eigenen Abschnitt werden 37 Belege aufgeführt, die Originalmaterial umfassen.

In this paper the type collections of the Brassicaceae at the herbarium of the Martin-Luther-University Halle-Wittenberg are listed. Methodology follows BRAUN (1998) and HOFFMANN (1998). It should be noted that a closer scrutiny of the collections at HAL may lead to detection of more type collections. In an additional list of the original material, collections are cited that may be type material but its status could not be ascertained.

Each entry in the checklist consists of the following parts:

- 1) The original name of species and a complete author citation,
- 2) Type localities of the specimen(s), annotations, previous typifications, locations of syntypes (as far as known),
- 3) The currently adopted name, if it may easily be inferred from monographic works.

Aethionema elongatum Boiss., *Diagn. Pl. Or. Nov. Sér. 1, 6: 17, 1845.*

„Kotschy 583, Pl. Pers. austr. ed Hohenacker. In rupestribus alpis Kuh-Daëna sparsim. 8. Jul. 1842.“ (syntype: HAL 81456, other syntype: G).

Alyssopsis kotschy Boiss., *Diagn. Pl. Or. Nov. Sér. 1, 6: 14, 1845.*

„Kotschy, in m. Kuh Barfi prope u. Schiraz, Maj 1842“ (syntype: HAL 85356, other syntypes: G, E). - *Dielsiocharis kotschy* (Boiss.) O.E. Schulz.

Alyssum heterotrichum Boiss., *Diagn. Pl. Or. Nov. Sér. 1, 6: 15, 1845.*

„Kotschy 224, prope ruinas u. Persepolis, M. Apr. 1842“ (syntype: HAL 86102, other syntypes: G, BM, E, K, OXF, W).

Alyssum wierzbickii Heuff., Flora 18: 242, 1835.

several specimen, e.g. „3. *Alyssum wierzbickii*. In montanis rupestribus Tilsa mare dictis ad Oravicza. May. Flor. Banatus. Wierzbicki“, „1277 *Alyssum wierzbickii* Heuff., Bannat, an schattigen steinigten Waldstellen der Berge Tilsa mare und Tilsa mik. Juni. Dr. Wierzbicki“ (type: HAL 86105, 86106).

Arabis anachoretica Porta ex Huter, Oesterr. Bot. Zeitschr. 54: 139, 1904.

„Tirolia austral. Val di Ledro in antris mts. Corno, sol calcar. 800-900 m, Aug. 1888, leg. Porta“ (type: HAL 85351).

Arabis cuneifolia A. Rich., Tent. Fl. Abyss. 1: 17, 1847.

„Schimper 997, *Arabis cuneifolia* Hochst. Ad rupes in regionibus summis montium Sémensium prope Silke, 23. Jun. 1838“ (isotype: HAL 85352, holotype: P, other isotypes: K, S).

Arabis owaihiensis Cham. & Schltld., Linnaea 1: 17, 1826.

„*Arabis* O-waihiensis n., O wahu in montibus“ (holotype: HAL 85354).

Aubrieta intermedia Heldr. & Orph. in Boiss. Diagn. Pl. Or. Nov. Sér. 2, 1: 36, 1854.

„Orphanides 379. *Aubrieta intermedia* Heldr. & Orph. n. sp. In monte Ziria (Cyllene) prope Tricala, 3000-5000', 22. Apr.-4. [?] Mai 185[4?]" (type: HAL 84116).

Brassica moricandioides Boiss., Elench. 12, 1838.

„Herb. E. Boissier. *Brassica moricandioides* Boiss. El. n° 12. in rupibus propé Ronda. Jun. 1837.“ (type: HAL 84125).

Brossardia retusa Boiss., Fl. Orient. 1: 336, 1867.

„Kotschy 327, 523. Pl. Pers. austr. ed Hohenacker. In declivibus ... alpis Kuh-Delu ...“ (type: HAL 84114).

Cardamine flaccida Cham. & Schltld., Linnaea 1: 21, 1826.

