

F. Schumm (2026):

Images of Lichens

Vezda Lichenes Selecti Exsiccati
part 32

With this volume, I continue the documentation of Vezda's works on exiccata, now with Lichenes Selecti as part 32. I have chosen the genus names that Vezda used, even though others are now more common. However, I also include the currently used names in the synonym list and the index. In addition, I have again made every effort to add species descriptions to the detailed information on the labels from the literature.

For the descriptions of europaean species I used mainly the excellent descriptions that are provided in Prof. Nimis *ITALIC* 8 under the URL: **<https://italic.units.it/>**

and the Australian Lichenslist under the Url: **https://www.anbg.gov.au/abrs/lichenlist/lichenchecklist_e_o.html**

F. Schumm, 2026

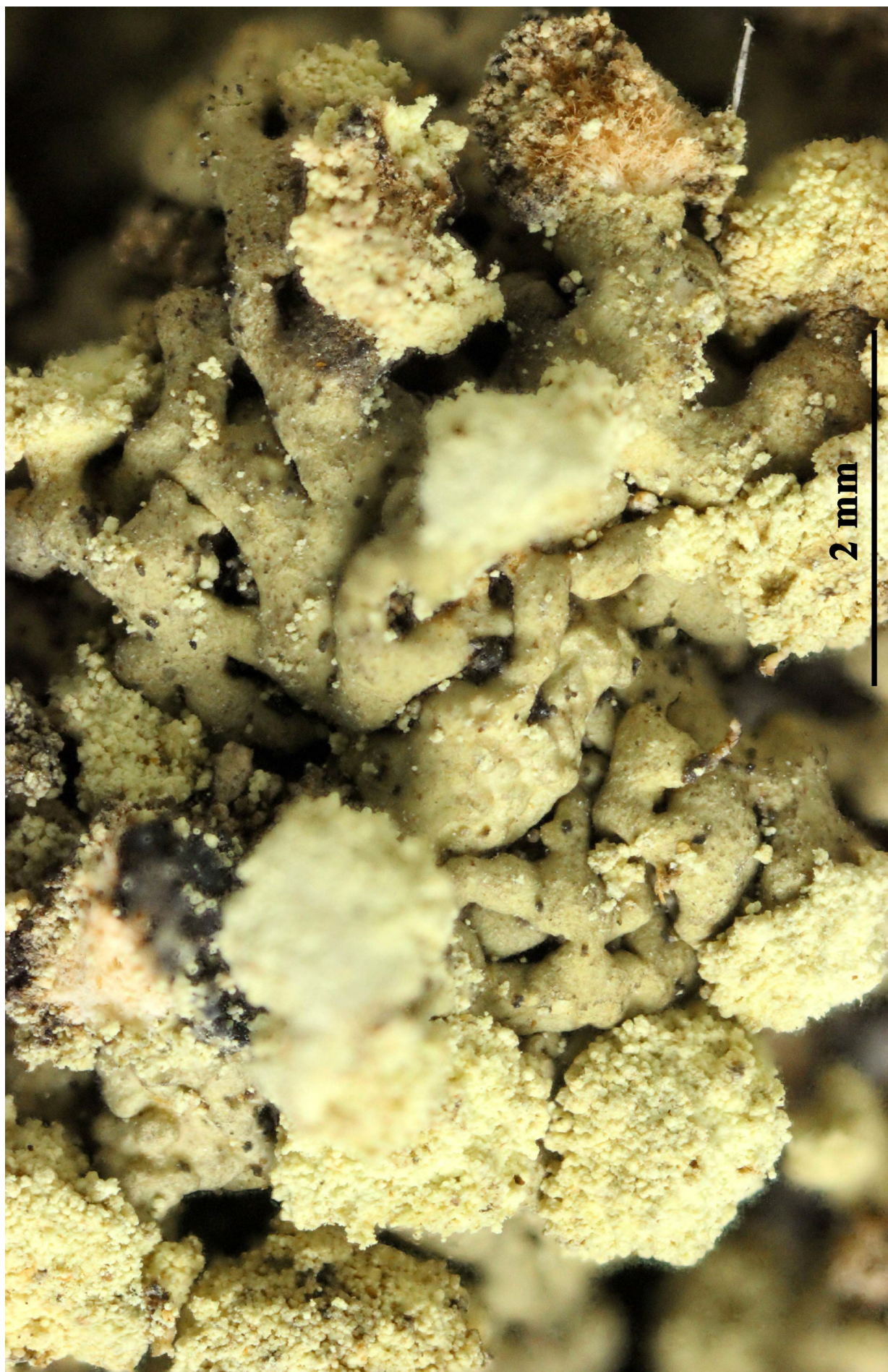
Parmelia incurva (Pers.) Fr., Nov. Sched. Critic. Lich. (Lundae): 31 (1826)
= *Lichen incurvus* Pers. 1794
= *Arctoparmelia incurva* (Pers.) Hale, Mycotaxon 25(1): 252 (1986)
= *Imbricaria incurva* (Pers.) DC.
= *Xanthoparmelia incurva* (Pers.) Hale

[VZ2096], Austria. Salisburgia, Lungau, Kendlbruckner Mühlbachgraben, prope locum Spreitzer dictum, Predlitz, 1100 m. Ad truncum ligneum faenilium. Lg. R. Türk et H. Wittmann. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 2096.

Thallus foliose, heteromerous, dorsiventral, closely adnate, yellowish to yellowish green or yellowish grey, usually grey in central parts, rather glossy, sorediate, with elongated, 0.2-1.5(-3) mm wide, convex, often overlapping and radiating lobes, forming up to 10 cm wide (usually smaller), often confluent rosettes. Soralia laminal, strongly convex and almost subglobose, 2-4 mm across, most frequent on the central lobes; lower surface pale brown, with sparse, black rhizines. Upper cortex of tightly packed, anticlinally oriented hyphae, with a pored epicortex, the cell walls with Cetraria-type lichenan; medulla white, not amyloid; lower cortex appearing velvety due to minutely papillose, projecting hyphae. Apothecia rare, lecanorine, 2-4 mm across, with a brown to brown-black disc and a smooth thalline margin. Epithecium brown; hymenium colourless, I+ blue; paraphyses sparingly branched, the apical cells slightly swollen; hypothecium colourless. Asci 8-spored, clavate, the K/I+ blue tholus penetrated by a faintly amyloid apical cushion with parallel or diverging flanks, the wall K/I-, surrounded by a K/I+ blue outer layer, Lecanora-type. Ascospores 1-celled, hyaline, ellipsoid, 9-12 x 6-8 µm. Pycnidia rare, laminal, immersed, black. Conidia hyaline, bacilliform, 4-7 x c. 1 µm. Photobiont chlorococcoid. Spot tests: cortex K+ yellow, C-, KC+ pale yellow, P-; medulla and soralia K-, KC+ pink, P- or P+ rust-red, UV+ strongly blue-white. Chemistry: cortex with usnic acid and atranorin; medulla with alectoronic acid and variable amounts of protocetraric and collatolic acids. - Note: a circumpolar, arctic-alpine to boreal-montane species found on steeply inclined, hard, acid siliceous rocks in cold, wind-exposed mountain summits.



Parmelia incurva



Parmelia incurva

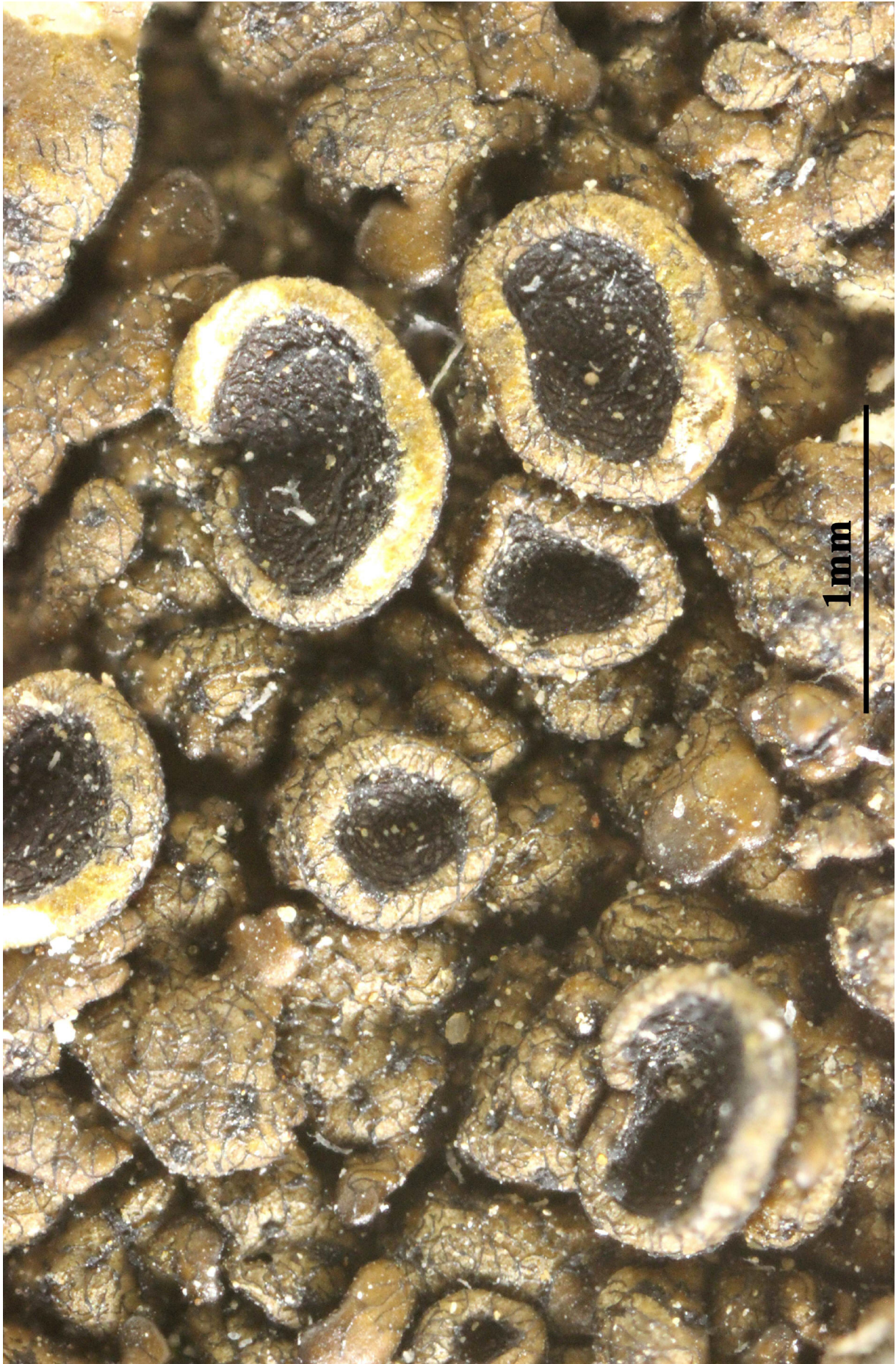
Parmelia luteonotata J. Steiner [as 'luteo-notata'], Verh. Kaiserl.-Königl. zool.-bot. Ges. Wien 52: 472 (1902)
= *Xanthoparmelia luteonotata* (J. Steiner) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch, Taxon 53(4): 968 (2004)

[VZ2195], Cyprus. Larnaca, in vicinitate pagi Oroklini, haud procul a litore, 5 m. Ad lapides siliceos in saxo conglomerato calcareo. Leg. A. Vězda, 23.6.1987. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2195.

Thallus foliose, heteromerous, dorsiventral, loosely to moderately adnate, forming up to 10 cm wide, sometimes coalescing rosettes. Lobes (0.5-)1-3 mm wide, sublinear to irregular, discrete to imbricate, rarely developing subfruticose branches, the upper surface brown to dark brown, uneven and rugose, the lower surface tan to pale brown, moderately to densely rhizinate; rhizines simple, to 0.5 mm long. Upper cortex paraplectenchymatous, with a pored epicortex, the cell walls with *Xanthoparmelia*-type lichenan; medulla white; lower cortex paraplectenchymatous. Apothecia usually numerous, lecanorine, sessile to stipitate, to 4 mm across, with a brown disc and a smooth thalline margin. Epithecium brown; hymenium colourless; paraphyses simple; hypothecium colourless. Asci 8-spored, clavate, the K/I+ blue tholus penetrated by a faintly amyloid apical cushion with parallel or diverging flanks, the wall K/I-, surrounded by a K/I+ blue outer layer, *Lecanora*-type. Ascospores 1-celled, hyaline, ellipsoid, 8-11 x 4-7 µm. Pycnidia common, immersed. Conidia weakly dumbbell-shaped 4-7 x c. 1 µm. Photobiont chlorococcoid. Spot tests: upper cortex K-, C-, KC-, P-, N+ blue green, UV-; medulla K-, C-, KC- or KC+ pink, P-, UV+ white. Chemistry: medulla with divaricatic or stenosporic acids, with or without gyrophoric acid as an accessory substance. - Note: a mainly Mediterranean species of sun-exposed siliceous rocks wetted by rain, occurring also in dry-warm sites of the Alps.



Parmelia luteonotata

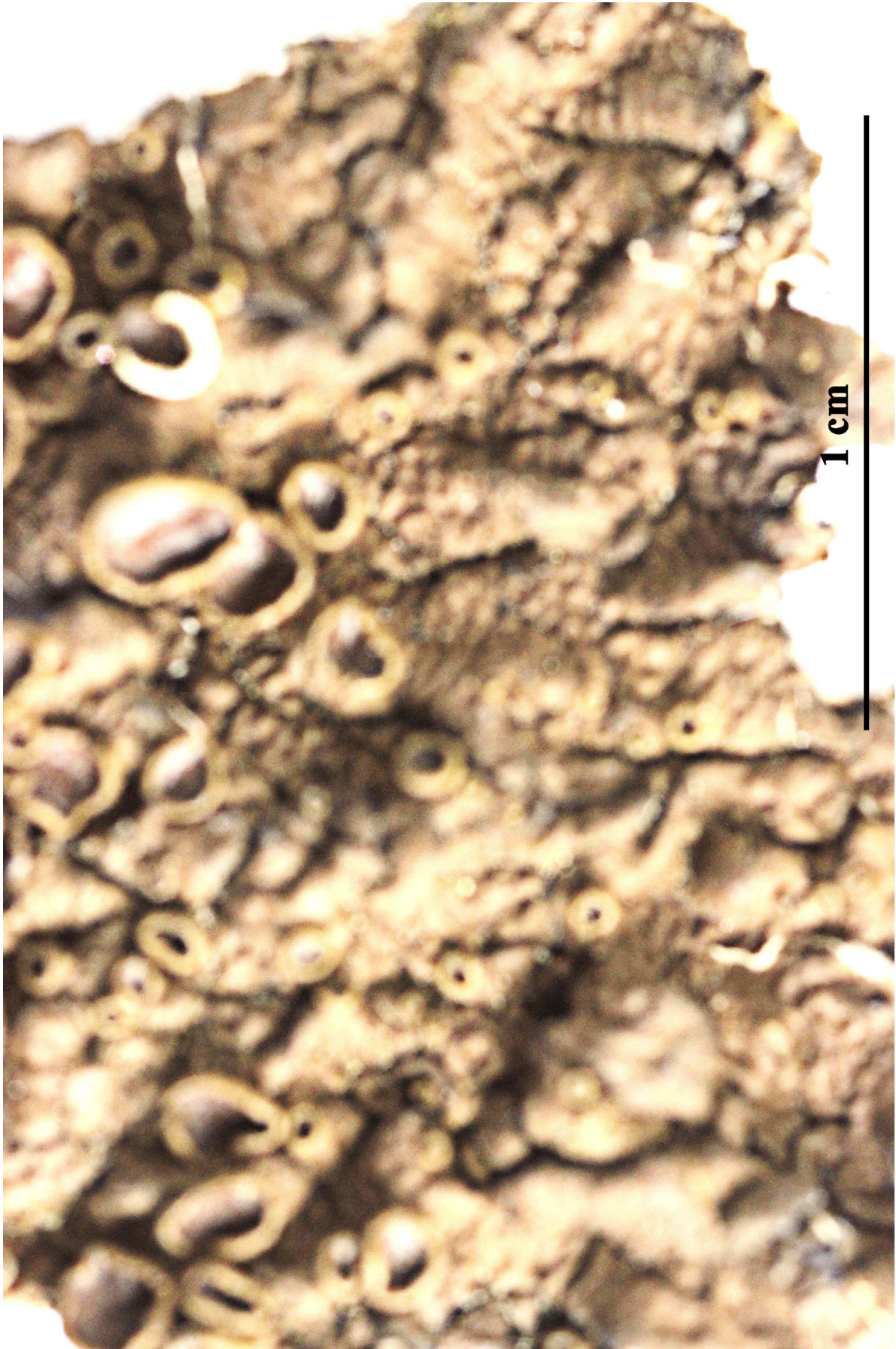


Parmelia luteonotata

Parmelia prolixa* var. *attica Leuckert, Poelt & B. Schwarz, in Vězda, Lichenes Selecti Exsiccati, Fasc. (Průhonice) 43: no. 1069 (1972)
= *Xanthoparmelia attica* (Leuckert, Poelt & B. Schwarz) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch, Taxon 53(4): 966 (2004)

[VZ1969], Graecia. Attica. Ad pedem septentrionalem motis Penteli (Pentelicon) prope vicum Dionissos haud procul ab urbe Athiae. In rupibus humilioribus. Leg. B. Schwarz, Ch. Leuckert et J. Poelt, 11.4.1971. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1069.

Thallus foliose, heteromerous, dorsiventral, forming 5-12 cm wide rosettes, the lobes appressed, 0.5-3 mm wide, flat, wrinkled and contorted in older parts, smooth or with a faint network of ridges, the upper surface dark brown, matt or glossy at tips, the lower surface black, sometimes brown at margins, with simple, black rhizines. Upper cortex paraplectenchymatous, brown, with a pored epicortex, the cell walls with Xanthoparmelia-type lichenan; medulla white; lower cortex paraplectenchymatous. Apothecia rather rare, lecanorine, sessile to subpedicellate, 1-1.5(-2.5) mm across, with a slightly concave to flat, dark brown disc and a thin, persistent, smooth thalline margin. Epithecium orange-brown; hymenium colourless; paraphyses c. 2.5 µm thick at mid-level, the apical cells up to 3.5 µm wide; hypothecium colourless. Asci 8-spored, clavate, the K/I+ blue tholus penetrated by a faintly amyloid apical cushion with parallel or diverging flanks, the wall K/I-, surrounded by a K/I+ blue outer layer, Lecanora-type. Ascospores 1-celled, hyaline, ellipsoid. Pycnidia laminal, black, globose, the wall mostly colourless, brown around the ostiole. Conidia straight, fusiform or bifusiform. Photobiont chlorococcoid. Spot tests: upper cortex K-, C+ blue-green, P-, UV-, N+ blue-green; medulla K+ yellow turning red-orange, C-, KC+ faintly orange in upper part, KC- or KC+ fleeting red, P+ yellow-orange, UV+ white. Chemistry: medulla with norstictic acid (major), alectoronic acid, and an unidentified fatty acid (minor). - Note: a species growing on siliceous, sometimes weakly calciferous rocks in sunny sites, known from Greece.



Parmelia prolixa var. *attica*



Parmelia prolixa var. *attica*

Parmelia rysssolea (Ach.) Nyl., Syn. meth. lich. (Parisiis) 1(2): 397 (1860)
= *Dufourea rysssolea* Ach.
= *Xanthoparmelia rysssolea* (Ach.) O.Blanco et al.

[VZ1907], Hispania. Prov. Soria: Prope vicum Judes, Paramera, 1250 m. Supra terram calcatream in *Junipereto thuriferae* soluto. Leg. A. Crespo. J. Poelt et A. Vězda. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR.1907.



Parmelia ryssolea



Parmelia ryssolea

Parmelia rysssolea (Ach.) Nyl., Syn. meth. lich. (Parisiis) 1(2): 397 (1860)
= *Dufourea rysssolea* Ach.
= *Xanthoparmelia rysssolea* (Ach.) O.Blanco et al.

[VZ1268],Romania, Dobrogea, Tirguşor, in colle supra vallem fluminis Casimcea prope pagum Casimcea, 80 m, ad terram stepposam. Lg. A. Vezda, 1.5.1974. Ex A. Vězda: Lichenes Selecti Exsiccati Nr. 1268.



Parmelia ryssolea

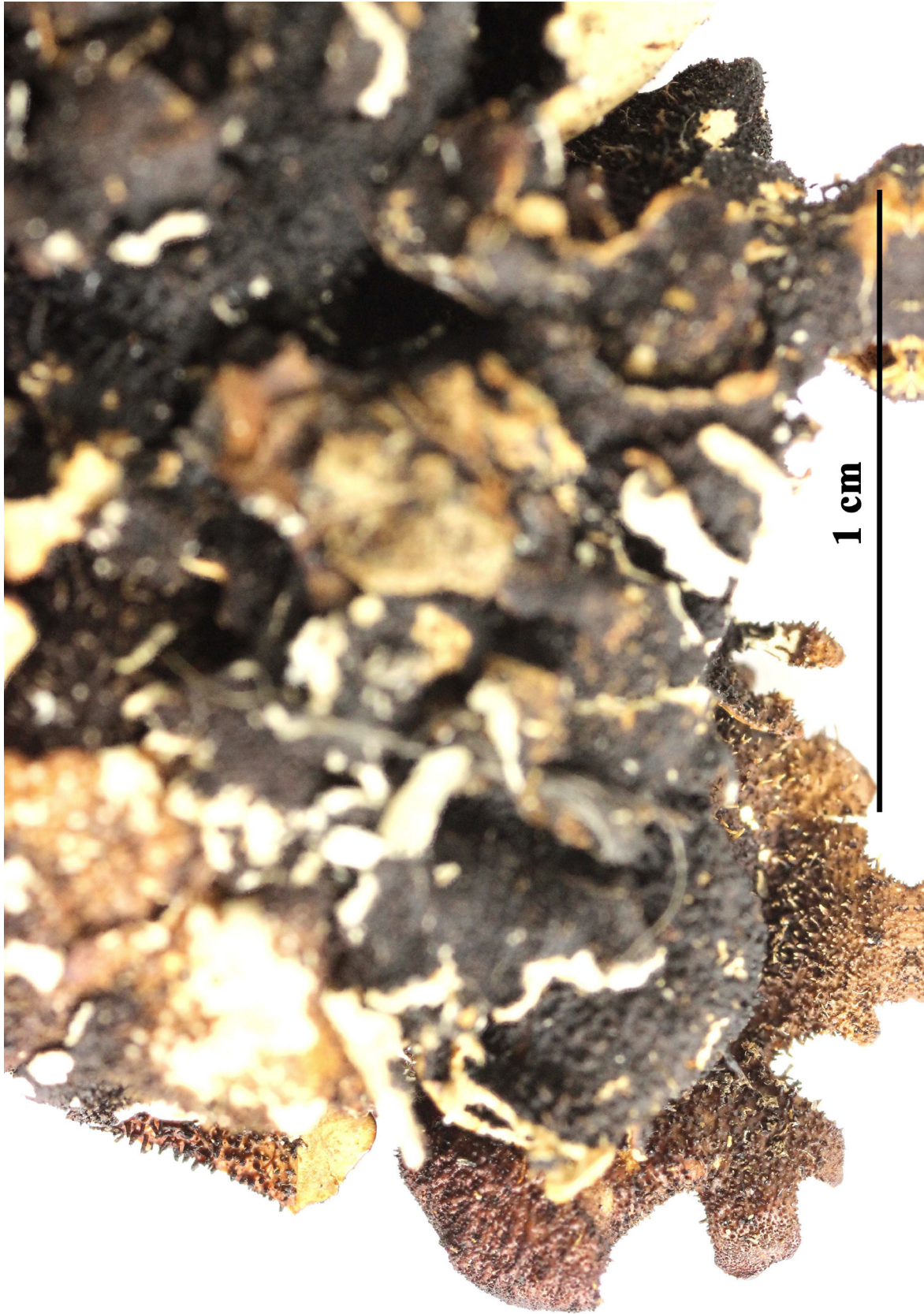


Parmelia ryssolea

Parmelia tasmanica Hook. f. & Taylor, London J. Bot. 3: 644 (1844)
= *Xanthoparmelia tasmanica* (Hook. f. & Taylor) Hale, Phytologia 28(5):
489 (1974)

[VZ1441], Tanzania. Kilimanjaro: prope casam alpinam Barranco dic-
tam, 3900 m. In summo rupium. Leg. T. Pócs (no. 6934, 3.7.1976, det.
M. E. Hale. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1441.

