

## Lectotypification of *Thesium kernerianum* Simonk.

BARTÓK Attila<sup>1</sup>, NEGREAN, Gavril<sup>2</sup> & SOMLYAY Lajos<sup>3</sup>

(1) Sindan-Pharma, RO-011171 Bucureşti, Ion Mihalache Blvd. 11.; bartok.attila@gmail.com

(2) Grădina Botanică "Dimitrie Brândză" a Universității din București,  
RO-060101 Bucureşti, 1–3 Aleea Portocalelor  
(3) MTM Növénytár, H-1476 Budapest, Pf. 222.

### A *Thesium kernerianum* Simonk. lektotipizálása

**Összefoglalás** – A *T. kernerianum* a tágabb értelemben vett Keleti-Kárpátok endémikus növénye (Szücs 1943, Morariu 1952, Negrean & Dihoru 2009, Hurdu et al. 2012a, 2012b). A szerzők áttekintik a faj felfedezésének történetét, irodalmi és herbárium adatait, tipizálják a nevet, és helyesbítnek néhány, a szakirodalomban felbukkanott tévedést. Habár a fajt Simonkai még az erdélyi flóraművének (Simonkai 1887) megjelenése előtt írta le a Királykőről és a Bucsecsról (Simonkai 1886a: 183), újabb források (Hendrych 1993, Sârbu & Mititiuc 1994, Negrean & Dihoru 2009), tévesen, a flóraművet tüntetik fel a faj protológusaként. A faj felfedezését követően az 1960-as évekig nem találtak újabb lelőhelyeket a botanikusok, így az a képzet alakult ki, hogy a *T. kernerianum* csak a Délnyugati-Kárpátok egy-két pontján fordul elő (vö. Javorka 1924–1925, Soó 1933, Szücs 1943, Morariu 1952). Hendrych (1963) azonban a prágai herbáriumban felfedezett egy példányt, amelyet még 1935-ben, a Délnyugatihoz tartozó Ráró-hegységen gyűjtött egy cseh kutató. Ez a lelőhely mintegy 250 km-rel északra tolta ki a faj addig ismert areáját. Később néhány ponton előkerült a Csukás-hegységből, a Csalhóból, és a sokáig figyelmen kívül hagyott (vö. Morariu & Beldie 1976, Dihoru & Pârvu 1987) ráró-hegységi adat is megerősítést nyert (Sârbu & Zündorf 1993). A *T. kernerianum* jelenleg ismert lelőhelyeit Oprea (2005), Ciocârlan (2009) és Negrean & Dihoru (2009), herbáriumi példányait Mihăilescu (2001) és Negrean & Dihoru (2009) foglalják össze. Kétes és megerősítést igényel a faj Fogarasi-havasokból (nem pontosított lelőhelyről) közölt adata (Pușcariu-Soroceanu et al. 1977). A szerzők felsorolják az általuk ismert herbáriumi példányokat (nagyjából gyűjtési időrendben), kiegészítve az eddig nem publikált anyaggal, továbbá a Simonkai originálék alapján lektotipizálják a *T. kernerianum* nevet. Ezzel a szakirodalomban tévesen közölt (Beldie 1967, Negrean & Dihoru 2009) *locus classicus* (Bucsecs: Gaura-völgy) is helyesbítésre kerül. A faj tényleges *locus classicus*-sa a Királykő, ahonnan a lektotípus származik.