„Talcahuano, Chile austr. Poeppig 168“, „*Cardamine flaccida* n. Chile [written by A. v. Chamisso]" (type: HAL 84865, 84866).

Cardamine nemophila Phil., Linnaea 30: 186, 1859-1860.

„Puerto Montt“ (lectotype: HAL 85359).

Cardamine obliqua Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 19, 1847.

„Schimper 989, in regione superiori montis Bachit ad rivulos. 24. Jun. 1838“ (isotype: HAL 81734, holotype: P, other isotypes: B, BM, K, S, W).

Cardamine purpurea Cham. & Schltld., Linnaea 1: 20, 1826.

„Ins[ulis] St. Laurentii. A. v. Ch[amisso]" (holotype: HAL 85360).

Cardamine simensis Hochst. ex A. Rich., Tent. Fl. Abyss. 1: 19, 1847.

„Schimper 571, Demerki 9. Aug. 1838“ (type: HAL 85361).

Cardamine vulgaris Phil., Linnaea 28: 665, 1856.

„Valdivia“ (type: HAL 85362).

Conringia persica Boiss., Diagn. Pl. Or. Nov. Sér. 1, 6: 12, 1845.

„Kotschy 339, Pl. Pers. austr. ed. Hohenacker. In convallibus reg. sup. m. Kuh-Barfi pr. u. Schiras. 4. Maj. 1842“ (type: HAL 84091, other type: K).

Crambe kotschyana Boiss., Diagn. Pl. Or. Nov. Sér. 1, 6: 19, 1845.

„Kotschy 380, Pl. Pers. austr. ed. Hohenacker. Ad latera in occid. spectantia m. Sabst-Buschom. pr. u. Schiras. 14. Maj. 1842“ (syntype: HAL 80982, other syntypes: W, G).

Draba henneana Schltld., Linnaea 10: 100, 1835.

„Labrador Wenck“, Wenck has provided D.F.L.v. Schlechtendal with the material

collected by Henne in Labrador. The specimen has no ripe fruit as mentioned in the diagnosis. (holotype: HAL 84109).

Draba laevigata Cham. & Schltld., *Linnaea* 1: 25, 1826.

„*Draba laevigata* n. Ins[ulis] St. Laurentii. A. v. Ch[amisso]“ (holotype: HAL 84110).

Erysimum persepolitianum Boiss., *Diagn. Pl. Or. Nov. Sér. 1, 6: 11, 1845.*

„Kotschy 261, Pl. Pers. austr. ed. Hohenacker. In collibus pr. ruinas u. Persepolis 19. Apr. 1842“ (isolectotype: HAL 84090, lectotype: W).

Farsetia stenoptera Hochst., *Allg. Bot. Zeitung* 31: 176, 1848.

„Kotschy 81, ad montem Cordofanum Arasch-Cool et in planitie sub Mimosis, 30. Sept. 1839“ (syntype: HAL 86100, other syntypes: W, B, BM, BR, K, M, P, S).

Isatis raphanifolia Boiss., *Diagn. Pl. Or. Nov. Sér. 1, 6: 19, 1845.*

„Kotschy 67, Pl. Pers. austr. ed. Hohenacker. In umbrosis promontorii pr. Gere inter Abuschir et Schiras. 19. Mart. 1842“ (syntype: HAL 81726, other syntype: E).

Kardanoglyphos nana Schltld., *Linnaea* 28: 472, 1856.

„W. Lechler pl. peruv. ed. Hohenacker, n. 2583, Agapatae, Aug. m. 1854“ (holotype: HAL 85363).

Lepidium altissimum Rech. f., *Dansk Biol. Skr.* 10, 3: 14, 1958.

„Nr. 1410, Afghanistan: Zentral-Nuristan: Mrami-(Papruk-)Paß, Westseite in Richtung Schtiwe..., 4.8.1935, ca. 3000-4200 m. leg. G. Kerstan, det. Rechinger“ (type: HAL 81730). - *Stroganowia puberula* Kitam.

Lepidium owaihiense Cham. & Schltld., *Linnaea* 1: 32, 1826.