Thallus adnate to usually loosely adnate on rock, rather firm, 5-15 cm
broad, light yellowish green, lobes sublinear, 2-5 mm wide, contiguous
to imbricate, more or less black rimmed; upper surface continuous,
emaculate, shiny to dull, irregularly cracked and rugulose with age,
isidia and soredia lacking; medulla white; lower surface plane, black,
shiny, sparsely to moderately rhizinate, the rhizines black, simple, 0.3-1
mm long. Pycnidia common; conidia bifusiform, 0.5 x 5-7 μ m. Apothe-
cia common, substipate, 2-10 mm in diameter; spores 5-6 x 8-10 μ m.
Chemistry: Salazinic, consalazinic, norstictic (trace), protocetraric
(trace), and usnic acids, Distribution Canada, USA, Mexico, Peru,
Argentina, Australia, New Zealand, Kenya, South Africa



Parmelia tasmanica



Parmelia tasmanica

Usnea rubiginea (Michx.) A. Massal., Mem. Imp. Reale Ist. Veneto 10: 45 (1861)

= *Usnea florida* var. *rubiginea* Michx. 1803

= *Usnea rubicunda* Stirt. Scottish Natur., 6: 102, 1881.

[VZ1319], Hispania. Catalaunia, prov. Girona: Gavarres, in colle inter Llagostera et Tossa, 300 m. Ad truncos *Quercus suberis*. Leg. X. Llimona, 25.5.1974. Ex A. Vězda Lichenes Selecti Exsiccati Nr. 1319.

Thallus fruticose-filamentous, reddish-brown at least in basal parts, otherwise greenish-grey with red-brown flecks at least in basal parts, at first shrubby, later becoming subpendulous, (3-)5-15(-20) cm long, branching anisotomic-dichotomously with divergent branches. Main branches up to 2 mm thick, not inflated, frequently transversally or longitudinally cracked, the basal parts darker or concolourous, with conspicuous annular cracks; lateral branches not constricted at attachment point. Papillae absent to numerous but usually indistinct on main branches; tubercles absent to numerous on main and secondary branches, usually absent on terminal branches, short and verrucose, sometimes eroded at top; fibrils nearly absent to numerous, short and spinulose to long and slender, irregularly distributed on the whole thallus. Soralia punctiform, irregular in outline, even or slightly stipitate, flat to erumpent, developing initially from the cortex (on the whole thallus) or on top of tubercles (on main branches), or on fiberclles (on the main and secondary branches), covered in abundant, clustered isidiomorphs. Cortex moderately thick to thick (9-13% of total branch thickness), shiny to vitreous in longitudinal section; medulla white, dense to compact; central axis white, rather thick (40-56%). Apothecia very rare, lecanorine. Asci 8-spored, Lecanora-type. Ascospores 1-celled, hyaline, ellipsoid. Photobiont chlorococcoid. Spot tests and chemistry: cortex K-, C-, KC-, P-, with usnic acid; medulla with 2 chemotypes: 1) K+ yellow slowly turning orange, C-, KC-, P+ deep orange, with stictic acid (main) and norstictic and psoromic acids (accessory); 2) K+ yellow turning red, C-, KC-, P+ orange, with salazinic acid (main) and norstictic acid (accessory). - Note: a mild-temperate, chiefly Mediterranean-Atlantic species found on ancient specimens of *Quercus cerris*, *Q. suber*, and other acid-barked broad-leaved trees in open, but semi-natural, warm-humid forests below the montane belt; locally abundant only in parts of Tyrrhenian Italy, from

Tuscany to Calabria, mostly not far from the coast; there is no recent record from Northern Italy, where the species might be extinct. It is included in the Italian red list of epiphytic lichens as “Near-threatened” (Nascimbene & al. 2013c).



Usnea rubiginea



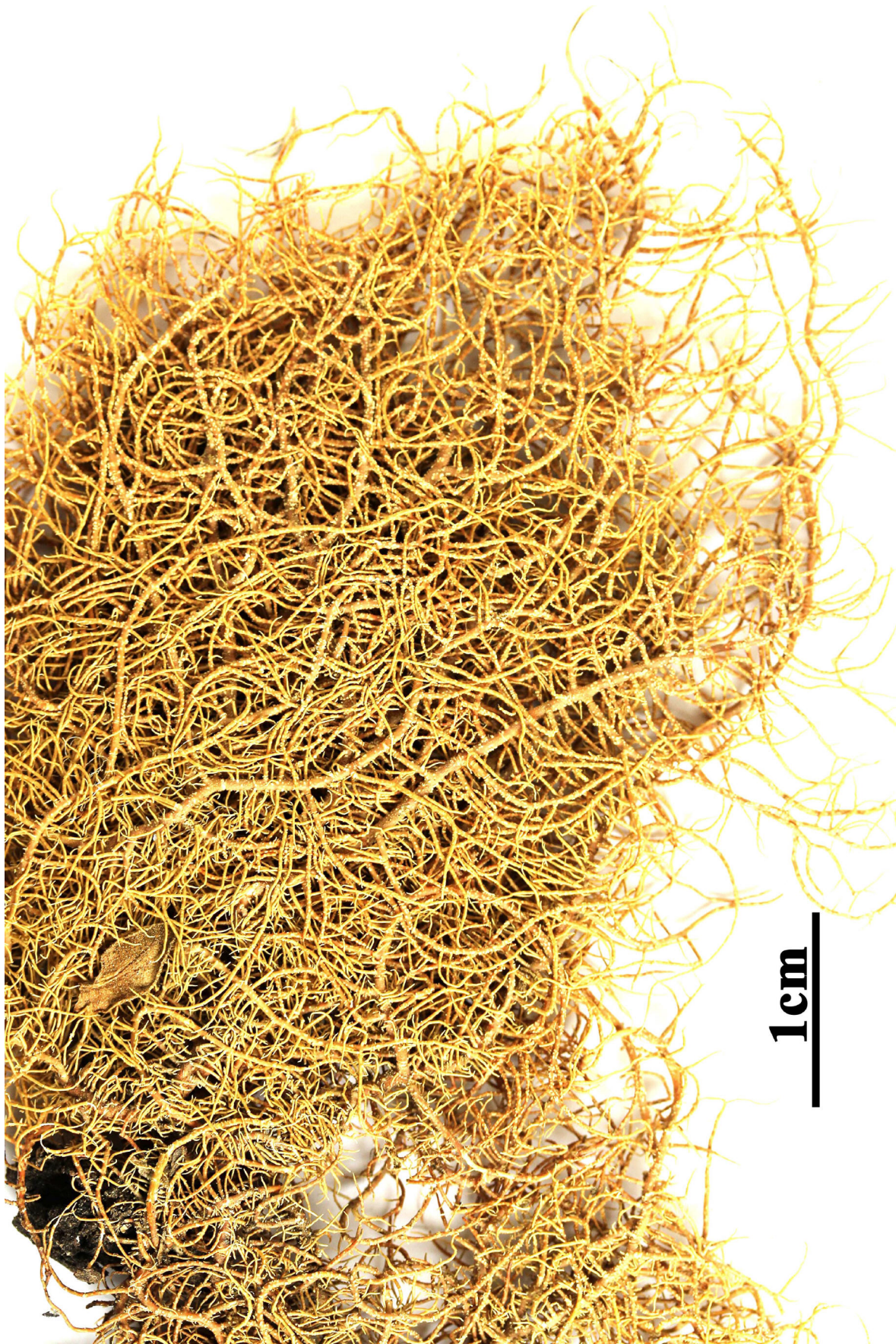
Usnea rubiginea

Usnea rubicunda Stirt., Scott. Natural. 6(3): 102 (1881) [1881-1882]

[VZ2323], Australia. Tasmania. Table Cape, loco "Wyniard" dicto, in litore, 30 m. In ramulis arborum. Leg. G. Kantvilas (204/85), 29.9.1985. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2323.

Thallus shrubby to straggly, erect to subpendulous, 6–15 (–30 cm) long, mottled green and red to shades of red only; branching subdichotomous to irregular; base black; trunk cracked, pale to red; branches terete, 0.5–1.0 mm wide; branchlets numerous; fibrils dense, rarely sparse, 3–5 mm long, with or without pseudocyphellae; papillae, if present, numerous and small, usually on primary and/or secondary branches only. Isidia arising directly from cortex or erupting from pseudocyphellae, sparse to dense, short; pseudocyphellae small, plane or punctiform and raised, becoming large with eruption of isidia; soralia absent. Cortex thick, glassy in appearance. Medulla dense; axis 1/2–3/4 width of branch, hyaline. Apothecia uncommon, terminal on small lateral branches, to 4 mm diam.; disc plane; fibrils sparse on margin; lower surface with fibrils, with or without isidia. Ascospores $8\text{--}10 \times 5\text{--}6 \mu\text{m}$. CHEMISTRY: Cortex containing usnic acid. Medulla K⁺ yellow; containing stictic acid (major), constictic acid (minor), norstictic acid (minor), menegazziaic acid (trace), cryptostictic acid (trace) and $\pm$ gyrophoric acid (trace). -

Occurs in eastern Qld and north-eastern Australia, ; grows on bark in rainforest and open forest, on fence posts; rarely on rocks. Cosmopolitan.



Usnea rubicunda



Usnea rubicunda

Usnea pulvinata Fr., in Lehmann, Pl. Preiss. 2: 145 (1846)

[VZ1196], Tanzania. Kiboriani montes, septentrionem versus Mpwap-wa, 1800 m. Ad saxa quarzitica. Leg. T. Pócs et L. Mezösi (no. 6566/K), 11.5.1972, det. A. Vězda EX A. Vězda LICHENES SELECTI EXSICCATI NR. 1186.

Thallus shrub-like, small (to c. 5 cm tall), black at base. Branches pale grey, stiff, terete, not swollen, not narrowed at joints, often fastigate. Spinules numerous. Fibrils numerous. Pseudocyphellae numerous on small branches and fibrils, absent from main branches, plane or on tubercles. Papillae absent. Medulla dense. Axis pale to dark pink, thick (diameter generally more than width of medulla). Isidia abundant on distal pseudocyphellae, and then often black tipped, present also on cortex of main branches, and then pale. Soredia absent. Apothecia uncommon. CHEMISTRY: (1) Norstictic acid and/or salazinic acid, (2) protocetraric acid and/or fumarprotocetraric acid, $\pm$ barbatic acid (+), (3) no diagnostic substances. ECOLOGY: Rare on exposed rocks at 2000 to 2300 m. DISTRIBUTION: . Cameroon, Zimbabwe, Madagascar, South Africa, Australia.



Usnea pulvinata



Usnea pulvinata

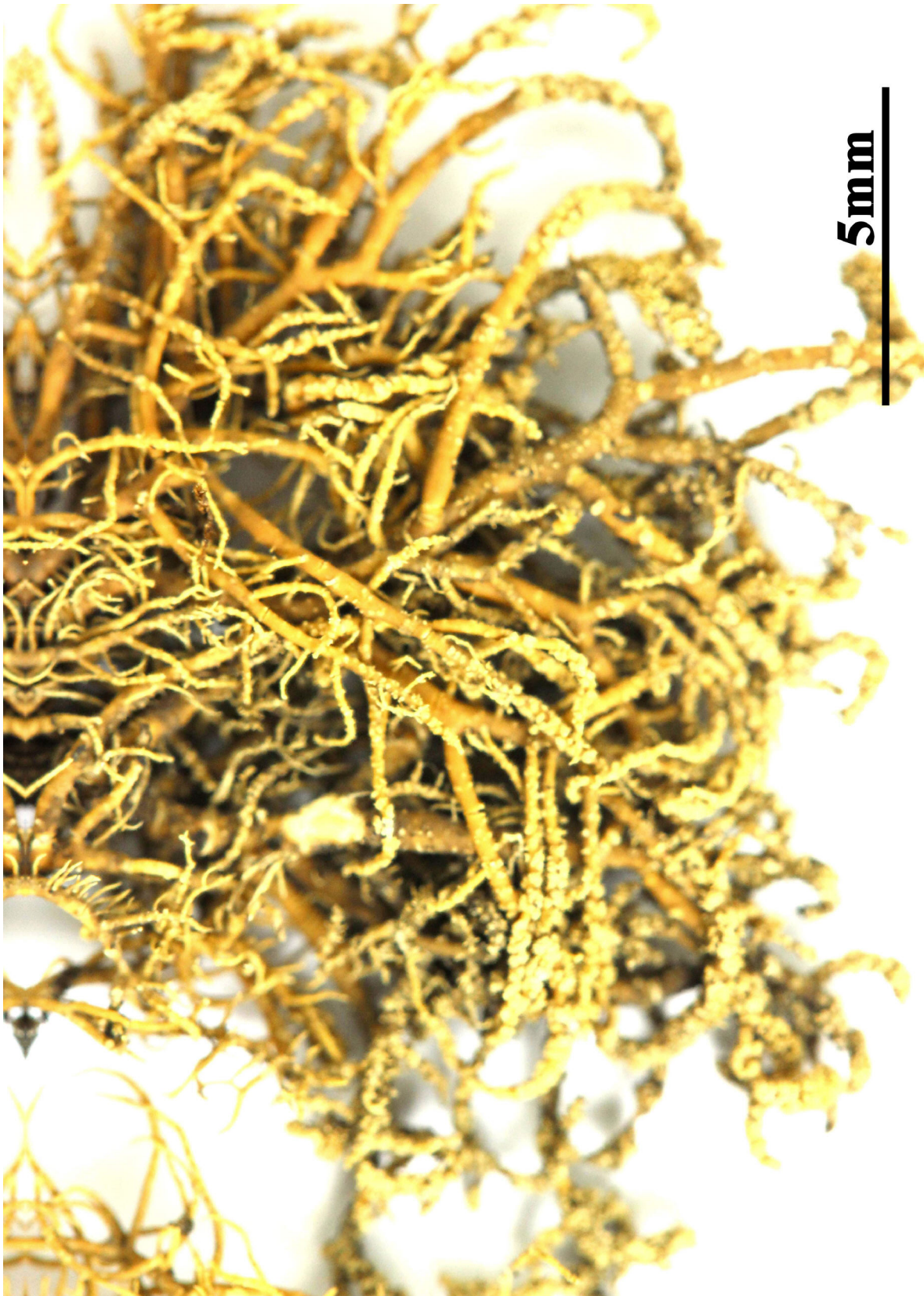
Usnea rupestris Motyka, Lich. Gen. Usnea, Stud. Monogr. (Leopoli) 2: 306 (1937)
= *Usnea flammea* Stirt., Scott. Natural. 6(3): 102 (1881) [1881-1882]

[VZ1173], Hispania. Distr. Guipuzcoa, Fuenterrabia, in pede montis Jaizquibel, 50-200 m. Ad saxa arenacea calcarea in litore maris. Leg. J. Vivant, 16.4.1973. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1173.

Thallus fruticose-filamentous, pale green to yellow-grey, shrubby to rarely subpendulous, (3-)4-7(-8) cm long, branching (at least near the base) isotomic-dichotomously with divergent branches. Main branches cylindrical or irregular, often arising 3–5 mm above the attachment point, tapering in longitudinal section, 0.7-1 mm thick, smooth (without foveolae and transverse furrows), the base usually whitish, with conspicuous annular cracks exposing the medullary tissue. Lateral branches not or only slightly constricted at attachment point. Papillae absent to abundant, verrucose; fibrils more or less numerous, slender, spinulose, 2-3 mm long. Soralia at first punctiform, then efflorescent, irregular in outline and often enlarged and occupying up to half the diameter of the branch, originating from the cortex or rarely from eroded papillae, with numerous, 0.15-0.3 mm long, clustered isidiomorphs which tend to break off easily. Cortex matt in longitudinal section, rather thin (6-10% of branch thickness); medulla white, dense to compact, moderately thin to moderately thick (17-29%); central axis white, rather thick (29-49%); ratio axis/medulla ranging between 1 and 2.4. Apothecia usually absent. Photobiont chlorococcoid. Spot tests: cortex K-, C-, KC-, P-; medulla K+ yellow to slowly reddish orange, C-, KC-, P+ yellow-orange. Chemistry: cortex with usnic acid; medulla with usnic, stictic, menegazziaic and constictic acids, more rarely with norstictic and/or lobaric acids. - Note: a western European, oceanic species, mainly epiphytic, but also found on rocks and soil in damp situations, below the subalpine belt.



Usnea rupestris



Usnea rupestris

Usnea scabrida Taylor, Phytologist 1: 1095 (1844)

[VZ2022}, Australia. Tasmania. Qattle, 80 m. In ramulis (*Exocarpus cupressiformis*) in silva sicca. Leg. G. Kantvilas (no. 654/84) et J. Jarman, 17.6.1984. EX A. VĚZDA LICHENES SELECTI EXSSICATI NR. 2022.

Thallus tufted, to 2 cm long; fibrils very dense, usually short (c.0.5 mm long), very few c.2 mm long. Medulla narrow, dense; axis 1/3–3/5 width of branch. Apothecia usually to 10 mm diam.; fibrils dense on margin, often in several rows, some forked; lower surface with dense short fibrils. CHEMISTRY: Cortex containing usnic acid. Medulla K–; containing scabrosins.-Endemic to south-western Australia.



Usnea scabrida



Usnea scabrida

Usnea sulphurea Th. Fr., K. svenska Vetensk-Akad. Handl., ny följd 7(no. 2):
9 (1867)

[VZ2299], Svalbard. Woodfjorden-Bockfjorden, in pede montis Sverregjeliet, 50 m. Ad saxa basaltica, Leg. J. Liška, 3.8.1988. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 2299.

Thallus minus aut parvus, vulgo ca. 2-3 cm, rarius uaque ad 4 cm altus, erectus, dense caespitoso fruticulosus, crebre subdichotome ramosus, sat compressus, tenuis sed sat rigidus, solediosus, apotheciis destitutus, sulphureo aut straminescente lutens, interdum sordide fuscescens aut etiam rufus, parte superiore annulatim aut maculatim nigrata, apices versus colore nigro dominante, sed interdum tantum papillis nigro tinctis, nitidiusculus aut opacus. Basis thalli vulgo crassula et rigida, brevis, protinus simplex, sed mox supra thallus crebre dichotome ramosus aut e basi communi rami plures excrescunt. Rami numerosi, basi sat distincte, rarius leviter aut non attenuati, supra incrassatuli, ad apices iterum attenuati, loco crassissimo rare ultra 1 mm crassi, sat crebre instar penicilium ramificantes, ramis suobparaellis, Omnes rami teretes aut tantum leviter deformatuli, laeves aut valde obtuse verruculoso papillati, glabri, fere nitidi, continui, propter annula nigra saepius annulati -apparentes, eramulosi. Summitates tenuiter subulatae, leviter flexuoso plicatae, solediatas. Apothecia bon visa. SAoredoa crebra, ut videtur subtiliter isidiosa, rare bene conservata, e tuberculis saepius fere capitiformibus fatiscentia, fere semper nigrata. Cortex ceassitudine mediocris, ca. 100 μm crassus, durus, pallide fuscus. Medulla crassa, crassitudine ca. 200 μm . laxa aut laxisma. alba. K- . Axis sat tenuis, ca. 350 μm crassrs, rigidus. (Ex Motyka 1936, p. 21)



Usnea sulphurea



Usnea sulphurea

Usnea tanzanica Motyka, Folia geobot. phytotax. 10(3): 327 (1975)

[VZ1322], Tanzania. Prov. Mbeya, in monte ignivomo, Rungwe, 2600-2900 m. Ad ramulos arborum in regione subalpina. Leg. T. Pócs (no. 6507), 21.1.1972. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1322. -ISOTYPUS.

Thallus ca. 3-4 cm longus et latus, basi constricta, anguste obscurata substrato affixus, fruticulosus, suberectus vel subpatens, parce vel sat abundanter ramosus; rami primarii parte mediali usque ad 2 mm crassi vel vulgo tenuiores, versus basin et apices sensim attenuati, teretes, continui, laeves et glabri vel tenuissime papillati, papillis brevibus vel brevissime cylindricis, thallo concoloribus, corticatis, sat crebre, irregulariter ramosuli, ramulis brevibus, patentibus vel paulo arcuato-ascendentibus. Apothecia in nonnullis speciminibus fere ad omnes ramos crassiores formata, plerumque vero nondum evoluta, terminalia, 3.5 mm lata vel minora, rotundata, fere plana, sat distincte tenuiter marginata, excipulo cupuliformi, laevi, indistincte foveolato vel rare papillato, ciliis marginalibus sat numerosis, 2-3 mm longis, majoribus intermixtis, patentibus. Soredia nulla. Cortex tenuis, fere papyraceus, sat elasticus. Medulla crassa, laxa. Axis tenuis. K on cortex non tinctus, medulla rubescens, Pd+ medulla aurantiaco-rubescens. Hab.: Ad ramulos arborum in regione subalpina. - Tanzania. Prov. Mbeya, in monte ignivomo Rungwe, alt. 2600-2900 m. Holotypus in herb. J. Motyka, Lublin, isotypi in exsicc. Lich. sel. no. 1322. (Ex Folia geobot. phytotax, 10(3): 327, 1975)

Usnea tanzanica





Usnea tanzanica

Usnea trachycarpa (Stirt.) Müll. Arg., Nuovo G. bot. ital. 21(1): 37 (1889)
= *Neuropogon trachycarpus* Stirt. 1881

[VZ2374], Argentina: Tierra del Fuego: Dept. Ushuaia. Sierra Alvear, in Monte ad septentriones hospitii "Tierra Mayor", 1000-1200 m. In rupibus siliceis duris venti expositis. Leg. T. Ahti, J. Poelt, N. Scutari et S. Stenroos, 14.1.1989. EX A. V&ZDA LICHENES SELECTI EXSICCATI NR. 2374.

Upright stem, 3-6 cm high, cespitose, moderately branched; the ramifications are provided with side divaricated secondary branches, a yellow sulphur to pale color, black jaspered fine branches, without soredium. Main branches about 1.5 mm in diameter, cylindrical, surface from wrinkled to faveolate, unshining to slightly gleaming. Medulla soft or compact, central thread of variable diameters, comprising from one-fifth to half of the total of the branch; K- or faintly reddish or blood-red, PD (+), yellow or orangeyellow. Apothecia always present and usually in abundance, terminalia, round with up to 1 cm in diameter, flat or concave; receptacle richly coated with infuseria branches {o the brim, disk from grey to pale brown and without gleam. Elliptical lackspurs, approximately 10 x 8 mm. Saxicolous.



Usnea trachycarpa



Usnea trachycarpa

Usnea vesiculata Motyka, Lich. Gen. Usnea, Stud. Monogr. (Leopoli) 1: 112, 114 (1936)

[VZ1450], Tanzania. Kilimanjaro: planities Shira dicta, prope casam alpinam Shira dictam, 3600 m. Ad saxa locis venti expositis. Leg. T. Pócs (no. 6924), 27.6.1976, det A. Vězda. EX A. VĚZDA LICHENJES SELECTI EXSICCATI NR. 1450.

Thallus pendulous, several decimetres long, usually concolorous at base but occasionally black. Branches dark greenish grey to pale stramineous, often pink to reddish brown at high altitudes, flaccid, terete, with swollen segments. Cortex thin. Fibrils numerous, but often absent from swollen segments. Pseudocyphellae usually present, generally punctiform, sometimes broadly orbicular, less often linear or of irregular shape, raised or plane. Papillae sometimes present on swollen segments. Foveolae occasional. Perforations frequent in swollen segments. Spinules occasional. Medulla mainly in a thin layer below cortex, connected to axis by radial hyphae, somewhat denser in small branches. Axis narrow, white to pale pink. Isidia abundant to absent, when present generally on pseudocyphellae, sometimes on cortex also, pale or dark tipped. Soralia absent, but soredia sometimes produced by large pseudocyphellae. Apothecia frequent. CHEMISTRY: (1) Fumarprotocetraric acid, $\pm$ protocetraric acid, sometimes accompanied by accessory substances in small amounts (diffractaic acid, barbatic acid, salazinic acid, or fatty acids), (2) salazinic acid, $\pm$ norstictic and/or galbinic acid, $\pm$ fatty acids, $\pm$ barbatic acid (+), (3) psoromic acid, $\pm$ barbatic or diffractaic acid, (4) stictic acid aggregate, with a fatty acid, (5) no diagnostic substances, at most traces of diffractaic and/or barbatic acids. ECOLOGY: Common on branches and trunks of trees, especially in open montane woodland and forest glades, on branches in the ericaceous zone, and on rocks and twigs in alpine moorland, at 1000 to 4000 m, but mainly at 2000 to 3200 m. Throughout the tropics and extending into cool temperate.



