

New and noteworthy records of lichenized and lichenicolous fungi from Estonia

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Herewith, we continue to update the Estonian checklist of lichenized, lichenicolous and allied fungi, and report 12 lichenized (*Aspicilia aquatica*, *Evernia illyrica*, *Lecidea swartzioidea*, *Physcia alnophila*, *Protoblastenia borealis*, *P. compressa*, *Rehmia rubescens*, *Sarcogyne nivea*, *Thelidium rimosulum*, *Verrucaria cernaensis*, *V. linkolae* and *V. tenebrosa*) and one lichenicolous (*Phacographa glaucomaria*) species new for Estonia. In addition, the species *Lobarina scrobiculata*, last found nearly half a century ago, has been rediscovered in Estonia.

The specimens were identified using standard microscopy techniques and spot tests commonly employed for the identification of lichens (Randlane & Saag, 2004; Smith et al., 2009). The abbreviation K used in the text means ca 10% potassium hydroxide used for spot tests and I means Lugol's solution. Lichen substances in one of the specimens of *Evernia illyrica* were detected using thin layer chromatography (TLC, solvent A; Orange et al., 2001). The identifications of *Aspicilia aquatica*, *Protoblastenia borealis*, *P. compressa*, *Sarcogyne nivea*, *Verrucaria cernaensis*, *V. linkolae* and *V. tenebrosa* were confirmed based on blasting of the internal transcribed spacer (ITS) rDNA region against the sequences deposited in the GenBank (<https://www.ncbi.nlm.nih.gov>). The workflow from DNA extraction to sequencing is described in previous papers (e.g. Jüriado et al., 2022). The new sequences are made publicly accessible through PlutoF (Abarenkov et al., 2010) and are identified in the text by their UNITE UDB-codes

(Abarenkov et al., 2023). The cited specimens are deposited in the herbarium of Tallinn Botanic Garden (TALL) and in the fungarium of the University of Tartu (TUF), and the extracted DNA samples in the DNA and Environmental Sample Collection of the University of Tartu (TUE). Specimens originating from the herbarium of the former Euroacademy are marked as ex ICEB.

Information on the stand ages of the forest sites is based on the data from the Estonian Forest Register (2026). The abbreviations of the country regions and frequency classes follow Randlane & Saag (1999): NE – northeastern part, NW – northwestern part, SE – southeastern part, SW – southwestern part, WIs – Western islands; rr – very rare (1–2 localities), r – rare (3–5 localities). The following abbreviations are used for persons: AS – Ave Suija, EO – Ede Oja, IJ – Inga Jüriado, LM – Ljudmilla Martin, LM-O – Liis Marmor-Ohtla, PL – Piret Lõhmus. Lichenicolous fungi are marked with #.

New species for Estonia

ASPICILIA AQUATICA (Fr.) Körb. – NE: Lääne-Viru Co., Haljala comm., Lahemaa National Park (59.5829°N, 26.1748°E), in river, on erratic boulder (granite), leg. EO & IJ 7 June 2025, det. EO 10 June 2025 (TUF073418; UNITE: UDB07684704). Freq.: rr.

Aspicilia aquatica has a white-grey crustose thallus (without lichen substances) and black immersed apothecia (Fig. 1). The spores of the Estonian specimen are quite large, 26–30 ×

16–20 µm, fitting the description by Cannon et al. (2023). The closest matches of the ITS sequence were FJ532371 (Sweden) and EU057896 (UK), with sequence identities of 98.0% and 99.34%, respectively, both determined as *Aspicilia aquatica*.

Aspicilia aquatica grows on periodically submerged siliceous rocks in streams and lakes (Westberg et al., 2021; Cannon et al., 2023; Nimis, 2026). The species has been found in different parts of Europe, including Finland and Sweden, in North America and Asia, and there are also a couple of records from Antarctica (Westberg et al., 2021; GBIF, 2026a).