### Lectotipificarea speciei *Thesium kernerianum* Simonk.

**Rezumat** – *Thesium kernerianum* este un endemit rar al Carpaților Orientali, specie de Carte Roșie. În lucrarea de față autorii revizuiesc istoricul descoperirii, datele bibliografice și datele de herbar ale speciei, fac lectotipificarea numelui, precum și îndreaptă unele greșeli întâlnite în literatura de specialitate. Specia a fost descrisă de Lajos Simonkai din Piatra Craiului, respectiv Bucegi (Simonkai 1886a: 183) încă înainte de apariția lucrării sale despre flora Transilvaniei (Simonkai 1887). Surse mai noi (Hendrych 1993, Sârbu & Mititiuc 1994, Negrean & Dihoru 2009) menționează eronat, ca protolog al speciei, lucrarea despre flora Transilvaniei a lui Simonkai. Până în anii 1960 specia a fost considerată ca endemit al Munților Bucegi și Piatra Craiului, însă Hendrych (1963) a identificat o coală de herbar cu *Thesium* (colectat din Munții Rarău în anul 1935 de către S. Staněk, dar greșit identificat, ulterior dovedindu-se a fi *Thesium kernerianum*), descoperire ce a dus la pierderea atributului de endemit transilvănean, specia devenind astfel endemit al Carpaților Orientali. Între timp specia a fost găsită și în

Munții Ciucas, iar în 1984 și în Ceahlău (SÂRBU & ZÜNDORF 1993). Este dubioasă și necesită confirmare prezența speciei în Munții Făgăraș, de unde a fost citată de PUȘCARU-SOROCEANU et al. (1977) în pajiști calcifile montane și alpine, fără coronime. Distribuția speciei este sintetizată în literatură de către OPREA (2005), CIOCĂRLAN (2009) și NEGREAN & DIHORU (2009), iar specimenele de herbar de către MIHĂILESCU (2001) și NEGREAN & DIHORU (2009). Autorii înșiră în ordinea cronologică a culegerii exemplarele de herbar cunoscute, precum și lectotipifică numele *Thesium kernerianum*. Cu această ocazie este corectată o eroare perpetuată în literatura de specialitate (BELDIE 1967, NEGREAN & DIHORU 2009), referitoare la *locus classicus* al speciei, care nu este în Valea Gaura din Bucegi, ci în Piatra Craiului, de unde provine și lectotipul.

**Abstract** – *Thesium kernerianum* is an endemic species of the Eastern Carpathians (in broad sense). The paper includes a survey of the discovery as well as the literature and herbarium records of this species. The name is lectotypified, and a few inaccuracies appearing in the literature are corrected.

**Keywords:** Lajos Simonkai, lectotypification, Romania, Santalaceae, *Thesium kernerianum*

## Introduction

*Thesium kernerianum* Simonk. is considered to be an Eastern Carpathian (in broad sense) endemic species (SZÜCS 1943, MORARIU 1952, HENDRYCH 1993, NEGREAN & DIHORU 2009, HURDU et al. 2012a, 2012b). Its protologue is, however, sometimes erroneously referenced in the literature (HENDRYCH 1993, SÂRBU & MITITIUC 1994, NEGREAN & DIHORU 2009). The main aims of our paper were (1) to survey the records, and (2) to lectotypify the name and thus establish the *locus classicus* of this poorly known species. Herbarium acronyms follow *Index Herbariorum* [1].

## Records of *Thesium kernerianum* in historical context

During his field researches aiming at elaborating a monograph on the Transylvanian vascular flora, the Hungarian botanist Lajos Simonkai visited the Piatra Craiului (= Királykő, Königstein) and the Bucegi (= Bucsecs) massifs of the South-Eastern Carpathians at the end of August 1883. The main scientific results of these trips were published in a few papers (e.g. SIMONKAI 1886a, 1886b) prior to the monograph itself (SIMONKAI 1887). Unfortunately, being overshadowed by the monograph, these papers are often ignored in Romanian botanical literature (e.g. BELDIE 1967, MIHĂILESCU 2001, NEGREAN & DIHORU 2009).

Undoubtedly, among the taxonomic novelties released by Simonkai before the publication of his monograph, one of the most remarkable is *Thesium kernerianum* Simonk. (HENDRYCH 1962, 1963). As it is evident from the labels of the traced voucher specimens in BP herbarium (BP 42510, BP 42511), Simonkai discovered this taxon below the summit region of the Piatra Craiului massif on 26–27th August 1883. A few days later (29–31st August) Simonkai visited the Bucegi massif, where he also found *T. kernerianum* in the valley system “Gaura” (SIMONKAI 1886b: 154). Unfortunately, no voucher specimen collected by him at the latter locality was traceable by us. The new species *T. kernerianum* was described in SIMONKAI (1886a: 183), with the gathering information reading “Habitat in saxosis alpis Királykő et Bucsecs hinc-inde sat copiose, ubi anno 1883 aug. 26–30 fructiferum legi.” In the monograph SIMONKAI (1887: 478) gave the same localities.