Usnea vesiculata



Usnea vesiculata

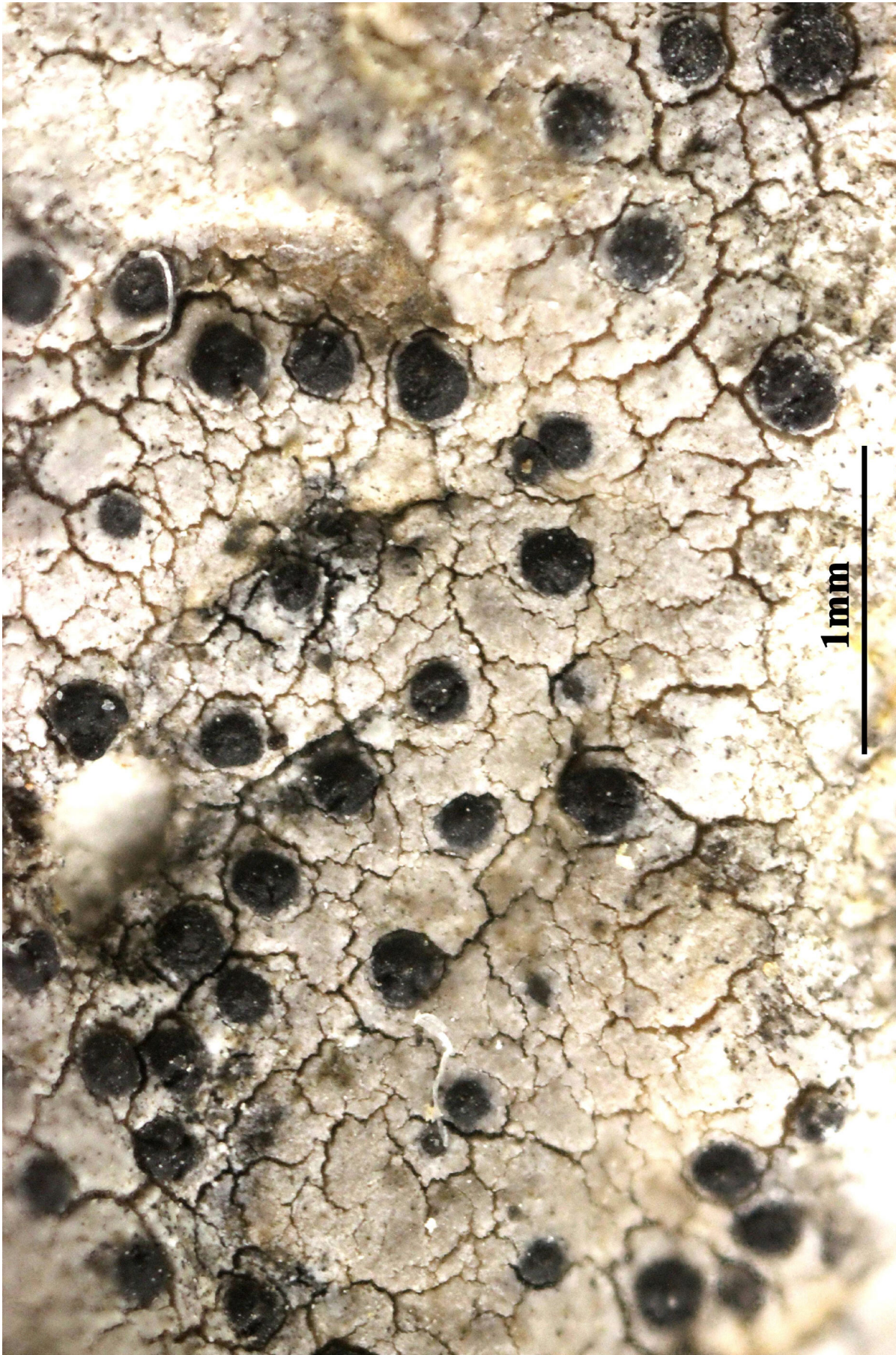
Verrucaria coerulea DC., in Lamarck & de Candolle, Fl. franç., Edn 3 (Paris)
2: 318 (1805)

[VZ2026] Jugoslavia. Crna Gora (Montenegro): montes Durmitor, in monte Zupci supra transitum Sedlo, 2050-2100 m. in rupibus calcareis. Leg. A. Vězda, 22.8.1084. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2026.

Thallus crustose, episubstratic, (0.1-)0.2-0.3 mm thick, often forming suborbicular patches which are raised above adjacent endolithic species, closely and finely rimose to rimose-areolate, pale grey, usually covered in a bluish-white, compact pruina, often well-delimited by a dark prothalline line. Cortex poorly differentiated, with a pale brown pigment in sun-forms, overlain by a thick epinecral layer; medulla white, paraplectenchymatous, filled with crystals, not forming a dark basal layer. Perithecia black, 0.2-0.3 mm across, 3/4 to completely immersed in the thallus, the apex flat to shallowly convex, 0.1-0.2 mm wide. Involucrellum appressed to exciple, c. 50 µm thick, dimidiate or extending to base-level; exciple 0.15-0.2 mm across, the wall colourless or lightly pigmented in lower part, rarely black; hamathecium of up to 20-30 µm long periphysoids, interascal filaments absent; hymenial gel hemiamyloid, I+ red (I+ blue at very low concentrations of I), K/I + blue. Asci 8-spored, broadly clavate, bitunicate-fissitunicate, thick-walled above when young, with a small ocular chamber, Verrucaria-type, 45-55 x 14-18 µm. Ascospores 1-celled, hyaline, ellipsoid, (12-)13-17(-22) x 5-7(-9) µm. Photobiont chlorococcoid. Spot tests: thallus K-, C-, KC-, P-, UV-. Chemistry: without lichen substances. - Note: on steeply inclined surfaces of compact calciferous rocks, restricted to upland areas in Southern Italy, where it exceptionally occurs also above tree-line. Perhaps related to *Staurothele* (Gueidan & al. 2009). For further details see Krzewicka (2012) and Orange & al. (2023). The name is often spelled *coerulea*, but the original *caerulea* is perfect classical



Verrucaria coerulea



Verrucaria coerulea

Verrucaria melaenella Vain., Acta Soc. Fauna Flora fenn. 49(no. 2): 44 (1921)
= *Verrucaria xyloxena* Norman, Bot. Notiser: 87 (1867)

[VZ1151], Suecia. Värmland: Glava. Dammarna, 140 m. Ad terram arenaceam calcariam. Leg. S. W. Sundell, 20.5.1972. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 1151.

Thallus crustose, episubstratic, brown to blackish brown, thin, verrucose, sometimes surrounded by a brown prothallus, composed of 15-35 μm wide goniospores surrounded by a brownish hyphal coat, the cells isodiametrical to oblong, thick-walled. Perithecia frequent, brownish black to black, globose to broadly ovoid, 0.15-0.25 mm across, immersed, the upper part projecting, not flattened at the top. Involucrellum absent; exciple dark-carbonaceous throughout, without a hyaline outer layer; hamathecium of branched, 25-35 μm long paraphyses, interascal filaments absent; hymenial gel hemiamyloid, I+ red (I+ blue at very low concentrations of I), K/I+ blue. Asci 8-spored, clavate, I-, fissitunicate, the wall thickened above, with a small ocular chamber, dehiscent by extrusion of an endotunica to form a delicate rostrum, Verrucaria-type, 50-60(-75) x 16-21 μm . Ascospores 1-celled (overmature spores sometimes 1-septate), hyaline, ellipsoid to narrowly ellipsoid, (13.5-)15-21(-27) x (5.5-)6-9(-11) μm , 2-4 times as long as wide, without gelatinous appendages. Photobiont chlorococcoid. Spot tests: thallus K-, C-, KC-, P-, UV-. Chemistry: without lichen substances. - Note: on calciferous soil, often associated with acrocarpous mosses, rarely on dust-impregnated wood, mostly in upland areas but usually below the Alpine belt; easily overlooked, and perhaps more widespread in the Alps. For further information see Orange (1991), Krzewicka (2012) and Pykälä & al. (2019).



Verrucaria melaenella



Verrucaria melaenella

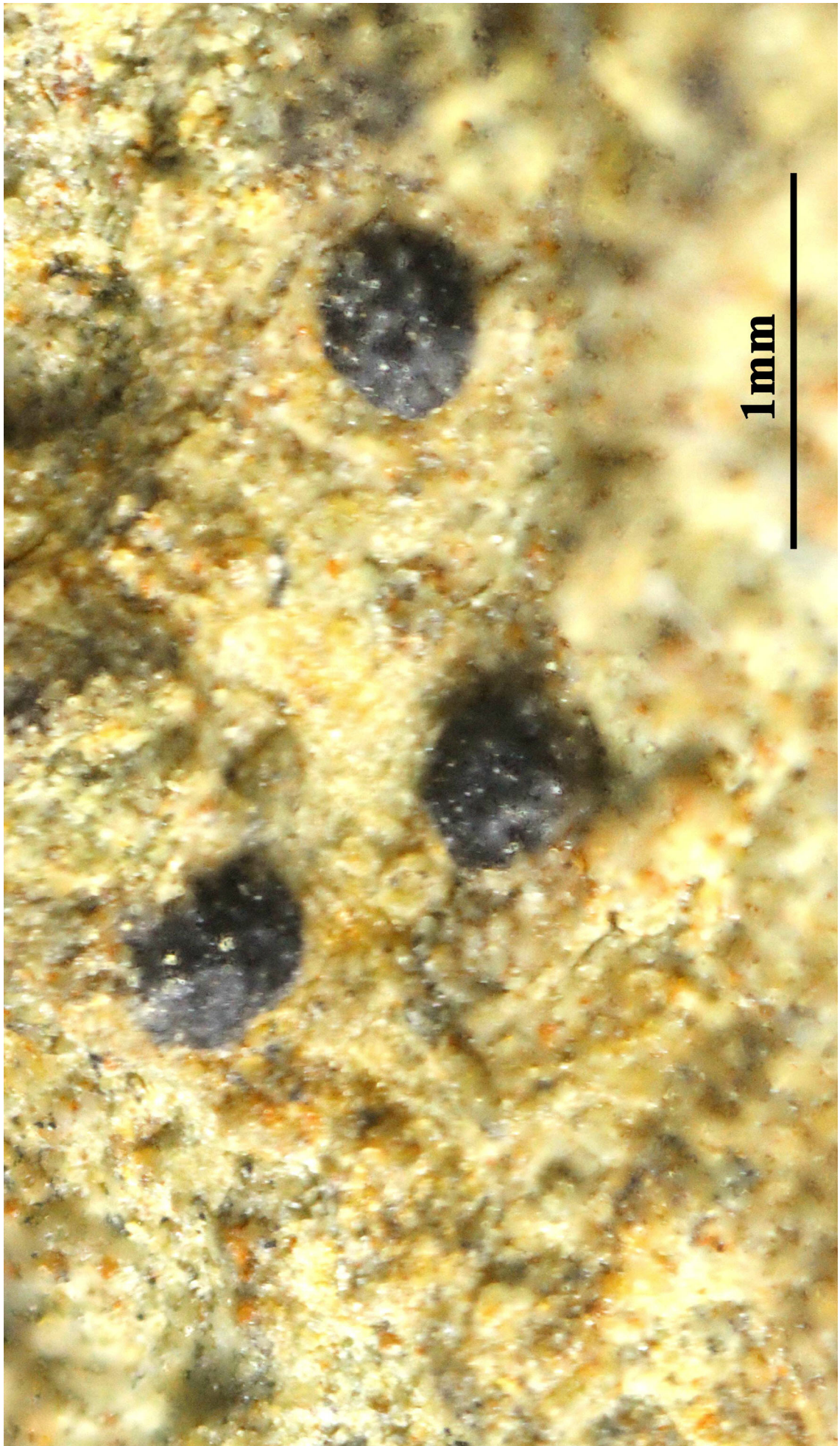
Verrucaria prominula Nyl. ex Mudd, Man. Brit. Lich.: 291 (1861)

[VZ1651], Magna Britannia. Anglia. East Cornwall, Veryan, Nare Head, Kiberick Cove. Ad saxa maritima. Leg. D. L. Hawksworth (no. 2381), det. P. James. EX A. VĚZDA LICHENEDS SELECTI EXSICCATI NR. 1651.

Thallus superficial, often very thin, up to 0.14 mm thick in small depressions in the substrate, white, grey or pale mauve-brown, with a slightly waxy appearance when well developed. Perithecia usually prominent, 0.32-0.52(-0.8) mm diam, conical, rounded or flattened at apex, not covered by thallus; involucrellum thick, appressed to exciple, somewhat broadened below. Ascospores oblong with rounded apices, occasionally a few slightly constricted, (10.5-) 11.5- 4(-16) x (4.5-) 6.5- 8(-9) μm , length/width ratio (1.4-) 1.5-2(-2.3). On vertical, shaded faces or in dry crevices on soft, flaking siliceous rocks on seashores, most frequently in the mesic to xeric-supralittoral zones; occasional. W. British Isles, rare elsewhere. Europe, N. America, Asia (e.g. Taiwan), Tasmania. - Distinguished by the large perithecia, thin thallus and small, distinctly oblong ascospores with squared ends.



Verrucaria prominula

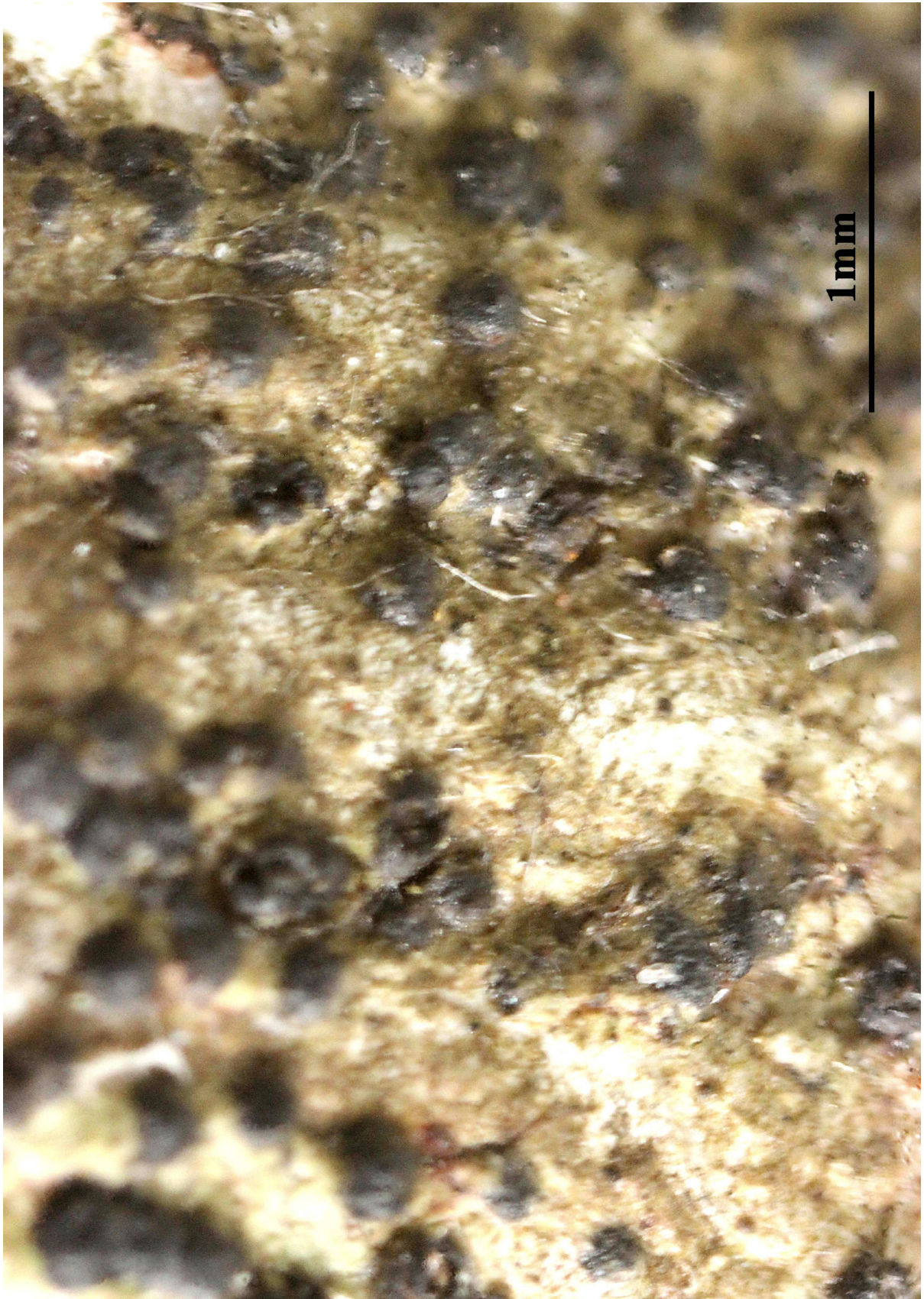


Verrucaria prominula

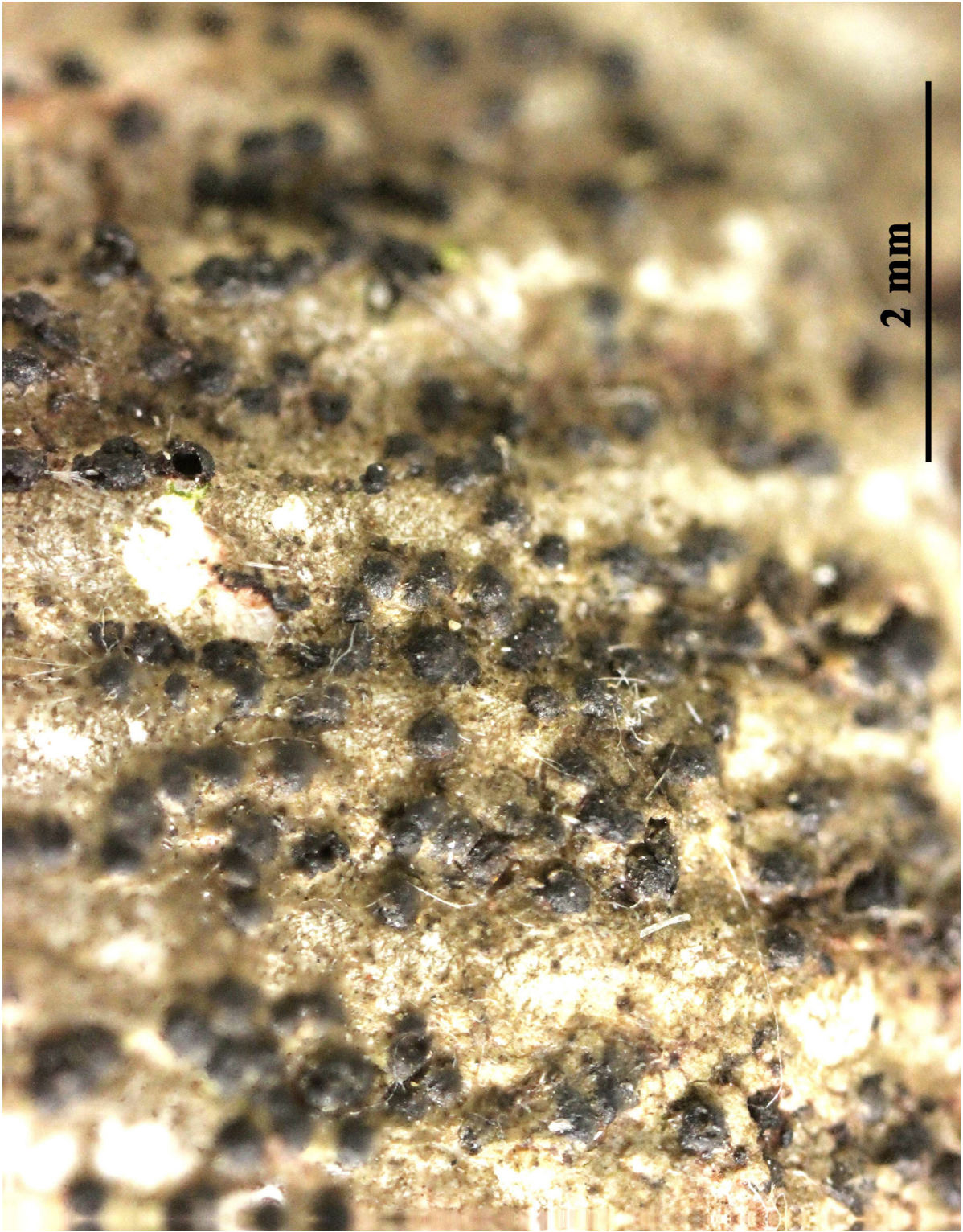
Verrucaria thalassina (Zahlbr.) Zschacke, Rabenh. Krypt.-Fl., Edn 2
(Leipzig) 9(1.1): 132 (1933)
= *Verrucaria papillosa* var. *thalassina* Zahlbr. 1911

[VZ1751], Hollandia. Prov. Zeeland, Noord Beveland: Middleplaten,
ad meridiem a Kortgene. Ad SCorium sp. in arena, in litore insulae
parvae. Leg. et det. H. Sipman (no. 9064), 21.3.1878, conf. T. D. W.
Swinscow. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1751.

Lager bräunlich oliv, sehr dünn, 0.050-0.070 mm dick, kleine zerstreute
oder zusammenfließende Flecke bildend, vielfach verschwindend, so
daß die Früchte der Unterlage aufzusitzen erscheinen, feucht bgallertig
verwbt mit zerstreuten pleurococcusähnlichen Algen, meist kugelig,
von 0.004-0.007 mm Dicke unter der Algenschicht Ölkugelzellen.
Früchte mit eingesenktem Grunde, als halbkugelige schwarze, 0.24-0.4
mm breite Warzen hervortretend; Scheitel nabelig eingedrückt, zuletzt
durchbohrt. Gehäuse kugelig, völlig schwarz, 0.01⁸ mm dick, soweit
die Frucht freiliegt auf 0.050 mm verdickt. Verdickung nach unten
deutlich abgegrenzt; Kern wasserhell, durch Jod weinrot gefärbt, etwa
0.2 mm weit, Mündung 0.04 mm breit. Schläuche keulig, etwa 0.05 mm
lang, 0.0218 mm breit. Sporen eiförmig oder ellipsoidisch, 0.018-0.024
x 0.010-0.012 mm. (Ex Zschacke, H.: 1934, p.140)



