



## Typification of the name *Thymus serpyllum* L. (Lamiaceae)

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Lectotypification of the name *Thymus serpyllum* L. (Lamiaceae) is presented. The name is typified by a specimen from the Burser herbarium (UPS), the only one which corresponds well with the present concept of *T. serpyllum* and undoubtedly represents original material.

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### CONTENTS

Introduction . . . . .	271
The typification and discussion of the protologue . . . . .	272
Acknowledgements . . . . .	275
References . . . . .	276

### INTRODUCTION

Linnaeus (1753: 590–591) had a broad conception of *Thymus serpyllum* which has subsequently resulted in the description of many infraspecific taxa. Briquet (1895) considered Linnaeus's species to be a complex of five subspecies, but Lyka (1927) reported 21 subspecies and many other infraspecific taxa in Central Europe. A great deal of this variation is currently treated at the level of separate species. At the same time, *Thymus serpyllum* is a species comprising two subspecies, *T. serpyllum* subsp.

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- 590 DIDYNAMIA GYMNOSPERMIA.
- vulgare*. 7. ORIGANUM spicis subrotundis paniculatis conglomeratis, bracteis calyce longioribus ovatis. Origanum foliis ovatis, spicis laxis erectis confertis paniculatis. *Hort. cliff.* 305. *Fl. succ.* 480. *Mat. med.* 299. *Roy. lugdb.* 323. *Gron. virg.* 65. Origanum sylvestre. *Bauh. pin.* 223. Origanum sylvestre f. vulgare. *Fuchs. hist.* 522. *Habitat in Europæ, Canadæ rupestribus. Americanum bracteis coloratissimis gaudet.*
- oviter*. 8. ORIGANUM spicis oblongis aggregatis hirsutis, foliis cordatis tomentosis. Origanum lignosum Syracusanum perenne, umbella amplissima brevi, lato & nervoso folio. *Bocc. mus.* 2. p. 45. t. 38. Origanum onites. *Bauh. pin.* 222. *an?* *Habitat Syracusæ.* *h* *Habitus Majoranæ sed lignosus. Caulis pilis longis patulis. Folia parva, cordata, subsessilia, acuta, rarius serrata, utrinque tomentosa, ex alis ramorum rudimenta. Spica congestæ, ut in Majoranæ, sed oblongæ, in singulo pedunculo ternæ, intermedio sessili, villosæ; Flores albi.*
- lysiacum*. 9. ORIGANUM spicis longis ternatis pedunculatis villosis, foliis ovatis villosis. Majorana lytiaca vel cretica. *Bauh. pin.* 224. Marum lytiacum. *Lob. ic.* 499. \* *Habitat - - -* *Habitus Majoranæ. Folia subrotundo-ovata, acuta, pilis vagis adpersa. Rami ex axillis. Corymbis terminalis, ex ramis longioribus brachiatus. Spica sepius nique 3, terminales, longæ, erectæ, tetragone, villosæ.*
- Majorana*. 10. ORIGANUM foliis ovalibus obtusis, spicis subrotundis compactis pubescentibus. *Hort. cliff.* 304. *Hort. upf.* 151. *Mat. med.* 298. *Roy. lugdb.* 324. Majorana vulgaris. *Bauh. pin.* 224. Amaracus vulgarior. *Lob. ic.* 498. *β. Majorana tenuifolia. Bauh. pin.* 224. Majorana hortensis odorata perennis. *Marif. hist.* 3. p. 359. *Habitat - - -* *⊙*
- THYMUS.
- Serpyllum*. 1. THYMUS floribus capitatis, caulibus repentibus, foliis planis obtusis basi ciliatis. *Fl. succ.* 477. *Mat. med.* 282. *Thy-*
- DIDYNAMIA GYMNOSPERMIA. 591
- Thymus repens, foliis planis, floribus verticillato-spicatis. *Hort. cliff.* 306. *Roy. lugdb.* 325. Serpyllum vulgare minus. *Bauh. pin.* 220. Serpyllum vulgare. *Dod. pempt.* 277. *β. Serpyllum vulgare majus. Bauh. pin.* 220. *γ. Serpyllum vulgare minus, capitulis lanuginosis. Tournef. inst.* 197. *It. gotl.* 219. *δ. Serpyllum angustifolium hirsutum. Bauh. pin.* 220. *ε. Serpyllum foliis citri odore. Bauh. pin.* 220. *Habitat in Europæ aridis apricis. h*
2. THYMUS erectus, foliis revolutis ovatis, floribus vulgari-verticillato-spicatis. *Hort. cliff.* 305. *Hort. upf.* 160. *Mat. med.* 281. *Roy. lugdb.* 325. *Sauv. monsp.* 143. Thymus vulgaris, folio tenuiore. *Bauh. pin.* 219. Thymus vulgaris, folio latiore. *Bauh. pin.* 219. Thymum durius. *Dod. pempt.* 276. *Habitat in G. Narbonneffis, Hispaniæ montosis saxosis. h*
3. THYMUS floribus verticillato-spicatis, caule suffru-Zygitico, foliis linearibus basi ciliatis. *Laef.* Thymo vulgatori rigidiori simile. *Bauh. hist.* 2. p. 271. Thymum angustior longiorque folio. *Barr. ic.* 777. Serpyllum sylvestre Zygis diocoridis. *Clus. hist.* 358. Serpyllum folio thymi. *Bauh. pin.* 220? *Habitat in Hispania. Facies T. vulgaris, at Folia basi ciliata.*
4. THYMUS floribus verticillatis, pedunculis unifloris, caulibus erectis subramosis, foliis acutis serratis. *Fl. succ.* 478. Thymus caulis vix ramosis, foliis ovatis acutis, pedunculis plurimis unifloris. *Hort. cliff.* 306. *Roy. lugdb.* 325. Clinopodium arvense, ocymi facie. *Bauh. pin.* 225. Clinopodium vulgare. *Lob. ic.* 506. *Habitat in Europæ glareosis, cretaceis, siccis. ⊙*
5. THYMUS verticillis sexfloris, foliis obtusifolius alpinis, concavis tubierratis. Clinopodium verticillis paucifloris in spicam congestis. *Hall. belv.* 653. Clinopodium montanum. *Bauh. pin.* 225. *Bocc. mus.* 2. p. 50. t. 45. Acini pulchra species. *Bauh. hist.* 3. p. 620. *Ha-*