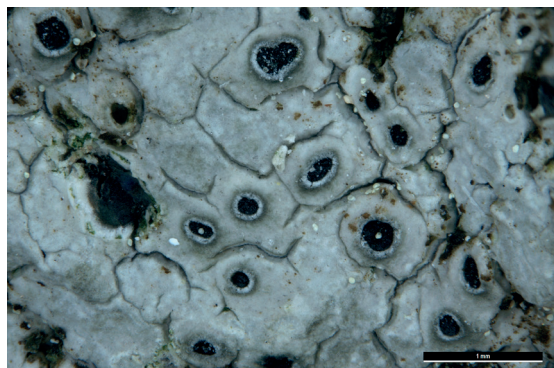


Fig. 1. *Aspicilia aquatica* (TUF073418; photo by E. Oja).

EVERNIA ILLYRICA (Zahlbr.) Du Rietz – WIs: Hiiu Co., Hiiu comm., Kõpu Nature Reserve (58.9200°N, 22.3708°E; 58.9197°N, 22.3718°E), in a ca 170-year-old *Myrtillus* site type spruce-dominated coniferous forest, on *Picea abies* branch, leg. PL 24 Sept. 2025, det. LM-O & PL 28 Nov. 2025 (TALL L017607, TUF073817). Freq.: rr.

Evernia illyrica was growing on the branches of at least five *Picea abies* trees. It is a macrolichen with fruticose pendulous thallus resembling *E. divaricata* (it was initially described as a subspecies of *E. divaricata*; Zahlbruckner, 1904). The two species can be distinguished based on thallus colour and chemistry: *E. illyrica* has a light grey thallus reacting K+ yellow (cortex with atranorin), whereas the thallus of *E. divaricata* is yellowish to greenish, K– (cortex with usnic acid). Both species contain divaricatic acid in the medulla (Moberg & Thell, 2011). The TALL

sample has both substances – atranorin and divaricatic acid – in the thallus.

Evernia illyrica is a rare species with scattered localities in Europe, e.g., France, Germany, Italy, Greece and Slovenia, and has been found mainly in the southern part of the continent (GBIF, 2026b). In the Baltic and Fennoscandian region, the species has been recorded only from one locality in Southern Sweden, in the first half of the 20th century (Westberg et al., 2021). *Evernia illyrica* shares similar habitats with *E. divaricata* growing mainly on the branches of spruce and fir trees in humid forests (Wirth et al., 2013). In Estonia, it was found together with *Alectoria sarmentosa*, another pendulous species associated with old-growth stands and with old spruces (Fig. 2).



Fig. 2. Samples of *Evernia illyrica* (right) and *Alectoria sarmentosa* (left) in Kõpu Nature Reserve (24 Sept. 2025; photo by P. Lõhmus).

LECIDEA SWARTZIOIDEA Nyl. – NW: Harju Co., Naisaasaar (59.5607°N, 24.5413°E), in a sparse young pine forest by the sea, on granite pebble, leg.

LM & M. Temina 11 July 1996, det. LM 25 Feb. 2026, ver. LM-O 25 June 2026 (TALL L017332, ex ICEB 13601). Freq.: rr.

Lecidea swartzioidea is a crustose lichen growing on exposed siliceous rocks (Fryday et al., 2024). With its whitish grey thallus and black apothecia, it looks similar to *Lecidea lapicida*. The species contains norstictic acid (K+ red) like *L. lapicida* var. *pantherina* but unlike *L. lapicida* var. *pantherina*, which has colourless to pale brown hypothecium, *L. swartzioidea* has dark brown hypothecium (Nimis, 2026). The medulla reacts I+ blue-violet as in *L. lapicida* (Fryday et al., 2024; Nimis, 2026).

Lecidea swartzioidea has been found mainly in Europe, including Finland and Sweden, but there are also some records from other parts of the world, e.g., Canada, Russian Far East and New Zealand (Westberg et al., 2021; GBIF, 2026c).