Verrucaria thalassina

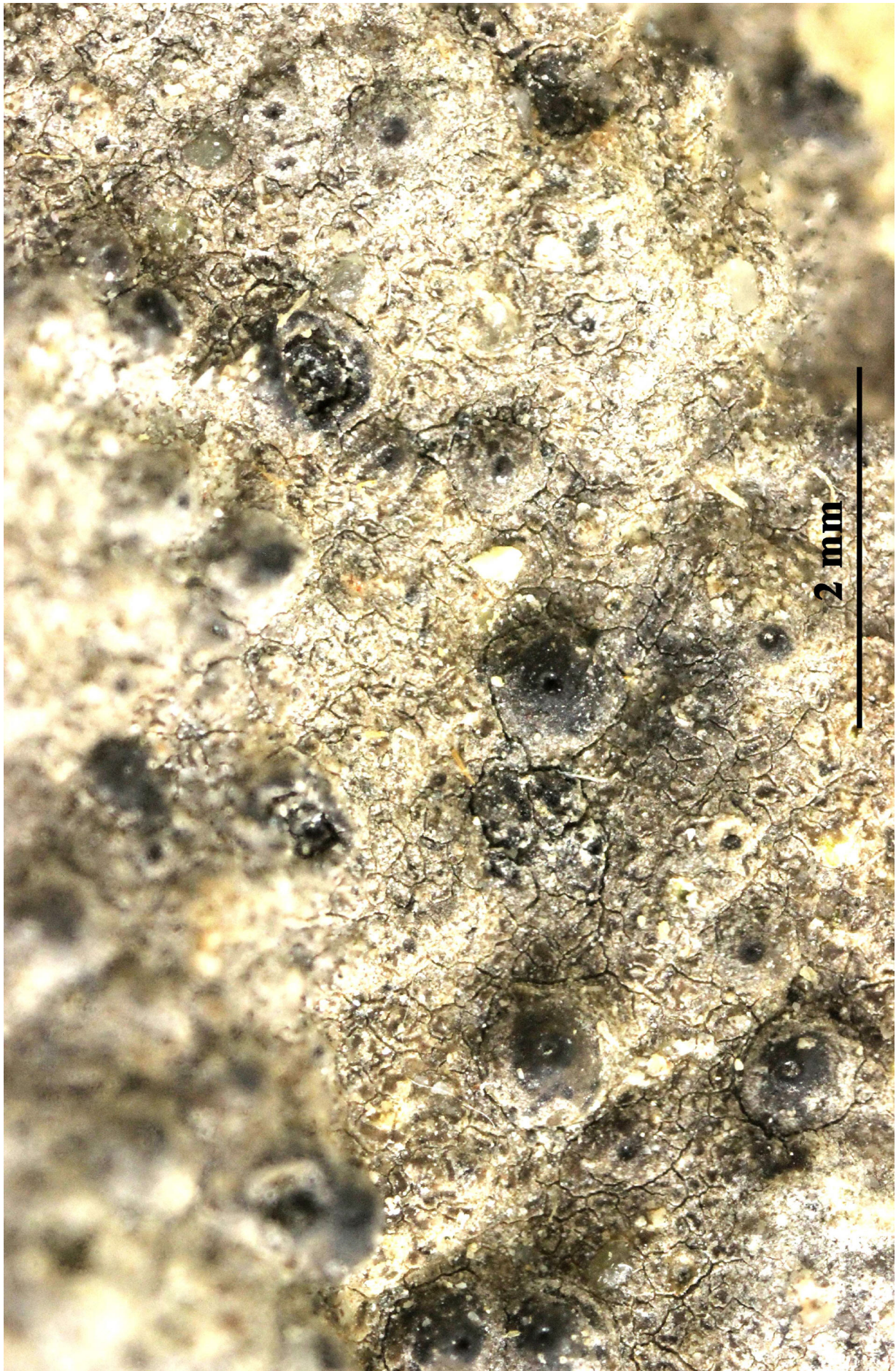


Verrucaria thalassina

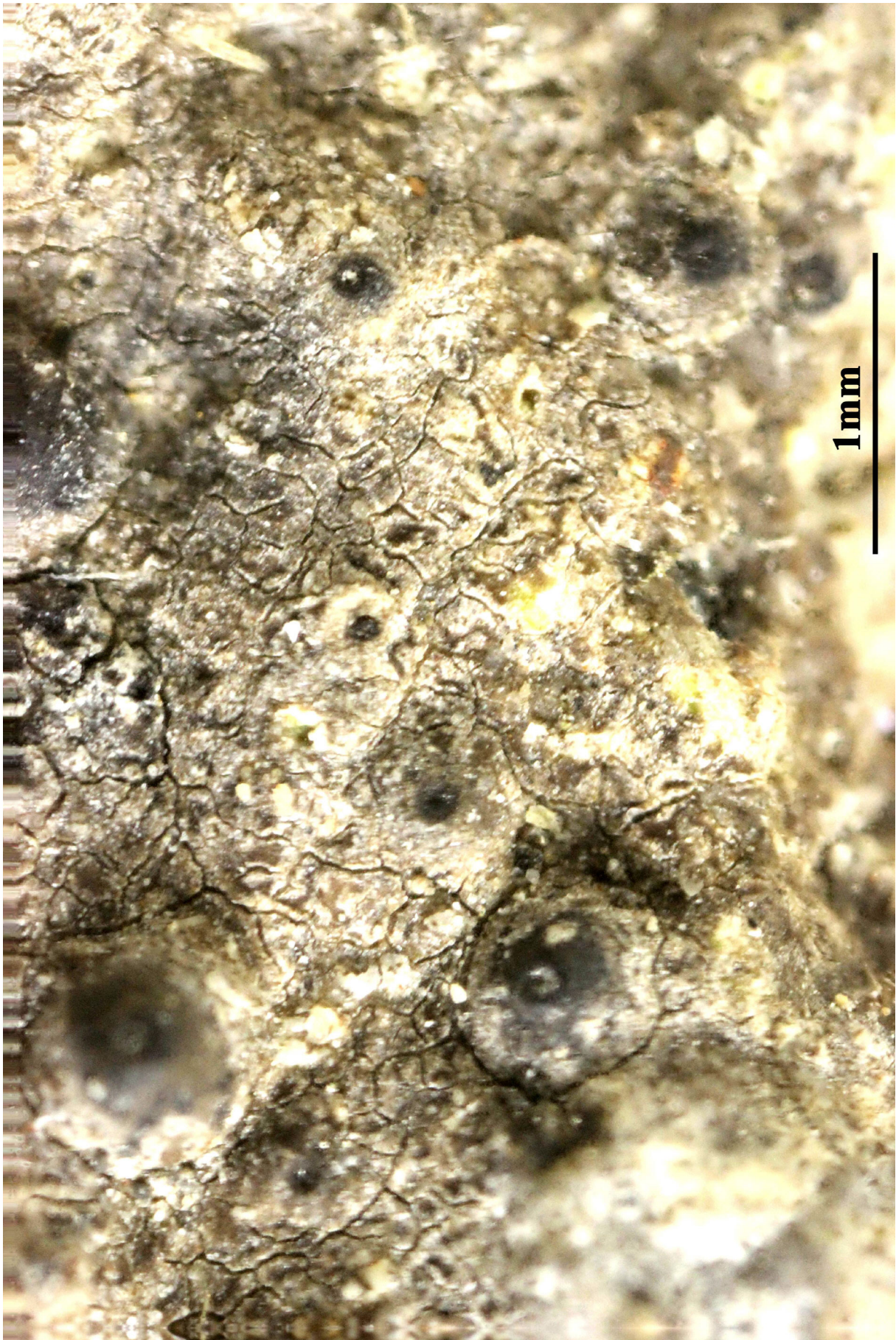
Verrucaria transiliens (Arnold) Lettau, Hedwigia 52(1-2): 89 (1912)
= *Amphoridium transiliens* Arnold 1890

[VZ1176], Gallia. Vaucluse, Vaison-la-Romaine, 270 m. Ad saxa calcarea septentrionem versus spectantia. Leg. Cl. Roux, 2.11.1972. Ex A. VěZDA LICHENES SELECTI EXSICCATI NR. 1176.

Thallus crustose, hemiendosubstratic to very thinly episubstratic, whitish grey, pale brown or dark grey-brown, when well-developed (usually near the perithecia) finely rimose to minutely areolate. Perithecia black, up to 150/cm², 1/2-3/4 immersed, the apical part projecting, 0.3-0.5 mm across, slightly conical with somehow flattened top to almost hemispherical, the flanks covered with a thin, whitish-farinose thalline layer. Involucrellum surrounding almost completely the exciple, but thinner in lower part, laterally 50-80 µm thick, not sharply delimited and often fringed-eroded in outer part; exciple globose, 0.27-0.4 mm across, the wall dark brown and difficult to separate from the closely appressed involucrellum; hamathecium of 30-40 µm long periphysoids, interascal filaments absent; hymenial gel hemiamyloid, I+ red (I+ blue at very low concentrations of I), K/I+ blue. Asci 8-spored, clavate, I-, fissitunicate, the wall thickened above, with an ocular chamber, dehiscent by extrusion of an endotunica to form a delicate rostrum, Verrucaria-type. Ascospores 1-celled, hyaline, ellipsoid, (22-)24-31(-33) x 12-16 µm. Photobiont chlorococcoid. Spot tests: K-, C-, KC-, P-, UV-. Chemistry: without lichen substances. - Note: on calcareous pebbles (e.g. on calciferous sandstone) near the ground, especially in clearings of woodlands and on track sides; probably more widespread, having being overlooked, or confused with similar species. For further details see Breuss (2004).



Verrucaria transiliens

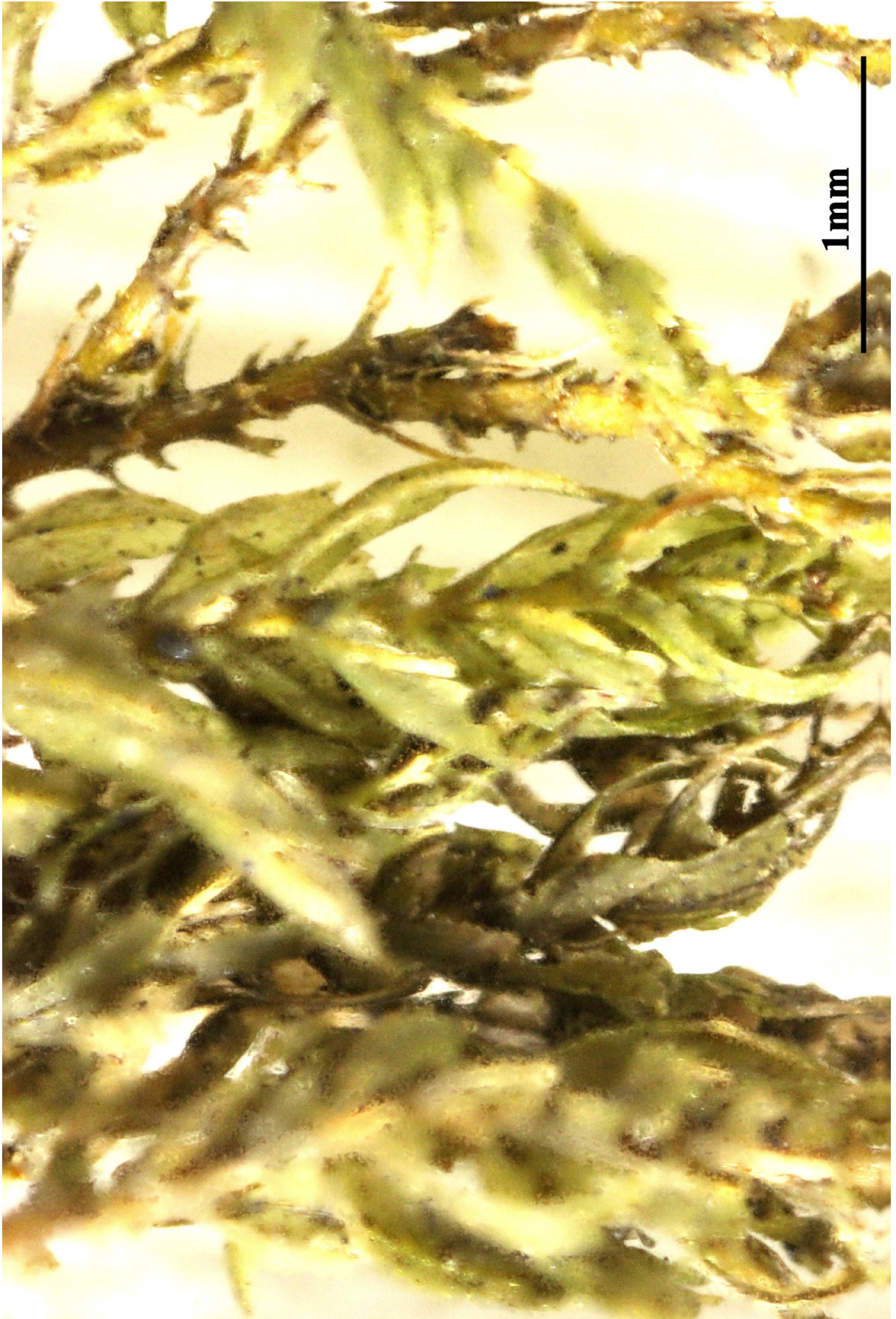


Verrucaria transiliens

Vezdaea aestivalis (Ohlert) Tscherm.-Woess & Poelt, in Brown et al.,
Lichenology: Progress & Problems: 91 (1976)
= *Lecidea aestivalis* Ohlert 1870

[VZ1658], URSS. Transcaucasia, Colchis. Distr. Chosta, supra cataractam rivi Agura, 300-400 m. Supra muscum (*Thamnium alopecurum*) vicens. Leg. V. Vašák et A. Vězda. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1658.

Description of the genus: Asci in loose tufts, not bound together by gelatin, outermost thick-walled, with reduced hyphae-like paraphyses, or each ascus surrounded by a hyphal net. -- Inconspicuous short-lived species, primarily colonizing moss, but may overgrow mosses on other substrates



Vezdaea aestivalis

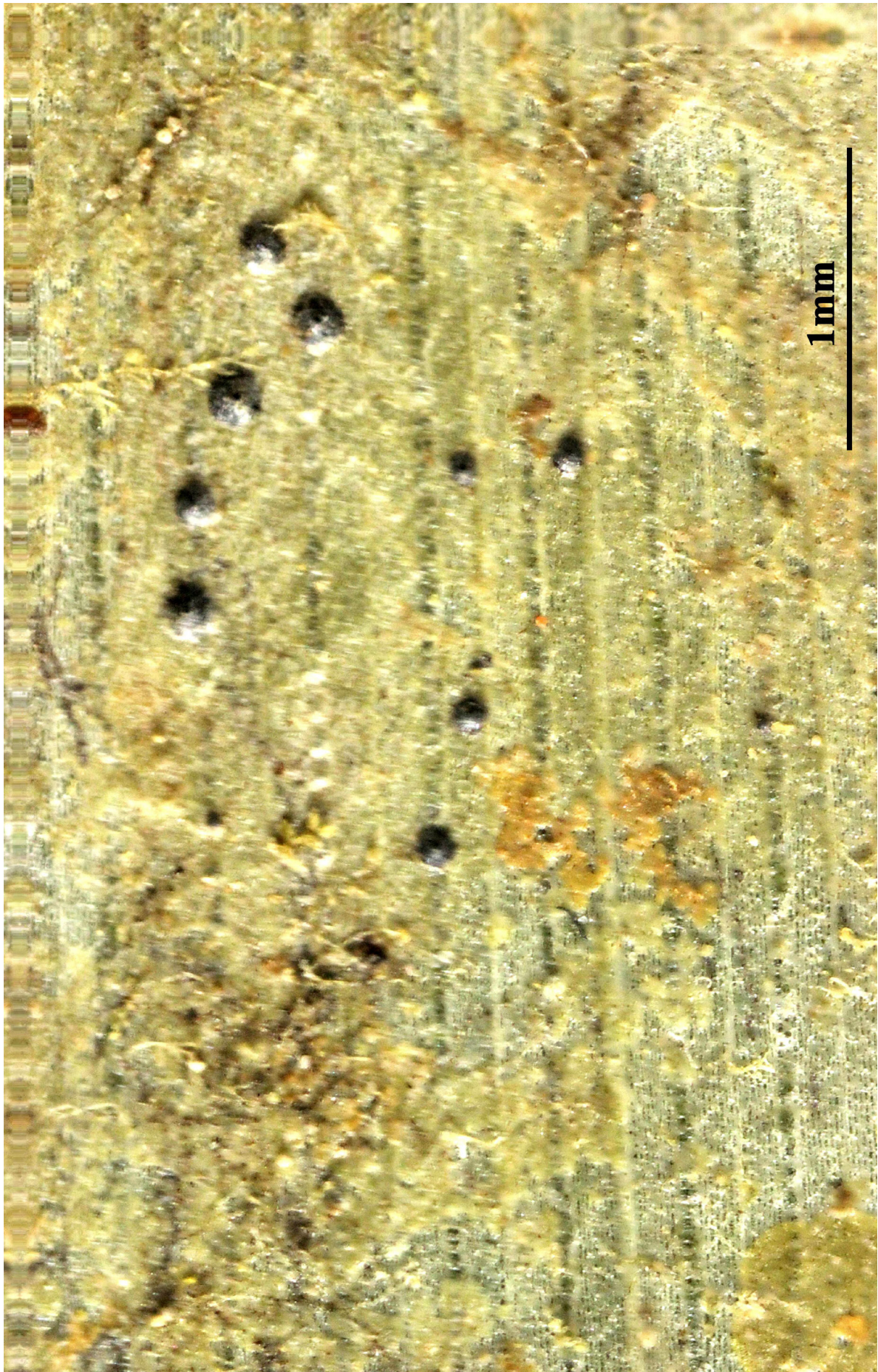


Vezdaea aestivalis

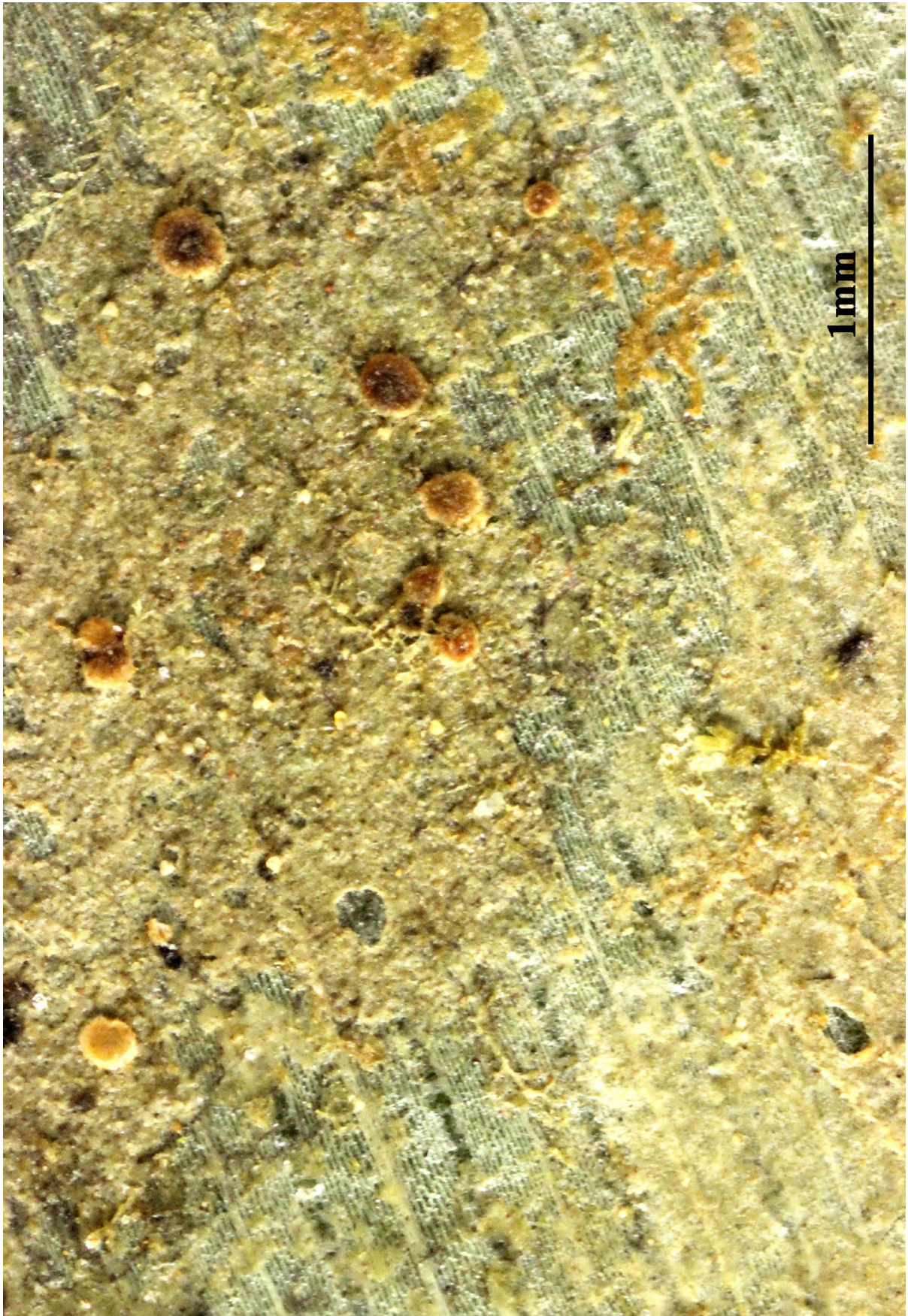
Vezdaea foliicola Sérus., Mycotaxon 8(1): 136 (1979)

[VZ2304], Brasilia. São Paulo: Cananéia, insula Comprida, 1 m. In litore in vegetazione "mangrove" dicta. Foliicola. Leg. J. Poelt, 16.7.1979, det. A. Vězda. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2304.

Thallus continuous or marginally dispersed, 10–30 mm across and 10–15 μm thick, smooth, green. Apothecia adnate, rounded, 0.5–1.2 mm diam. and 50–60 μm high, emarginate; disc pale yellow to chamois colored, laterally with byssoid zone formed by sterile paraphyses. Hymenium 40–50 μm high, colorless. Paraphyses abundant, forming nets around asci. Asci 35–45 x 8–12 μm . Ascospores 8 per ascus, ellipsoid to oblong, 15–25 x 4–6 μm , non- or 1-septate, 3.5–4.5 times as long as broad. Conidiomata not observed. Chemistry: no substances detected by TLC. - Distribution and Ecology. Neotropics and tropical Africa. Usually found at higher elevations, extremely rare but sometimes forming extensive populations.



Vezdaea foliicola



Vezdaea foliicola

Xanthomaculina convoluta (Hue) Hale, Lichenologist 17(3): 263 (1985)
= *Omphalodium convolutum* Hue 1900
= *Xanthoparmelia hueana* (Gyeln.) O. Blanco et al.

[VZ2146], Namibia. Distr. Swakopmund, ad orientem a Swakopmund.
ASd terram glareosam. Leg. I. Kärnefet(no. 8602), 16.1.1986. EX A.
VěZDA LICHENES SELECTI EXSICCATI NR. 2146.

Thallus free-growing on soil. foliose, forming tubular, convolute sticks with black outer surface (= morphological the under side) and pale green inner surface (the latter is often not visible when dry), 3-5 cm long, 2-5 mm thick, simple or sparsely branched expanding when wet to 15(-20) mm wide, upper surface greenish, with prominent, effigurate white maculae, margins sparsely ciliate, cilia to 1.5 mm long, lower surface black, rhizinate or with very sparse rhizines. Apothecia extremely rare. Chemistry: medulla K+ yellow-orange to red, P+ yellow to orange; usnic, stictic, norstictic, cryptostictic, constictic acids.- Namib desert endemic.



Xanthomacu.....



Xanthomaculina convoluta

Xanthoparmelia chlorochroa (Tuck.) Hale, Phytologia 28(5): 486 (1974)
= *Parmelia chlorochroa* Tuck. 1860

[VZ2039], USA. Colorado. Chaffee County: 18 km ad meridiem et occidentem versus ab Antero Juncion (ad orientem versus a Buena Vista), 2400 m. ad terram in Pineto sparso (*Pinus edulis*) Leg. W. L. Culberson (no. 18671, 8.8.1984. - Annot.: Usnic acid, salazinic acid, norstictic acid (trace), protocetrariuc acid (trace), consalazinic acid (probable trace) and unidentified pigment; anal by TLC C. F. Culberson and A. Johnson. - Ex A. Vězda Lichenes Selecti Exsiccati Nr. 2039.

Thallus: foliose, very loosely adnate, usually free growing and ±tubular, leathery, 3-10 cm in diam. or fragmenting into separate lobes, dichotomously lobate; lobes sublinear, elongate, extremely convex except the lobe apices, separate to overlapping, 1.5-5 mm wide, not lobulate; apices subrotund, sometimes revolute, smooth to crenate, eciliate; upper surface yellow-green, smooth initially but becoming rugulose and cracked with age, shiny, epruinose and emaculate, without isidia, soralia or pustulae; medulla white, with continuous algal layer; lower surface pale to dark brown, strongly convolute but not completely inrolled, often with raised rim towards apices, moderately to densely rhizinate; rhizines pale brown, simple to furcate, 0.3-1 mm long; Apothecia very rare, substipitate, 2-4 mm wide, laminal on thallus; disc cinnamon-brown to dark brown, epruinose; margin isidiate; asci clavate, 8-spored; ascospores hyaline, simple, ellipsoid, 11-13 x 5-6 µm; Pycnidia rare, immersed; conidia: bifusiform, 6-7 x 0.5 µm; Spot tests: upper cortex K-, C-, KC-, P-; medulla K+ yellow to dark red, C-, KC-, P+ orange; Secondary metabolites: upper cortex with usnic acid (major); medulla with salazinic acid (major) consalazinic acid (minor), and usually norstictic and protocetraric acids (both trace). - Substrate and ecology: on soil, often in open, arid habitats; World distribution: intermountain areas of western North America. in pinyon-juniper communities in northern Arizona and Baja California.



Xanthoparmelia chlorochroa



Xanthoparmelia chlorochroa

Xanthoparmelia chlorochroa (Tuck.) Hale, Phytologia 28(5): 486 (1974)
= *Parmelia chlorochroa* Tuck. 1860

[9093], USA, Nebraska, Sioux County: Agate fossil Beds National Monument; 21 mi of Harrison off Nebraska Route 29; T28N, R55W; 1370 m, rocky bluffs and short-grass prairie; on soil. Leg. R. S. Egan, 28. May 1988 (EL-13421) - Annot.: usnic and salazinic acids (Egan). TLC: p117/1: usnic (major), salazinic (major), consalazinic (major), norstictic, protocetraric (trace). Ohne Isidien. Ohne Sorale. Unterseite schwarz. Ex Herbario F. Schumm.

Thallus: foliose, very loosely adnate, usually free growing and ±tubular, leathery, 3-10 cm in diam. or fragmenting into separate lobes, dichotomously lobate; lobes sublinear, elongate, extremely convex except the lobe apices, separate to overlapping, 1.5-5 mm wide, not lobulate; apices subrotund, sometimes revolute, smooth to crenate, eciliate; upper surface yellow-green, smooth initially but becoming rugulose and cracked with age, shiny, epruinose and emaculate, without isidia, soralia or pustulae; medulla white, with continuous algal layer; lower surface pale to dark brown, strongly convolute but not completely inrolled, often with raised rim towards apices, moderately to densely rhizinate; rhizines pale brown, simple to furcate, 0.3-1 mm long; Apothecia very rare, substipitate, 2-4 mm wide, laminal on thallus; disc cinnamon-brown to dark brown, epruinose; margin isidiate; asci clavate, 8-spored; ascospores hyaline, simple, ellipsoid, 11-13 x 5-6 µm; Pycnidia rare, immersed; conidia: bifusiform, 6-7 x 0.5 µm; Spot tests: upper cortex K-, C-, KC-, P-; medulla K+ yellow to dark red, C-, KC-, P+ orange; Secondary metabolites: upper cortex with usnic acid (major); medulla with salazinic acid (major) consalazinic acid (minor), and usually norstictic and protocetraric acids (both trace). - Substrate and ecology: on soil, often in open, arid habitats; World distribution: intermountain areas of western North America. in pinyon-juniper communities in northern Arizona and Baja California.