„*Lepidium O-wahense* n., O Wahu, Anno 1816. A. v. Ch[amisso]“ (holo(?) type: HAL 84102).

Lepidium suffruticosum Phil., *Linnaea* 28: 670, 1856.

„*Lepidium suffruticosum* Ph. [written by R.A. Philippi], Cordillera de la Compañía. Nov. 1853.“ Type citation: „In andibus prov. Santiago variis locis crescit“ (possible type: HAL 84103).

Machaerophorus matthioides Schltld., *Linnaea* 28: 469, 1856.

„W. Lechler pl. peruv. ed. Hohenacker, n. 1702, In rupestr. Cord. de Tuno, Mai [18]54“ (holotype: HAL 85367).

Menonvillea trifida Phil., *Linnaea* 28: 610, 1856.

„*Menonvillea trifida* Ph. [written by R.A. Philippi], Cordillera de Santiago“ (type: HAL 84113).

Nasturtium impatiens Schltld. & Cham., *Linnaea* 5: 212, 1830.

„Mexico, in monte Orizaba, leg. Deppe & Schiede“ (holotype: HAL 00996, typified by John H. Beaman). - *Descurainia impatiens* (Schltld. & Cham.) O.E. Schulz.

Nasturtium orizabae Schltld. & Cham., *Linnaea* 5: 212, 1830.

„Mexico, in monte Orizaba, Sept. [18]28, leg. Deppe & Schiede“ (holotype: HAL 11429, designated by an unknown person).

Oreas involucrata Cham. & Schltld., *Linnaea* 1: 30, 1826.

„Unalaschka, A. v. Ch[amisso]“ (lectotype: HAL 84097).

Redowskia sophiaefolia Cham. & Schltld., *Linnaea* 1: 33, 1826.

„*Redowskia sophiaefolia* n. Redowski Kamtschatka, A. v. Ch[amisso]“ (type: HAL 84106, typified by K. Werner).

- Schimpera arabica* Hochst. & Steud. in Schimper, Pl. Arab. Exsicc. no. 244, 1835.
 „Schimper 244, In planitie Marcha. Arab. petr. 18. Mart 1835“ (type: HAL 84117).
- Sinapis baetica* Boiss., Elench. 14, 1838.
 „Herb. E. Boissier. *Sinapis baetica* Boiss. El. n° 14. ad limites agrorum in calidis Regn. Granat. Mai 1837.“ (type: HAL 84124).
- Sisymbrium andinum* Phil., Linnaea 28: 665, 1856.
 „*Sisymbrium andinum* Ph. [written by R.A. Philippi], Cordillera Linares, Enero 56 P[hilibertus] G[ermain]“ (type: HAL 86108).
- Sisymbrium parvifolium* Phil., Linnaea 28: 667, 1856.
 „*Sisymbrium parvifolium* Ph. [written by R.A. Philippi], Cordillera Linares, Enero 56 P[hilibertus] G[ermain]“ (type: HAL 84271).
- Sisymbrium petraeum* Phil., Linnaea 28: 668, 1856.
 „*Sisymbrium petraeum* Ph. [written by R.A. Philippi], Cordillera Chillan, Febr. 55 P[hilibertus] G[ermain]“ (type: HAL 84089).
- Subularia monticola* Schweinf., Beitr. Fl. Aethiop. 1: 76, 1867.
 „In kleinen Alpen-Sümpfen 14000', Berg Dedschenn Abyss. 7. Oct. [18]50. W. Schimper“ (isotype: HAL 80495, holotype: B †, other K, P, S).
- Vella spinosa* Boiss., Elench. 20, 1838.
 „Herb. E. Boissier. *Vella spinosa* Boiss. El. n° 20. in mont. calc. Regn. Granat. Jun. 1837. Alt. 5000'-7000“ (type: HAL 84126).