Figure 1. *Species plantarum*. Protologue of the name *Thymus serpyllum*.

*serpyllum* and *T. serpyllum* subsp. *tanaensis* (Hyl.) Jalas (Jalas, 1947). The latter represents plants with broad leaves, 3–6 mm wide, a concept partly based on the monograph of Jalas (1947), and followed in *Flora europaea* (Jalas, 1972) and several other regional floras (e.g. Barbarič, 1987; Klokov, 1954; Stace, 1997). *Thymus serpyllum* L. subsp. *serpyllum* was previously treated as *T. serpyllum* subsp. *angustifolius* var. *linneanus* Gren. & Godr. by Jalas (1947), as autonyms were not recognized in this earlier work.

## THE TYPIIFICATION AND DISCUSSION OF THE PROTOLOGUE

*Thymus serpyllum* L., *Species plantarum*: 590–591, 1753 - LT (designated here): Herb. Burser XII: 118 (UPS).

The protologue of the name *Thymus serpyllum* (Fig. 1) comprises the following elements (Linnaeus, 1753: 590–591):

1. THYMUS floribus capitatis, caulibus repentibus, foliis planis obtusis basi ciliatis. *Fl. Suec.* 477. *Mat. med.* 282.  
Thymus repens, foliis planis, floribus verticillato-spicatis. *Hort. cliff.* 306. *Roy. lugdb.* 325.  
Serpyllum vulgare minus. *Bauh. pin.* 220.  
Serpyllum vulgare. *Dod. pempt.* 277.

- β. *Serpyllum vulgare majus*. *Bauh. pin.* 220.
  - γ. *Serpyllum vulgare minus, capitulis lanuginosis*. *Tournef. inst.* 197. *It. gotl.* 219.
  - δ. *Serpyllum angustifolium hirsutum*. *Bauh. pin.* 220.
  - ε. *Serpyllum foliis citri odore*. *Bauh. pin.* 220.
- Habitat in Europae aridis apricis.*

The first element in the protologue, the diagnostic phrase name “*THYMUS floribus capitatis, caulibus repentibus, foliis planis obtusis basi ciliatis*” is referred directly to Linnaeus’s *Flora suecica* (1745: 173). It is also cited via his *Materia medica* (1749: 99). In the former work this phrase name is accompanied by the following note: “*Habitat in campis elevatis montibusque apricis exaridis passim, in Scania campestri copiosius. varietas γ [Serpyllum vulgare minus, capitulis lanuginosis. Tournef. inst. 197] capitulis tomentosis Upsaliae passim obvia caussatur a Kerme, uti in Veronica, Cerastio; sed praeter hanc monstrosam varietatem, aliam reperire licet frequentem in peninsula Orientali Gotlandiae Sanct Olofsholme dicta, ubi hic Thymus foliis omnibus utrinque albis rigidisque pilis utrinque hispidus est.*” There is no specimen connected with this note in any of the Linnaean herbaria. Thus it is not immediately apparent which plants had Linnaeus in mind, but the plants which he classified as unnamed variety γ, i.e. those characterized by “*capitulis tomentosis*” do not belong to what is at present considered to be *T. serpyllum*. They might most probably be referred to *T. praecox* subsp. *britannicus* (Ronniger) Holub or, less probably, to *T. pulegioides* L. *s.l.*