PHACOGRAPHIA GLAUCOMARIA (Nyl.) Hafellner – Ws: Lääne Co., Vormsi Island, Rumpo Peninsula (58.9572°N, 23.2945°E), in alvar with sparse juniper thickets, ca 70 m from the shoreline, on *Glaucomaria rupicola* on granite pebble, leg. LM & Jüri Martin 10 Oct. 1999, det. LM 14 July 2026 (TUF095991, ex ICEB 9693). Freq.: rr.

This non-lichenized species growing on the thalli of *Glaucomaria rupicola* coll. has semi-immersed apothecia with widely exposed dark brown disc and black margin, arranged in groups of mostly 5–25, individual apothecia 0.4–0.6(–0.7) mm in diameter, (4–)8-spored asci, 3-septate ascospores, hyaline at first then turning pale brown (Hafellner, 2009; Cannon, Coppins et al., 2021). The spores measure 20–24(–26) × 6–7 µm according to Hafellner (2009) and 21–29 × 7–9 µm according to Cannon, Coppins et al. (2021). The Estonian specimen fits the above description; the apothecia being arranged in dense groups of 3–11.

Hafellner (2009) notes that *Phacographa glaucomaria* “has nothing to do with *Arthonia glaucomaria* Nyl., a heterotypic synonym of *A. varians* (Davies) Nyl.”, another parasite on *Glaucomaria rupicola* that has been recorded also in Estonia. The latter species develops in the hymenium of the host’s apothecia, causing their characteristic darkening, whereas its own ascomata lack a distinct margin (Nimis, 2026).

Phacographa glaucomaria is growing in Northern Hemisphere with most known localities in Europe, the closest to Estonia located in Finland and Sweden (GBIF, 2026d).

PHYSICIA ALNOPHILA (Vain.) Loht. et al. – SW: Pärnu Co., Saarde comm., Mustla village (58.1330°N, 25.0861°E), on *Fraxinus excelsior*, leg. LM 24 Sept. 1996, det. LM 9 Feb. 2026, ver. LM-O 12 March 2026 (TALL L017330, ex ICEB 2646). Freq.: rr.

Physcia alnophila used to be regarded as a variety of *P. aipolia* but as DNA based analyses indicated that they are distinct, *P. alnophila* was raised to species level in 2009 (Lohtander et al., 2009). *Physcia alnophila* resembles *P. aipolia* but has somewhat smaller thallus (up to 4 cm in diameter), with narrower, less than 2 mm wide lobes which are usually discrete. The apothecia are small (up to 1.5 mm) and abundant, occurring also on the lobe tips (Lohtander et al., 2009; Stenroos et al., 2021). The spores of *P. alnophila* are slightly smaller compared to *P. aipolia*, measuring 16–22(–24) × 7–10 µm; however, there is some overlap in spore size (Lohtander et al., 2009; Stenroos et al., 2021). The apothecia of the Estonian specimen measure up to 1.2 mm and the spores 21–22.5 × 8–9(–9.5) µm (n=10) fitting the above description.

Physcia alnophila has been recorded in Northern Hemisphere in Europe, North America and Asia (GBIF, 2026d). Most of the localities in Europe are in Fennoscandia (GBIF, 2026e), where the species is growing on deciduous trees, especially on *Alnus incana* and *Salix* spp. (Westberg et al., 2021).

PROTOBLASTENIA BOREALIS Pykälä & Myllys – NW: Harju Co., Tallinn, Maarjamägi (59.4529°N, 24.8139°E), limestone outcrop in klint forest, on limestone together with *Verrucaria viridula*, *V. dolosa*, *V. nigrescens*, and *Verrucaria* sp., leg. IJ 17 May 2022, det AS 24 June 2026 (TALL L017461.a; UNITE: UDB07686182). Freq.: rr.

Protoblastenia borealis is a new species that has been recently described from Finland (Pykälä & Myllys, 2025). The species has white to pale grey, mostly rimose to areolate thallus and yellow-orange to brown-orange, slightly convex to strongly convex apothecia (Pykälä & Myllys, 2025; Fig. 3). *Protoblastenia borealis* is morphologically

very variable and may be difficult to distinguish from the similar species, including the closely related *P. rupestris* without sequencing; however, *P. borealis* differs from *P. rupestris* in having mostly rimose thallus (Pykälä & Myllys, 2025). The Estonian specimen was identified based on the results of the blast search. The sequence is 100% identical with PV766656, PV766642, and PV766646, all identified as *P. borealis*.