Original material

- Alyssum altaicum* C.A. Mey. in Ledeb., Fl. Alt. 3: 55, 1831.
 several specimen, (HAL 85348, 85349, 85350).
- Alyssum imbricatum* Schldtl. ex DC., Syst. 2: 308, 1821 nom. inval.
 „*Alyssum imbricatum* Sibiria, Willd. dedit“ (HAL 86107).
- Alyssum sibiricum* Willd., Sp. Pl. 3: 465, 1800.
 „*Alyssum sibiricum* Willd. dedit“ (HAL 86103).
- Alyssum spathulatum* Steph. in Willd., Sp. Pl. 3: 465, 1800.
 „*Alyssum spathulatum* e Sibiria, Willd. dedit“ (HAL 85346).
- Alyssum tenuifolium* Steph. in Willd., Sp. Pl. 3: 460, 1800.
 „*Alyssum tenuifolium* e Sibiria, Willd. dedit“ (HAL 86104).
- Arabis gracilis* Willd. ex Ledeb., Fl. Ross. 1: 185, 1842 nom. inval.
 „*A. gracilis* e Kamtschatka W[illd.] dedit“ (HAL 85353).
- Arabis uralensis* Willd. ex Ledeb., Fl. Ross. 1: 120, 1842 nom. inval.
 „*Arabis uralensis* en lapid obs. fluviis Ural. Pallas, W[illd.]“ (HAL 85355).
- Braya aenea* Bunge, Del. Sem. Hort. Dorp. 8, 1841.
 „Herb. Bunge, *Braya aenea* mihi. Flor. orient. altaica 1839“ (HAL 84095).
- Braya rosea* Bunge, Del. Sem. Hort. Dorp. 8, 1841.
 „Herb. Bunge, *Braya rosea* mihi. Flor. orient. altaica 1839“ (HAL 84096).
- Cardamine gilanensis* Willd. ex DC., Syst. 2: 262, 1821 nom. inval.
 „*Cardamine gilanensis*, herb. W[illd.], Pallas e ... Ghilan ...“, „*Cardamine gilanensis*, herb. W[illd.], Pallas e Prov. Ghilan Persia“ (HAL 85358).
- Cardamine macrophylla* Willd., Sp. Pl. 3: 484, 1800.
 several specimen, e.g. „*Cardamine macrophylla* e Sibiria, Pallas“ (HAL 85347).