The specimen in the Linnaean herbarium in London (LINN) no. 744.2 is annotated by Linnaeus with the number “1”, the species number from the *Species plantarum*, at the bottom of the sheet. The sheet also bears the symbol “ε”, which indicates its origin as the western edge of Asia and is usually associated with specimens collected by Gerber, principally in the district of the River Don or Astrachan (Savage, 1945; Stearn, 1957: 106). This specimen does not correspond to what is currently understood as *T. serpyllum* (e.g. Jalas, 1972: 182) and can be identified as *T. pallasianus* Heinr. Braun, because of the congestion of very narrow leaves on the nodes, the very narrow upper calyx tooth and the absence of at least an indication of monopodial branching.

The second phrase name in the protologue is cited from *Hortus cliffortianus* (Linnaeus, 1738) and also via *Flora leydensis prodromus* (van Royen, 1740). There are seven specimens in the Clifford herbarium (BM) which might be connected with the phrase name, but none could be traced in the van Royen herbarium (L). The former are marked as 306 *Thymus* no. 2, 2α, 2β, 2γ, and 2δ (fol. A, B, 5). However, none of these specimens corresponds with current usage of the name *T. serpyllum*, and all are therefore unsuitable for designation as lectotype. Unlike *T. serpyllum*, the specimens no. 2, 2α, 2β have a sympodially branched quadrangular stem with goniotrichous indument, and can be classified as *T. pulegioides* L. The specimens 2γ, and 2δ (fol. A, B, 5) have whole leaf blades covered by long dense hairs, whilst *T. serpyllum* has leaves which are ciliate at the base, but otherwise glabrous (only *T. serpyllum* f. *ericoides* (Wimm. & Grab.) Neuman has leaves which are sometimes ciliate on the margin, but glabrous on the blade). These latter specimens most probably belong to the polymorphic species *T. praecox* Opiz.

There are four polynomials in the protologue cited from Bauhin’s *Pinax* (Bauhin, 1623: 220), three of them belonging to Linnaeus’s unnamed varieties β, δ, and ε. There are four specimens in the Burser herbarium in UPS which are associated with Bauhin’s work and which bear the corresponding polynomials, namely nos.