Protoblastenia borealis grows on calcareous and calciferous rocks on both shady and sun-exposed habitats (Pykälä & Myllys, 2025). So far, the species is known only from Finland (GBIF, 2026f), where it is regarded as the most common species of *Protoblastenia* in the country.

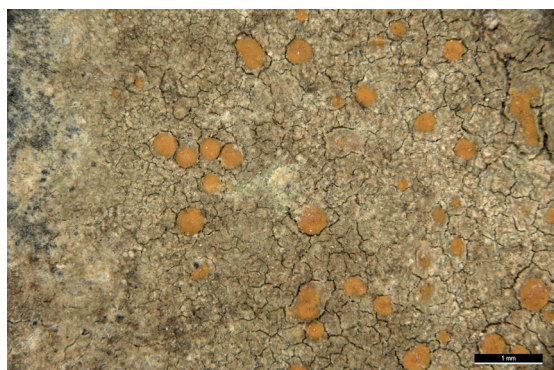


Fig. 3. *Protoblastenia borealis* (TALL L017461; photo by E. Oja).

PROTOBLASTENIA COMPRESSA Pykälä & Myllys – NW: Harju Co., Tallinn, Astangu-Mäeküla (59.40°N, 24.62°E), on limestone together with *Polyblastia abscondita*, leg. AS 28 May 2023, det. AS 4 Dec. 2025 (TUF095081.b; UNITE: UDB07674663). Freq.: rr.

Protoblastenia compressa is another new species that has been recently described from Finland (Pykälä & Myllys, 2025). The species has white to pale grey areolate thallus and yellow to orange, plane to slightly convex apothecia (Pykälä & Myllys, 2025; Fig. 4). Compared to similar species (e.g. *Protoblastenia rupestris*), *P. compressa* has thinner apothecia and thinner thallus (Pykälä & Myllys, 2025). The Estonian specimen was identified as *P. compressa* based on the results of the blast search, with 98.40 to 99.16% identity (e.g., PV766662, PV766661).

The species grows on calcareous rocks and seems to prefer shady habitats, e.g. north-facing walls of lime quarries (Pykälä & Myllys, 2025). So far, in addition to Finland where the species was first described, it has also been reported from Norway and France (GBIF, 2026g).

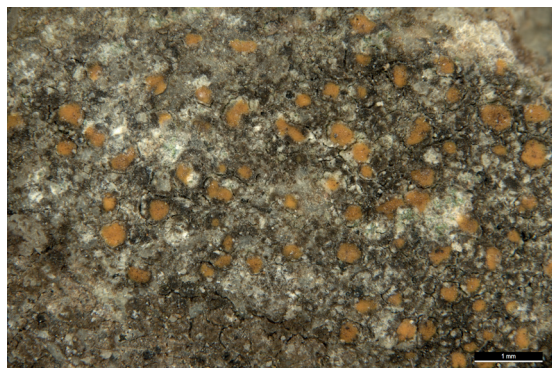


Fig. 4. *Protoblastenia compressa* (TUF095081.b; photo by E. Oja).

REHMIA RUBESCENS Th. Fr. – WIs: Saare Co., Saaremaa comm., Võhma village (58.5557°N, 22.3822°E), pine forest, on granite stone, leg. R. Melsas 11 Feb. 2025, det. AS 10 June 2026 (TUF095487; UNITE: UDB07677592); same locality (58.5554°N, 22.3493°E), forest, on granite stone, leg. R. Melsas 24 May 2025, det. AS 10 June 2026 (TUF095917; UNITE: UDB07686143). Freq.: rr.