Xanthoparmelia chlorochroa



Xanthoparmelia chlorochroa

Xanthoparmelia cylindriloba M.D.E. Knox, in Knox & Brusse, Jl S. Afr. Bot. 49(2): 147 (1983)
= *Xanthoparmelia kiboensis* (Dodge) Krog & Swinscow, Lichenologist 19: 428 (1987).

[VZ2063], Kenya. Regio montis Kenya, in parte superiore vallis Teleki, 4200 m. Ad terram glacie destructam. in regione alpina. Leg. O. Hedberg, 27.7.1948, det. D. Knox (1980) - TLC: usnic, salazivic and norstictic acid anal. D. Nox. - ISOTYPUS - EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2063.

Thallus loosely attached, irregularly spreading, more or less caespitose, rarely subpulvinate. Lobes at first adjacent, becoming imbricate, sublinear to cuneate, concave, plane, convex, or subterete, here and there irregularly constricted, central lobes 0.1-0.2 mm wide, often crowded, peripheral lobes 0.4--2(3) mm wide, much divided towards the apices. Upper side smooth to slightly foveate, emaculate, continuous or transversely cracked, often black marginate. Medulla white, here and there becoming ochraceous throughout or near the lower cortex. Under side smooth or wrinkled, shiny or dull, black, sparsely rhizinate. Isidia absent. Apothecia up to 2 cm diam., at first deeply concave, becoming plane and radially split, thalline margin thick, entire or dentate. Spores 8-10 x 3-4 μ m. Pycnidia common, pycnoconidia 6-7 μ m long. CHEMISTRY: Salazinic acid, $\pm$ norstictic acid, usnic acid. ECOLOGY: Saxicolous, muscicolous, or terricolous in the ericaceous and alpine zones at 3000 to 5000 m alt., locally common. - Africa. (Ex Swinscow & Krog 1988: Macrolichens of East Africa)



Xanthoparmelia cylindriloba

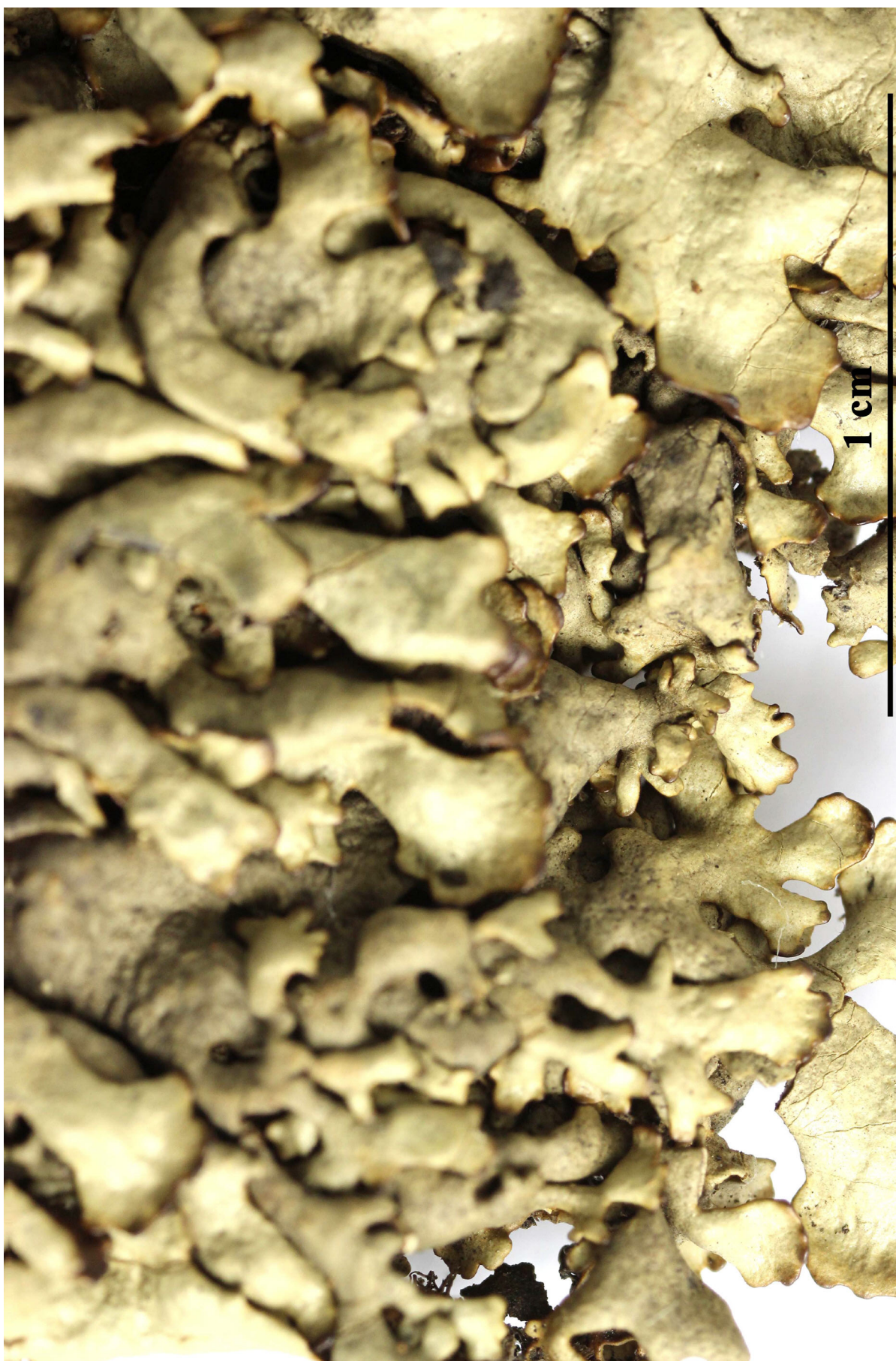


Xanthoparmelia cylindriloba

Xanthoparmelia somloensis (Gyeln.) Hale [as 'somloënsis'], in Ahti, Brodo & Noble, Mycotaxon 28(1): 96 (1987)
= *Parmelia somloensis* Gyeln. 1931
= *Xanthoparmelia stenophylla* (Ach.) Ahti & D. Hawksw., Lichenologist 37(4): 363 (2005)

[VZ2173], Hungaria. Distr. Veszprém, Doba, in monte Somló, 300-350 m. Ad saxa andesitica. Leg. E. Farkas et L. Lökös, 9.5.1987 - Annot.: Most of the reports of *X. taractica* (Gyeln.) Hale in North America and Europe refer to this species; T. Ahti, I. M. Brodo, W. Noble. - EX VěZDA LICHENES SELECTI EXSICCATI NR. 2173.

Thallus foliose, heteromerous, dorsiventral, loosely attached, forming up to 20 cm wide patches, the lobes (0.5-)2-3(-5) mm broad, flattened, isotomic-dichotomously branched, more or less imbricate, the upper surface yellowish green, white-maculate, the lower surface tan at margins, pale brown in central parts, with pale, mostly simple rhizines which are sparse at margin. Upper cortex paraplectenchymatous, with a pored epicortex, the cell walls with *Xanthoparmelia*-type lichenan; medulla white; lower cortex paraplectenchymatous. Apothecia frequent, lecanorine, strongly constricted at base, to 8(-15) mm across, with a brown, smooth disc and a smooth thalline margin. Epithecium brown; hymenium colourless; paraphyses simple; hypothecium colourless. Asci 8-spored, clavate, the K/I+ blue tholus penetrated by a faintly amyloid apical cushion with parallel or diverging flanks, the wall K/I-, surrounded by a K/I+ blue outer layer, *Lecanora*-type. Ascospores 1-celled, hyaline, ellipsoid, 8-11 x 4-6 µm. Pycnidia common, appearing as black dots on the upper surface. Conidia weakly dumbbell-shaped, 5-6 x c. 1 µm. Photobiont chlorococcoid. Spot tests: upper cortex K-, C-, KC+ yellow, P-; medulla K+ yellow turning red, C-, KC-, P+ orange-red, UV-. Chemistry: upper cortex with usnic acid; medulla with salazinic acid and traces of norstictic and protocetraric acids. - Note: on weathered siliceous rocks and mineral soil in open, dry situations, with a very wide altitudinal range.



Xanthoparmelia somloensis



Xanthoparmelia somloensis

Xanthoparmelia somloensis (Gyeln.) Hale [as 'somloënsis'], in Ahti, Brodo
& Noble, Mycotaxon 28(1): 96 (1987)
= *Parmelia somloensis* Gyeln. 1931
= *Xanthoparmelia stenophylla* (Ach.) Ahti & D. Hawksw., Lichenologist
37(4): 363 (2005)

[5291], Spanien, Gran Canaria, Barranco de Los Tilos südlich Moya; N
28°04.766, W 15°35.935, Höhe 620 m. Leg. F. Schumm & U. Schwarz,
28.12.1998, det. F. Schumm, conf. Elix 07.1999. Mark: K gelb dann
schnell rot, C-, P tief goldgelb; Rinde: K mehr/minder gelblich, C-, P+
gelb. Ex Herbrio F. Schumm Nr.5291.

Thallus foliose, heteromerous, dorsiventral, loosely attached, forming
up to 20 cm wide patches, the lobes (0.5-)2-3(-5) mm broad, flattened,
isotomic-dichotomously branched, more or less imbricate, the upper
surface yellowish green, white-maculate, the lower surface tan at mar-
gins, pale brown in central parts, with pale, mostly simple rhizines
which are sparse at margin. Upper cortex paraplectenchymatous, with
a pored epicortex, the cell walls with *Xanthoparmelia*-type lichenan;
medulla white; lower cortex paraplectenchymatous. Apothecia fre-
quent, lecanorine, strongly constricted at base, to 8(-15) mm across,
with a brown, smooth disc and a smooth thalline margin. Epithecium
brown; hymenium colourless; paraphyses simple; hypothecium co-
lourless. Asci 8-spored, clavate, the K/I+ blue tholus penetrated by a
faintly amyloid apical cushion with parallel or diverging flanks, the
wall K/I-, surrounded by a K/I+ blue outer layer, *Lecanora*-type. Asco-
spores 1-celled, hyaline, ellipsoid, 8-11 x 4-6 µm. Pycnidia common,
appearing as black dots on the upper surface. Conidia weakly dumbell-
shaped, 5-6 x c. 1 µm. Photobiont chlorococcoid. Spot tests: upper
cortex K-, C-, KC+ yellow, P-; medulla K+ yellow turning red, C-, KC-,
P+ orange-red, UV-. Chemistry: upper cortex with usnic acid; medulla
with salazinic acid and traces of norstictic and protocetraric acids. -
Note: on weathered siliceous rocks and mineral soil in open, dry
situations, with a very wide altitudinal range.



Xanthoparmelia somloensis

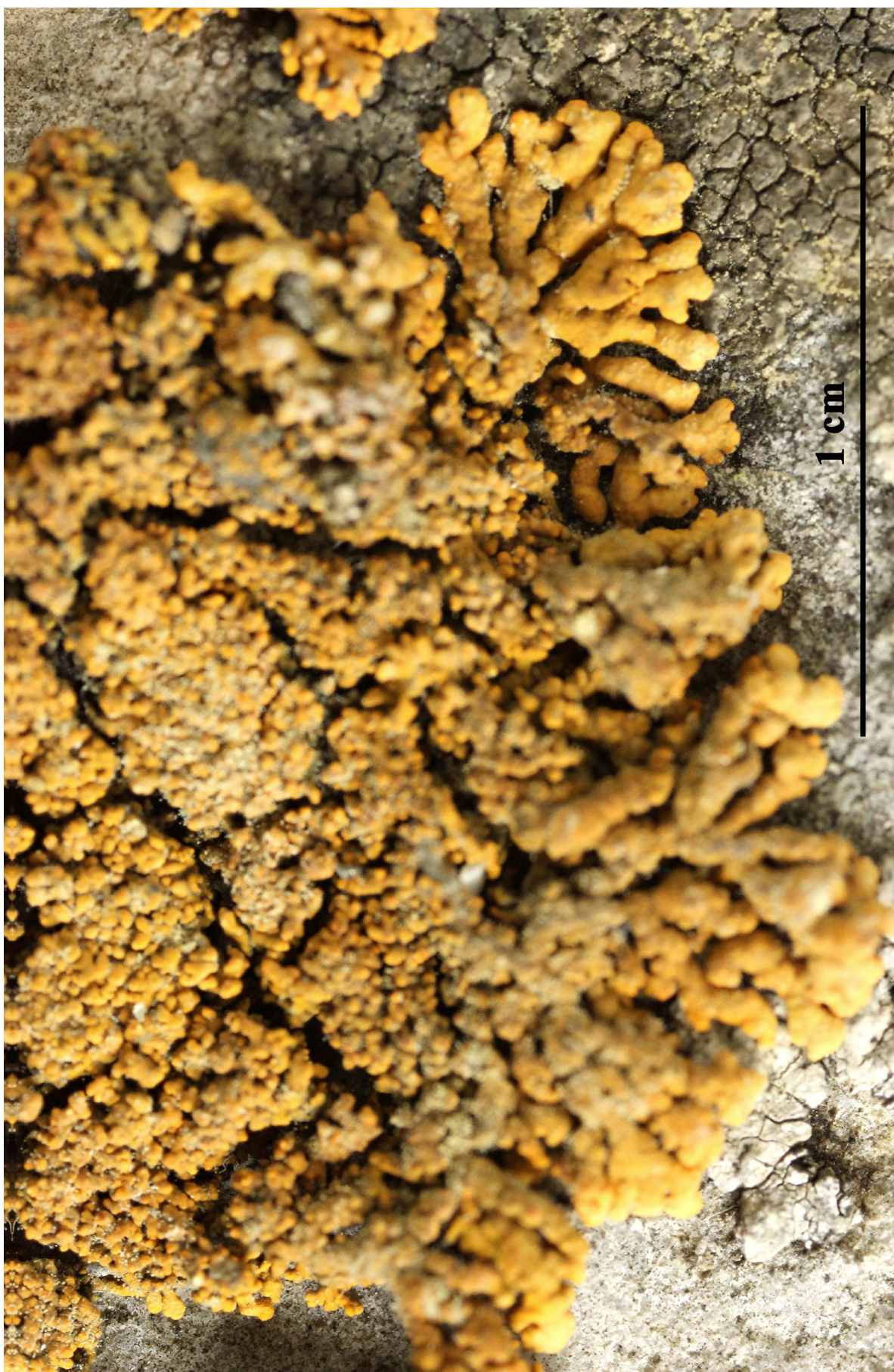


Xanthoparmelia somloensis

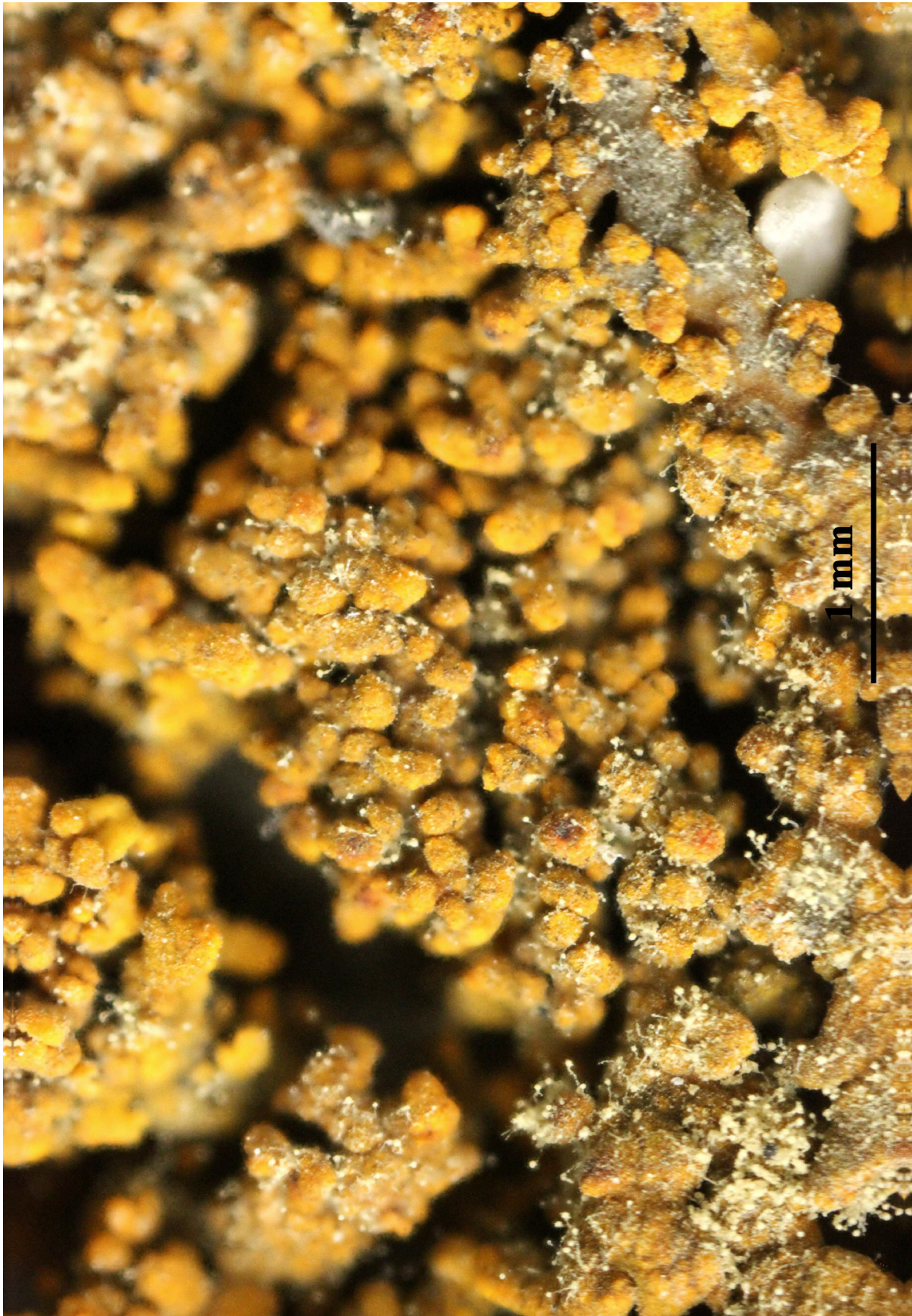
Xanthoria domogledensis Vězda, Lichenes Selecti Exsiccati, Fasc. (Průhonice) 52: 6 (no. 1294) (1975)
= *Zeroviella domogledensis* (Vězda) S.Y. Kondr. & Hur, in Kondratyuk, Kim, Yu, Jeong, Jang, Kondratiuk, Zarei-Darki & Hur, Ukrain. Bot. J. 72(6): 582 (2015)

[VZ1194], Romania. Distr. Mahedinti. Baile Herculane, in cacumine montis Domogled, 1100 m. Ad saxa calcarea septentrionem spectantia. Leg. I. Pisút et A. Vězda, 3.6.1972. Ex A. Vězda Lichenes Selecti Exsiccati Nr. 1294.

Species ex affinitate *Xanthoriae elegantis* sed thallo isidiosa praedita, isidiis subglobulatis, e partibus centralibus thallorum dense escrecentibus. Apothecia ignota.



Xanthoria domogledensis



Xanthoria domogledensis

Xanthoria elegans (Link) Th. Fr., Lich. arct. (Uppsala): 69 (1860)
= *Lichen elegans* Link 1791
= *Rusavskia elegans* (Link) S.Y. Kondr. & Kärnefelt Ukrayins'kyi Bot.
Zhurn., 60: 433, 2003.

[VZ1248], Tanzania. Kilimanjaro. Transitus Mawenzi dictus, 4250 m.
Ad terram lapidosam in semidesertis alpinis. Leg. T. et S. Pócs (no.
6251), 16.9.1970, det. A. Vězda. EX A. VĚZDA LICHENES SELECTI
EXSICCATI NR. 1248.

Thallus foliose, heteromerous, dorsiventral, tightly adnate, deep orange to orange-red, forming up to 6 cm wide, often confluent rosettes, the central parts sometimes dying off in old thalli. Lobes strongly convex, 0.5-1(-1.3) mm wide, remaining discrete for their entire length, with pale maculae visible at high magnification; lower surface white, rarely with very short, white hapters. Upper and lower cortex mesodermate paraplectenchymatous; medulla white. Apothecia common, lecanorine/zeorine, laminal, substipitate, up to 2.5 mm across, orange to orange-red. Epithecium orange-brown, c. 10 µm thick, K+ purple-red; hymenium colourless, 60-90 µm high; paraphyses simple or sparingly branched, septate, the apical cells swollen; hypothecium colourless to pale brown, 20-80 µm high. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I+ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, hyaline, ellipsoid, (9-)11-16(-18) x 5-9 µm, the equatorial thickening ("septum") (1-)3-5 µm. Pycnidia immersed, slightly darker than thallus. Conidia narrowly ellipsoid, 2-3.5 x 1-1.5 µm. Photobiont chlorococcoid. Spot tests: upper surface K+ purple-red, C-, KC-, P-, UV+ intensely orange-red. Chemistry: parietin (major), fallacinal, emodin, teloschistin and parietinic acid, corresponding with chemosyndrome A of Söchting (1997). - Note: a holarctic and bipolar species found both on well-lit natural rock outcrops and on man-made substrata (especially tiles), mostly in upland areas, descending to lower elevations in continental sites; in strongly eutrophicated situations it can occasionally overgrow bryophytes and plant remains. The species is extraordinarily variable in colour and form, very different individuals often occurring side by side on the same surface.



Xanthoria elegans



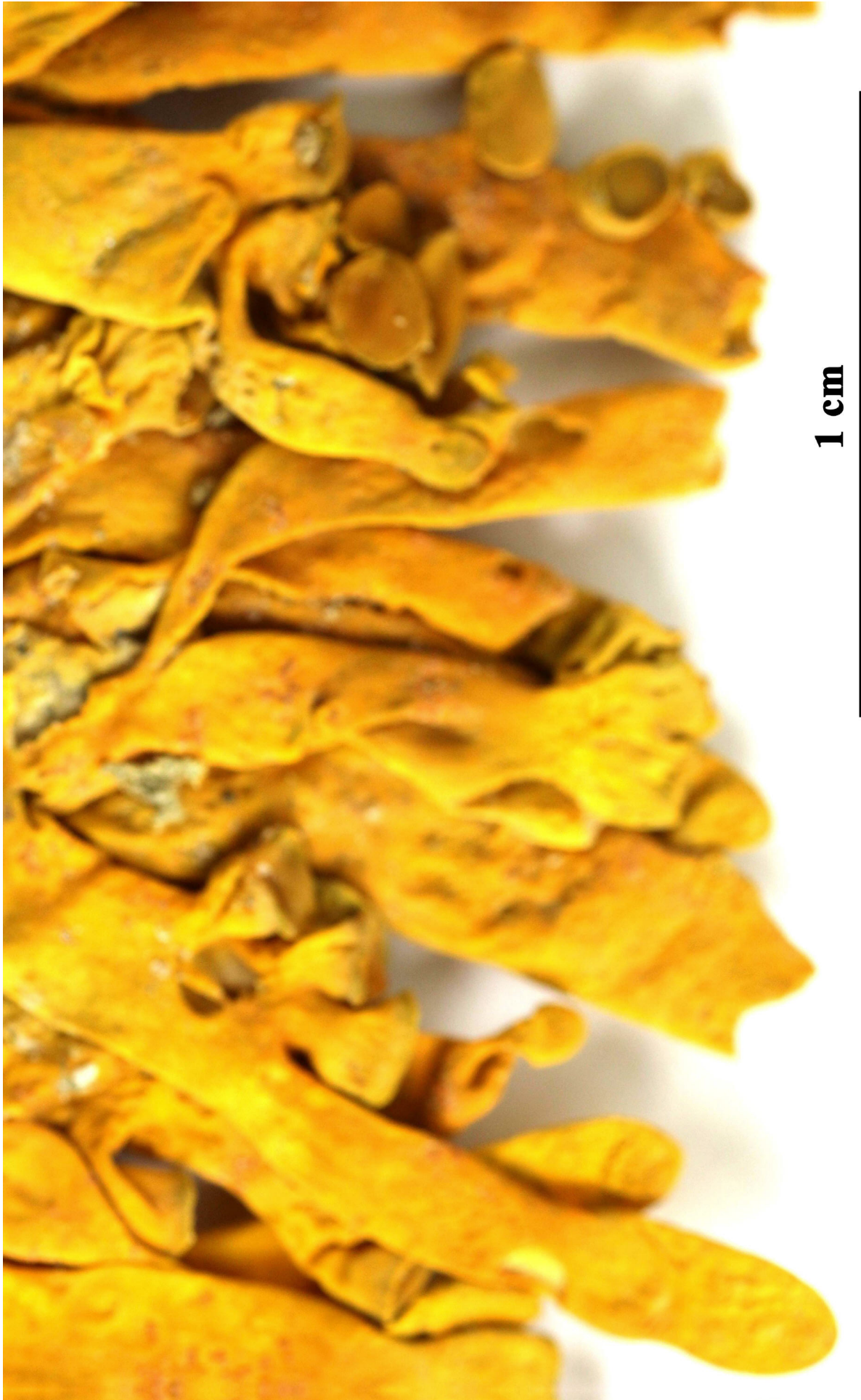
Xanthoria elegans

Xanthoria flammea (L. f.) Hillmann, Hedwigia 62: 199 (1920)
 = *Dufourea flammea* (L. f.) Ach., Lich. Univ.: 524 (1810)
 = *Lichen flammeus* L. f., Suppl. Pl.: 451 (1781)
 = *Lichenoides flammea* (L. f.) Hoffm. [as 'flammeum'], Descr. pl. cl. crypt.
 1.1(fasc. 1 [intro.], 2): 11 (1789)
 = *Lichenoides flammeum* (L. f.) Hoffm., Descr. Adumb. Plant. Lich. 1(1):
 11 (1789) [1790]
 = *Lobaria flammea* (L. f.) Raeusch., Nomencl. bot., Edn 3: 830 (1797)
 = *Parmelia flammea* (L. f.) Ach., Methodus, Sectio post. (Stockholmia): 253
 (1803)
 = *Physcia flammea* (L. f.) Nyl., Mém. Soc. Imp. Sci. Nat. Cherbourg 3: 174
 (1855)
 = *Xanthodactylon flammeum* (L. f.) C.W. Dodge, Beih. Nova Hedwigia 38:
 116 (1971)

[VZ1275], Africa Austro-Occidentalis. Lüderitz, loco Grosse Bucht dicto prope Lüderitz, in territorio desertum Namib, in proximitate maris. In ramulis fruticum(*Salsola* et *Lycium* sp.) locis vento salso expositis. Leg. U. Volk, 7.2.1974, det. V. Wirth. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 1275.