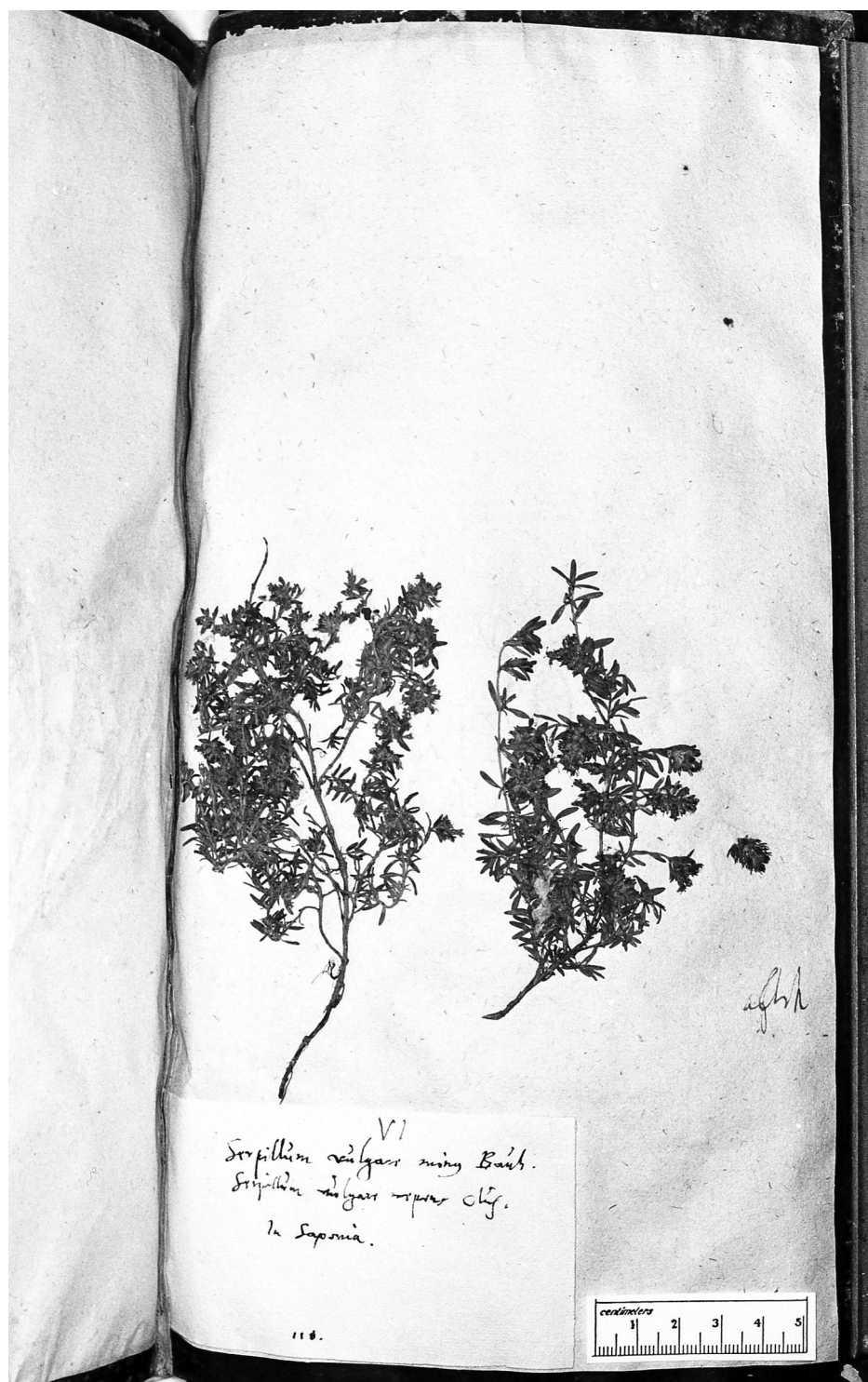


Figure 2. The lectotype of *Thymus serpyllum* L., UPS – herbarium Burser, no. XII: 118 (Photograph courtesy of the Botanical Museum (Fytoteket), Uppsala University).



XII: 115, 117, 118, and 119. Linnaeus is known to have studied specimens in the Burser herbarium (Savage, 1937; Stearn, 1957: 116-117), and in many cases recorded his own determinations of them. These specimens therefore undoubtedly represent original material. The specimen no. XII: 118, bearing the inscription “Serpillum vulgare minus Bauh. / Serpillum vulgare repens Clus. / In Saxonia” corresponds well with the present concept of *T. serpyllum* (Fig. 2). Both plants on the sheet have  $\pm$  rounded, monopodially branched stems, with holotrichous indument. Leaves of fertile stems are equal in size and shape, their blades are ciliate at the base, but otherwise glabrous. Venation of leaves is camptodromous and the upper calyx tooth is broadly triangular. Indeed the mentioned locality “Saxonia [Saxony, Germany]”, fits the distribution area of this taxon which spreads from south-east France, northern Austria, Hungary and Ukraine in the south, to Scandinavia in the north. The remaining three specimens in the Burser herbarium do not correspond to the present concept of *T. serpyllum* as they have either sympodially branched quadrangular stems with the goniotrichous indument (nos. XII: 115, referring to the unnamed variety  $\beta$ , and 117, to the variety  $\epsilon$ ), or a sympodially branched stem with alelotrichous indument and dense hairs on the leaves and inflorescences (no. XII: 119, variety  $\delta$ ). They can be identified as *T. pulegioides* L. (nos. 115 and 117) and *T. froelichianus* Opiz (or *T. pulegioides* in the case of Jalas, 1972: 182).

Dodoens’s (1616) illustration of “Serpillum vulgare”, also cited in the protologue by Linnaeus, cannot be critically identified for the purpose of the precise application of the name and thus it is not appropriate for designation as the lectotype. Nevertheless, Dodoens refers to the distribution of this plant in “Germania, Bohemia, aut Belgio, sed & in Italia ac Galia”, which at least partly corresponds to the distribution of *T. serpyllum* in the present sense.

The unnamed variety  $\gamma$  cited from Linnaeus’s *Wästgöta-Resa* (1747), and Tournefort (1719: 197) (who himself refers to Bauhin (1623: 220)), corresponds to the same morphological type as variety  $\gamma$  in Linnaeus’s *Flora suecica* (1745: 173) (see above), and according to our opinion, does not fit the present concept of *T. serpyllum*.

After considering all of the elements of the protologue, the specimen from the Burser herbarium is the only one which clearly corresponds with current usage. It is therefore designated here as the lectotype of the name *Thymus serpyllum* L.

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