Actually, up to the 1960s no new locality of this species was reported, thus making a common assumption among botanists that the distribution area of *T. kernerianum* is very small, being restricted only to a few localities in the South-Eastern Carpathians (see PAX 1898, 1908, BORNMÜLLER 1913, JÁVORKA 1924–1925, SÓÓ 1933, SZÜCS 1943, MORARIU 1952). In the second half of the 20th century, however, the Czech botanist Radovan Hendrych revealed

a voucher specimen of *T. kernerianum* in PR herbarium, which was collected by the Moravian botanist Stanislav Staněk in the Rarău massif (Southern Bucovina, Romania) in 1935 (HENDRYCH 1963). Consequently, the distribution range of *T. kernerianum* suddenly expanded *ca.* 250 km northwards (see also JALAS & SUOMINEN 1976). Surprisingly, the new locality has remained unknown in the Romanian literature for some time (see MORARIU & BELDIE 1976, DIHORU & PÂRVU 1987), and was recognised only by NEGREAN & OLTEAN (1989) (see also SÂRBU & ZÜNDORF 1993 and OPREA & SÎRBU 2012). Nonetheless, new localities of *T. kernerianum* were reported by Romanian botanists from the Ciucas Mts. (PAUCĂ *et al.* 1960, CIUCĂ 1967, 1984, Negrean herb. 1982), Făgăraş Mts. (PUŞCARU-SOROCEANU *et al.* 1977) and Ceahlău Mts. (SÂRBU & ZÜNDORF 1993). The latter somewhat links the geographically distant localities of *T. kernerianum* in the Rarău massif and the South-Eastern Carpathians, whereas the record from the Făgăraş Mts. is rather dubious and needs confirmation.

The currently known localities of the species are summarised by OPREA (2005), CIOCÂRLAN (2009) and NEGREAN & DIHORU (2009). The number of voucher specimens enumerated by MIHĂILESCU (2001) and NEGREAN & DIHORU (2009) is less than a dozen. We hereby list all the known specimens, including those not published so far, arranged in a rough chronological order of gathering. It is worth mentioning that no voucher specimen was found in CRAI and SIB herbaria.

- 1883: *Simkovics (Simonkai)*, Piatra Craiului Mts. (BP)  
1896: *Pax*, Piatra Craiului Mts. (BP)  
1912: *Bornmüller*, Bucegi Mts. (W)  
1935: *Staněk*, Pietrele-Doamnei (Rarău Mts.) (PR)  
1946, 1949: *Şerbanescu*, Bucegi Mts. (BUCM)  
1955: *Morariu*, Piatra Craiului Mts. (BVS)  
1970, 1973, 1974, 1975, 1990, 1999: *Negrean*, Bucegi Mts. (BUC, BUCM, private herb.)  
1982: *Negrean*, Ciucas Mts. (private herb.)  
1984: *Sârbu & Zündorf*, Ceahlău Mts. (I)  
1990, 1991: *Sârbu*, Pietrele-Doamnei (Rarău Mts.) (I, CL)  
1994, 1997: *Mihăilescu*, Piatra Craiului Mts. (BUCA)

### Lectotypification of *Thesium kernerianum*

As highlighted above, this species was described in SIMONKAI (1886a: 183), not in SIMONKAI (1887: 478) as stated by HENDRYCH (1993), SÂRBU & MITITIU (1994), and NEGREAN & DIHORU (2009). Moreover, some authors (e.g. BELDIE 1967, NEGREAN & DIHORU 2009) hold a firm belief that the *locus classicus* of *T. kernerianum* is Valea Gaura (Gaura valley) within the Bucegi massif. In fact, as a consequence of our lectotypification below, the type locality of *T. kernerianum* is established in the Piatra Craiului massif (Királykő), where this species was actually discovered by Simonkai:

***Thesium kernerianum* Simonk.**, Természetrajzi Füzetek 10: 183, 1886.

Lectotype (designated here): [Romania], “Transsilvaniae alpes austro-orientales: in saxosis alpis Királykő infra cacumen summum, 1800–1900 mt.” [Transylvania, Piatra Craiului Mts., below the summit, at an elevation of 1800–1900 m], 26–27. August 1883, L. Simkovics [*L. Simonkai*]; BP 42510 (Fig. 1). Isolectotype: BP 42511.



**Fig. 1.** Lectotype of *Thesium kernerianum* Simenk. (BP 42510).

**1. ábra.** A *Thesium kernerianum* Simenk. lektotípusa (BP 42510).

## References

- BELDIE, A. (1967): *Flora și vegetația munților Bucegi*. – Edit. Acad. Rep. Soc. România, București, 578 pp.
- BORNMÜLLER, J. (1913): Notizen aus der Flora der südlichen Karpathen. – *Mitt. Thür. Bot. Vereins* 30: 49–65.
- CIOCÂRLAN, V. (2009): *Flora ilustrată a României. Pteridophyta et Spermatophyta*. – Edit. Ceres, București, 1141 pp.
- CIUCĂ, M. (1967): Observații geobotanice asupra Munțelui Tesla. – *Natura, ser. Biol.* 2: 79–82.
- CIUCĂ, M. (1984): *Flora și vegetația pajistilor Munții Ciucăș*. – Edit. Acad. Rep. Soc. Române, București, 148 pp.
- DIHORU, G. & PÂRVU, C. (1987): *Plante endemice în flora României*. – Edit. Ceres, București, 183 pp.
- HENDRYCH, R. (1962): Divisio generis *Thesium* L., cum specierum euroasiaticarum respectu praecipuo. – *Novit. Bot. Horti Bot. Univ. Carol. Prag.* 1962: 17–24.
- HENDRYCH, R. (1963): *Thesium kernerianum* is not Endemic of the Transylvania. – *Novit. Bot. Horti Bot. Univ. Carol. Prag.* 1963: 7–9.
- HENDRYCH, R. (1993): *Thesium* L. – In: TUTIN, T. G., BURGES, N. A., CHATER, A. O., EDMONDSON, J. R., HEYWOOD, V. H., MOORE, D. M., VALENTINE, D. H., WALTERS, S. M. & WEBB, D. A. (eds.), *Flora Europaea. Volume 1: Psilotaceae to Platanaceae*, 2nd ed., Cambridge University Press, pp. 83–86.
- HURDU, B. I., PUȘCAȘ, M., TURTUREANU, P. D., NIKETIĆ, M., COLDEA, G. & ZIMMERMANN, N. E. (2012a): Patterns of plant endemism in the Romanian Carpathians (South-Eastern Carpathians). – *Contribuții Botanice* [ser. II.] 47: 25–38.
- HURDU, B. I., PUȘCAȘ, M., TURTUREANU, P. D., NIKETIĆ, M., VONICA, G. & COLDEA, G. (2012b): A critical evaluation of the Carpathian endemic plant taxa list from the Romanian Carpathians. – *Contribuții Botanice* [ser. II.] 47: 39–47.
- JALAS, J. & SUOMINEN, J. (eds.) (1976): *Atlas Flora Europaea. Distribution of Vascular Plants in Europe. 3. Salicaceae to Balanophoraceae*. – The Committee for Mapping the Flora of Europe & Societas Biologica Fennica Vanamo, Helsinki, 128 pp.
- JÁVORKA S. (1924–1925): *Magyar Flóra (Flora Hungarica)*. – Studium, Budapest, 1307 pp.
- MIHĂILESCU, S. (2001): *Flora și vegetația Masivului Piatra Craiului*. – Edit. Vergiliu, București, 400 pp.
- MORARIU, I. (1952): *Thesium* L. – In: SĂVULESCU, T. (ed.), *Flora Republicii Populare Române* 1, Edit. Acad. Rep. Pop. Române, București, pp. 361–373.
- MORARIU, I. & BELDIE, A. (1976): Endemisme din flora României. – In: SĂVULESCU T., POP E., BELDIE A. & MORARIU I. (eds.), *Flora Republicii Populare Române* 13, Edit. Acad. Rep. Soc. România, București, pp. 97–105.
- NEGREAN, G. & DIHORU, G. (2009): *Thesium kernerianum* Simonk. – In: DIHORU G. & NEGREAN G., *Cartea roșie a lantelor vasculare din România*, Edit. Acad. Române, București, pp. 536–537.
- NEGREAN, G. & OLTEAN, M. (1989): Endemite și zone endemoconservatoare din Carpații Sud-estici. – *Ocrotirea naturii și a mediului înconjurător* 33(1): 15–25.
- OPREA, A. & SÎRBU, C. (2012): The vascular flora of Rarău Massif (Eastern Carpathians, Romania). Note 1. – *Memoirs of the Scientific Sections of the Romanian Academy* 35: 55–84.
- PAUCA, A., PUȘCARU-SOROCHEANU, E. & CIUCĂ, M. (1960): Contribuții la studiul pajistilor din Masivul Ciucăș. – *Comunicări de Botanică* 1957–1959: 113–136.
- PAX, F. (1898): *Grundzüge der Pflanzenverbreitung in den Karpathen* 1. – Wilhelm Engelmann, Leipzig, 269 pp.
- PAX, F. (1908): *Grundzüge der Pflanzenverbreitung in den Karpathen* 2. – Wilhelm Engelmann, Leipzig, 321 pp.
- PUȘCARU-SOROCHEANU, E., CSÚRÖS, Ș. & GHISA, E. (1977): Aspecte din flora și vegetația Munților Făgăraș (Carpații Meridionali). – *Comunicări de Botanică* 1974: 17–34.
- SÂRBU, I. & ZUNDORF, H. J. (1993): Contribuții la răspândirea speciei endemice *Thesium kernerianum* Simk. în România. – *Buletinul Grădinii Botanice Iași* 4: 111–113.
- SÂRBU, I. & MITITIU, M. (1994): *Schedae ad „Floram Moldaviae et Dobrogeae Exsiccatam”, Centuria VIII*. – Hortus Botanicus Universitatis Iassiensis „Al. I. Cuza”, Iași, 36 pp.