Hillmann (1920): - Diese von alteren Autoren bald zu *Physcia*, bald zu *Parmelia* oder *Dufourea*, von Hoffmann zu *Lichenoides* gestellte Art gehört wegen ihres Gehaltes an Parietin unzweifelhaft zu den Theloschistaceen, und zwar ist sie wegen der Thallusform der Gattung *Xanthoria* einzuordnen. - Lager blattartig, hellgelb bis dunkelorange, oft fehlend, ohne Soredien. Apothezien in die Spitzen hohler, zylindrischer, gedunsener, einfacher oder oberwärts wenig verzweigter „Podetien“ ± eingesenkt, mit zuerst vertiefter, dann flacher, endlich schwach gewölbter und erweiterter Scheibe, und ganzem, dünnem, anfangs vortretendem, später zurückgedrangtem Rande. Sporen zu 8 im Schlauch, ellipsoidisch bis fast breit spindelförmig, 11—16,5 x 5—8 µm, zweizellig, mit dünner Querwand (in Kalilauge wird der die Zellen verbindende Kanal sichtbar). Pykniden orangerot, auf den Lagerlappen sitzend, Pyknokonidien langlich ellipsoidisch, klein, 2—2,5 x 0,5—1,0 µm. *X. flammea* ist in Südafrika heimisch und sicherlich dort an Rinden recht häufig, da sie von vielen Reisenden gesammelt worden ist. Man kann von ihr zwei Hauptformen unterscheiden: var. *thallophora*: Thallus bene evolutus, foliaceus, lobis crassiusculis, substrato appositis. Apothecia fere sessilia (podetia 2—3 mm longa). Scheint die seltenere Form zu sein. Die Lagerlappen sind ziemlich dick, oben kräftig gelb bis

orange geiarbt und abgerundet oder gekerbt; die Unterseite ist weifilich (nur am Rande gelb) und faltigrunzelig. Synonym zu dieser Abart ist *Parmelia flammea* Flot. Linnaea (1843), S. 27 (sec. spec. orig. in Museo Botan. Berol.). var. *podetiifera*: Thallus foliaceus evanescens. Podetia evoluta, usque ad 25 mm longa, fere caespitose crescentia. Die an die Podetien der Cladonien erinnernden Apothezienstiele sind oberwärts kraftig gelb bis orange, nach unten zu werden sie heller, am Grunde sind sie oft grau oder weifilich (offenbar wegen des Mangels an Belichtung); ihre Oberfläche zeigt zerstreute grubige Vertiefungen, die Innenwand der Rohre ist weißfilzig.





Erioderma barbellatum

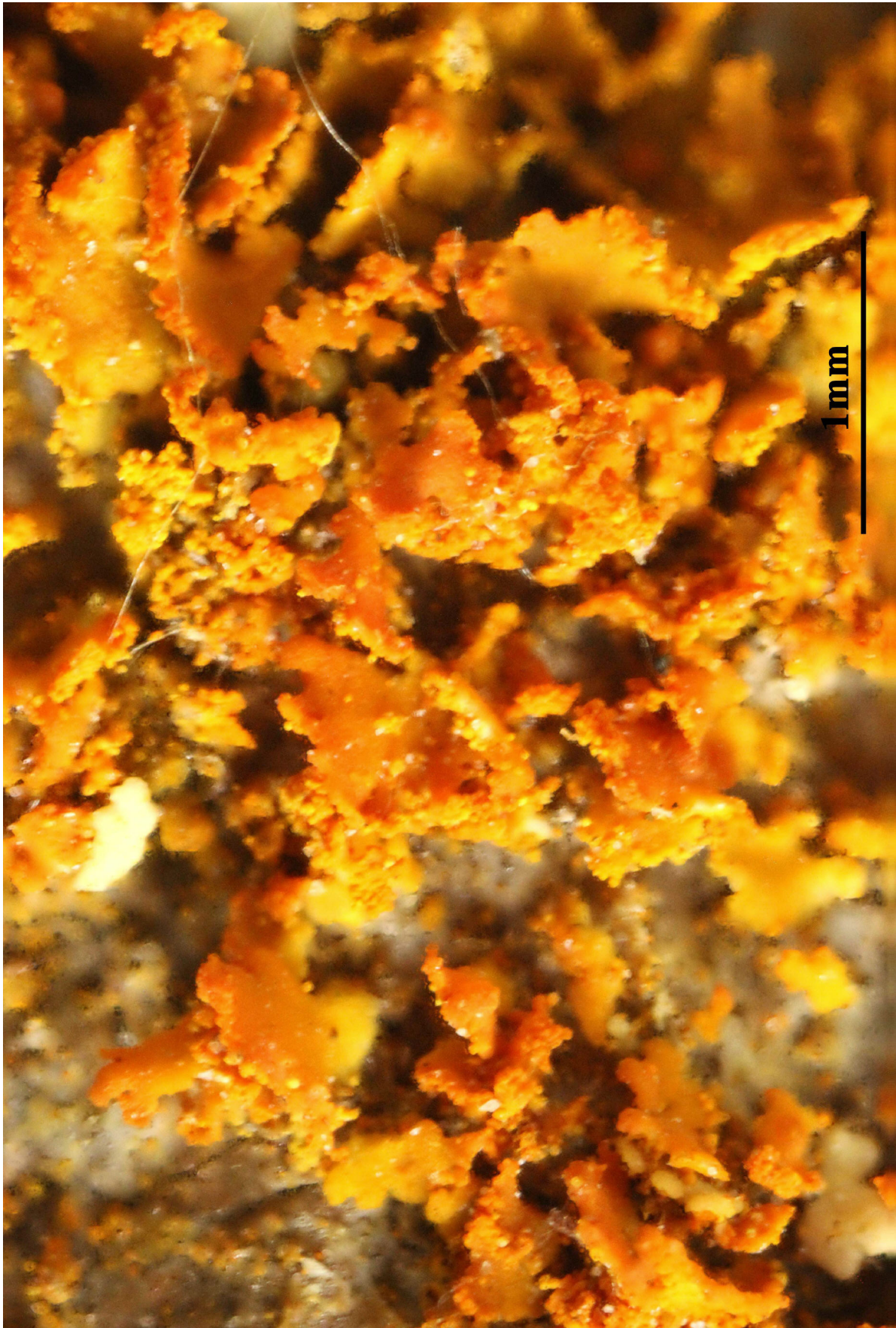
Xanthoria fulva (Hoffm.) Poelt & Petut., Nova Hedwigia 54(1-2): 24 (1992)
 = *Gallowayella fulva* (Hoffm.) S.Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur & A. Thell, in Fedorenko, Stenroos, Thell, Kärnefelt, Elix, Hur & Kondratyuk, Biblioth. Lichenol. 108: 57 (2012)
 = *Xanthomendoza fulva* (Hoffm.) Söchting, Kärnefelt & S.Y. Kondr. Mitt. Inst. allg. Bot. Hamburg, 30-32: 237, 2002.
 = *Lobaria fulva* Hoffm. - Deutschl. Fl., 2: 159, 1796.
 = *Oxneria fulva* (Hoffm.) S.Y. Kondr. & Kärnefelt.
 = *Xanthoria candelaria* f. *fulva* (Hoffm.) Zahlbr.

[VZ2500], Germania. Bavaria: Berte4sgadener Land, Unterschöna, Astenreitweg - Zulehenweg, 620 m. Ad truncum *Aceris pseudoplatani*, Leg. R. Türk & H. Wunder, 30.4.1991, det. J. Poelt et W. Petutschnig. EX A. VEZDA LICHENES SELECTI EXSICCATI NR. 2500.

Thallus foliose, heteromerous, dorsiventral, dark orange-red, lobed, not forming regular rosettes, but thalli often coalescing to cover large surfaces. Lobes up to 2 mm long, 0.2-0.7(-1) mm wide, ascending, the tips rounded and mostly unbranched, blastidiate along most of the lower surface, the blastidia 25-30 µm diam., in marginal parts sometimes gathered into 50-60 µm wide conblastidia; rhizines or hapters few, mostly located at the base of lobes. Apothecia very rare, lecanorine, orange-red. Thalline exciple paraplectenchymatous; proper exciple a strongly gelatinized plectenchyma with unoriented, short-celled hyphae; epithecium orange-brown, K+ purple-red; hymenium colourless; paraphyses simple or rarely branched, septate; hypothecium colourless or pale orange-brown. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I+ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, hyaline, broadly ellipsoid, with broadly rounded ends, 13.5-17.5 x 8-10.5 µm, the equatorial thickening ("septum") 4-6.5 µm. Pycnidia common, darker orange than thallus, immersed into thalline warts. Conidia baciliform, 3-4.5 x 0.9-1.2 µm. Photobiont chlorococcoid. Spot tests: upper surface K+ purple-red, C-, KC-, P-, UV+ orange. Chemistry: parietin (major), fallacinal (major), emodin, teloschistin (major) and parietinic acid (chemosyndrome A3 of Söchting 1997). - Note: most frequent on isolated deciduous trees along roads in continental Alpine valleys; often confused with *X. fallax* in the past.



Xanthoria fulva

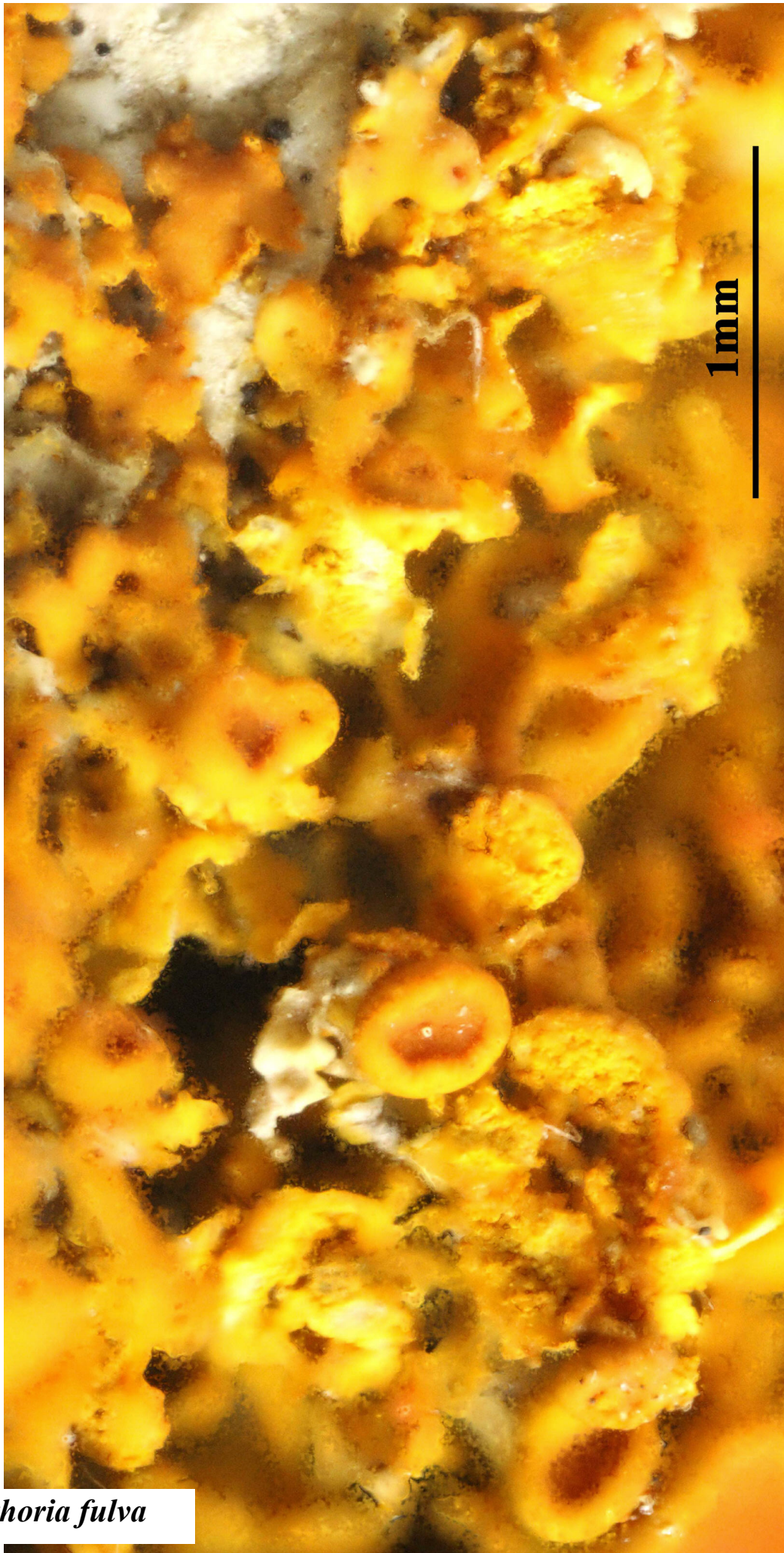


Xanthoria fulva

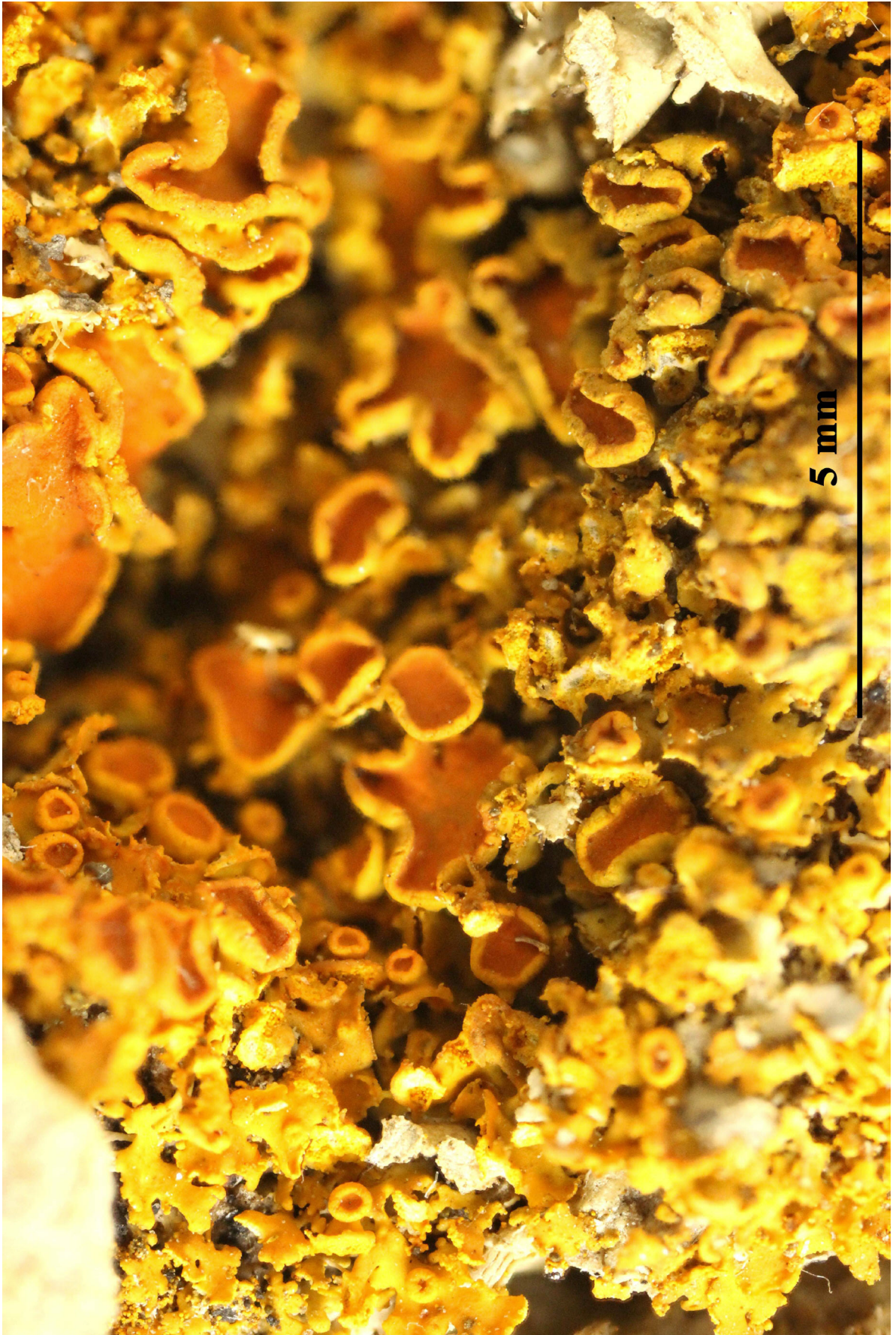
Xanthoria fulva (Hoffm.) Poelt & Petut., Nova Hedwigia 54(1-2): 24 (1992)
 = *Gallowayella fulva* (Hoffm.) S.Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur & A. Thell, in Fedorenko, Stenroos, Thell, Kärnefelt, Elix, Hur & Kondratyuk, Biblioth. Lichenol. 108: 57 (2012)
 = *Xanthomendoza fulva* (Hoffm.) Söchting, Kärnefelt & S.Y. Kondr. Mitt. Inst. allg. Bot. Hamburg, 30-32: 237, 2002.
 = *Lobaria fulva* Hoffm. - Deutschl. Fl., 2: 159, 1796.
 = *Oxneria fulva* (Hoffm.) S.Y. Kondr. & Kärnefelt.
 = *Xanthoria candelaria* f. *fulva* (Hoffm.) Zahlbr.

[VZ1222], Germania. Baden. Schwarzwald, Breitnau, 1000 m. Ad corticem *Aceris pseudoplatani*. Leg, V. Wirth, 2.1873 as *Xanthoria canelaris*, corr. as *Xanthoria fulva* by J. Poelt et Petutschnig 1990. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 1222.

Thallus foliose, heteromerous, dorsiventral, dark orange-red, lobed, not forming regular rosettes, but thalli often coalescing to cover large surfaces. Lobes up to 2 mm long, 0.2-0.7(-1) mm wide, ascending, the tips rounded and mostly unbranched, blastidiate along most of the lower surface, the blastidia 25-30 µm diam., in marginal parts sometimes gathered into 50-60 µm wide conblastidia; rhizines or hapters few, mostly located at the base of lobes. Apothecia very rare, lecanorine, orange-red. Thalline exciple paraplectenchymatous; proper exciple a strongly gelatined plectenchyma with unoriented, short-celled hyphae; epithecium orange-brown, K+ purple-red; hymenium colourless; paraphyses simple or rarely branched, septate; hypothecium colourless or pale orange-brown. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I+ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, hyaline, broadly ellipsoid, with broadly rounded ends, 13.5-17.5 x 8-10.5 µm, the equatorial thickening ("septum") 4-6.5 µm. Pycnidia common, darker orange than thallus, immersed into thalline warts. Conidia baciliform, 3-4.5 x 0.9-1.2 µm. Photobiont chlorococcoid. Spot tests: upper surface K+ purple-red, C-, KC-, P-, UV+ orange. Chemistry: parietin (major), fallacinal (major), emodin, teloschistin (major) and parietinic acid (chemosyndrome A3 of Söchting 1997). - Note: most frequent on isolated deciduous trees along roads in continental Alpine valleys; often confused with *X. fallax* in the past.



Xanthoria fulva



Xanthoria fulva

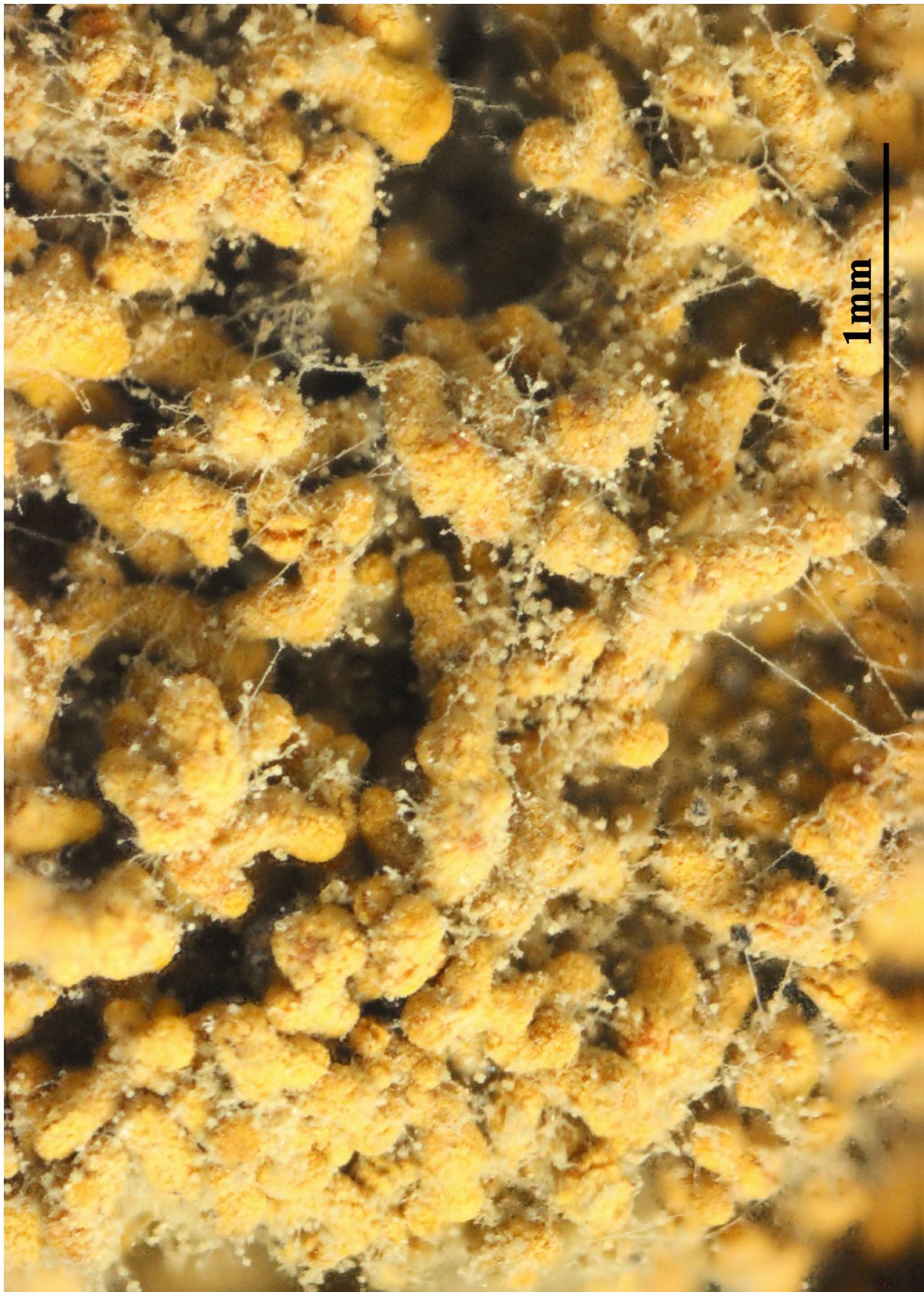
Xanthoria papillifera (Vain.) Poelt, Mitt. bot. StSamml., Münch. 11: 29
(1954)
= *Placodium papilliferum* Vain. 1899

[VZ1200], Romania. Dobrogea, distr. Tulcea: in valle fluminis Casimeca inter pagos Gura Dobrogei et Tirgușor, 50 m. Adsaxa calcarea. Leg. A. Vězda, 12.12.1973. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1200.

