F. Schumm (2025):

Images of Lichens Vol. 21
Haematomma



ARCHIVE FOR LICHENOLOGY Vol. 62, ISSN 1868-4173
online VI. 2025

In this book, I include illustrations of all the exsiccates of the genus Haematomma from my lichen herbarium. The numbers in [..] are the numbers of the bags in my private lichen herbarium F. Schumm in Wangen out of which the images are taken.

For the descriptions I consulted and used mainly:

Awasthi, DD. (1991): A key to the Microlihens of India, Nepal and Sri Lanka. - Bibliotheca Lichenologifa Band 40.

Brodo,I., Sharnoff, S. (2001): Lichens of North America.- Yale Universit Press.

Kalb, K. & Staiger, B. (1995): Die Flechtengattung Haematomma. - Bibliotheca Lichenologica 59:1-198.

Miao, C., Tang,R., Dong.L. Ren, Z. & Zhao, Z. (2018):Haematomma pluriseptsatum sp. nov. from China.- Mycotaxon 134.

Messuti, M. & Rosa, I. (2009): Notes on the Genus Haematomma in Argentinia. - Darwiniana 47(2): 297-308.

Rogers, R. W. (1982) The corticolous species of Haematomma in Australia. - Bryologist 14:115-129.

Rogers, R. W. (1985) Additional notes on Haematomma in Australia. - Lichenologist 17: 307-309.

Rogers, R. W. & Bartlett, J. K. (1986) The lichen genus Haematomma in New Zealand. - Lichenologist18:247-255.

Rogers, R. W. & Hafellner, J. (1988): Haematomma and Ophioparma two superficially similar Genera of lichenized Fungi.- Lichenologist 20(2): 167-174.

I often used also the excellent descriptions that are provided in Prof. Nimis ITALIC 7.0 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, 06.2025

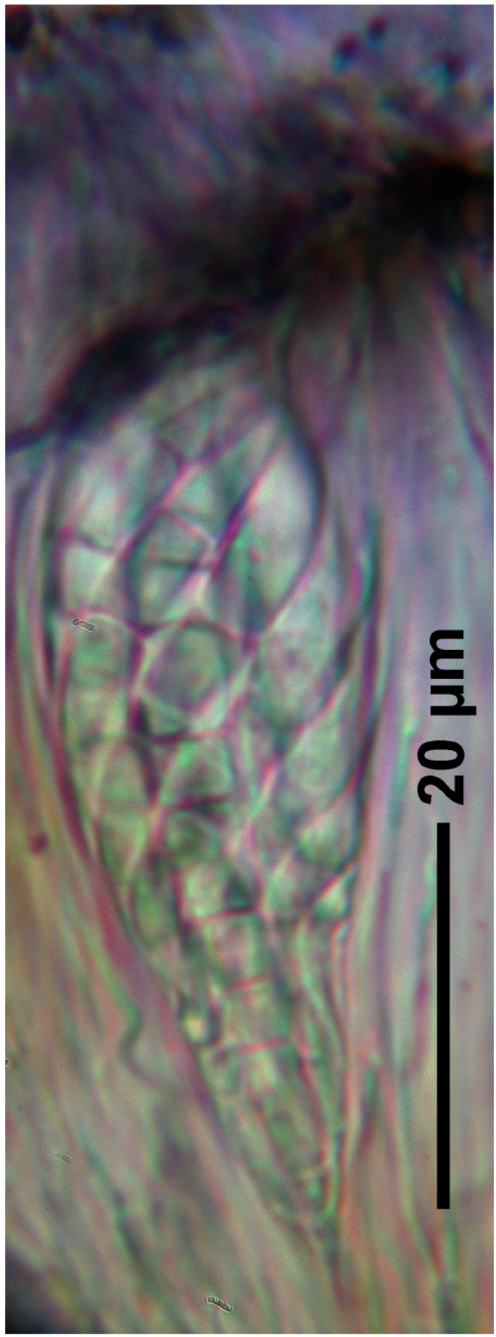
Haematomma africanum (J. Steiner) C.W. Dodge, Beih. Nova Hedwigia 38: 39 (1971)
= *Haematomma bubalinum* R.W. Rogers, Lichenologist 17(3): 308 (1985)
= *Haematomma puniceum var. africanum* J. Steiner, Bull. Herb. Boissier, 2 sér. 7: 641 (1907)

[7424], Philippinen, Negros, Prov. Negros Oriental, Mt. Talinis (Cuernos de Negros), Lunga Nature Trail von Valencia Barangay Lunga (9°16.676' N, 123°13.839' E) bis zum Camp Vendiola (09°16.281' N, 123°11.410' E), appr. 740 m. Leg. F. Schumm, 09.08.2000, det. F. Schumm, 2008.

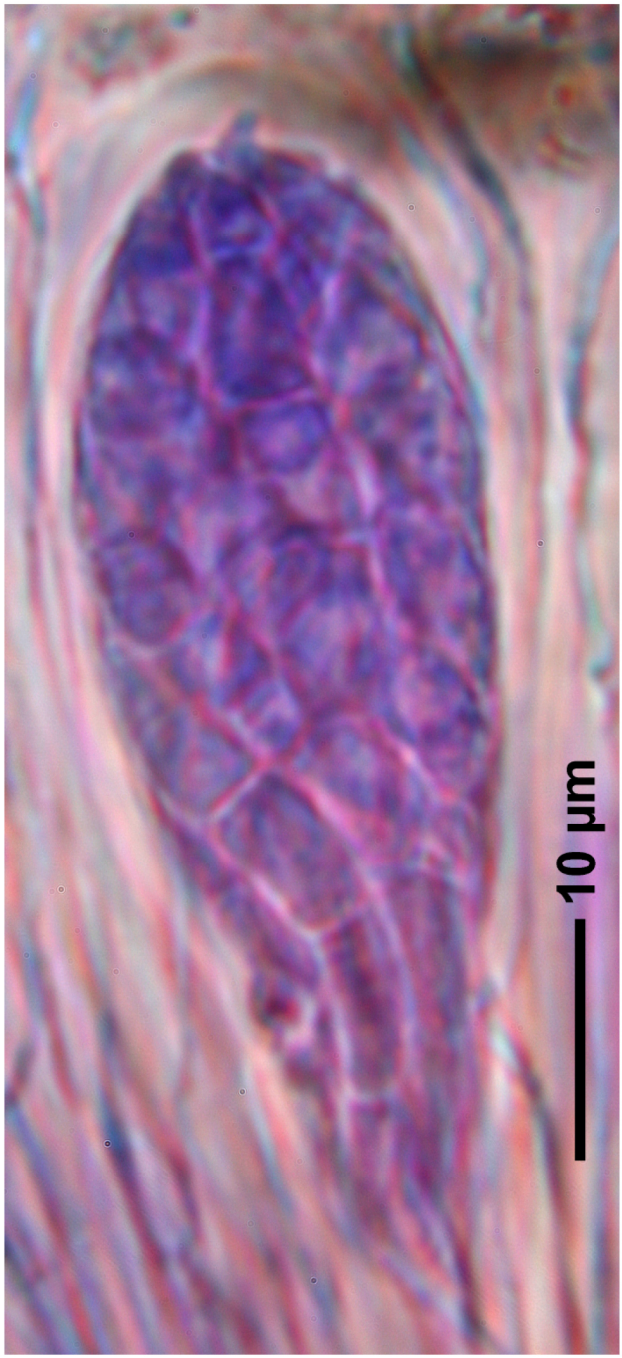
Thallus whitish to greenish grey, even or warty. Soredia and isidia absent. Apothecia sessile, cinnabar red, sometimes yellowish pruinose, 0.5-2 mm wide. Epithecium with dark red pigment, K+ blue-violet, but after short time becoming colourless. Ascospores hyaline, 8/ascus, 11-13(-20)-cellular, 45-80 x 4-5.5 µm, straight or „S"-curved. Chemistry: atranorin, haematommone, placodiolic acid. Pantropical. Lit. Staiger & Kalb (1995).



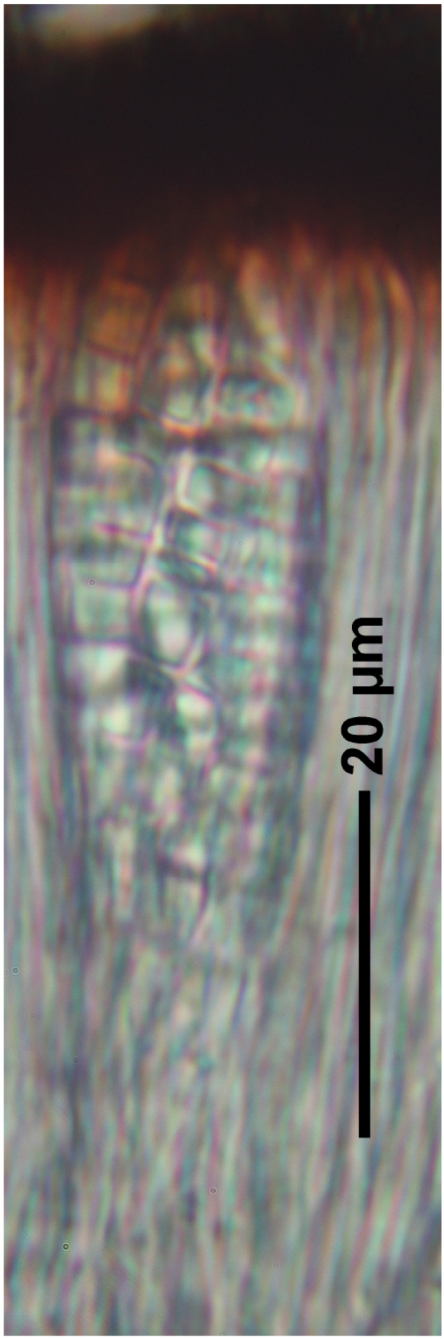
Haematomma africanum



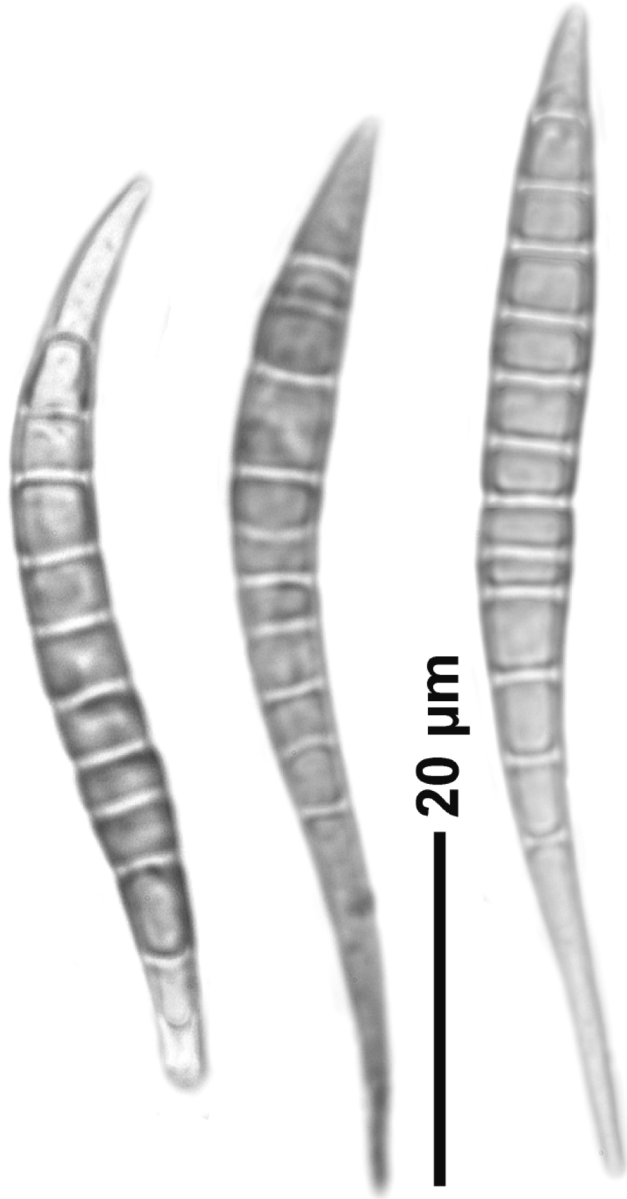
Haematomma africanum



Haematomma africanum



Haematomma africanum

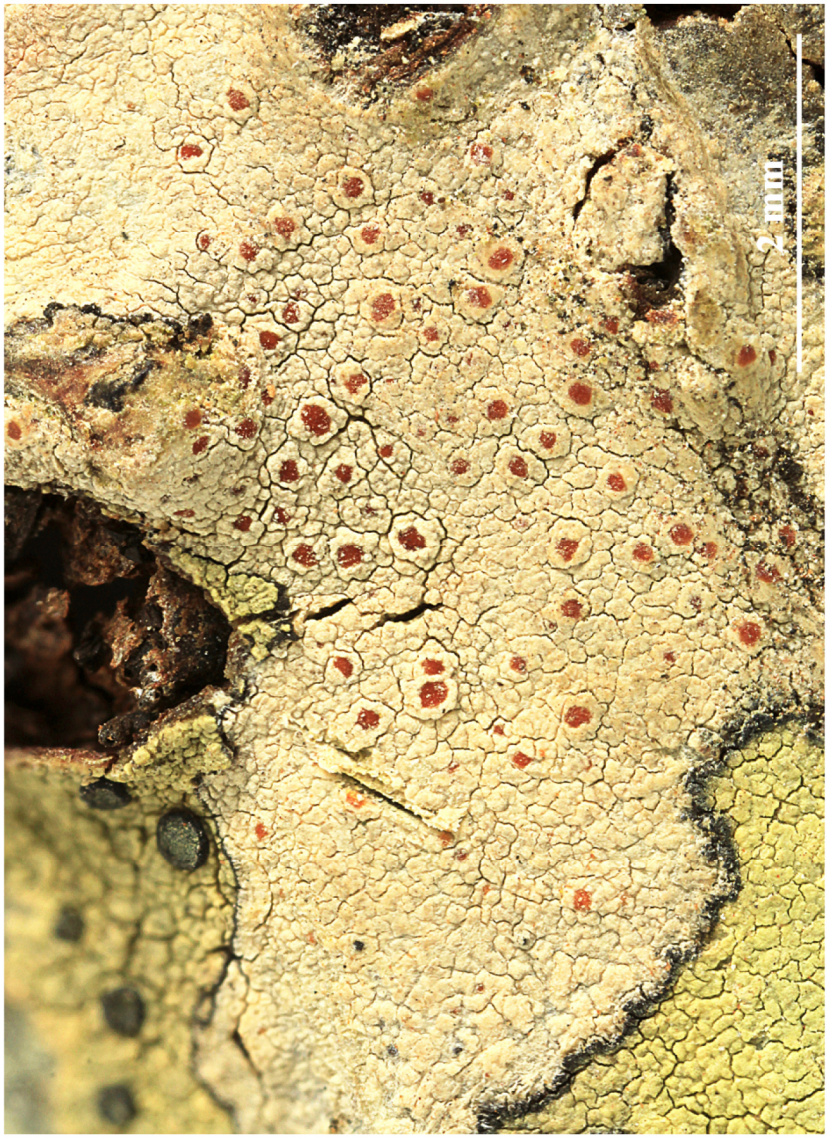


Haematomma africanum

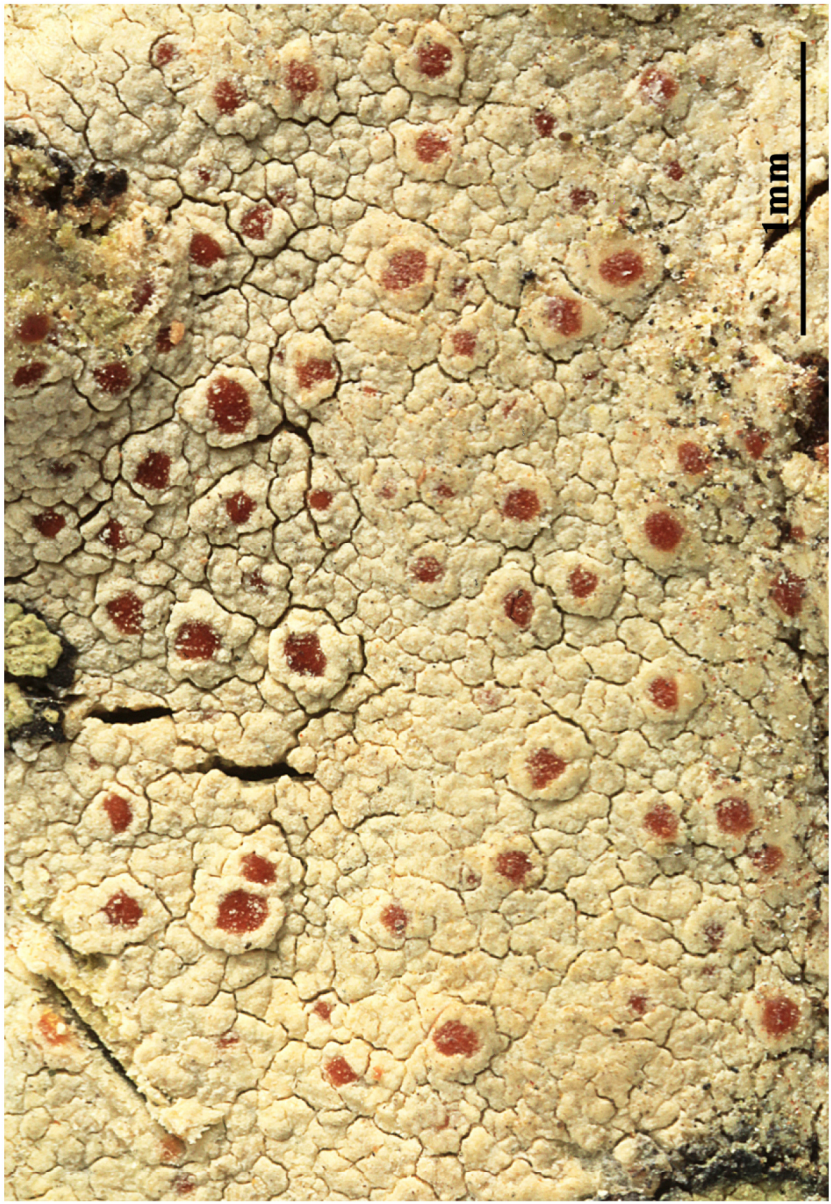
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[ABL48005F], Brazil, Sergipe, Poço Redondo, Cajueiros, Trilha Ecoparque. 09°39'43" S, 45°40'18" W, 30 m. On twig bark in Caatinga. Leg. M. Cáceres & A. Aptroot, (no. 48005F), 15. November 2018, det. A. Aptroot 2018.
- Thallus whitish, warty, without soredia. Apothecia sessile, 0.5-2 mm diam. Disc ± yellowish pruinose. Spores 8/ascus, 9-19-septate, 45-80 x 4-7 µm. Chemistry: atranorin, placodiolic acid, haematommon.