- SIMONKAI L. (1886a): Erdély flórájának néhány új faja. *Species florae Transsilvanicae nonnullae novae*. – *Természettudományi Füzetek* 10(2–3): 179–184.
- SIMONKAI L. (1886b): A Bucsecsen gyűjtött növényekről, Levél Csató János alispán úrhez. – *Magyar Növénytani Lapok* 10: 151–155.
- SIMONKAI L. (1887): *Erdély edényes flórájának helyesbitett foglalata. Enumeratio florae Transsilvanicae vesculosa critica*. – Kir. Magyar Természettudományi Társulat, Budapest [1886], 678 pp.
- SOÓ R. (1933): Analyse der Flora des historischen Ungarns. (Elemente, Endemismen, Relikte.) A magyar flóra elemzése. (Flóraelemek, endemizmusok, relikumok.) – *Magyar Biológiai Kutatóintézet Munkái* 6: 173–194.
- SZÜCS L. (1943): A Keleti Kárpátok endemikus növényfajai I. Die endemischen Pflanzenarten der Ostkarpathen I. – *Acta Geobotanica Hungarica* 5: 185–240.

#### Internet sources

[1] INDEX HERBARIORUM - [http:// sweetgum.nybg.org/ih/](http://sweetgum.nybg.org/ih/)

Beérkezett / received: 2014. 01. 08. • Elfogadva / accepted: 2014. 01. 22.