The species has grey to greyish brown thallus reacting K+ red indicating presence of norstictic acid. The species has muriform ascospores in dimensions of (25–)26.5–34.5(–40) × (12–)12.5–16(–18) µm (Ihlen, 2004). From Estonian lichens, *R. rubescens* is the most similar to *Rehmia reducta* (= *Rhizocarpon reductum*) that differs from *R. rubescens* by containing stictic acid (K+ yellow). The DNA sequences of Estonian specimens have 100% of identity with PV665080 (Sweden) and less than 85% with MH979421 and MH979422 (China), all determined as *R. rubescens*.

The species is growing on siliceous rocks, mainly in damp habitats, e.g. in north-facing slopes (Nimis, 2026). It has been recorded in different parts of Europe, including Finland and Sweden, and North America (Westberg et al., 2021; GBIF, 2026h).

SARCOGYNE NIVEA Kremp. – NW: Harju Co., Tallinn, by Lake Ülemiste (59.3761°N, 24.7522°E), in an open meadow-like habitat under the powerline, on concrete, leg. LM-O 1 Apr. 2025, det. AS 1 Oct. 2025 (TALL L017262; UNITE: UDB07684674). Freq.: rr.

Sarcogyne nivea is a crustose microlichen with white to pale brown thallus and lecideine dark brown to black, 0.3–1.0 mm wide apothecia (Knudsen et al., 2023; Nimis, 2026). The ascospores of *S. nivea* are 1-celled, hyaline and may vary from globose to ellipsoid, measuring $3\text{--}5 \times (1\text{--})2\text{--}3 \mu\text{m}$ (Knudsen et al., 2023; Nimis, 2026). The spores of the Estonian specimen are $3\text{--}5(6.5) \times 2\text{--}3 \mu\text{m}$ (n=20). The asci of our specimen measure $(57\text{--})65\text{--}70 \times (23\text{--})28\text{--}30 \mu\text{m}$, being wider compared to *S. regularis*, a common lichen growing on similar substrates, that has up to $18 \mu\text{m}$ wide asci (Randlane & Saag, 2004; Knudsen et al., 2021). The exciple of the Estonian specimen measures ca $100 \mu\text{m}$, fitting the dimensions given by Knudsen et al. (2023), $(50\text{--})100\text{--}120 \mu\text{m}$, and being wider compared to *S. regularis*, which has a up to $50 \mu\text{m}$ wide exciple (Knudsen et al., 2021). The closest matches of the ITS sequence were OQ171085 and OQ171100 with 99.67% to 99.83% of identity (both *S. nivea*, Czech Republic).

Sarcogyne nivea is a rare species that is known from Central and Southern Europe (GBIF, 2025a; Nimis, 2026) where it grows on limestone (Wirth et al., 2013; Nimis, 2026).

THELIDIUM RIMOSULUM Ceyn.-Gield. – NW: Harju Co., Tallinn, by Lake Ülemiste (59.3827°N, 24.7536°E; 59.3844°N, 24.7500°E; 59.3857°N, 24.7467°E; 59.3869°N, 24.7434°E; 59.3874°N, 24.7420°E; 59.3878°N, 24.7410°E), in an open rocky habitat in the splash zone right beside the lake, on limestone (and in one of the localities on concrete too), leg. EO & LM-O 3 July 2025, det. EO 7 July–29 Oct. 2025 (TALL L016499.a, TALL L016500.a, TALL L016501, TALL L016504.b, TALL L016506.b, TALL L016509.b, TALL L016512, TALL L016513, TUF073360.b, TUF073361.b, TUF073373.a), and det. EO & AS 28 Oct. 2025 (TUF073362.b, TUF073368.a; UNITE: UDB07684683, UDB07684690), and det. EO 29 July 2025, ver. EO, AS & J. Pykälä 28 Oct. 2025 (TUF073372.a; UNITE: UDB07684693). Freq.: rr.