Thallus whitish to greenish grey, even or warty. Soredia and isidia absent. Apothecia sessile, cinnabar red, sometimes yellowish pruinose, 0.5-2 mm wide. Epithecium with dark red pigment, K+ blue-violet, but after short time becoming colourless. Ascospores hyaline, 8/ascus, 11-13(-20)-cellular, 45-80 x 4-5.5 µm, straight or „S“-curved. Chemistry: atranorin, haematommone, placodiolic acid. Pantropical. Lit. Staiger & Kalb (1995).



Haematomma africanum

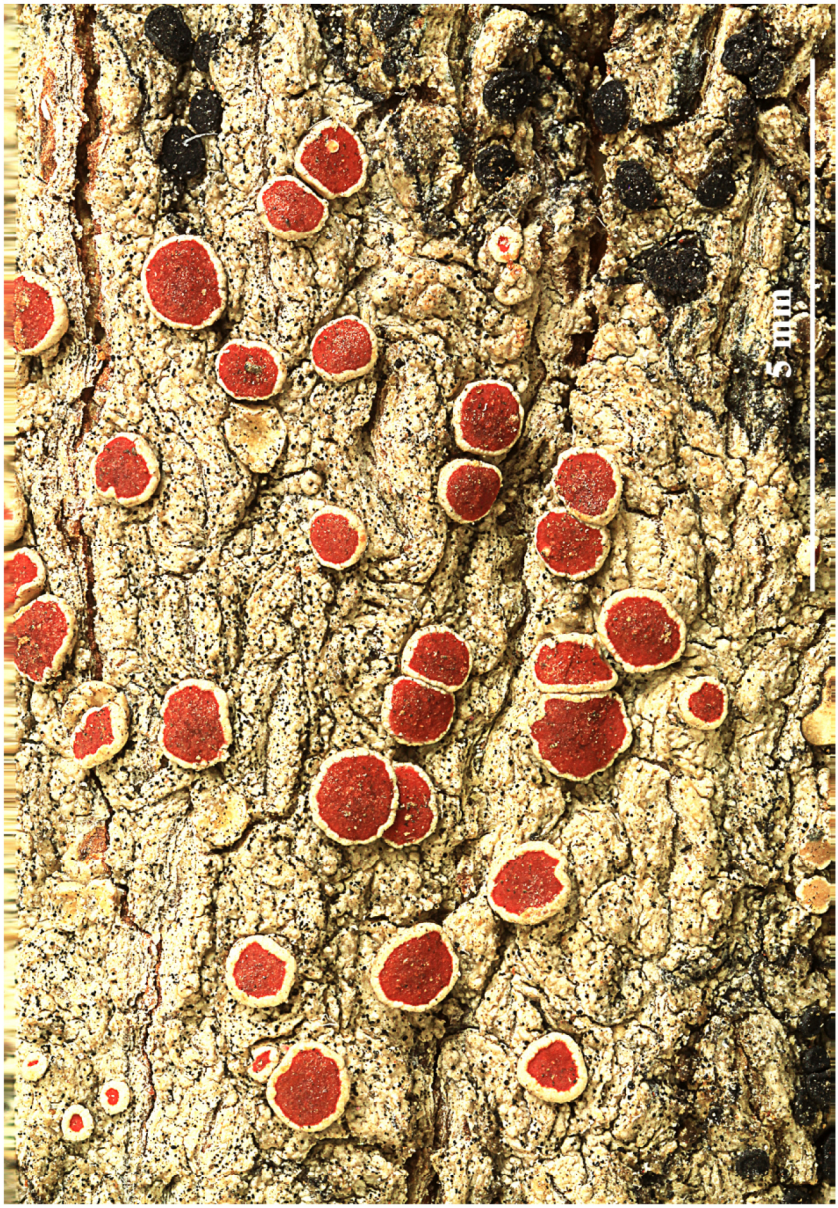


Haematomma africanum

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[LN017] Brazil. São Paulo: Serra da Mantiqueira near Campos do Jordão, c. 150 km NE of São Paulo, on the trunk of an unidentified deciduous tree at the edge of a humid cerrado, 1700 m, 22°45' S, 45°35' W, 25. V. 1978, leg. K. Kalb & G. Plöbst, 1978. EX K. KALB: LICHENES NEOTROPICI NR. 17. Chemistry: atranorin, placodiolic acid, haematommon, anal.: B. Staiger & K. Kalb. (Distributed misidentified as Haematomma puniceum (Sm. ex Ach.) Massal.)

Thallus whitish to greenish grey, even or warty. Soredia and isidia absent. Apothecia sessile, cinnabar red, sometimes yellowish pruinose, 0.5-2 mm wide. Epithecium with dark red pigment, K+ blue-violet, but after short time becoming colourless. Ascospores hyaline, 8/ascus, 11-13(-20)-cellular, 45-80 x 4-5.5 µm, straight or „S"-curved. Chemistry: atranorin, haematommone, placodiolic acid. Pantropical. Lit. Staiger & Kalb (1995).



Haematomma africanum



Haematomma africanum

Haematomma collatum (Stirt.) C.W. Dodge, Beih. Nova Hedwigia 38: 41 (1971)

= *Haematomma puniceum* var. *collatum* (Stirt.) Zahlbr., Cat. Lich. Univers. 5: 770 (1928)

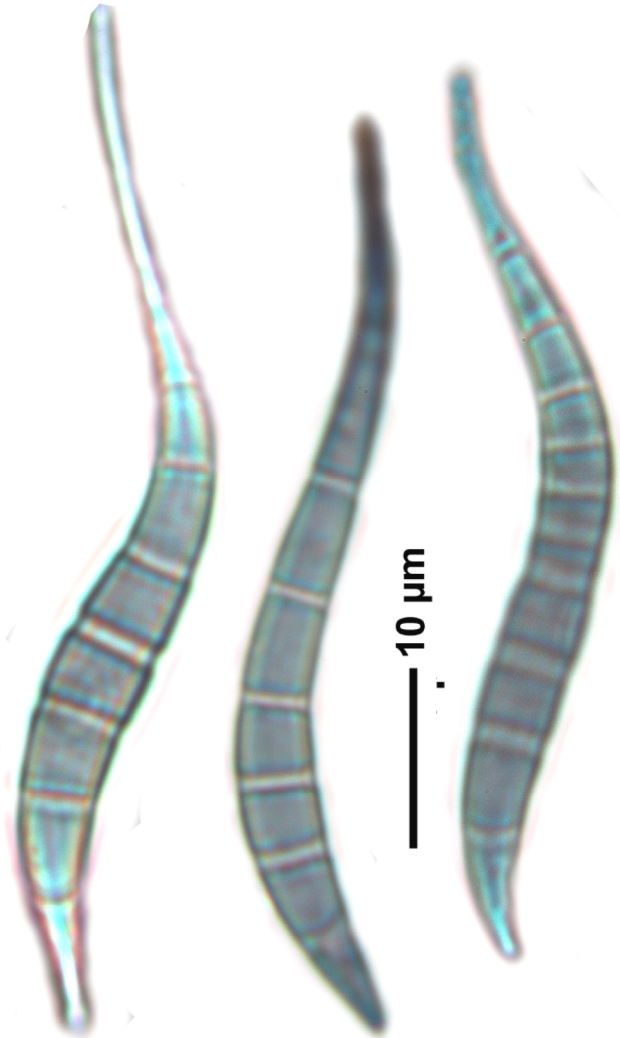
= *Lecanora punicea* var. *collata* Stirt., Trans. Glasgow Soc. Fld Nat. 5: 216 (1877)

[7651], Philippinen, Cebu, Prov. Cebu, auf dem Tops ca. 7 km NW von Cebu-City, bei 660 m. Leg. F. Schumm, 14.08.2000, det. F. Schumm 2008.

Thallus pale to yellowish grey, small warty. Isidia and Soredia absent. Apothecia sessile, 1-1.5 mm wide. Disc red, not pruinose. Thallin margin strongly crenate. Epithecium and upper hymenium with red pigment, K+ durable red-violet (russulone). Ascospores hyaline, 8/ascus, „S"-shaped, 9-11-cellular, 50-70 x 4-4.5 µm. Chemistry atranorin, sphaerophorine, russulone. Corticolous, pantropical.



Haematomma collatum



Haematomma collatum

Haematomma collatum (Stirt.) C.W. Dodge, Beih. Nova Hedwigia 38: 41 (1971)

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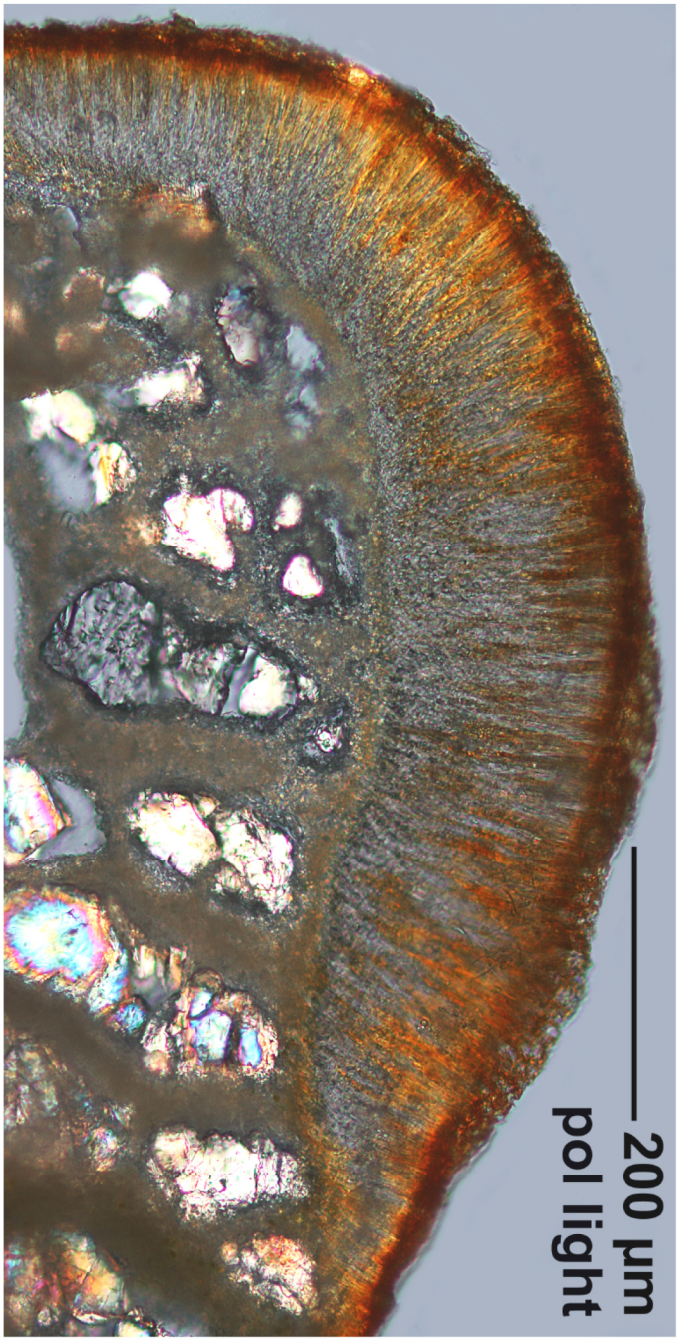
= *Lecanora punicea* var. *collata* Stirt., Trans. Glasgow Soc. Fld Nat. 5: 216 (1877)

[15525], La Reunion, Anse des Cascades, meist auf Cocos-Palmen; 21,18511° S, 55,82711° E, 0 m. Leg. F. Schumm & J.P. Frahm, 14.09.2009, det. F. Schumm, 02.2010.

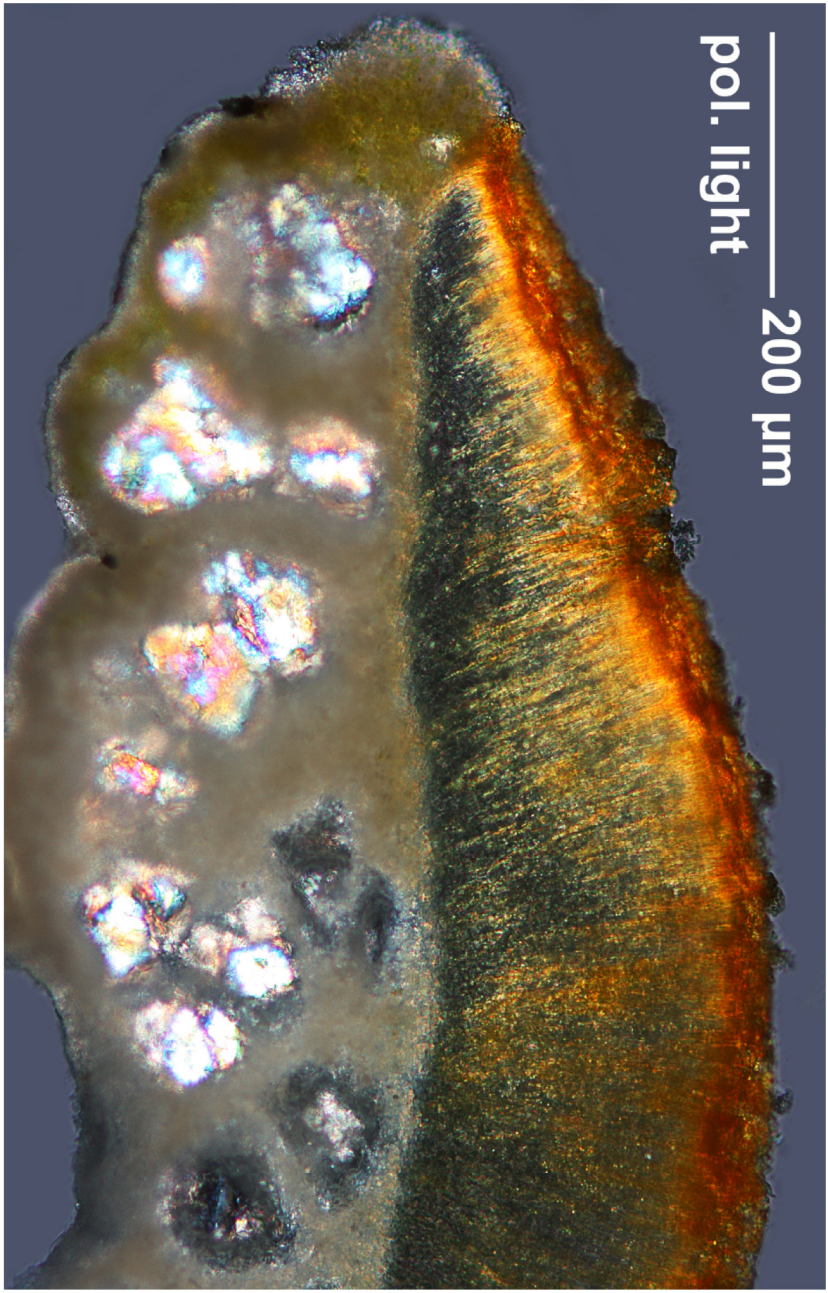
Thallus warty granulose. Soredia and isidia absent. Apothecia red. Epithecium with russulone (K+ durable red solution with tiny red crystals). Ascospores 52-53 x 5-6 µm, appr. (5-)7(-8)-septate, curved. Chemistry: thallus UV-, atranorin (min), russulone sphaerophorin, isosphaeric acid.