Lappen hochgewölbt-aufgeblasen, dicht mit vergreisweisen dicklichen und einheitlich dicken, nicht aufbrechenden fingerigen Papillen besetzt, häufig bereift. Apothecien nicht selten- Von den Karpaten bis zum Kaukasus (Ex J. Poelt)



Xanthoria papillifera

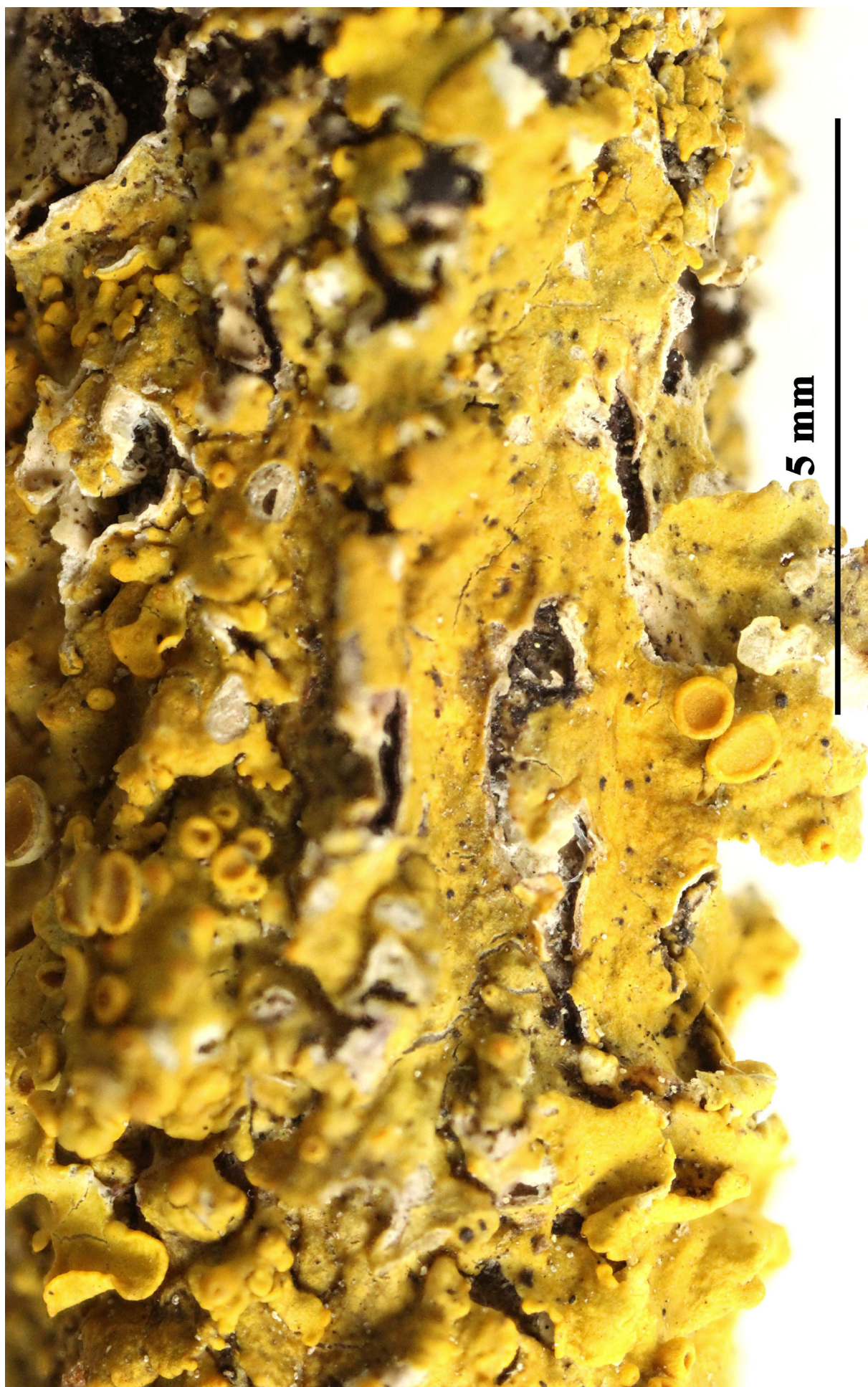


Xanthoria papillifera

Xanthoria parietina (L.) Th. Fr., Lich. arct. (Uppsala): 67 (1860)
= *Lichen parietinus* L. 1753

[VZ1897], Nova Zelandia. North Island, Karatiro, prope Cambridge. In ramulis arborum (*Liquidanbar*). Leg. O. et I. Degener (35671), 22.9.1981, det. A. Vězda. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1897.

Thallus foliose, heteromerous, dorsiventral, forming regular, up to 10(-15) cm wide, monophyllous rosettes, rather tightly adnate, the lobes concave to flattened, 1-3.5(-5) mm wide, 0.15-0.3 mm thick, yellow-orange to pale greenish grey in shade-forms, without a superficial layer of crystals, smooth or somewhat wrinkled. Lower surface white to pale yellow, wrinkled, with short, white hapters. Upper cortex palisadę paraplectenchymatous; medulla white, often with scleroplectenchymatous bundles; lower cortex mesodermatous paraplectenchymatous. Apothecia common, lecanorine/zeorine, laminal, stipitate, up to 8 mm across (usually less), with an orange, smooth, concave to flat disc and a smooth to rarely crenulate thalline margin. Epithecium yellow-brown, c. 10 µm thick, K+ purple-red; hymenium colourless, 50-90 µm thick; paraphyses simple or sparingly branched, the apical cells swollen; hypothecium colourless to pale brown. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I+ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, hyaline, ellipsoid, 10-15(-16) × 6-8(-9) µm, the equatorial thickening ("septum") 3-8 µm. Pycnidia immersed to slightly projecting, usually somehow darker orange than thallus. Conidia ellipsoid, 2.5-4 x 1-1.5 µm. Photobiont chlorococcoid. Spot tests: K+ purple-red, C-, KC-, P-, UV+ intensely orange-red. Chemistry: parietin (major), fallacinal, emodin, teloschistin and parietinic acid. - Note: absent only from heavily polluted areas, mainly epiphytic on well-lit trees, but sometimes present on nutrient-enriched, calciferous or basic siliceous rocks as well.



Xanthoria parietina



Xanthoria parietina (L.) Th. Fr., Lich. arct. (Uppsala): 67 (1860)
= *Lichen parietinus* L. 1753

[11993], GERMANY, Baden-Württemberg, Kreis Göppingen, Göppingen, an einer Pappelallee in der Blumenstraße, eutrophiert, photophytisch, 48°42.388' N, 0°40.042' E, 350 m. Leg. F. Schumm, 26.03.2005. Ex Herbario F. Schumm (TLC p400/9)

Thallus foliose, heteromorous, dorsiventral, forming regular, up to 10(-15) cm wide, monophyllous rosettes, rather tightly adnate, the lobes concave to flattened, 1-3.5(-5) mm wide, 0.15-0.3 mm thick, yellow-orange to pale greenish grey in shade-forms, without a superficial layer of crystals, smooth or somewhat wrinkled. Lower surface white to pale yellow, wrinkled, with short, white hapters. Upper cortex palisade paraplectenchymatous; medulla white, often with scleropletenchymatous bundles; lower cortex mesodermatous paraplectenchymatous. Apothecia common, lecanorine/zeorine, laminal, stipitate, up to 8 mm across (usually less), with an orange, smooth, concave to flat disc and a smooth to rarely crenulate thalline margin. Epithecium yellow-brown, c. 10 µm thick, K+ purple-red; hymenium colourless, 50-90 µm thick; paraphyses simple or sparingly branched, the apical cells swollen; hypothecium colourless to pale brown. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I+ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, hyaline, ellipsoid, 10-15(-16) × 6-8(-9) µm, the equatorial thickening ("septum") 3-8 µm. Pycnidia immersed to slightly projecting, usually somehow darker orange than thallus. Conidia ellipsoid, 2.5-4 × 1-1.5 µm. Photobiont chlorococcoid. Spot tests: K+ purple-red, C-, KC-, P-, UV+ intensely orange-red. Chemistry: parietin (major), fallacinal, emodin, teloschistin and parietinic acid. - Note: absent only from heavily polluted areas, mainly epiphytic on well-lit trees, but sometimes present on nutrient-enriched, calciferous or basic siliceous rocks as well.



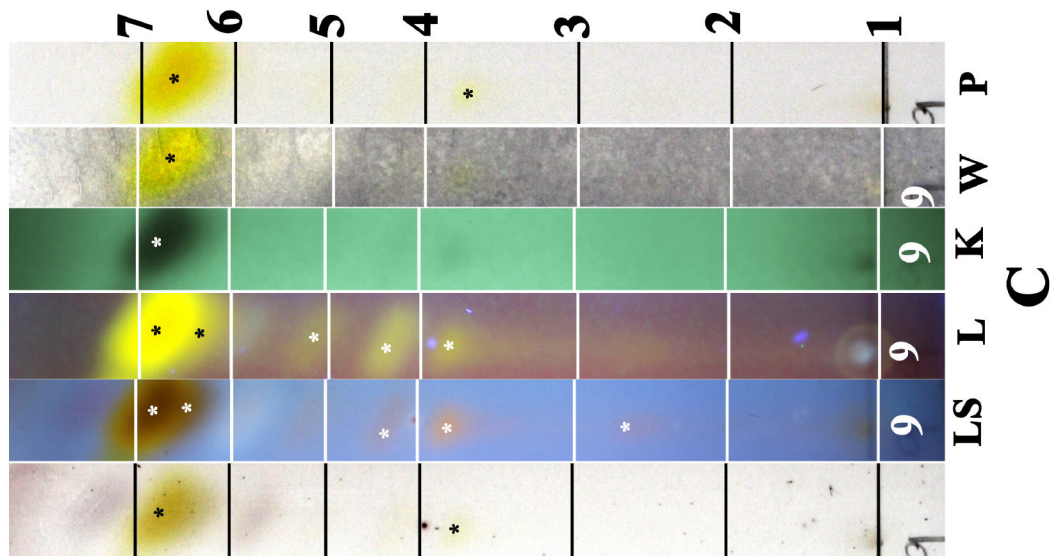
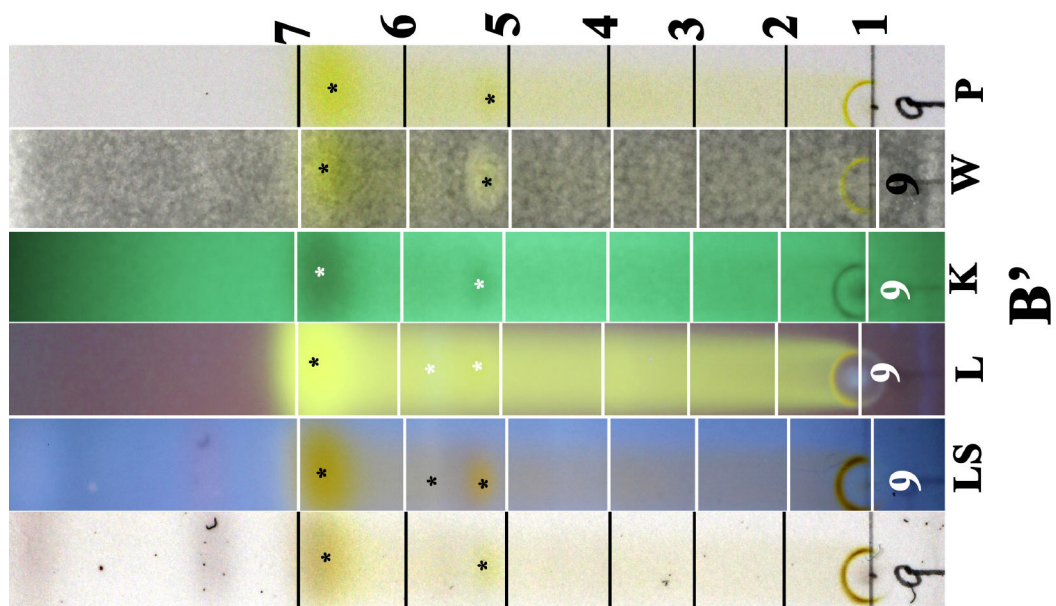
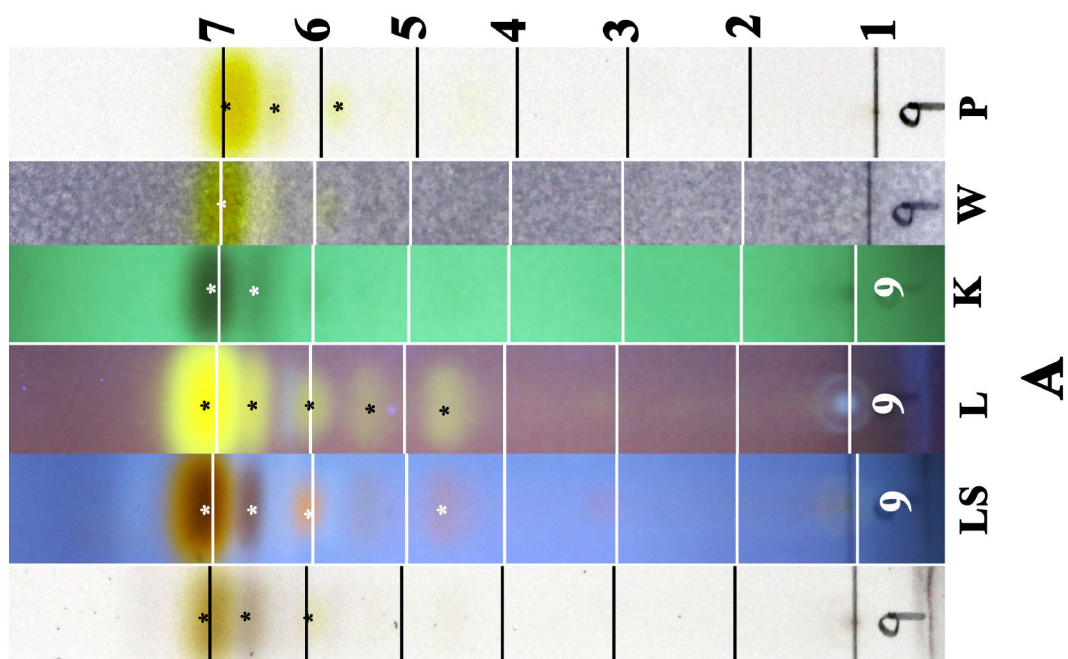
Xanthoria parietina



Xanthoria parietina



Xanthoria parietina



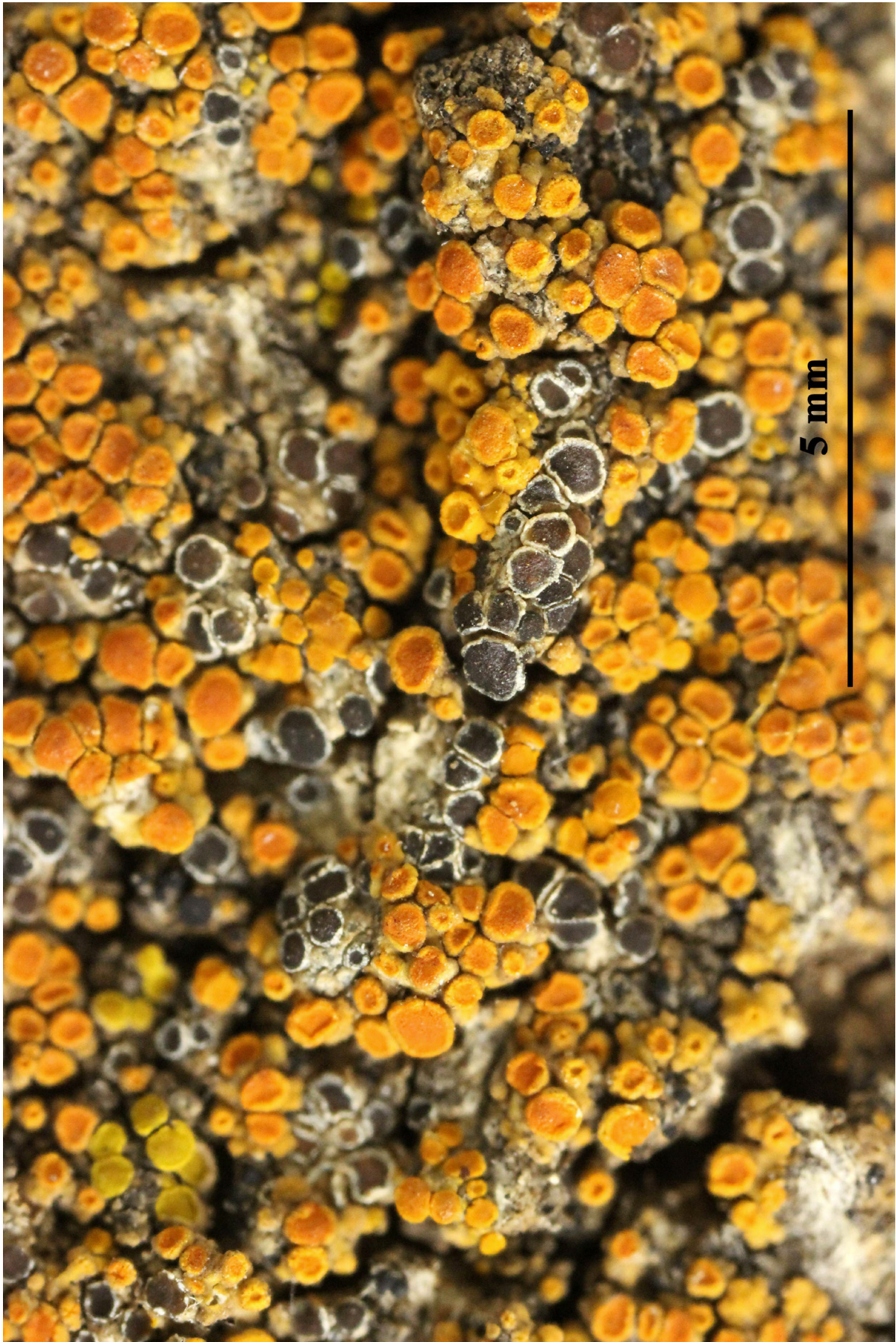
Xanthoria parietina

Xanthoria persica (J. Steiner) Szatala, Annls Mus. natn. Hung., n.s. 8: 148 (1957)

= *Xanthoria polycarpoides* var. *persica* J. Steiner 1910

= *Lazarenkoella persica* (J. Steiner) S.Y. Kondr. & Lőkös, in Kondratyuk, Kärnefelt, Lőkös, Hur & Thell, Acta Bot. Hung. 60(3-4): 383 (2018)

[VZ1223], Turcia. Sivas, ad marginem pagi Imranli (ad viam Sivas - Erzincan), ca. 40 km versus orient, a pago Zara), 1800 m. Ad corticem *Salicis*. Leg. J. Soják, 15.2-1973, det. A. Vězda. Ex A. Vězda Lichenes Selecti Exsiccati Nr., 1223.



Xanthoria persica



Xanthoria persica

Xanthoria resendei Poelt & Tav., Portug. acta biol., Sér. B 9: 302 (1968)
= *Martinjahnsia resendei* (Poelt & Tav.) S.Y. Kondr., Fedorenko, S.
Stenroos, Kärnefelt, Elix, Hur & A. Thell, in Fedorenko, Stenroos,
Thell, Kärnefelt, Elix, Hur & Kondratyuk, Biblioth. Lichenol. 108: 61 (2012)
= *Rusavskia resendei* (Poelt & Tav.) S.Y. Kondr. & Kärnefelt.

[VZ1148], Hispania. Almería. El Monsul, San José.- Siera de Gata,
30-60 m. ad lavam in litore maris. Lrg. X. Llimona, 22, 3, 1972. Ex A.
VěZDA LICHENES SELECTI EXSICCATI NR. 1148.

Thallus foliose, heteromerous, dorsiventral, closely attached, bright orange-yellow to deep orange, forming 3-8 cm wide, more or less regular rosettes. Lobes radiating, 0.4-0.6 mm wide, contiguous to separate, bifurcate or sparingly dichotomously branched, markedly convex and worm-like, stiff, the surface granulose to verrucose, with scattered paler maculae. Upper cortex palisade paraplectenchymatous; medulla white, with 17-35 µm wide chondroid strands of densely compacted hyphae; lower cortex mesodermatous paraplectenchymatous. Apothecia lecanorine/zeorine, sessile, 1-1.5(-2) mm across, with an orange, flat disc and a smooth to crenulate, usually paler, often finally excluded margin. Epithecium interspersed with orange granules reacting K⁺ purple-red; hymenium colourless, 40-60 µm high; paraphyses simple or bifurcate, swollen at tips; hypothecium colourless, underlain by a more or less continuous algal layer. Asci 8-spored, clavate, functionally unitunicate, apically thickened with a broad internal beak, the inner part of apex and external cap I⁺ blue, Teloschistes-type. Ascospores 2-celled, polarilocular, broadly ellipsoid, 8-12 x 6-8 µm, the equatorial thickening ("septum") 3-4.5 µm. Pycnidia immersed into orange warts, most frequent in central parts of thallus. Conidia ellipsoid-bacilliform, 2-3 x 0.8-1 µm. Photobiont chlorococcoid. Spot tests: K⁺ purple-red, C⁻, KC⁻, P⁻, UV⁺ intensely orange-red. Chemistry: thallus and apothecia with different anthraquinones (parietin, fallacinal, fallacinol) and three hopene-type triterpenes. ote: an apparently western Mediterranean (Macaronesia, NW Africa, Iberian Peninsula to Italy), strictly coastal silicicolous species, most frequent on steeply inclined surfaces of basic siliceous rocks in exposed situations.



Xanthoria resendei



Xanthoria resendei

Xanthoria resendei Poelt & Tav., Portug. acta biol., Sér. B 9: 302 (1968)
= *Martinjahnsia resendei* (Poelt & Tav.) S.Y. Kondr., Fedorenko, S.
Stenroos, Kärnefelt, Elix, Hur & A. Thell, in Fedorenko, Stenroos,
Thell, Kärnefelt, Elix, Hur & Kondratyuk, Biblioth. Lichenol. 108: 61 (2012)
= *Rusavskia resendei* (Poelt & Tav.) S.Y. Kondr. & Kärnefelt.

[7113], Spanien, Kanarische Inseln, Teneriffa, 1 km südöstlich von Los
Cristianos an einem Ausläufer des Mont Guaze, ca. 220 m, auf vulka-
nischem Gestein in Sukkulenten-Steppe. Leg. et det. F. Schumm,
27.12.1975, conf. A. Aptroot, 2021. Ex Herbario F. Schumm Nr. 7113.

Thallus foliose, heteromerous, dorsiventral, closely attached, bright
orange-yellow to deep orange, forming 3-8 cm wide, more or less
regular rosettes. Lobes radiating, 0.4-0.6 mm wide, contiguous to
separate, bifurcate or sparingly dichotomously branched, markedly
convex and worm-like, stiff, the surface granulose to verrucose, with
scattered paler maculae. Upper cortex palisade paraplectenchymatous;
medulla white, with 17-35 μm wide chondroid strands of densely
compacted hyphae; lower cortex mesodermatous paraplectenchyma-
tous. Apothecia lecanorine/zeorine, sessile, 1-1.5(-2) mm across, with
an orange, flat disc and a smooth to crenulate, usually paler, often
finally excluded margin. Epithecium interspersed with orange granules
reacting K⁺ purple-red; hymenium colourless, 40-60 μm high; para-
physes simple or bifurcate, swollen at tips; hypothecium colourless,
underlain by a more or less continuous algal layer. Asci 8-spored,
clavate, functionally unitunicate, apically thickened with a broad inter-
nal beak, the inner part of apex and external cap I⁺ blue, Teloschistes-
type. Ascospores 2-celled, polarilocular, broadly ellipsoid, 8-12 x 6-8
 μm , the equatorial thickening ("septum") 3-4.5 μm . Pycnidia immersed
into orange warts, most frequent in central parts of thallus. Conidia
ellipsoid-bacilliform, 2-3 x 0.8-1 μm . Photobiont chlorococcoid. Spot
tests: K⁺ purple-red, C⁻, KC⁻, P⁻, UV⁺ intensely orange-red. Che-
mistry: thallus and apothecia with different anthraquinones (parietin,
fallacinal, fallacinol) and three hopene-type triterpenes. ote: an appa-
rently western Mediterranean (Macaronesia, NW Africa, Iberian Penin-
sula to Italy), strictly coastal silicicolous species, most frequent on
steeply inclined surfaces of basic siliceous rocks in exposed situations.