Thelidium rimosulum is characterised by dark almost blackish crustose thallus with peeling areolae that are covered with subglobose to cylindrical isidia and sometimes with soralia. Perithecia are immersed to projecting, ascospores 1-septate $(11\text{--})13\text{--}17(19) \times 5\text{--}7(8) \mu\text{m}$ (Ceynowa-Gieldon, 2007). The thallus of Estonian specimens is similar: dark, peeling areolae that are uneven, with granules or small isidia-like outgrowths, however, the spores are somewhat larger, measuring $(12\text{--})17\text{--}21(25) \times (5\text{--})6\text{--}8(10) \mu\text{m}$ (n=73; pictures of the Estonian specimens can be found at <https://elurikkus.ee/app/taxonomy/taxon/1625073>). No reference ITS sequences identified as *T. rimosulum* are currently available in public databases. The closest matches of the ITS sequences were various Verrucariaceae (e.g., OM228781, *Thelidium* sp., 92.19%; FJ664849, *Verrucaria elaeina*, 91.13%).

Thelidium rimosulum is a rare species that is known from Europe, including Finland (Westberg et al., 2021; GBIF, 2025b). The species was described in 2007 from Poland, where it was found on small limestone rocks in a sunny habitat by a quarry (Ceynowa-Gieldon, 2007). In Finland, it has also been found on pebbles in a lime quarry (Westberg et al., 2021).

VERRUCARIA CERNAENSIS Zschacke – NW: Harju Co., Tallinn, by Lake Ülemiste (59.3857°N, 24.7470°E), in an open rocky habitat in the splash zone right beside the lake, on limestone, leg. EO 16 Apr. 2025, det. AS 1 Oct. (TUF073363.a; UDB07684685), and det. EO 23 Oct. 2025 (TALL L016518); by Lake Ülemiste (59.3857°N, 24.7467°E; 59.3869°N, 24.7434°E; 59.3878°N, 24.7410°E), same habitat and substrate, leg. EO & LM-O 3 July 2025, det. AS 1 Oct. 2025 (TUF073358.a, TUF073359, TUF073362.a; UNITE: UDB07684678, UDB07684679, UDB07684682). Freq.: rr.

Verrucaria cernaensis has brown, well-developed, regularly cracked thallus and only little-projecting black perithecia (Fig. 5); the ascospores measure $(15\text{--})18\text{--}22(27) \times (7.5\text{--})9.5\text{--}11.5(14) \mu\text{m}$ and the conidia $4\text{--}8 \times \text{ca } 1 \mu\text{m}$ (Orange et al., 2023; Nimis, 2026). The Estonian specimens fit the above description, the spores measuring $(17\text{--})18\text{--}22(25) \times (8\text{--})10\text{--}12(13) \mu\text{m}$ (n=37) and the conidia $4\text{--}9 \times 1\text{--}1.5 \mu\text{m}$. Characteristic

features are brown pigment in lower part of the thallus and pycnidia, scattered on the thallus surface. The closest matches of the ITS sequences were MZ409490 (99.83%, Austria), FJ664823 (99.83%, UK), and FJ645260 (95.02%, UK), all determined as *V. cernaensis*.

Verrucaria cernaensis is growing on frequently submerged rocks beside lakes and rivers and also on seeping and seasonally damp rocks, mainly on siliceous rocks but also on limestone and concrete (Orange et al., 2023). *Verrucaria cernaensis* has been found in different parts of Europe and in the eastern part of North America (GBIF, 2025c). There are no previous records from the Fennoscandian and Baltic countries (Westberg et al., 2021; GBIF, 2025c).

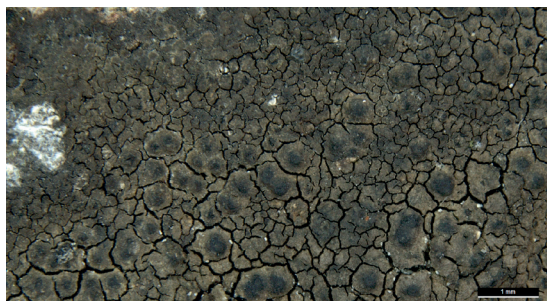


Fig. 5. *Verrucaria cernaensis* (TUF073362; photo by E. Oja).