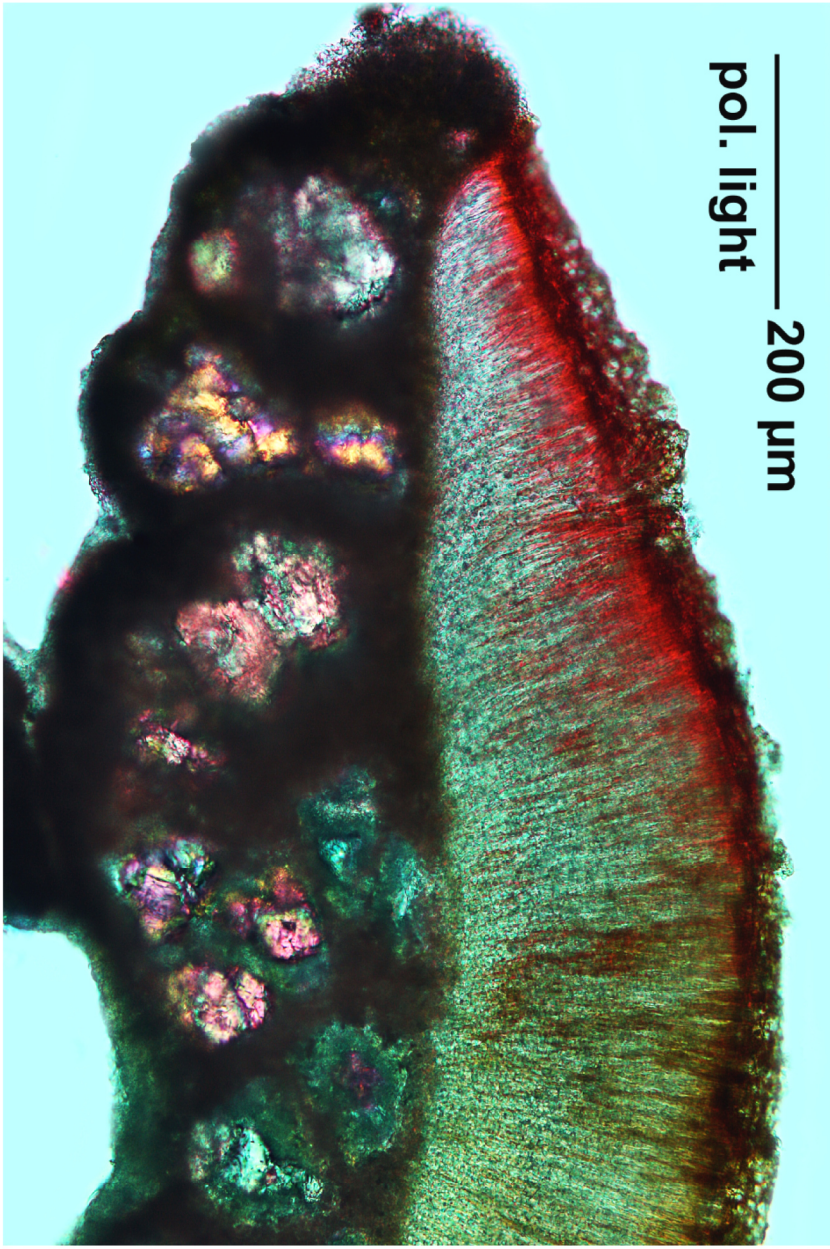
Haematomma collatum



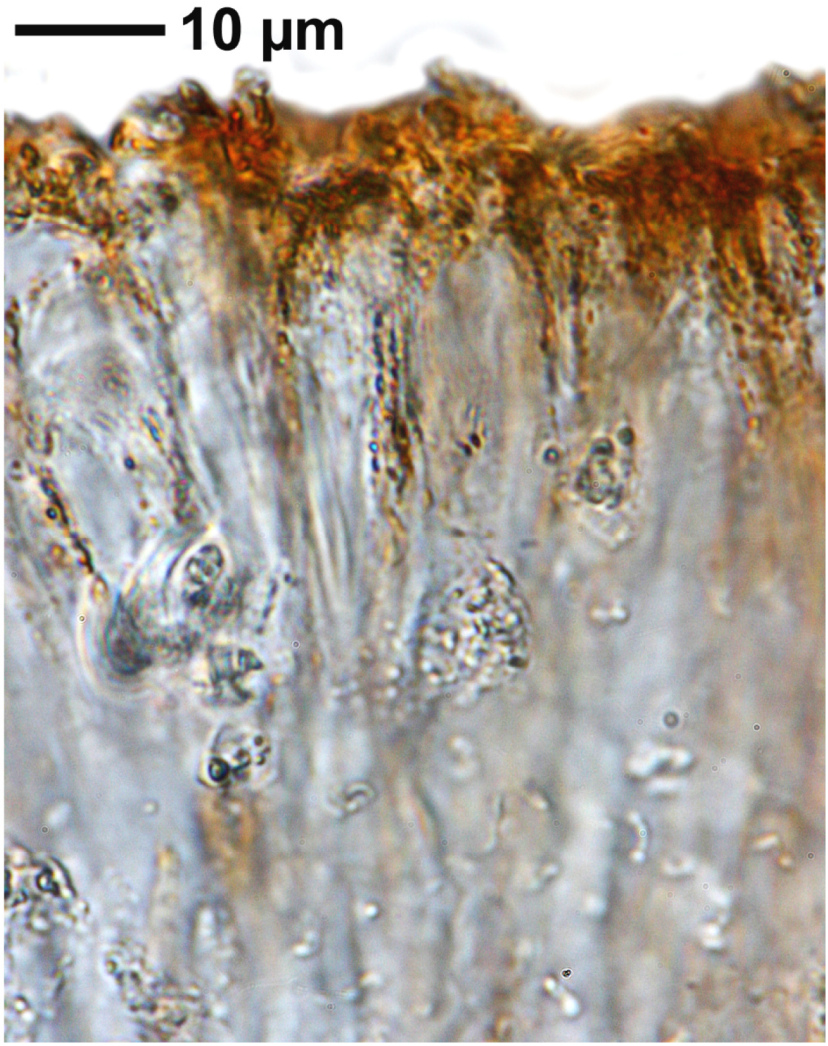
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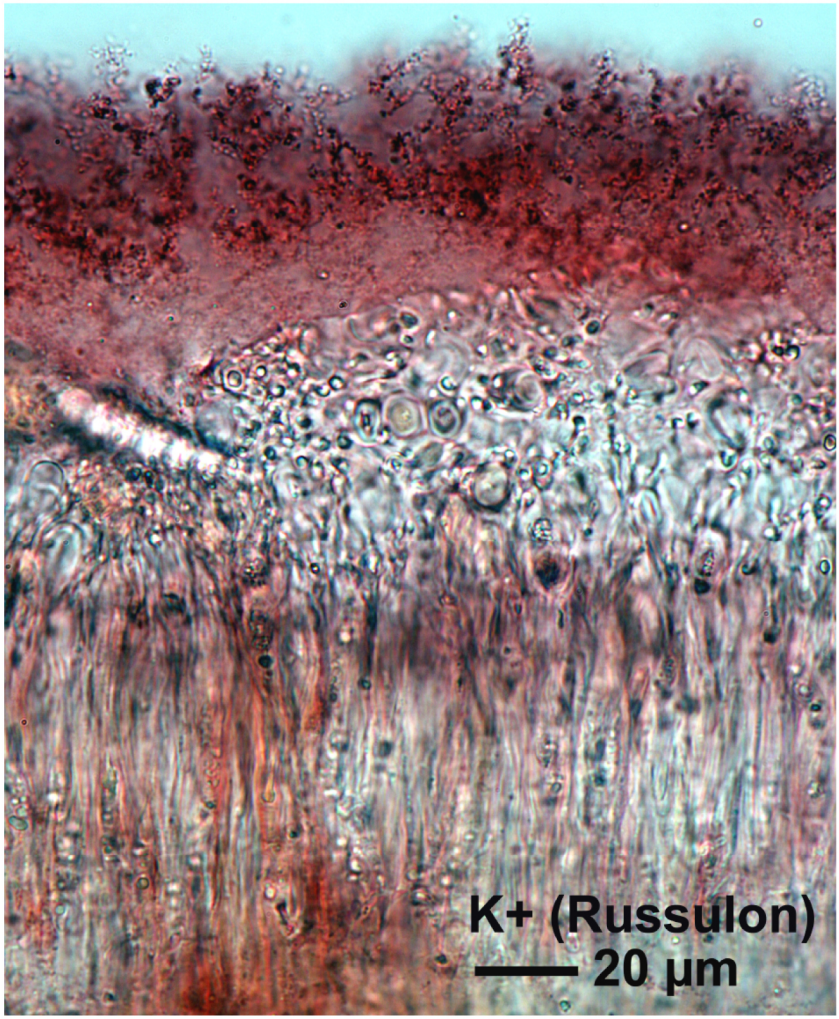
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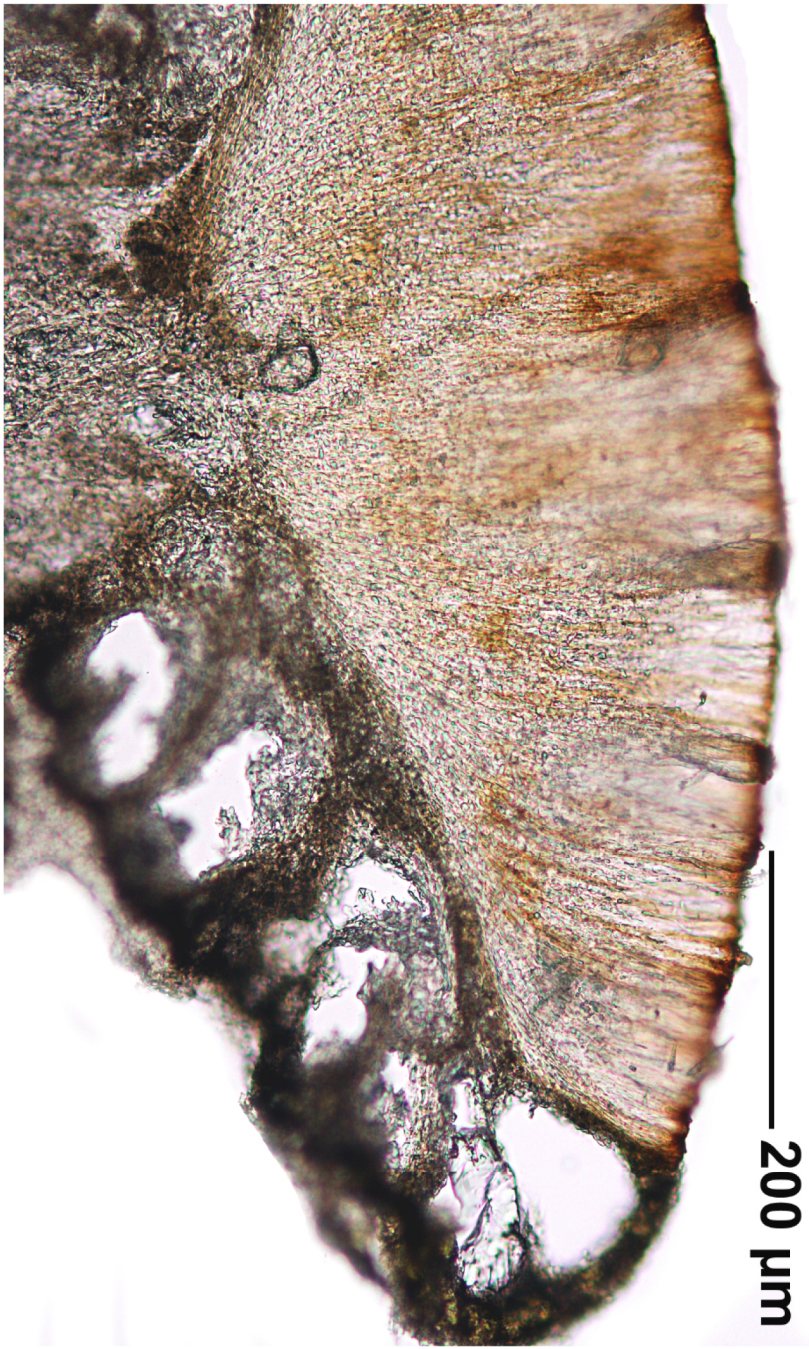
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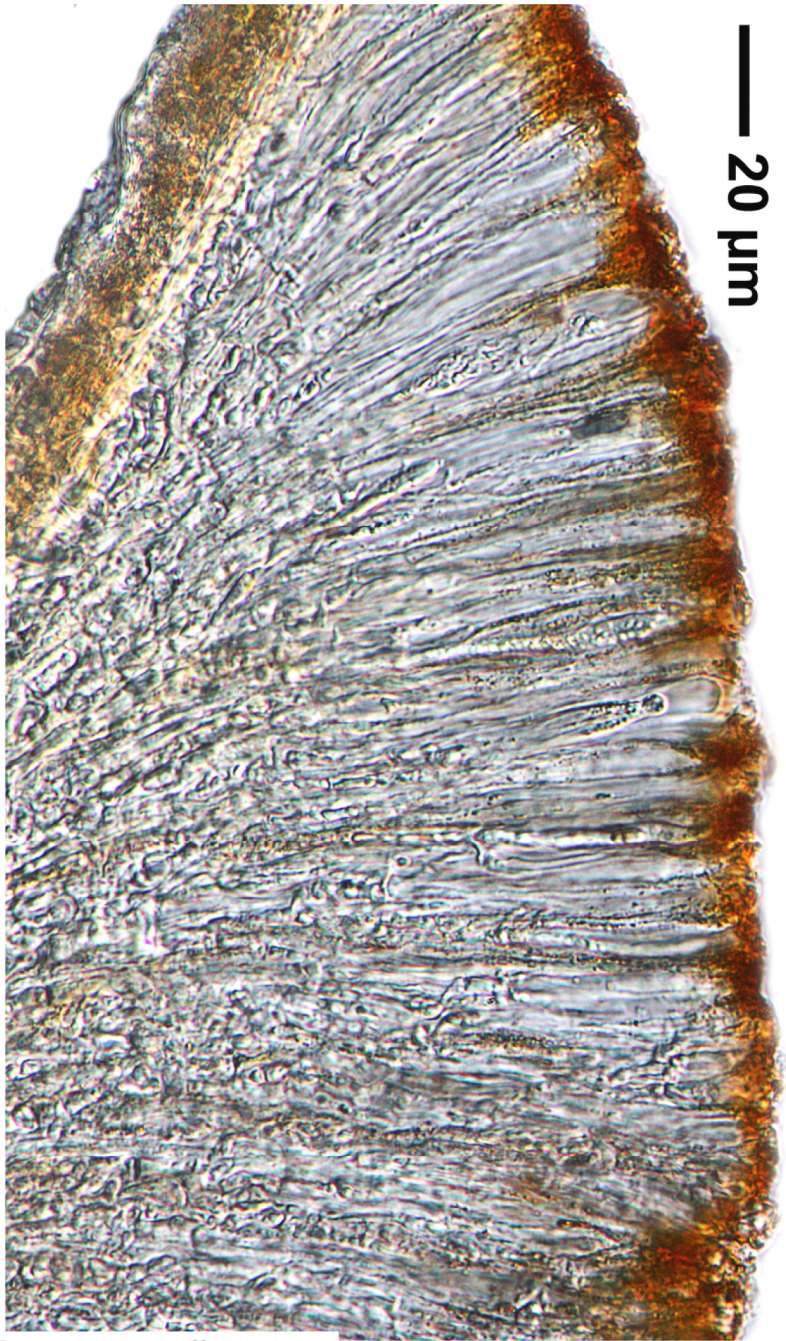
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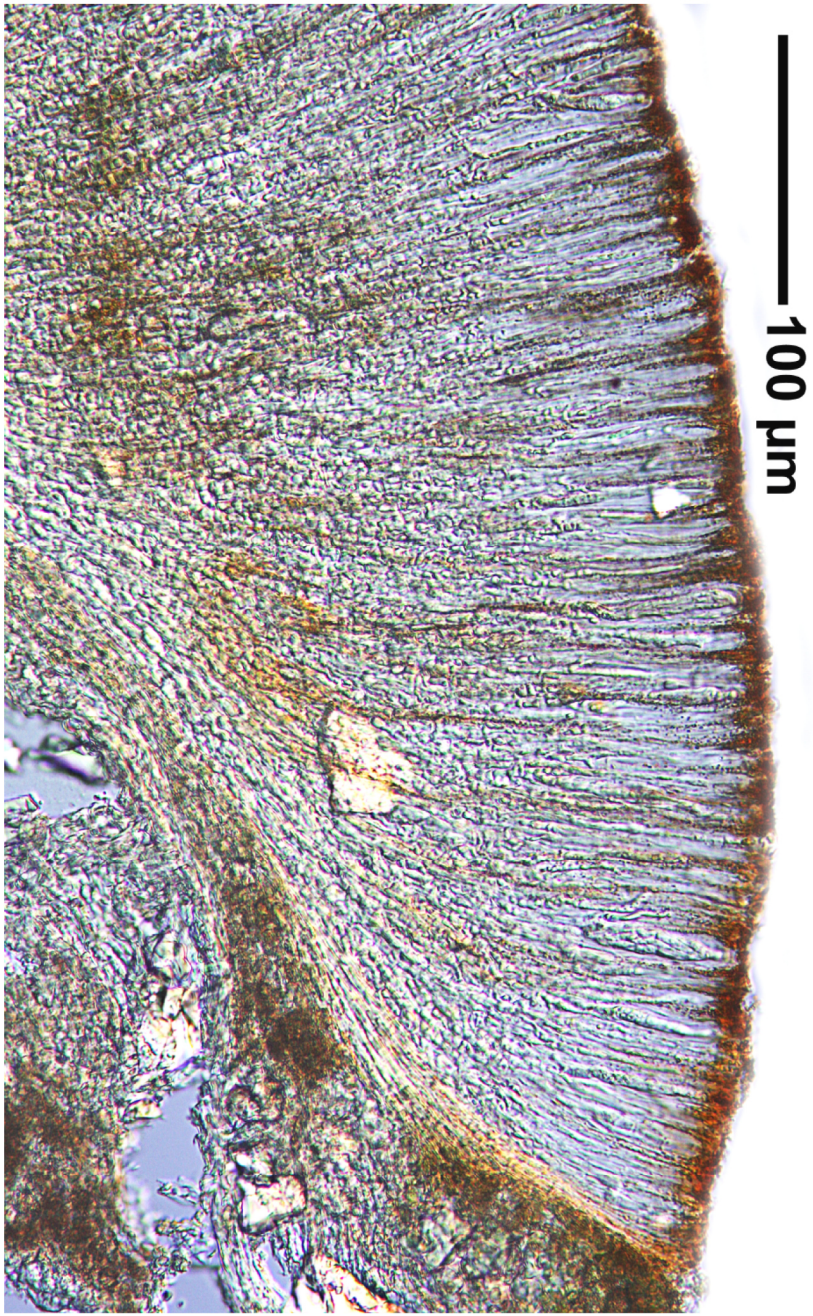
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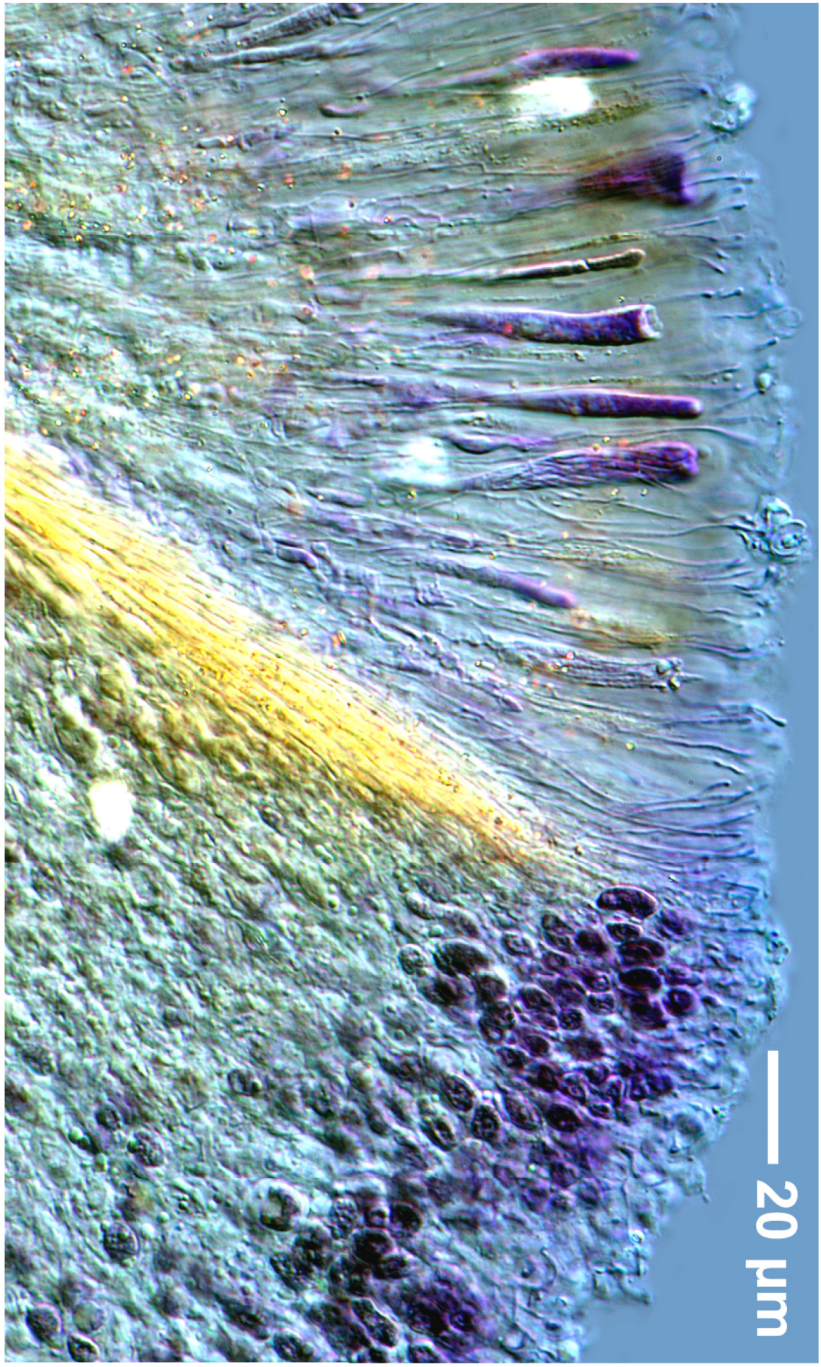
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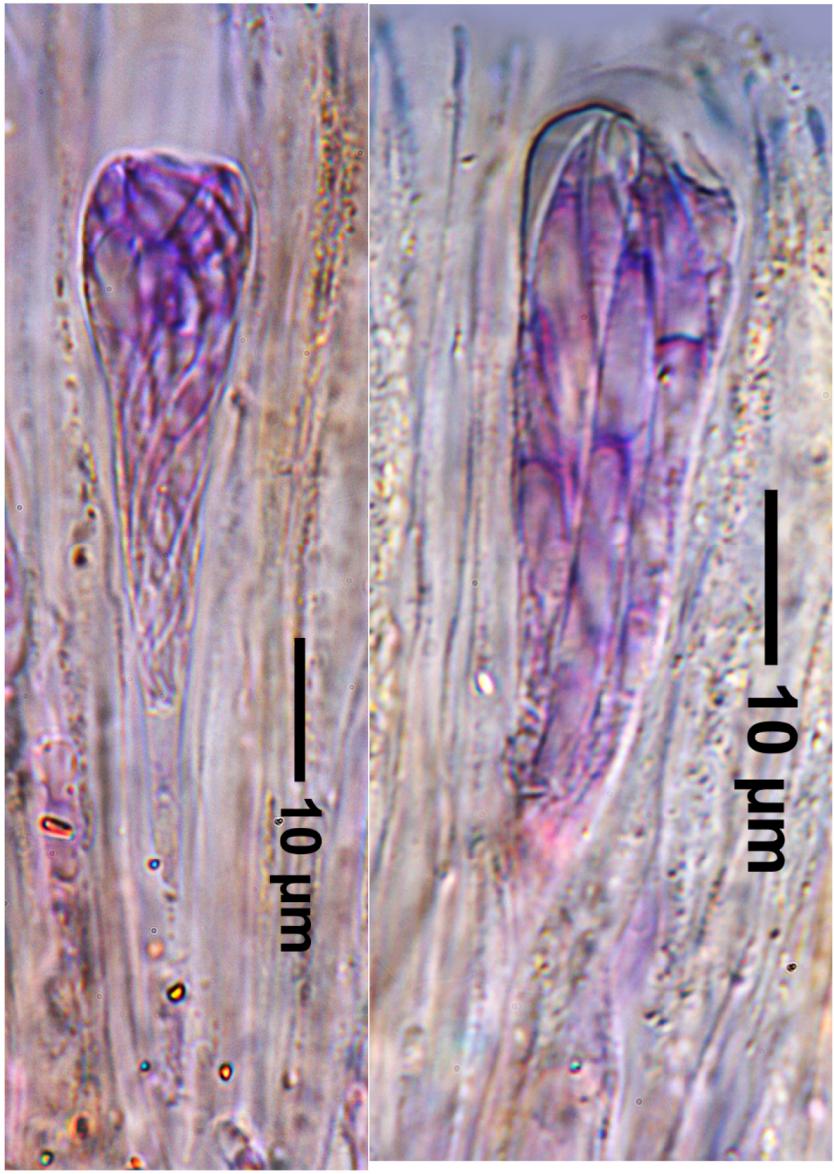
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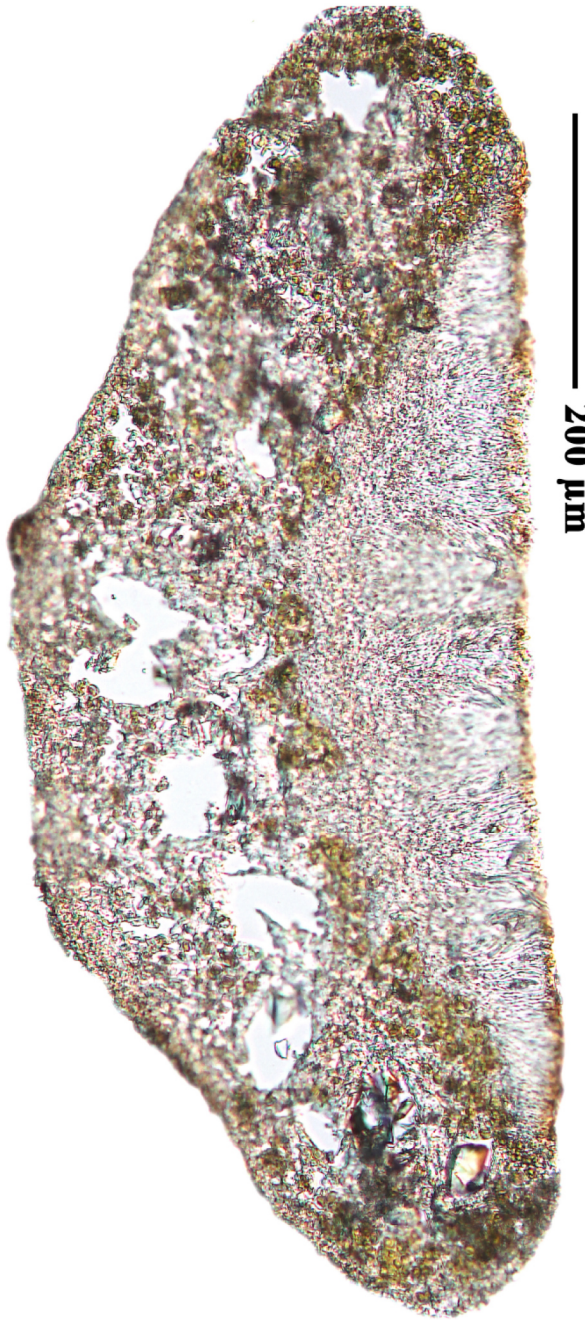
Haematomma eremaeum R.W. Rogers, Lichenologist 14(2): 124 (1982)
= *Haematomma pruinosum* R.W. Rogers, Lichenologist 14(2): 125 (1982)