Xanthoria resendei



Xanthoria resendei



Xanthoria resendei

Xanthoria steineri I.M. Lamb, J. Bot., Lond. 74: 350 (1936)

[VZ1249], Persia. Bandar Abbas. 57 km versus meridiem ab oppido Minab ad litore freti Hormuz, 26°41' bor., 57°05' orient., 5 m. in ramulis *Salvadorae* sp.. Leg. J. Soják. det A. Vězda. EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 1249.



Xanthoria steineri

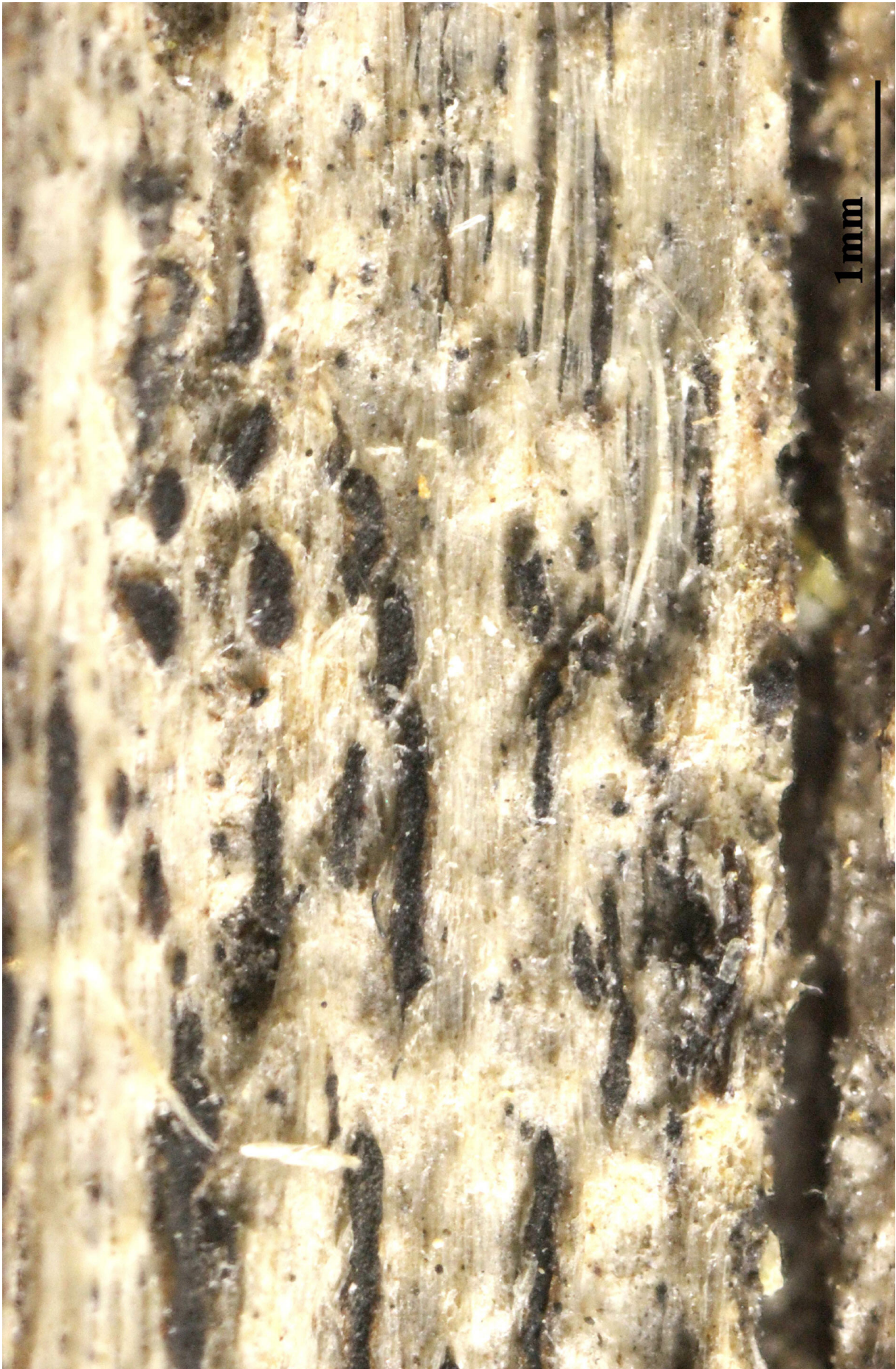


Xanthoria steineri

Xylographa abietina (Pers.) Zahlbr., Cat. Lich. Univers. 2: 151 (1922) [1924]
= *Hysterium abietinum* Pers. 1796
= *Xylographa parallela* (Ach.) Fr., Summa veg. Scand., Sectio Post.
(Stockholm): 372 (1849)

[VZ2315], Norvegia. Hordalandia: prope oppidum Granvin, loco dicto Gunnarsdalshaug. Ad lignum putrefactum. Leg. J. Havaas, 13.5.1950.- Annot.: this material was collected for "Lichens Norvegiae Occidentals Exsiccati", but never issued in that series; W. K. Culberson in litt. - EX A. VĚZDA LICHENES SELECTI EXSICCATI NR. 2315,

Thallus crustose, mostly endosubstratic and inapparent, rarely rimose or scurfy, with corticate, brown goniospores. Apothecia narrowly ellipsoid to linear, densely and evenly distributed, often following the wood grain, 0.3-1.7 x 0.1-0.28 mm, with a flat to slightly convex, dark brown to black disc and a thin, brown to black, finally excluded proper margin often visible only at the extremities. Exciple brown in outer part, colourless within, of laterally interwoven hyphae, paraplectenchymatous in vertical section, 15-37 µm wide; hymenium colourless or very pale yellowish brown, 55-110(-150) µm high, I+ blue-green turning rust red or I+ persistently blue; paraphyses strongly contorted, branched and anastomosing 1.7-2.5 µm thick at mid-level, often distally moniliform and apically swollen to (2.5-)4-6(-8) µm, the last 4-5 cells lying horizontally in knot-like tangles over the disc; hypothecium colourless to pale brown, 40-150 µm high. Asci 8-spored, clavate-cylindrical, unitunicate, the gelatinous sheaths covering the walls amyloid, the tholus lacking internal amyloid structures, similar to that in *Trapelia*. Ascospores 1-celled, hyaline ellipsoid, 10-16.5 x (3.5-)6-7.5(-8.5) µm. Pycnidia rare, partially immersed, globose. Conidia filiform, curved, 9-14 x 0.5-0.7 µm. Photobiont chlorococcoid. Spot tests: thallus K- or K+ yellowish (microscopic section!), C-, KC-, P- or P+ yellow. Chemistry: stictic acid or without lichen substances. - Note: a cool-temperate to boreal-montane, circumpolar species found on hard wood, on poles, fences and on flanks of decorticated boles, especially of conifers.



Xylographa abietina



Xylographa abietina

Xylographa trunciseda (Th. Fr.) Minks ex Redinger, Rabenh. Krypt.-Fl.,
Edn 2 (Leipzig) 9(2.1): 216 (1938)
= *Lecidea trunciseda* Th. Fr. 1874

[VZ2100], Suecia. Värmland, Dalby Paroecia, Brattmon, prope Digerfallet, 200 m. Ad trabem decorticatam prope cataractam. Leg. L-E. Muhr (no. 8041), 17.12.1985. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 2100.

Thallus crustose, endosubstratic, with corticate, 10-40 µm wide gonioscysts. Apothecia rugby-ball shaped (roundish to narrowly elliptical), often regenerating in chains from the outer tips of empty excipular shells, 0.2-3.9 x 0.09-0.24 mm, with a concave to flat, pale to dark brown disc, and a thin, brown, inconspicuous margin. Exciple of laterally interwoven hyphae, paraplectenchymatous in vertical section, 20-45(-67) µm wide, pale brown in outer part, colourless within; hymenium colourless to pale brown, easily separating from exciple, 60-85 µm high, I+ blue-green, then rust red; paraphyses slender, sparsely branched, 1.2-2 µm thick at midpoint, apically thickened to 3.5 µm, the apical cells sprawling over the disc; hypothecium colourless, 30-50(-70) µm high. Asci 8-spored, clavate-cylindrical, unitunicate, the gelatinous sheaths covering the walls amyloid, the tholus lacking internal amyloid structures, similar to that in *Trapelia*. Ascospores 1-celled, hyaline, ellipsoid, (8.5-)10-11(-13) x 4.5-7 µm. Photobiont chlorococcoid. Spot tests: K-, C-, KC-, P-. Chemistry: confriesiiic acid, or without lichen substances. - Note: on rotting wood, mostly of conifers, usually in the montane and subalpine belts; certainly more widespread in the Alps.



Xylographa trunciseda



Xylographa trunciseda

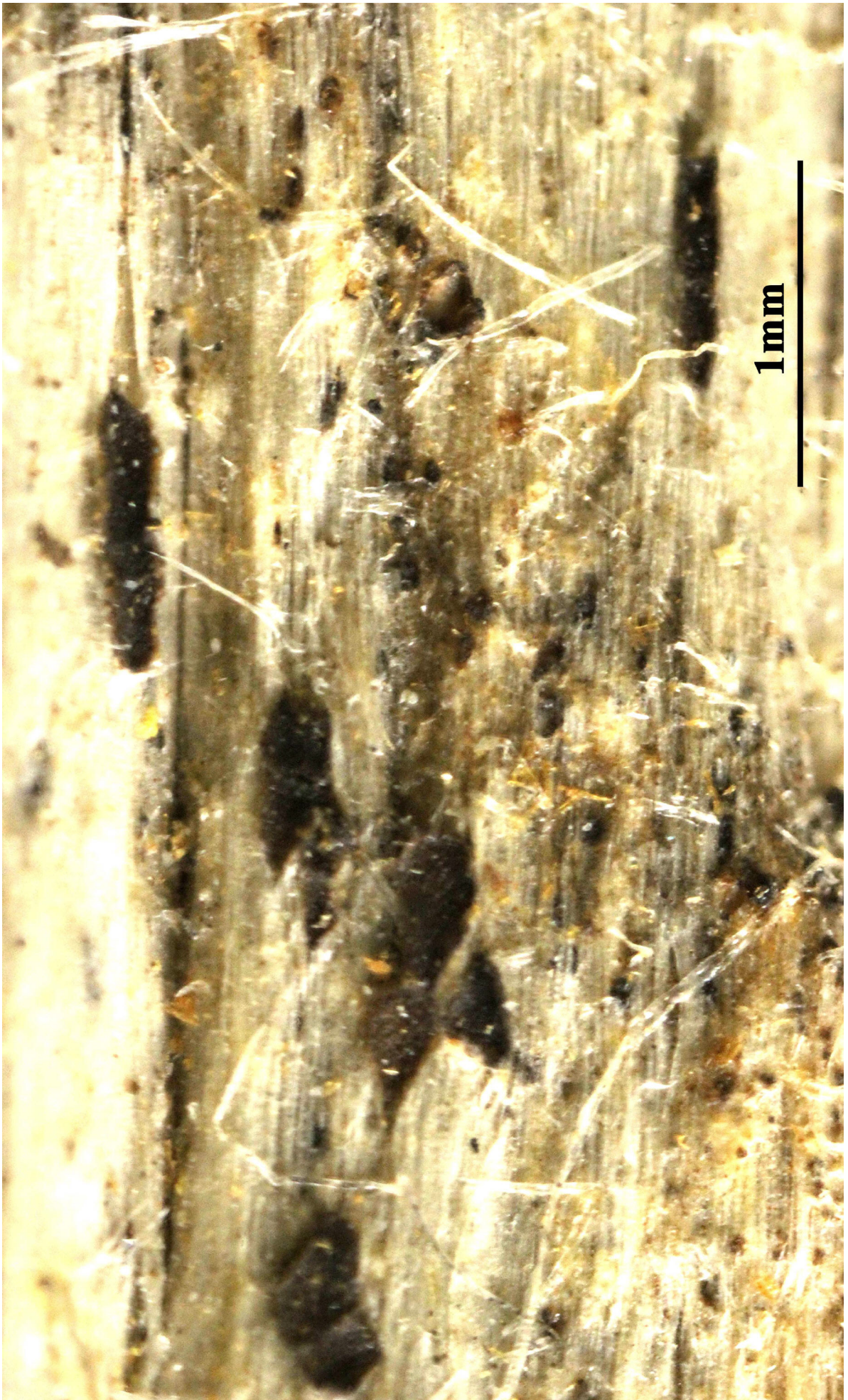
Xylographa vitiligo (Ach.) J.R. Laundon, Lichenologist 2: 147 (1963)
= *Spiloma vitiligo* Ach. 1803

[VZ1478], Magna Britannia. Caledonia: Perthshire. Black Wood of Rannoch, 250 m. Ad lignum *Pini silvestris*. Leg. B. J. Coppins, 24.3.1974. EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 1478.

Thallus crustose, endosubstratic to thinly episubstratic, forming endoxylic tubercles which burst open into concave to slightly convex soralia. Soralia rounded to fusiform, 0.2-0.6(-1) x 0.2-0.3(-0.8) mm in diam., often lacking a strong internal mycelial cushion, at first often brown or grey-mottled due to pigmentation of the external soredia, later more or less dirty white, often confluent and forming elongate, several mm long patches; soredia globose, with a more or less distinct paraple-ctenchymatous wall, 19-45 µm across, becoming conglutinated into colourless or brown, 22-50(-70) µm wide consoredia. Apothecia rare, solitary or in up to 3 mm wide clusters, more or less rounded, ellipsoid or fusiform, rarely substellate, usually straight, occasionally slightly curved, 0.3-0.6 x 0.1-0.3 mm, with a concave to flat, greyish white to brown disc, and an often reflexed, brown, often glossy proper margin. Exciple brown in outer part, colourless within; epithecium brown; hymenium colourless, 72-100 µm high; paraphyses 1-1.5 µm thick at mid-level, the apical cells up to 2.5(-3.5) µm wide; hypothecium colourless. Ascospores 1-celled, hyaline, elongate with rounded ends to ellipsoid, (8-)10-14(-16.5) x 4-7.5 µm. Photobiont chlorococcoid. Spot tests: soralia K+ yellow, C-, KC-, P+ yellow-orange. Chemistry: stictic acid plus traces of satellites. - Note: a mainly boreal-montane species found on decaying, decorticated but still hard stumps, mostly of conifers, especially near the base, or on fallen trunks, with optimum near treeline.



Xylographa vitiligo

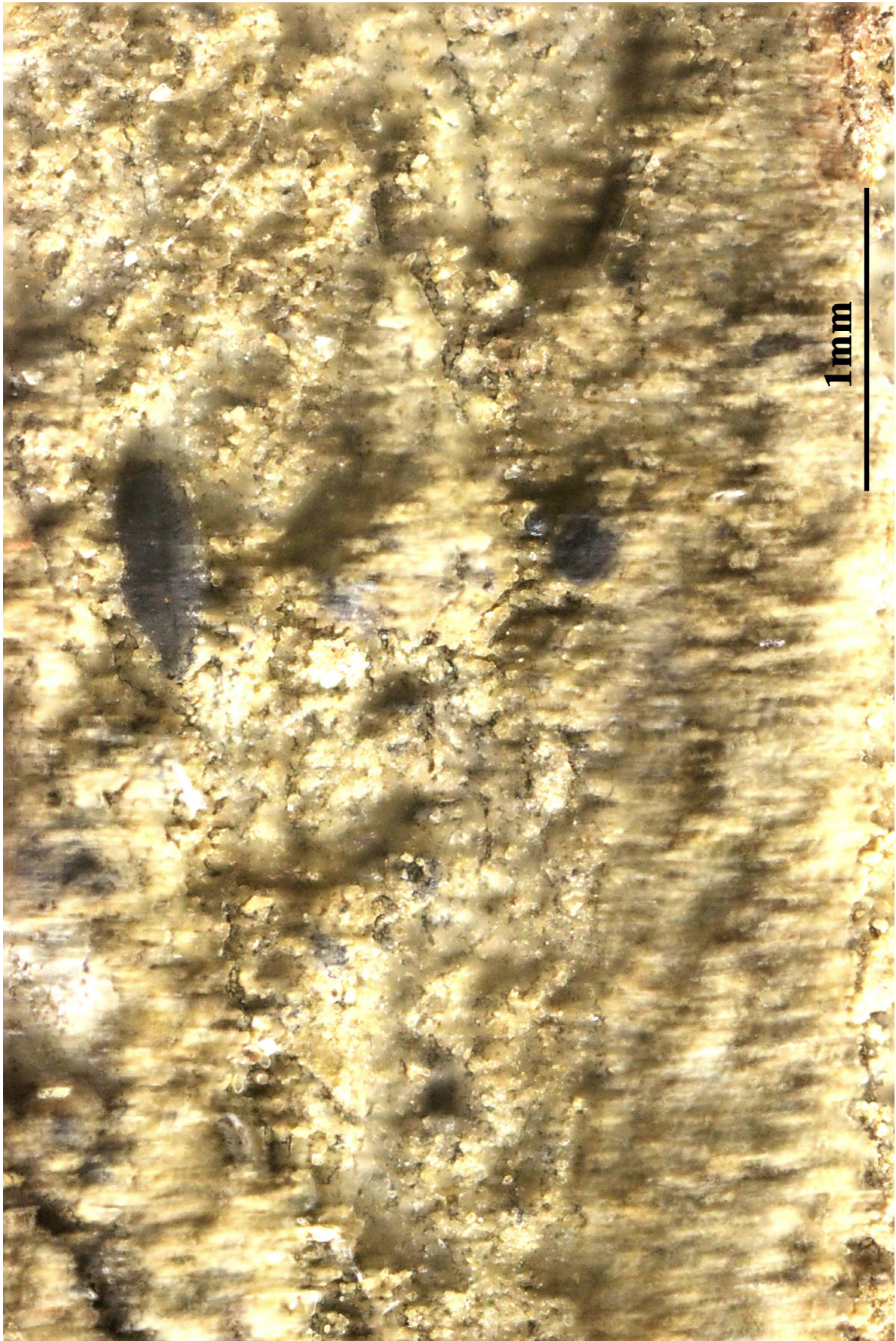


Xylographa vitiligo

Zamenhofia stoechadiana (F. Rose & Cl. Roux) Clauzade & Cl. Roux
, Bull. Soc. bot. Centre-Ouest, Nouv. sér., num. spec. 7: 830 (1985)
= *Porina stoechadiana* F. Rose & Cl. Roux 1982
= *Zamenhofia coralloidea* (P. James) Clauzade & Cl. Roux;

[VZ2127], Gallia. Provincia (Insulae Stoechades), haud procul ab Ar-
gentea Ora, 20 m. Ad truncum arboris (*Arbutus unedo*) Leg. Cl. Roux.
EX A. VěZDA LICHENES SELECTI EXSICCATI NR. 2127.

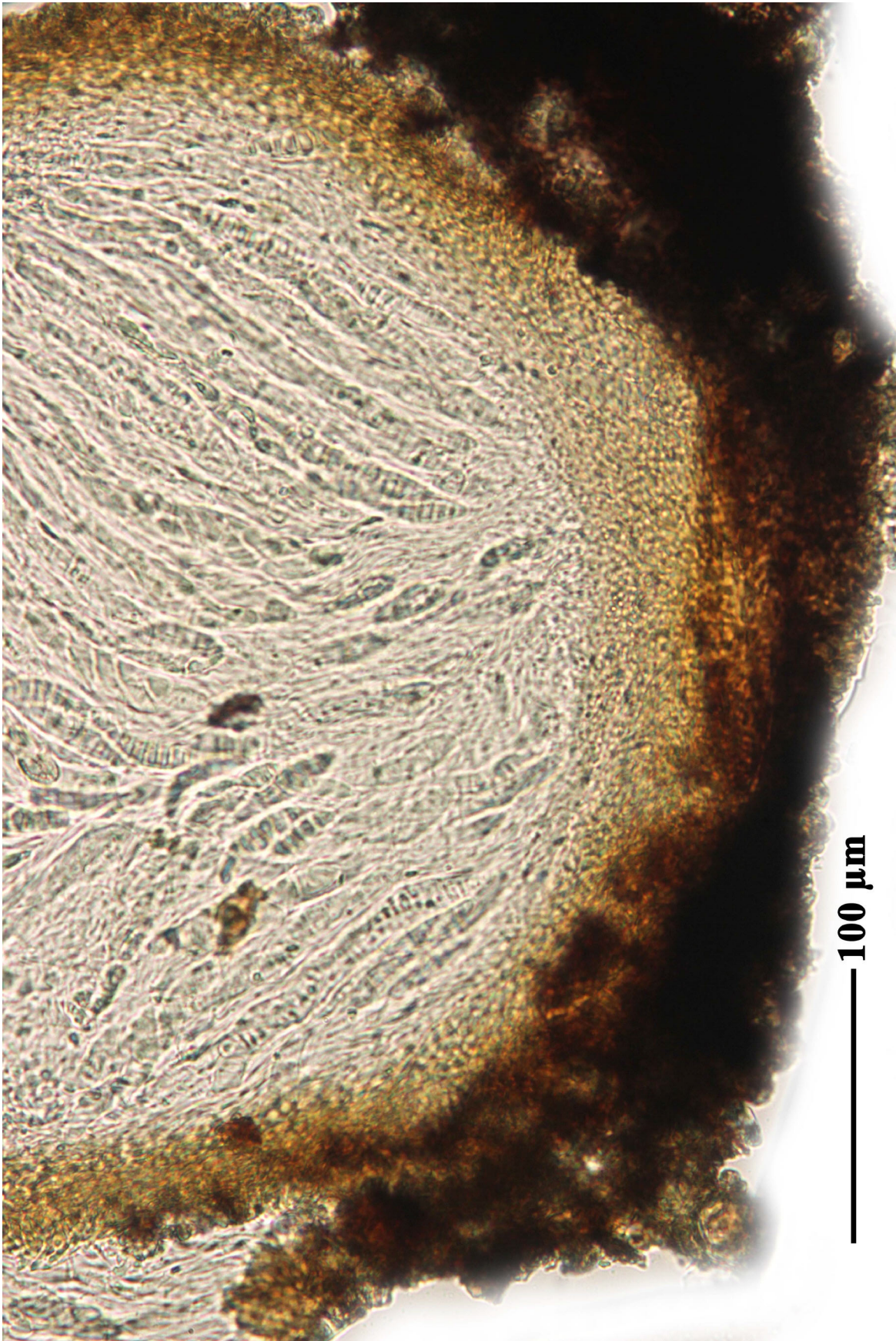
Thallus crustose, episubstratic, grey with a pinkish hue when fresh, isidiate. Isidia usually crowded, 0.1-0.2 x 0.04-0.07 mm, simple or rarely branched, elongate-ovoid to cylindrical, the apex often paler, formed of a tuft of hyaline hyphae resembling thin hairs. Perithecia black, 0.3-0.4 mm across, scattered, semi-immersed in the thallus or sometimes not obviously associated with the thallus. Involucrellum dark brown, K+ greenish blue to blackish, S+ purple-red, N+ orange to reddish brown; exciple yellow to brownish yellow (Porina-yellow pigment), K+ golden brown; hamathecium of paraphyses and simple or rarely branched, c. 1 µm thick paraphyses, the hymenial gel I-, K/I-. Asci 8-spored, clavate-cylindrical, thin-walled, functionally unitunicate, I-, K/I-, the apex truncate without a refractive chitinous ring. Ascospores (6-)9-11(-12)-septate, hyaline, elongate-ellipsoid, (35-)40-57(-65) x (5-)8-13(-15) µm. Photobiont trentepohlioid. Spot tests: thallus K-, C-, KC-, P-, UV-. Chemistry: thallus without lichen substances. - Note: a humid subtropical to Mediterranean-Atlantic lichen found on old, moderately sheltered trunks (e.g. of *Quercus ilex*) in humid areas, with a clearly Tyrrhenian range in Italy.



Zamenhofia stoechadiana



Zamenhofia stoechadiana



Zamenhofia stoechadiana



Zamenhofia stoechadiana



Zamenhofia stoechadiana

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