VERRUCARIA LINKOLAE Pykälä & Myllys – SW: Pärnu Co., Lääneranna comm., Puhtu-Laelatu Nature Reserve, Uulutilaid (58.5524°N, 23.5222°E), on granite stone, leg. AS 02 Aug. 2022, det. J. Pykälä 28 Oct. 2025 (TUF091945; UNITE: UDB07674118). Freq.: rr.

Verrucaria linkolae is a recently described species that has fleck-like pale greyish brown, greenish brown or dark brown thallus, often with goniocyst-like units, 1/4–1/2-immersed perithecia (0.1–0.2 mm diameter), involucrellum reaching to the exciple base level, and medium sized ascospores (11.4–)12.6–15.2(–17.4) × (4.4–)5.0–6.4(–7.6) µm (Pykälä et al., 2024; Fig. 6). It differs from other European *Verrucaria* species with a brown thallus and goniocyst-like units by the smaller, occasionally 1-septate spores (Pykälä et al., 2024). The spores of the Estonian specimen are 0–1-septate and measure

17–18 × 6–7 µm (n=3). The blast result showed the closest matches with PQ499473 (99.64%; Czech Republic), PP337746 (99.04%, Finland) and other sequences of *V. linkolae*, as well as with FJ664851 (*Verrucaria* sp., 99.67%, UK), OK332900 (*Verrucaria* sp., 99.67%, Czech Republic), and MG242447 (*Verrucaria* sp., 99.29%, Germany).

Verrucaria linkolae is the most common on siliceous rocks but also grows on calcareous rocks and bricks; it seems to prefer half-shady and shady habitats (Pykälä et al., 2024). The species has been reported from several European countries, including Finland where it was first described (Pykälä et al., 2024; GBIF, 2026i).

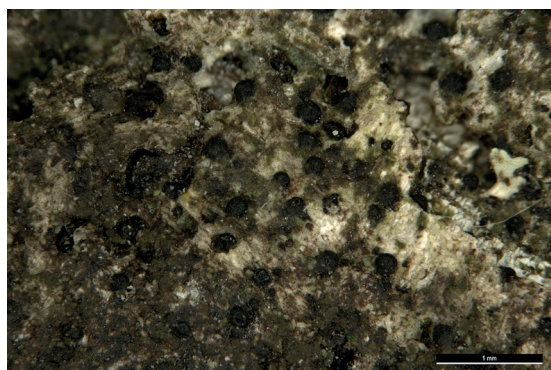


Fig. 6. *Verrucaria linkolae* (TUF091945; photo by E. Oja).

VERRUCARIA TENEBROSA Pykälä et al. – NW: Harju Co., Tallinn, Maarjamägi (59.4540°N, 24.8580°E), forest on limestone cliff, on limestone together with *Bacidina arnoldiana* and *Lepraria* sp., leg. LM-O 21 Oct. 2021, det. AS 23 Apr. 2026 (TALL L010327.a; UNITE: UDB07685873); Maarjamägi (59.4531°N, 24.8303°E), same habitat and substrate, leg. IJ 18 May 2022, det. AS 24 Apr. 2026 (TALL L017443; UNITE: UDB07685879). Freq.: rr.

Estonian specimens have grey to pale greenish-brown, slightly rimose thallus, with small (up to 0.3 mm), half-immersed perithecia, an involucrellum up to 50 µm thick, and an exciple that is brownish in spots (Fig. 7). Periphysoids measure 22–25 × 1–2 µm, fitting the description by Pykälä et al. (2018), who reported dimensions of 14–27 × 1.5–2.5 µm. The spores from the

Estonian material measure $(21\text{--}23\text{--}27\text{--}29) \times (8\text{--}9\text{--}11\text{--}12) \mu\text{m}$ ($n=24$), being slightly larger compared to the size range given by Pykälä et al. (2018), $(16\text{--}19\text{--}22\text{--}25) \times (7.5\text{--}8\text{--}9.5\text{--}11) \mu\text{m}$. The closest matches of the ITS sequences were KY652278 (100%, Finland), KY682961 (99.84%, Norway) and other sequences identified as *V. tenebrosa*.