[15664], Australia, Western Australia, between Narrogin und Williams, allee beside the street, 32.983°S, 117.067° E, 336 m. Leg. F. Schumm & E. Stocker-Wörgötter, 22.10.2009, det. J.A. Elix. - Spores c. 6-7 septate, 40-50 x 4.5-5 µm. Chemistry: atranorin, russulone, placodiolic acid (major) by TLC, anal. F. Schumm.

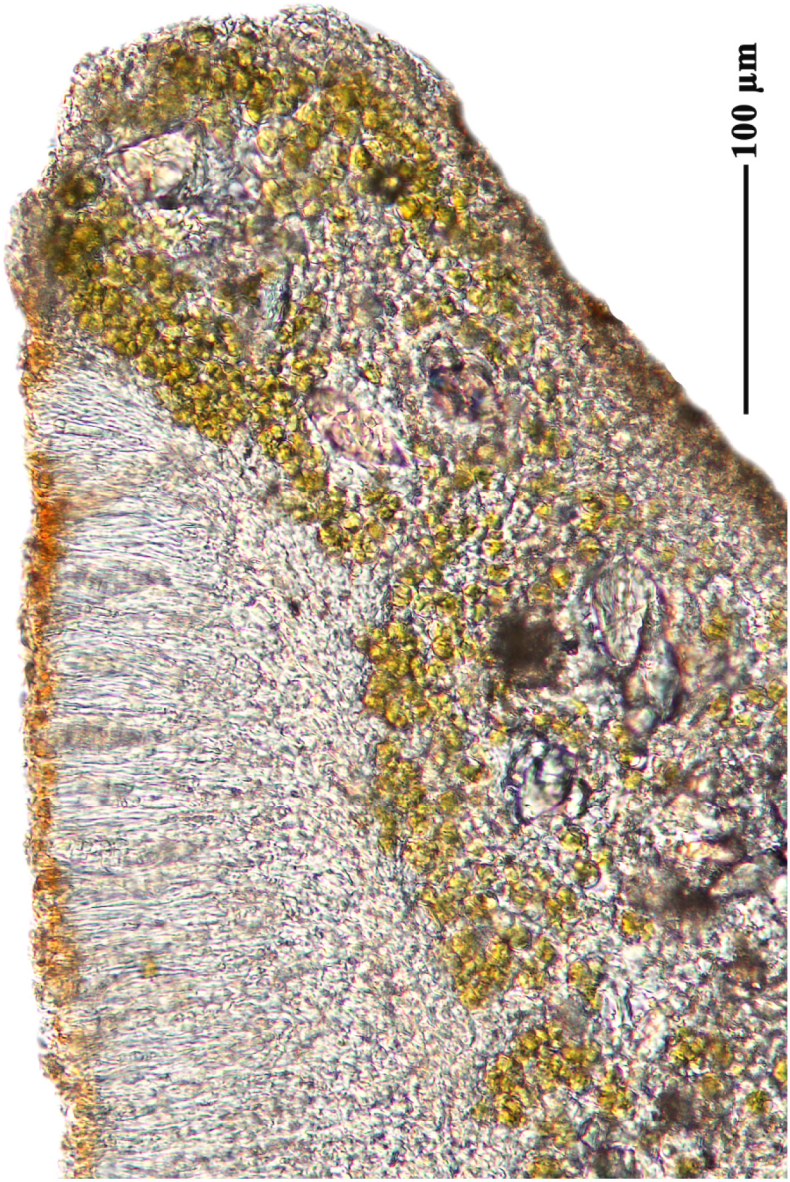
Thallus weiBlich, hellgrau oder cremefarben, uneben bis warzig, ± rissig, ca. 0,3 mm dick, ohne Sorale. Apothecien sitzend, an der Basis meist deutlich eingeschnürt, ca. 1-2 mm im Durchmesser, Scheibe scharlach- bis dunkel zinnoberrot, z. T. stark weiBlich bereift, Rand lagerfarben, glatt oder leicht crenuliert, bei dlteren Apothecien oft gewellt. Sporen zu 8 im Ascus, 6- bis 9- (bis 11-) zellig, gerade oder leicht sigmoid, 35 - (47,1) - 55 (bis 65) x 3,5 - (4,4) - 5 (bis 5,5) µm. Spermatien vom Typ länglich, gekrüimmt, 11-17 x 0,8-1 µm. Chemie: Atranorin, Placodiolsäure, Russulon. Verbreitung: endemisch in Westaustralien .



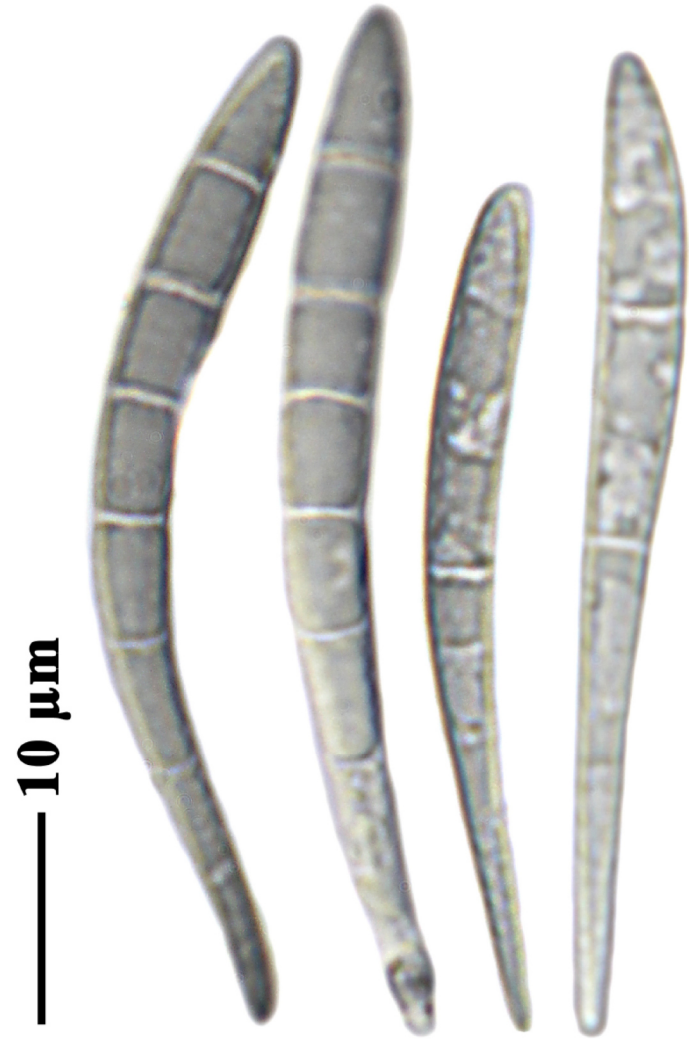
Haematomma eremaeum



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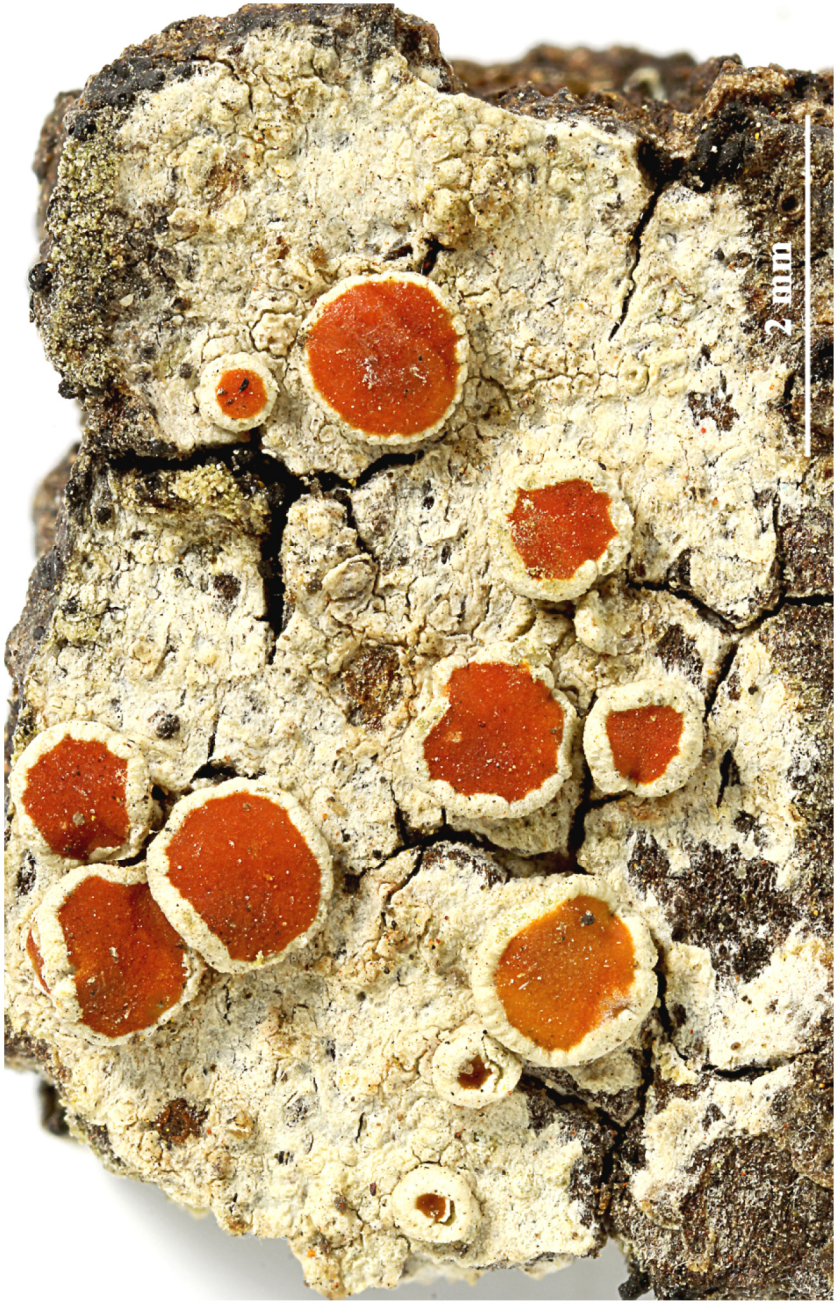
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Haematomma eremaeum R.W. Rogers, Lichenologist 14(2): 124 (1982)
= *Haematomma pruinosum* R.W. Rogers, Lichenologist 14(2): 125 (1982)

[15675], Australia, Western Australia, between Narrogin and Williams, 32.982°S, 117.067° E, 336 m, trees along the street. Leg. F. Schumm & E. Stocker-Wörgötter, 22.10.2009, det. J.A. Elix. Chemistry atranorin, russulone, placodiolic acid by TLC, anal. F. Schumm.