- Cochlearia arctica* Schltld. ex DC., Syst. 2: 367, 1821.
 „*Cochlearia arctica* in arcticis littoralis ad Obum Sibiria, Pallas“, authentic specimen, probably type (HAL 26702).
- Cochlearia siliquosa* Schltld. ex DC., Syst. 2: 369, 1821.
 „*Cochlearia siliquosa* in Unalashkae locis saxosis, Pallas“, authentic specimen, probably type (HAL 26767).
- Cochlearia spathulata* Schltld. ex DC., Syst. 2: 369, 1821.
 „*Cochlearia spathulata* Ins. St. Georgii. A. v. Ch[amisso]“ probably type (HAL 26755).
- Dentaria tenuifolia* Ledeb., Mém. Acad. Petersb. 5: 547, 1815.
 „*Dentaria tenuifolia* nob., Altai, Ledeb. ded.“ „*Dentaria tenuifolia* Ledeb. Altai“ (HAL 85366).
- Dontostemon micranthus* C.A. Mey. in Ledeb., Fl. Alt. 3: 120, 1831.
 (HAL 84100, 84111).
- Dontostemon perennis* C.A. Mey. in Ledeb., Fl. Alt. 3: 121, 1831.
 (HAL 84112).
- Draba altaica* Bunge, Del. Sem. Hort. Dorp. 8, 1841.
 „Herb. Bunge *Draba altaica* mihi. Flor. orient. altaica 1839“ (HAL 84108).
- Farsetia ramosissima* Hochst., Allg. Bot. Zeitung 24, I. Intell. 42, 1841, nom. nud.
 „Kotschy 26, ... prope pagum Cordofanum Abu-Gerad, 20. Sept. 1839“, „Kotschy 305, ... ad pagum Cordofanum Chursi, 24. Dec. 1839“ (HAL 84853, 84854, other: P, BR, K, M, S, UPS, W). - *F. hamiltonii* Royle.
- Hutchinsia alba* Bunge, Del. Sem. Hort. Dorp. 1839; et Linnaea 14: Litt. 119, 1840.
 „Herb. Bunge *Hutchinsia alba* mihi. Flor. orient. altaica 1839“ (HAL 84098).
- Hutchinsia pectinata* Bunge in Ledeb., Fl. Ross. 1: 201, 1842.
 „Herb. Bunge *Hutchinsia pectinata* mihi. Flor. orient. altaica 1839“ (HAL 84101).
- Hymenophyssa pubescens* C.A. Mey. in Ledeb., Fl. Alt. 3: 181, 1831.
 (HAL 84104).
- Isatis costata* C.A. Mey. in Ledeb., Fl. Alt. 3: 204, 1831.
 (HAL 84105, 84099).
- Isatis glauca* Willd. ex DC., Prod. 1:210, 1824 nom. inval.
 „*Isatis glauca* e Lusitania. C. de Hoffmannsegg“ (HAL 84121).
- Lepidium niloticum* Sieber ex Steud., Nom. ed. 2, 2: 27, 1841, nom. nud.
 „ad Nilas ripas. Sieber [written by F.A. Sieber]“ (HAL 84118).
- Matthiola deflexa* Bunge, Del. Sem. Hort. Dorp. 8, 1839; et Linnaea 14: Litt. 120, 1840.
 „Herb. Bunge *Matthiola deflexa* mihi. Flor. orient. altaica 1839“ (HAL 84107).
- Matthiola prostrata* Hochst. & Steud. ex Steud., Nom. ed. 2, 2: 106, 1841 nom. nud.
 „Schimper 862. In arena vallis Metne prope Taifam Arab. fel. 3. Dec. [18]35“ (HAL 84119).
- Matthiola stylosa* Hochst. & Steud. ex Steud., Nom. ed. 2, 2: 106, 1841 nom. nud.
 „Schimper 860. In deserto prope Dscheddam Arab. fel. 2. Feb. [18]36“ (HAL 84120).
- Moricandia crassifolia* Gay ex Boiss., Fl. Orient. 1: 389, 1867 nom. inval.
 „Schimper 444. In regione Wadi Gurra Arab. petr. 25. Jun. 1835“ (HAL 84115).
- Odontarrhena fischeriana* C.A. Mey. ex Turcz., Bull. Soc. Nat. Mosc. 15: 245, 1842.
 „*Odontarrhena fischeriana* m. *Alyssum* DC. Dahuria. C.A. Meyer“ (HAL 84123).

Odontarrhena obovata C.A. Mey. in Ledeb., Fl. Alt. 3: 61, 1831.

several specimen (HAL 85364).

Pachyneurum grandiflorum Bunge, Del. Sem. Hort. Dorp. 8, 1839; et Linnaea 14: Litt. 121, 1840.

„Herb. Bunge *Pachyneurum grandiflorum* mihi. Suppl. alterum. Flor. orient. altaica 1839“ (HAL 85357).

Pteroneurum dalmaticum Vis., Flora 12 1. Erg. 17, 1829.

„In arenosis marit. Dalm. Vis.“ (HAL 85365).

Ptilotrichum canescens C.A. Mey. in Ledeb., Fl. Alt. 3:66, 1831.

several specimen (HAL 86101).

Sisymbrium humile C.A. Mey. in Ledeb., Fl. Alt. 3: 137, 1831.

„Altai, Ledeb. dedit“ (HAL 86109, 86110).

Sisymbrium mollissimum C.A. Mey. in Ledeb., Fl. Alt. 3: 140, 1831.

(HAL 86111).

Smelowskia cinerea C.A. Mey. in Ledeb., Fl. Alt. 3: 171, 1831.

(HAL 84092, 84093).

Smelowskia integrifolia C.A. Mey. in Ledeb., Fl. Alt. 3: 168, 1831.

(HAL 84094).

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