According to Pykälä et al. (2018), *V. tenebrosa* occurs in shady habitats, usually on calcareous pebbles on north-facing cliffs. Our specimens were found in similar habitats in limestone klint forests. So far, the species has been recorded only from Finland and Norway (Pykälä et al., 2018; GBIF, 2026j).

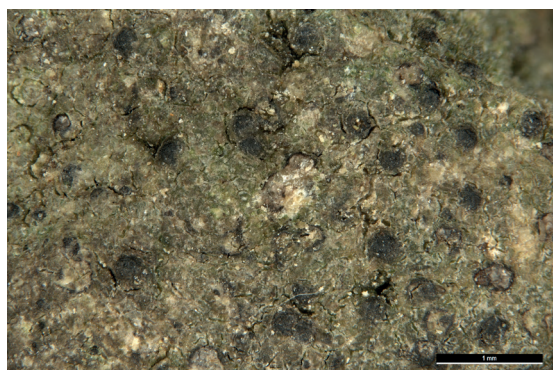


Fig. 7. *Verrucaria tenebrosa* (TALL L017443; photo by E. Oja).

Rediscovered species

LOBARINA SCROBICULATA (Scop.) Nyl. – SW: Pärnu Co., Saarde comm., Siiraku Nature Reserve (58.2183°N, 24.8050°E), in a ca 200-year-old *Filipendula* site type mixed forest, on fallen *Fraxinus excelsior*, leg. PL 20 July 2025, det. PL, IJ & EO 21 Oct. 2025 (TUF073575). Freq.: r.

Lobarina scrobiculata was found on a fallen ash trunk about ten meters up (Fig. 8), and the thallus had likely been growing there before the tree fell. On 24 April 2026, PL also observed the species on the trunk of a nearby old *Alnus incana*, where a single smaller thallus was present at a height of approximately 5 m. The species has been found in Estonia previously by Arthur Hermann von Rühl in the early 20th century on an ash in Pärnu Co., in Kilingi forest

district (Räsänen, 1931; the voucher specimen could not be located), whereas the historical office of the forest district was located ca 4.5 km from the current locality, and later in 1979 by Hans Trass in Põlva Co., by the river Ahja near Valgesoo (TUF009274; Trass & Randlane, 1994). *Lobarina scrobiculata* is a lichen of elevated conservation concern in Europe, being extinct, rare or decreasing in European countries (Jørgensen & Tønsberg, 2007; Wirth et al., 2011; Cannon, Magain et al., 2021; Stenroos et al., 2021; Randlane et al., 2024; Nimis, 2026).



Fig. 8. A specimen of *Lobarina scrobiculata* (with a bluish-grey thallus) photographed in Siiraku Nature Reserve. A fragment of *Lobaria pulmonaria* (green thallus) was placed beside it to illustrate the colour contrast between the wet thalli (10 Nov. 2025; photo by P. Lõhmus).

Acknowledgements

Our sincere thanks go to Raul Melsas and Marina Temina for the collections, to Juha Pykälä for consulting *Verrucaria* sequences and to Saara Velmala for checking whether the voucher specimen of *Lobarina scrobiculata* is preserved in Veli Räsänen's collection in the Helsinki herbarium. Lab work for DNA analysis was done by Rasmus Puusepp and Marju Vahter (University of Tartu). The anonymous reviewer and editor Polina Degtjarenko are highly appreciated for valuable

comments and corrections. The study was financially supported by Tallinn Urban Environment and Public Works Department, Estonian Research Council (grant PRG1170), Estonian Environmental Board (grant LLTOM25359) and Estonian Ministry of Education and Research (Center of Excellence AgroCropFuture, grant TK200). The equipping of the TLC lab was supported by the Estonian Research Council (grant PSG884 to Estonian University of Life Sciences).

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