Epithecium orange-red, K+ permanent purple, forming tiny crystals (russulone). Hypothecium pale. Excipulum with clusters of crystals. Ascospores curved, hyaline, up to 7 septate. Chemistry: atranorin, russulone, placodiolic acid. Lit. Staiger, B. & Kalb, K. (1995, Bibl. Lich. 59).

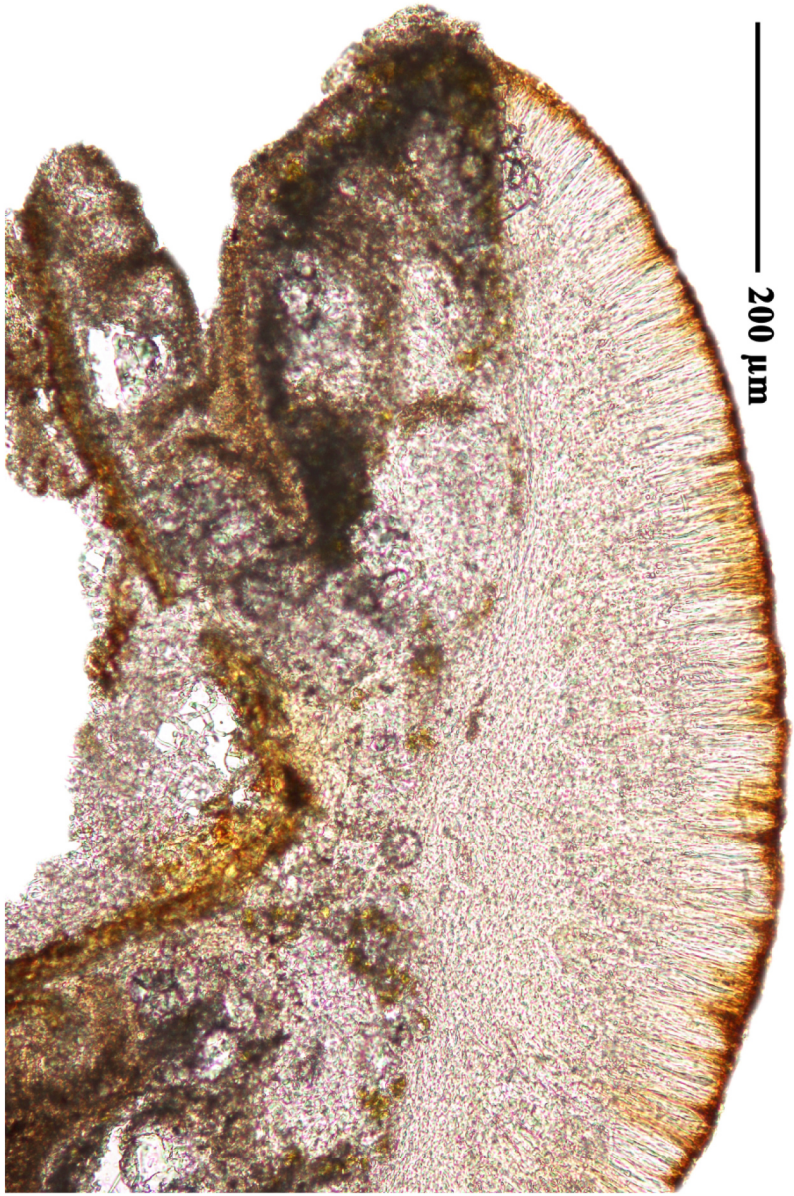
Thallus weiBlich, hellgrau oder cremefarben, uneben bis warzig, ± rissig, ca. 0,3 mm dick, ohne Sorale. Apothecien sitzend, an der Basis meist deutlich eingeschnürt, ca. 1-2 mm im Durchmesser, Scheibe scharlach- bis dunkel zinnoberrot, z. T. stark weiBlich bereift, Rand lagerfarben, glatt oder leicht crenuliert, bei älteren Apothecien oft gewellt. Sporen zu 8 im Ascus, 6- bis 9- (bis 11-) zellig, gerade oder leicht sigmoid, 35 - (47,1) - 55 (bis 65) x 3,5 - (4,4) - 5 (bis 5,5) µm. Spermatien vom Typ länglich, gekrüimmt, 11-17 x 0,8-1 µm. Chemie: Atranorin, Placodiolsäure, Russulon. Verbreitung: endemisch in Westaustralien .



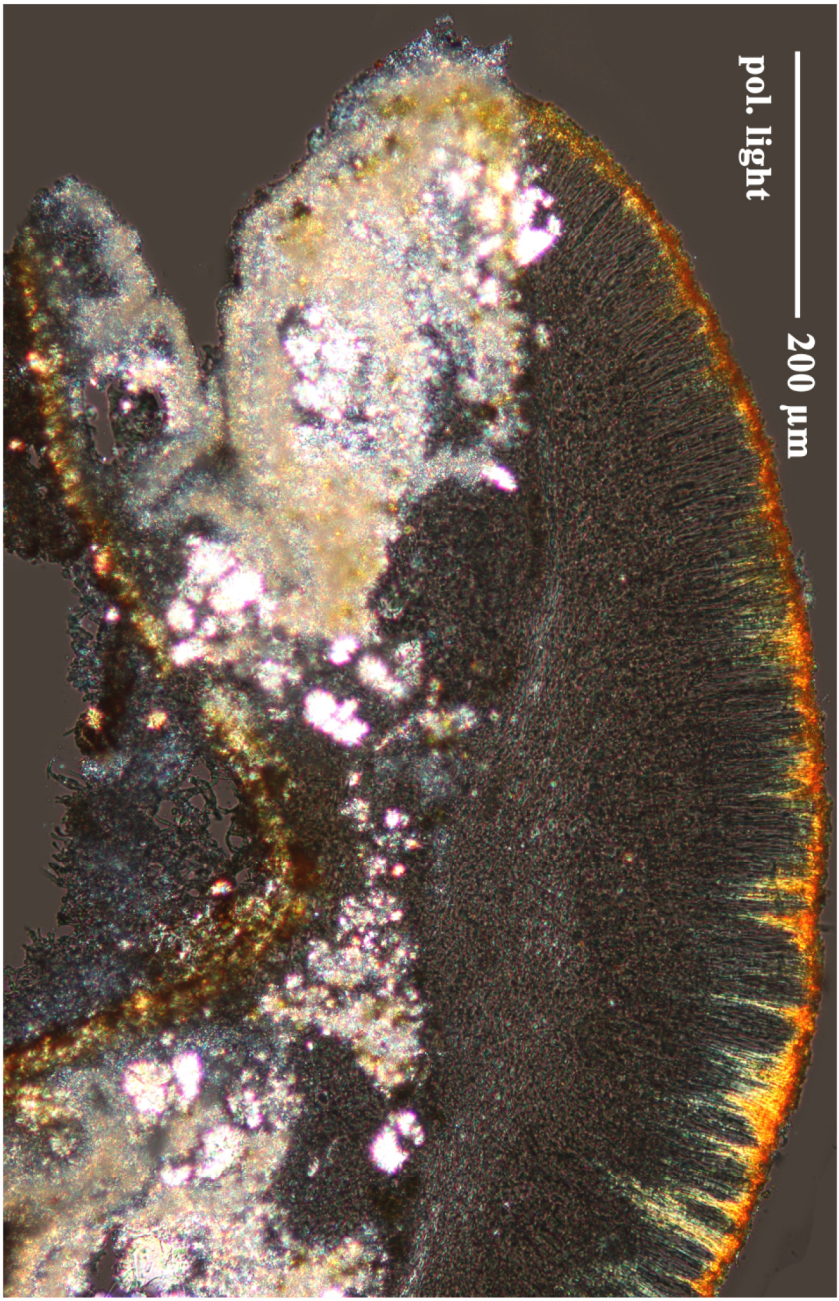
Haematomma eremaeum



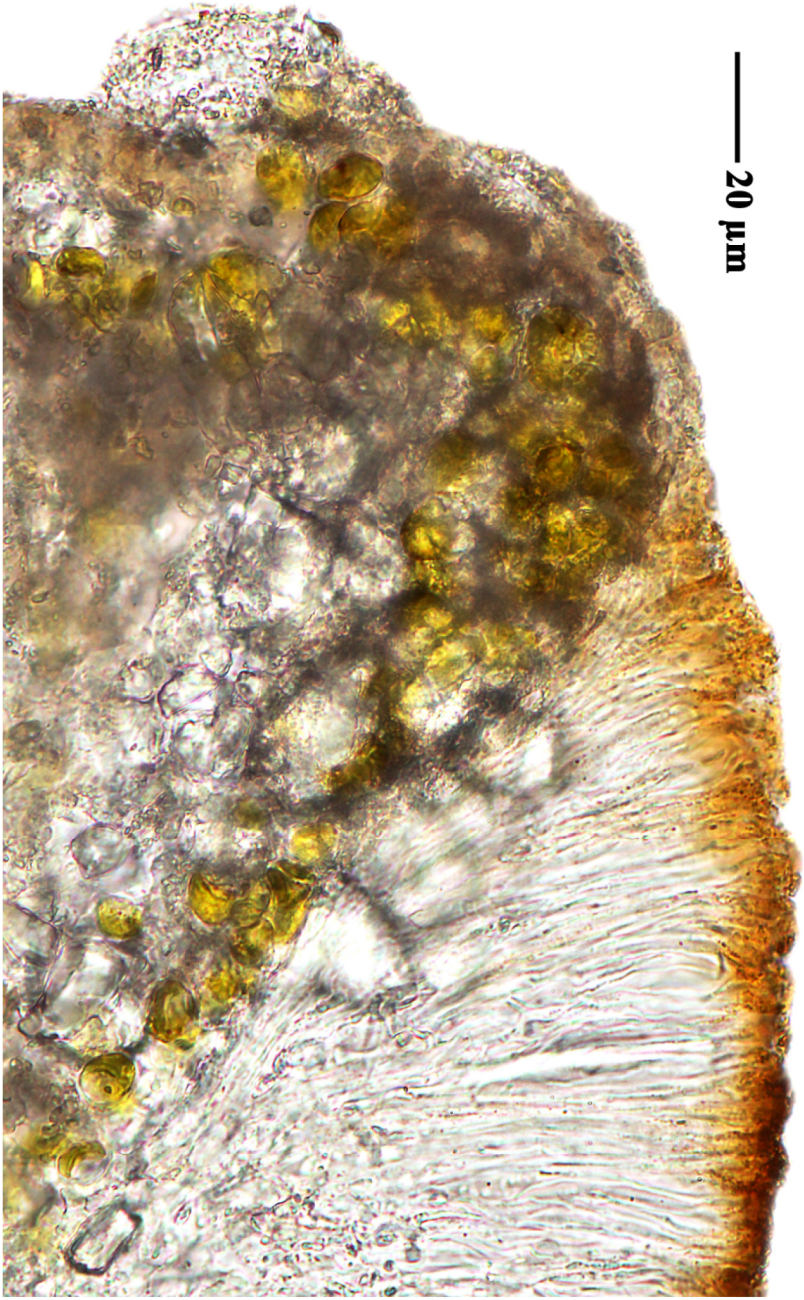
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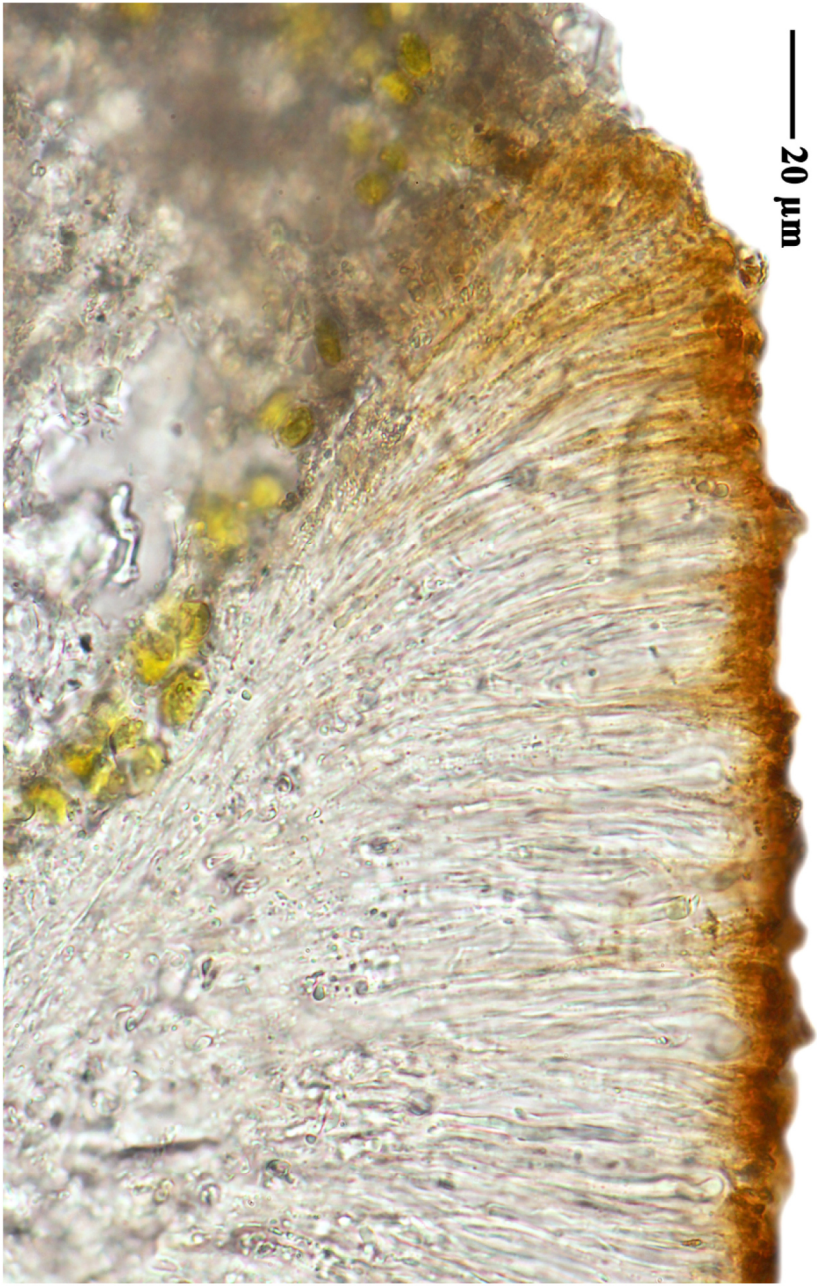
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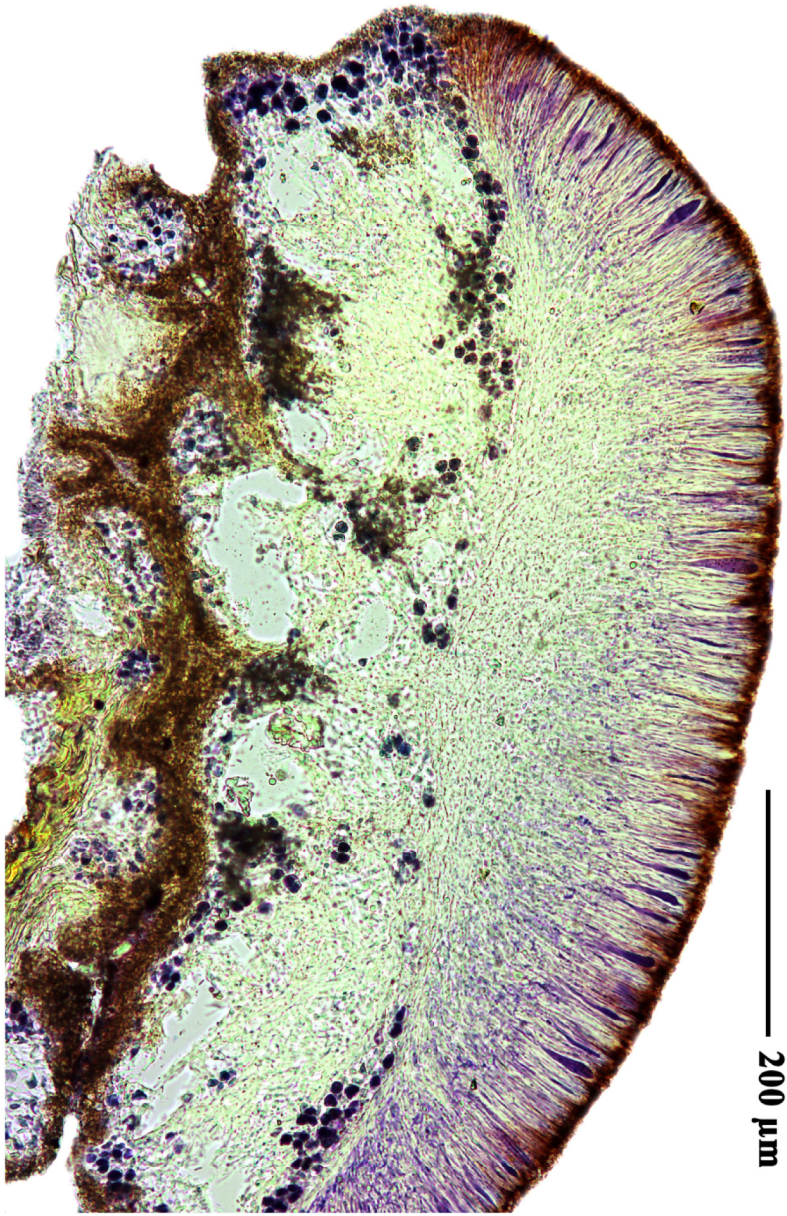
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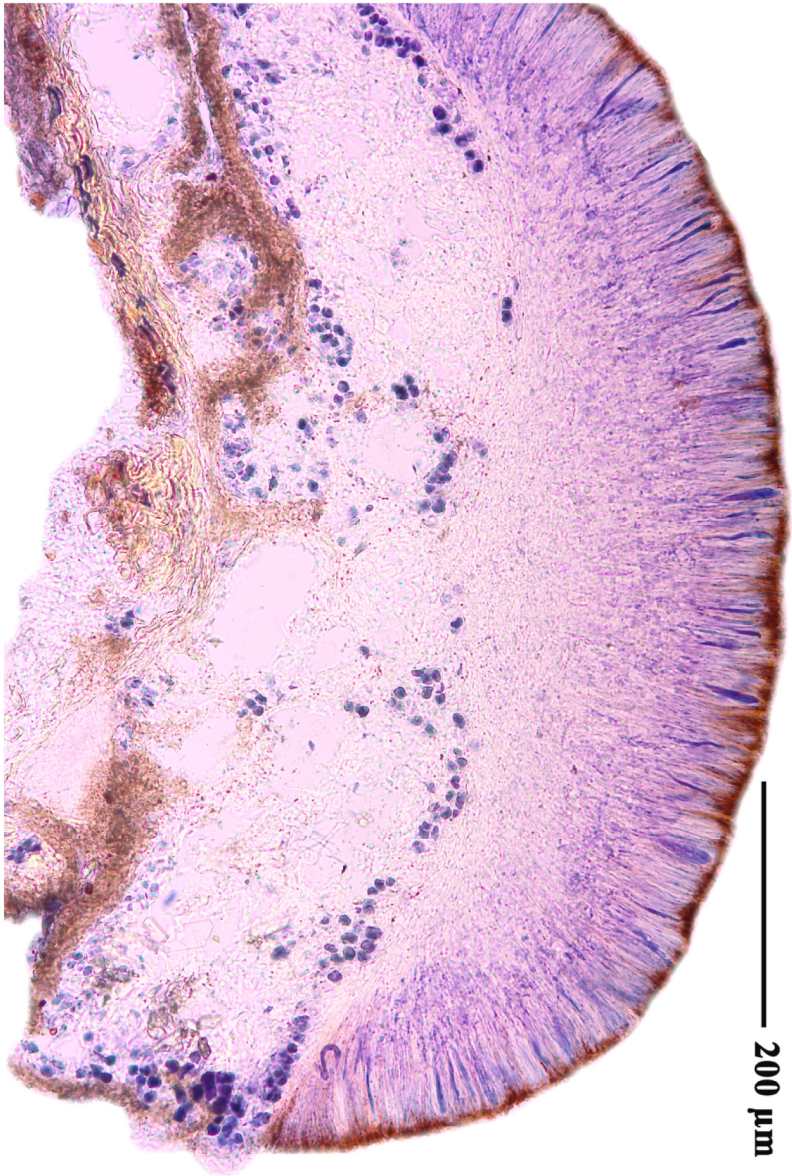
Haematomma eremaeum



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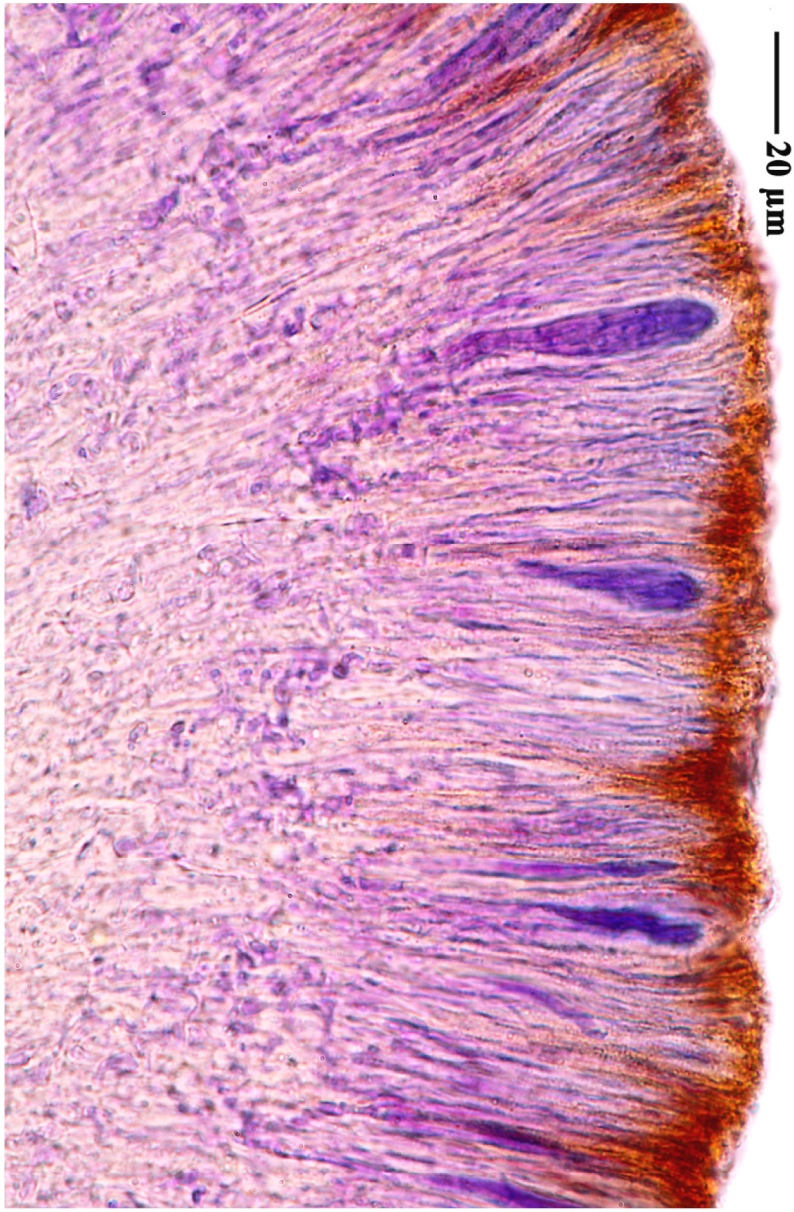
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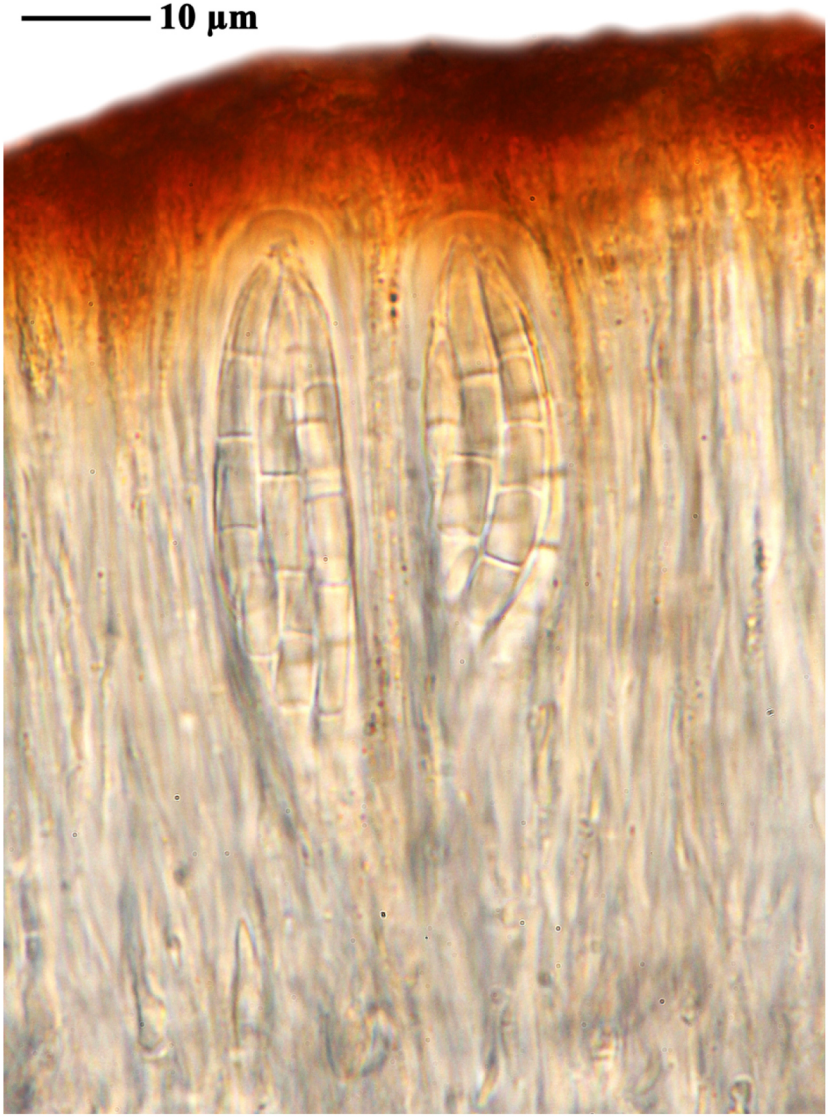
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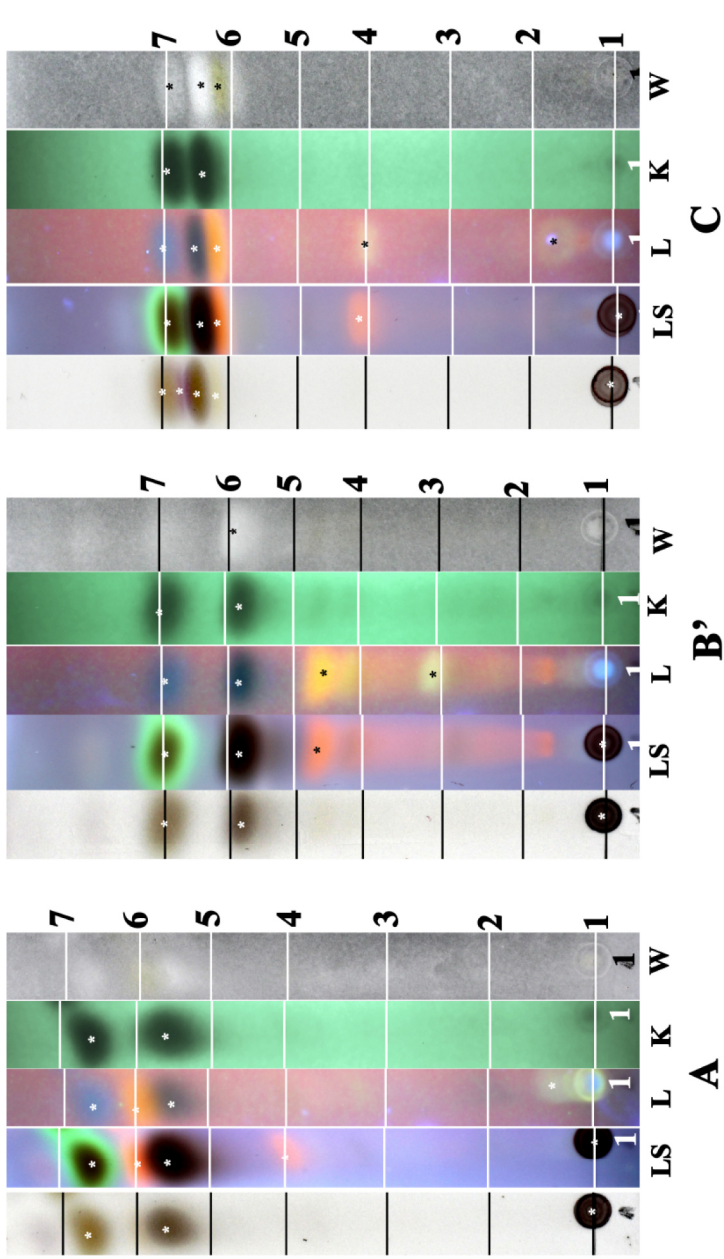
Haematomma eremaeum



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Haematomma eremaeum



[15675], p325/1

Haematomma eremaeum

Haematomma eremaeum R.W. Rogers, Lichenologist 14(2): 124 (1982)
= *Haematomma pruinosum* R.W. Rogers, Lichenologist 14(2): 125 (1982)

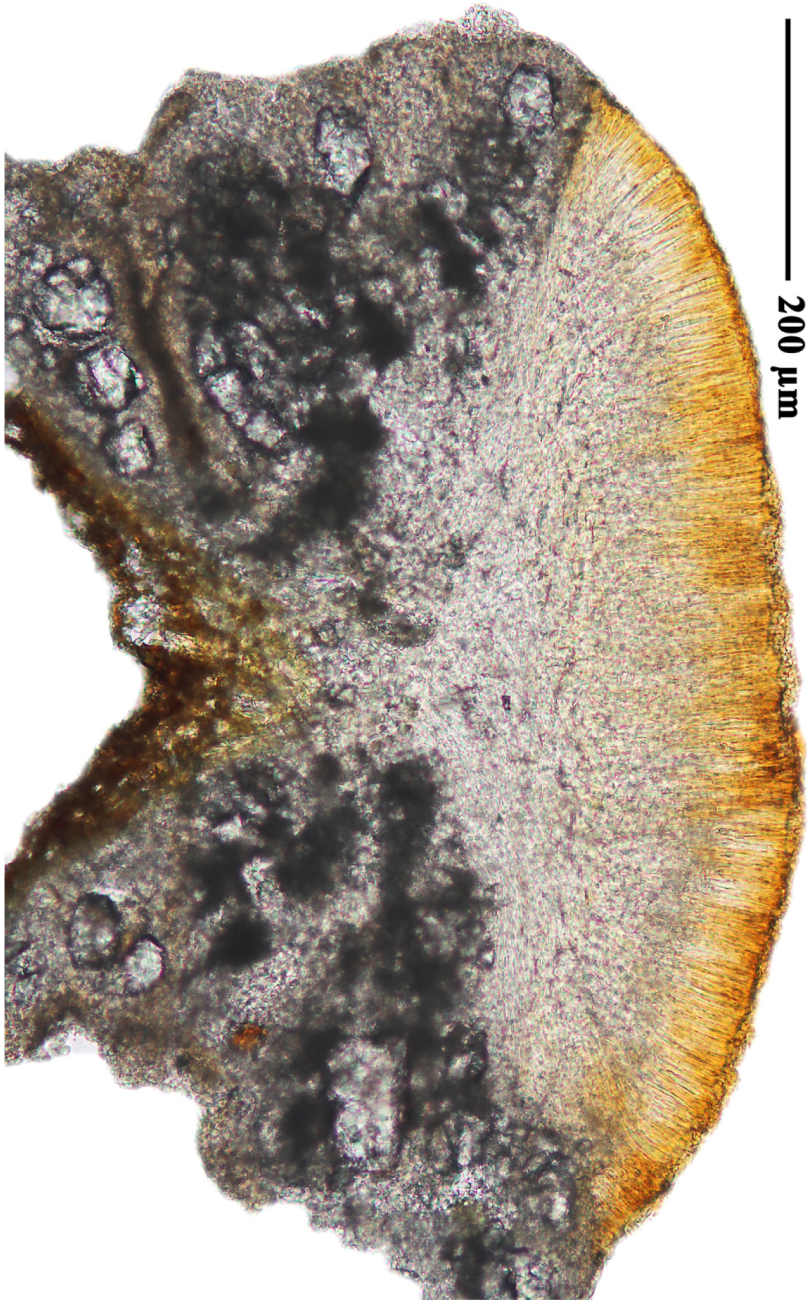
[15881], Australia, Western Australia, Donelly Well south of Yornup along SW Hwy, wetland associated with Eucalyptus rudis and Melaleuca preissiana, 34.07346° S, 116.17999° E, 260 m. Leg. F. Schumm & E. Stocker-Wörgötter, 25.10.2009, det. J.A. Elix. Chemistry: atranorin, russulone, race with only traces of placodiolic acid by HPTLC. - Spores c. 6-8-septate, hyaline, 40-45 x 5 µm. Epithecium K+ permanent purple (russulone).

Epithecium orange-red, K+ permanent purple, forming tiny crystals (russulone). Hypothecium pale. Excipulum with clusters of crystals. Ascospores curved, hyaline, up to 7 septate. Chemistry: atranorin, russulone, placodiolic acid. Lit. Staiger, B. & Kalb, K. (1995, Bibl. Lich. 59).

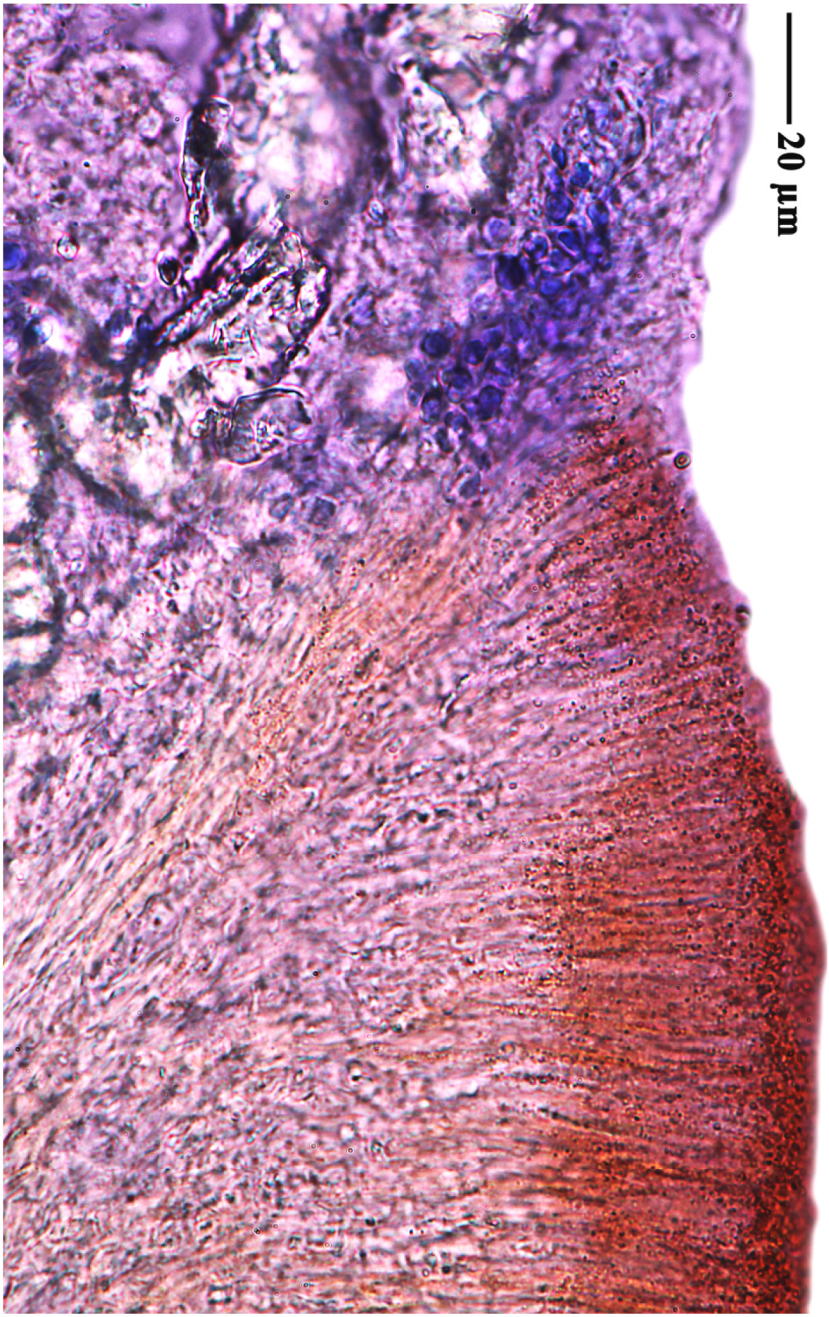
Thallus weiBlich, hellgrau oder cremefarben, uneben bis warzig, ± rissig, ca. 0,3 mm dick, ohne Sorale. Apothecien sitzend, an der Basis meist deutlich eingeschnürt, ca. 1-2 mm im Durchmesser, Scheibe scharlach- bis dunkel zinnoberrot, z. T. stark weiBlich bereift, Rand lagerfarben, glatt oder leicht crenuliert, bei älteren Apothecien oft gewellt. Sporen zu 8 im Ascus, 6- bis 9- (bis 11-) zellig, gerade oder leicht sigmoid, 35 - (47,1) - 55 (bis 65) x 3,5 - (4,4) - 5 (bis 5,5) µm. Spermatien vom Typ länglich, gekrüimmt, 11-17 x 0,8-1 µm. Chemie: Atranorin, Placodiolsäure, Russulon. Verbreitung: endemisch in Westaustralien .



Haematomma eremaeum



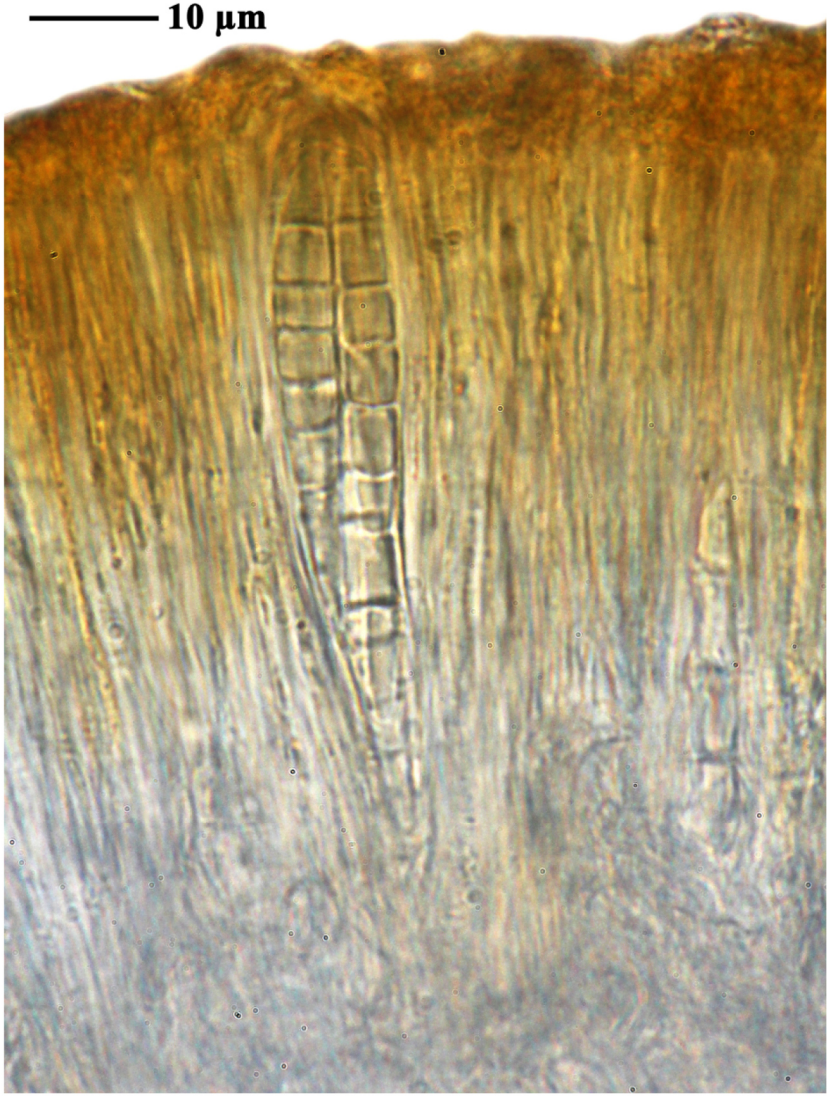
Haematomma eremaeum



Haematomma eremaeum



Haematomma eremaeum



Haematomma eremaeum



Haematomma eremaeum



Haematomma eremaeum

[15881], p325/2

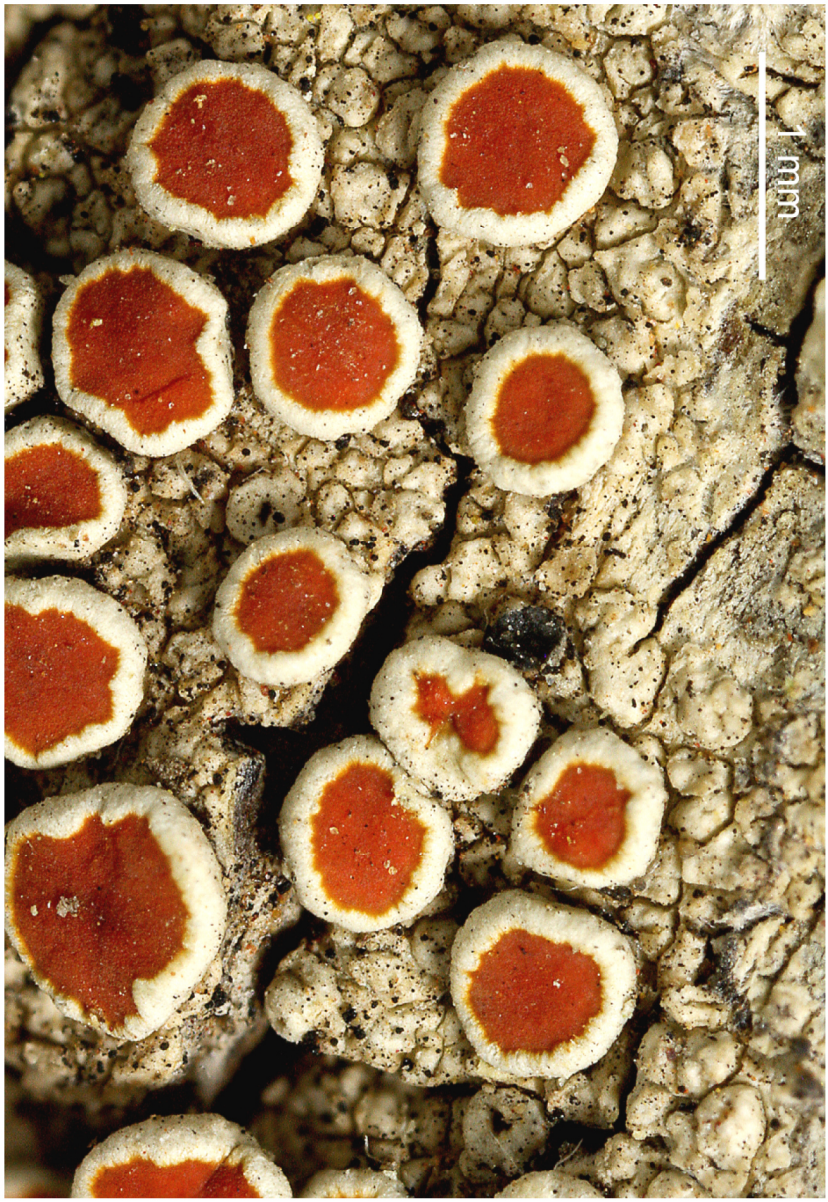
Haematomma eremaeum

Haematomma eremaeum R.W. Rogers, Lichenologist 14(2): 124 (1982)
= *Haematomma pruinosum* R.W. Rogers, Lichenologist 14(2): 125 (1982)

[19028], Australia, Western Australia, Pumphreys Bridge, 21 km south-west of Pingelly, 32°40' S, 116°54' E, 260 m, growing on dead *Acacia* in *Eucalyptus-Acacia* woodland on flats. Leg. J.A. Elix (40899), H.T. Lumbsch & H. Streimann, 11.09.1994. Chemistry: Thallus K+ yellow, C-, KC-, P+ yellow, placodiolic acid (major), atranorin (major), russulone (minor, in the epihymenium) by HPLC, TLC, LMS, anal. J.A. Elix & J.H. Wardlaw. EX J. A. ELIX: LICHENS AUSTRALASICI NR. 280.

Thallus esorediate, rugulose or warty, cream-coloured. Apothecia constricted at the base, disc cinnabar-red, ± white pruinose. Aphithecium with large crystals. Epihymenium with K+ permanent purple and forming tiny crystals (russulone). Ascospores 5-11 septate, 35-65 x 3.5-5.5 µm.

Thallus weiBlich, hellgrau oder cremefarben, uneben bis warzig, ± rissig, ca. 0,3 mm dick, ohne Sorale. Apothecien sitzend, an der Basis meist deutlich eingeschnürt, ca. 1-2 mm im Durchmesser, Scheibe scharlach- bis dunkel zinnoberrot, z. T. stark weiBlich bereift, Rand lagerfarben, glatt oder leicht crenuliert, bei älteren Apothecien oft gewellt. Sporen zu 8 im Ascus, 6- bis 9- (bis 11-) zellig, gerade oder leicht sigmoid, 35 - (47,1) - 55 (bis 65) x 3,5 - (4,4) - 5 (bis 5,5) µm. Spermatien vom Typ länglich, gekrüimmt, 11-17 x 0,8-1 µm. Chemie: Atranorin, Placodiolsäure, Russulon. Verbreitung: endemisch in Westaustralien .



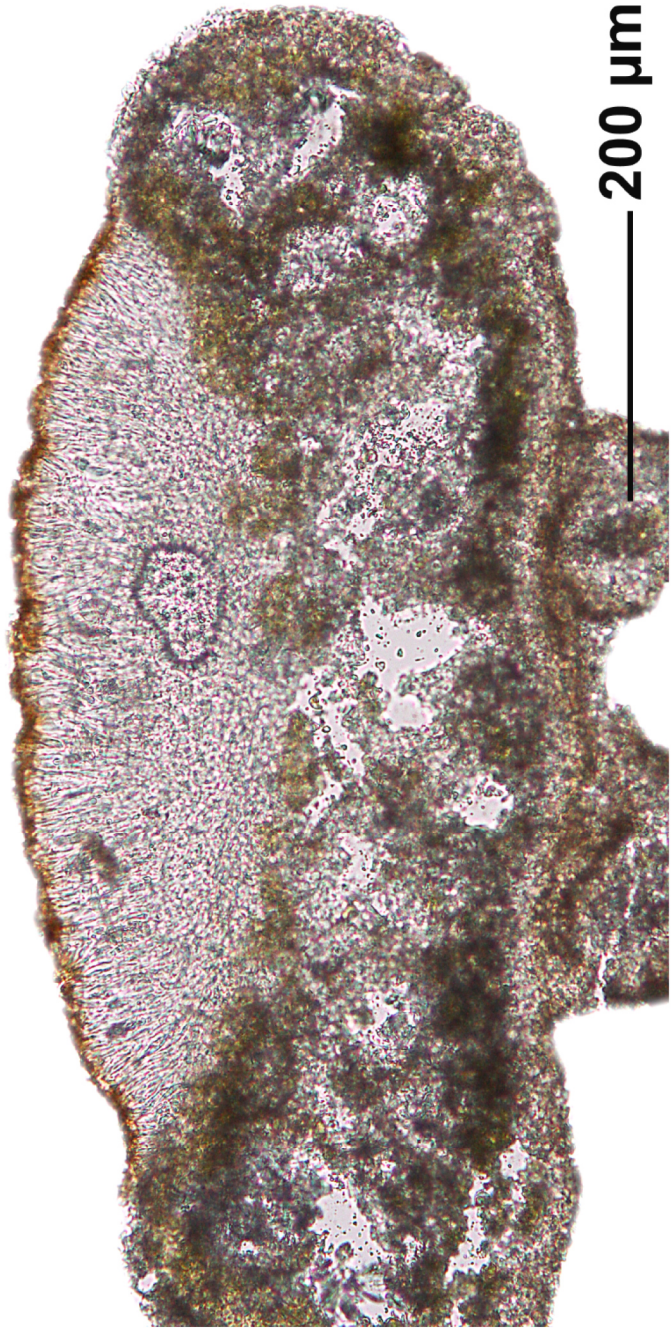
Haematomma eremaeum



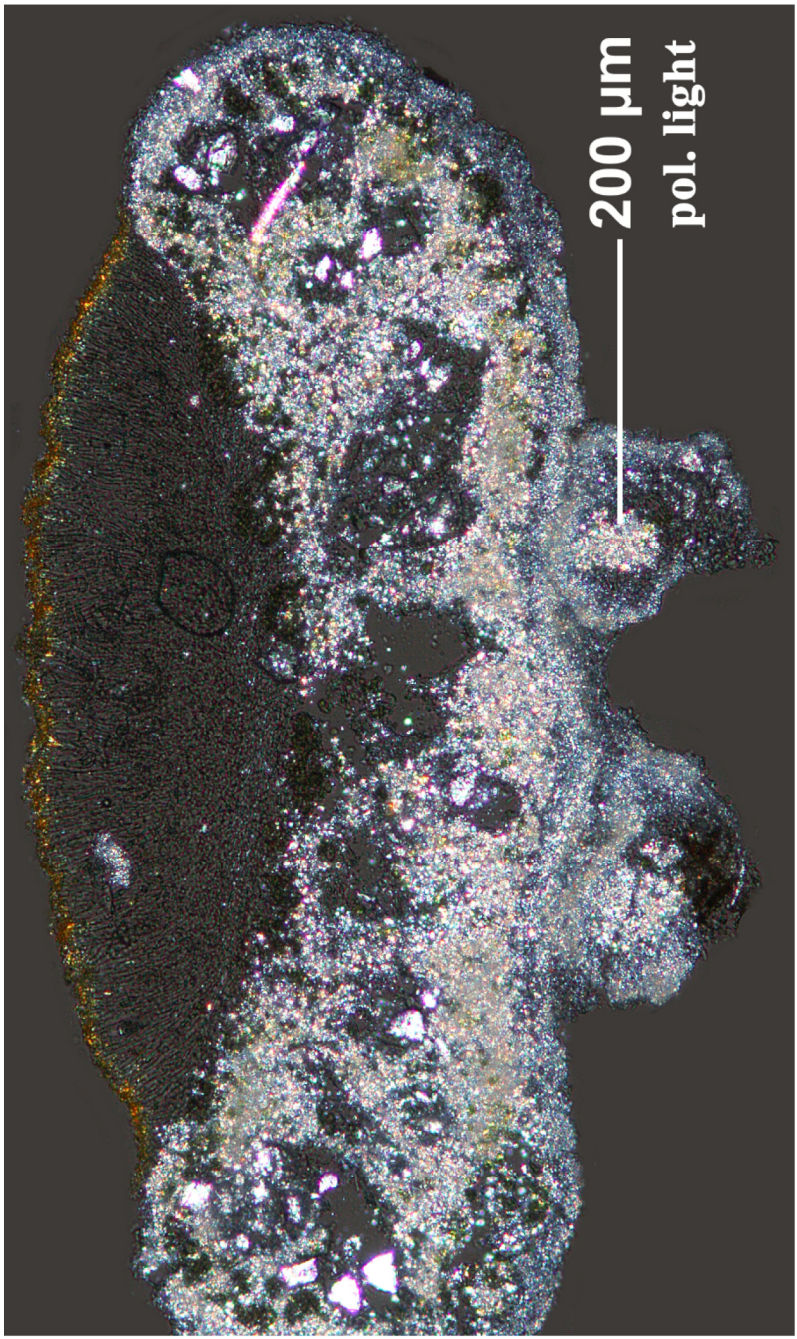
Haematomma eremaeum



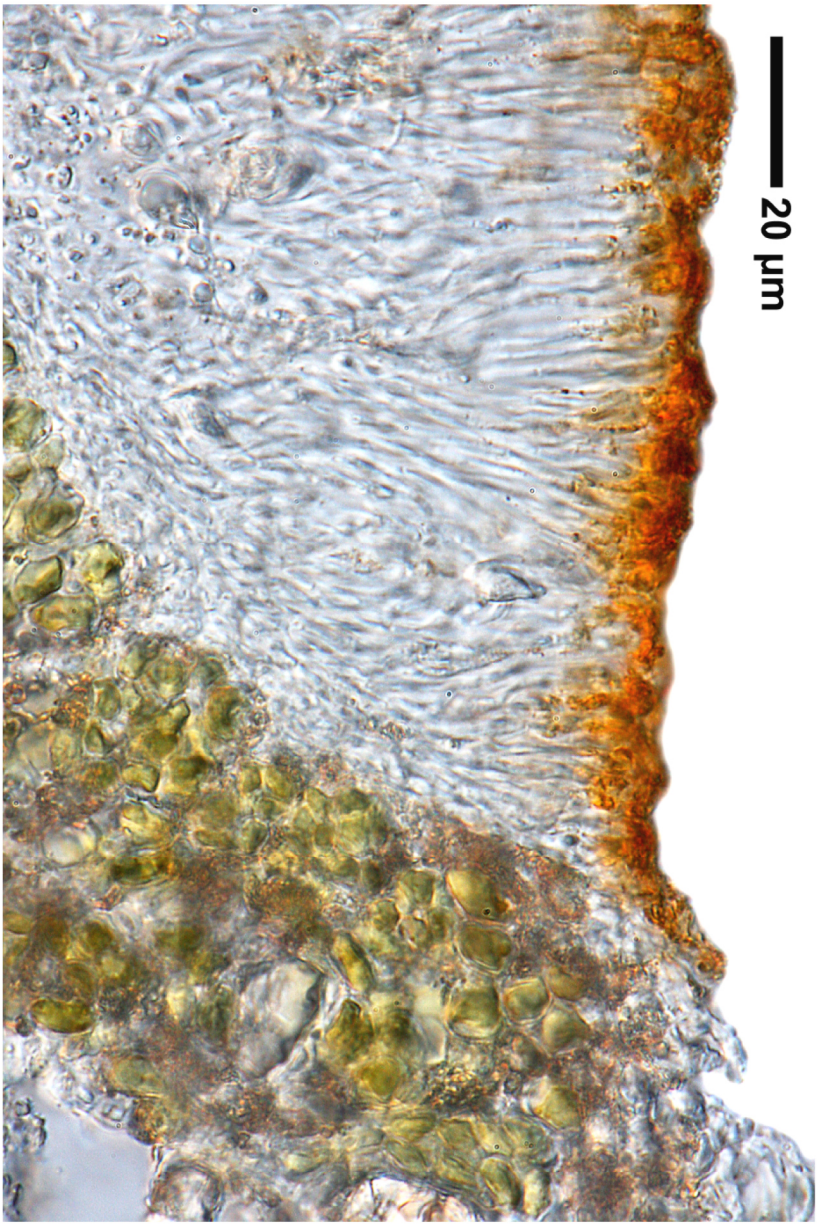
Haematomma eremaeum



Haematomma eremaeum



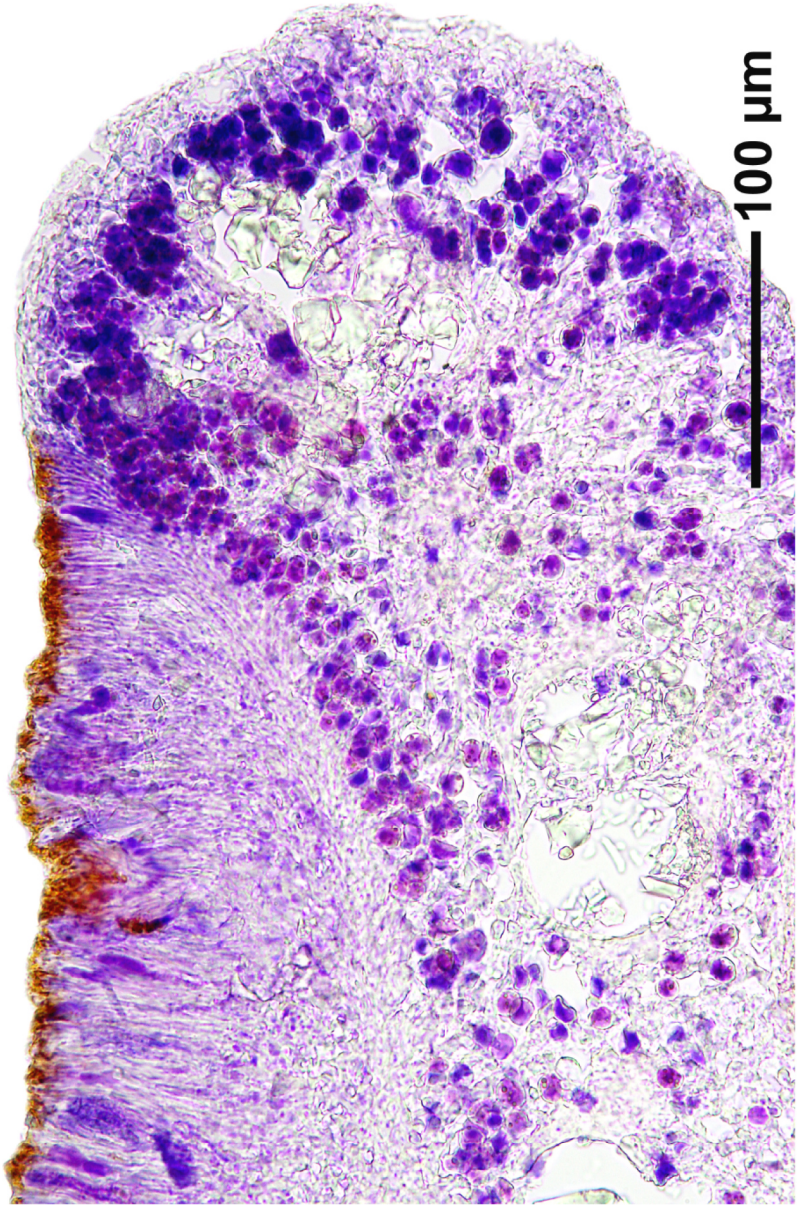
Haematomma eremaeum



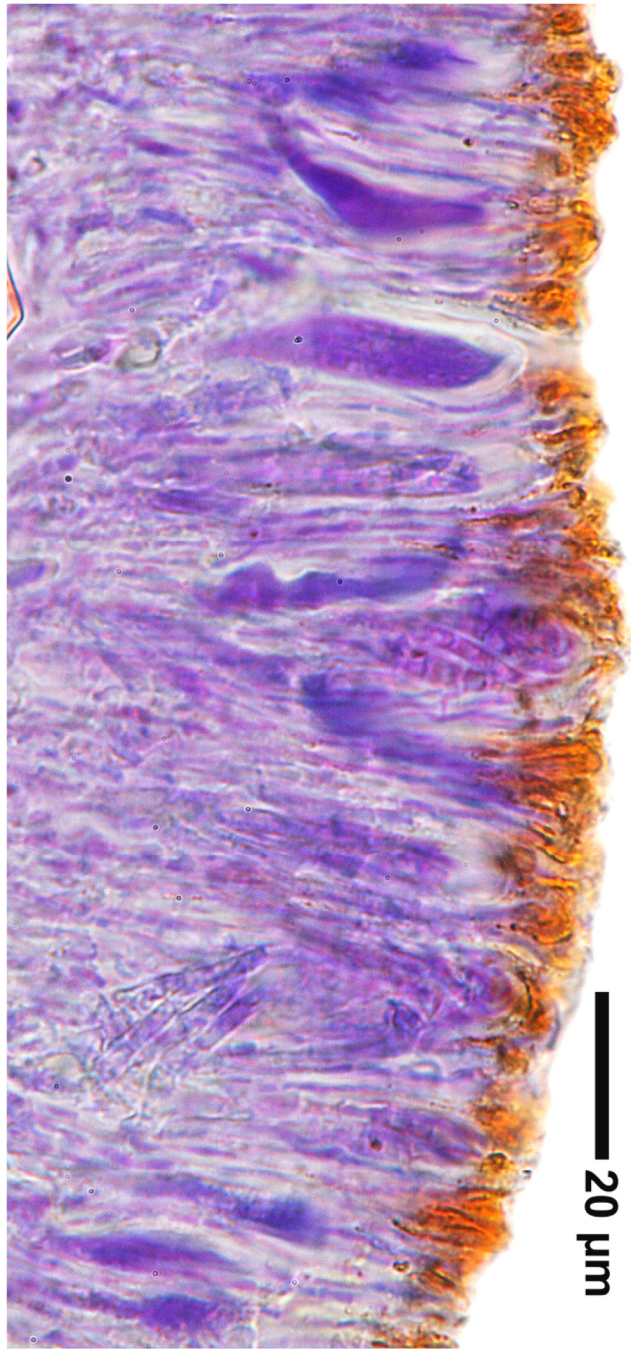
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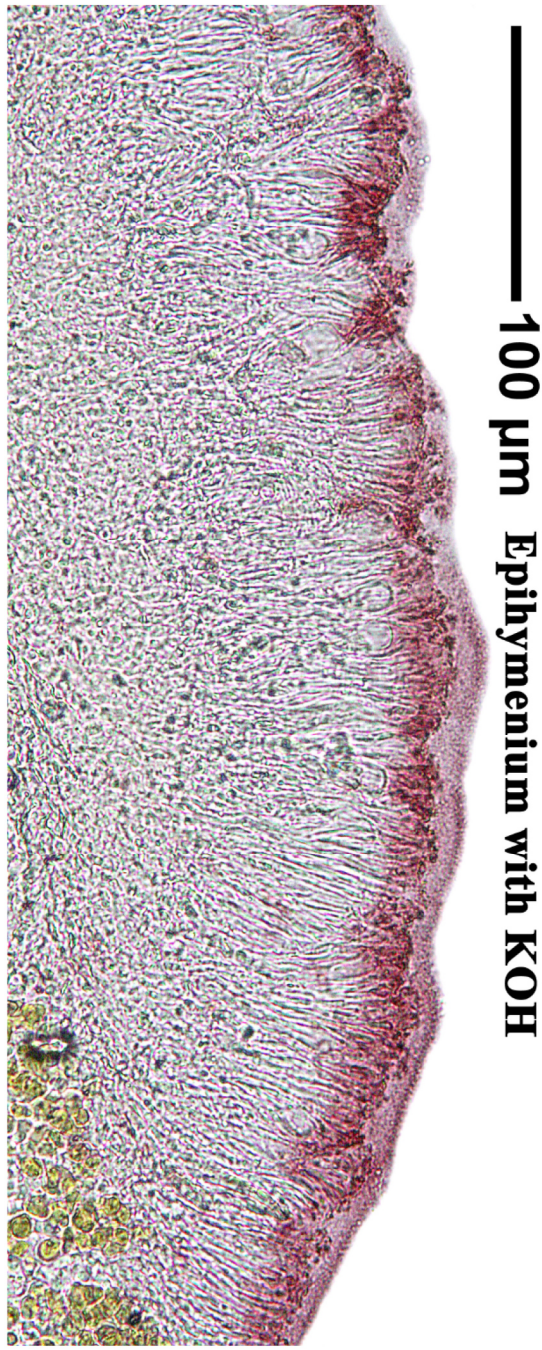
Haematomma eremaeum



Haematomma eremaeum

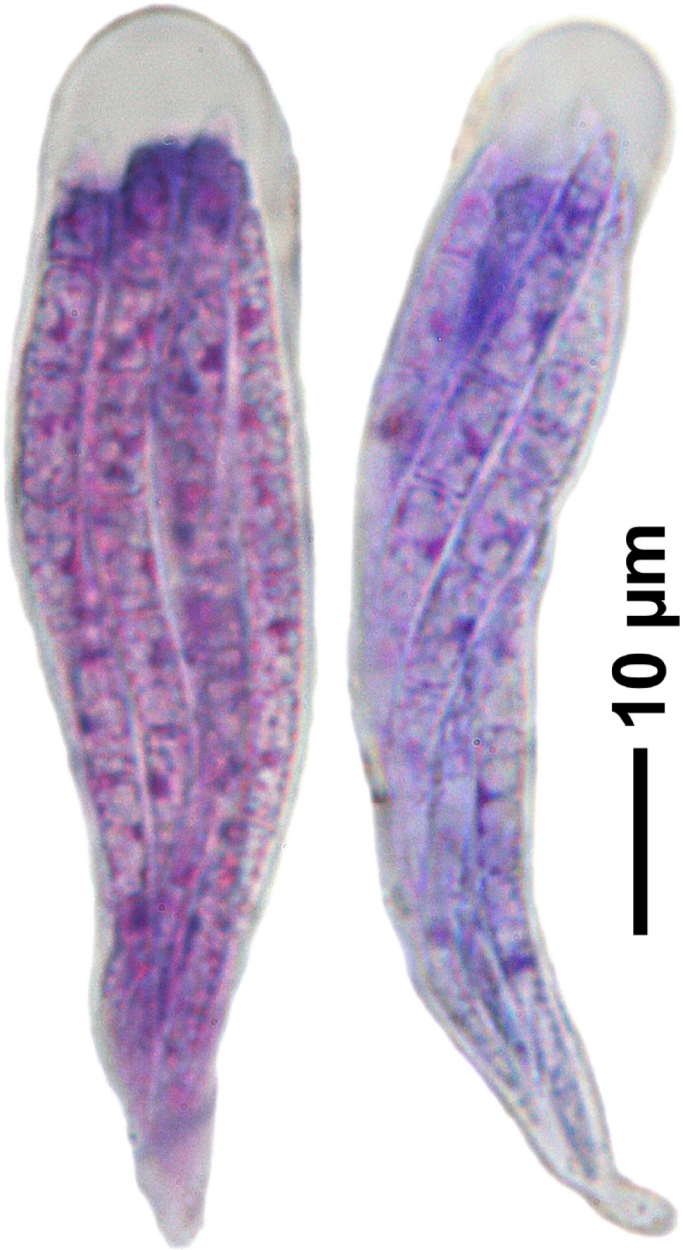


Haematomma eremaeum

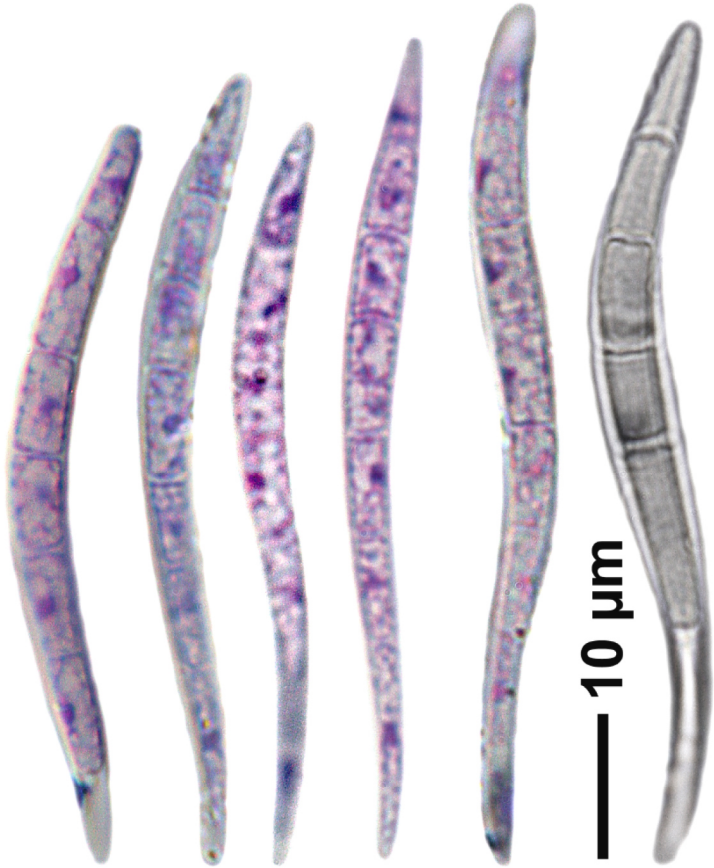


Haematomma eremaeum

Haematomma eremaeum

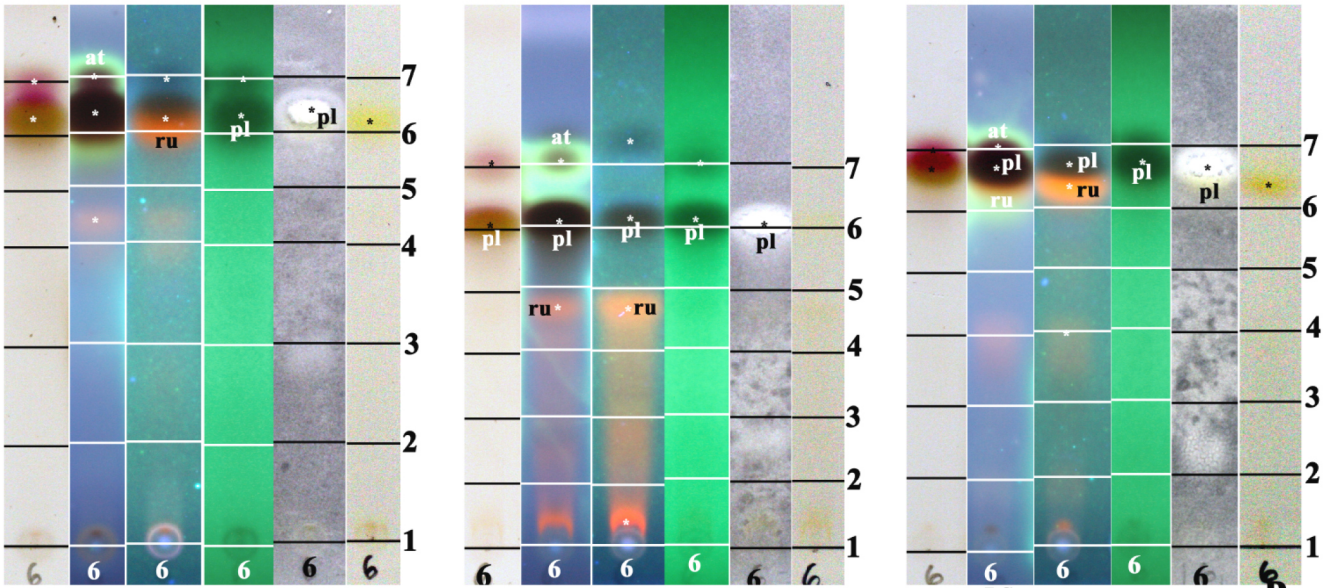


Haematomma eremaeum



Haematomma eremaeum

Haematomma eremaeum



[19028], p294/6

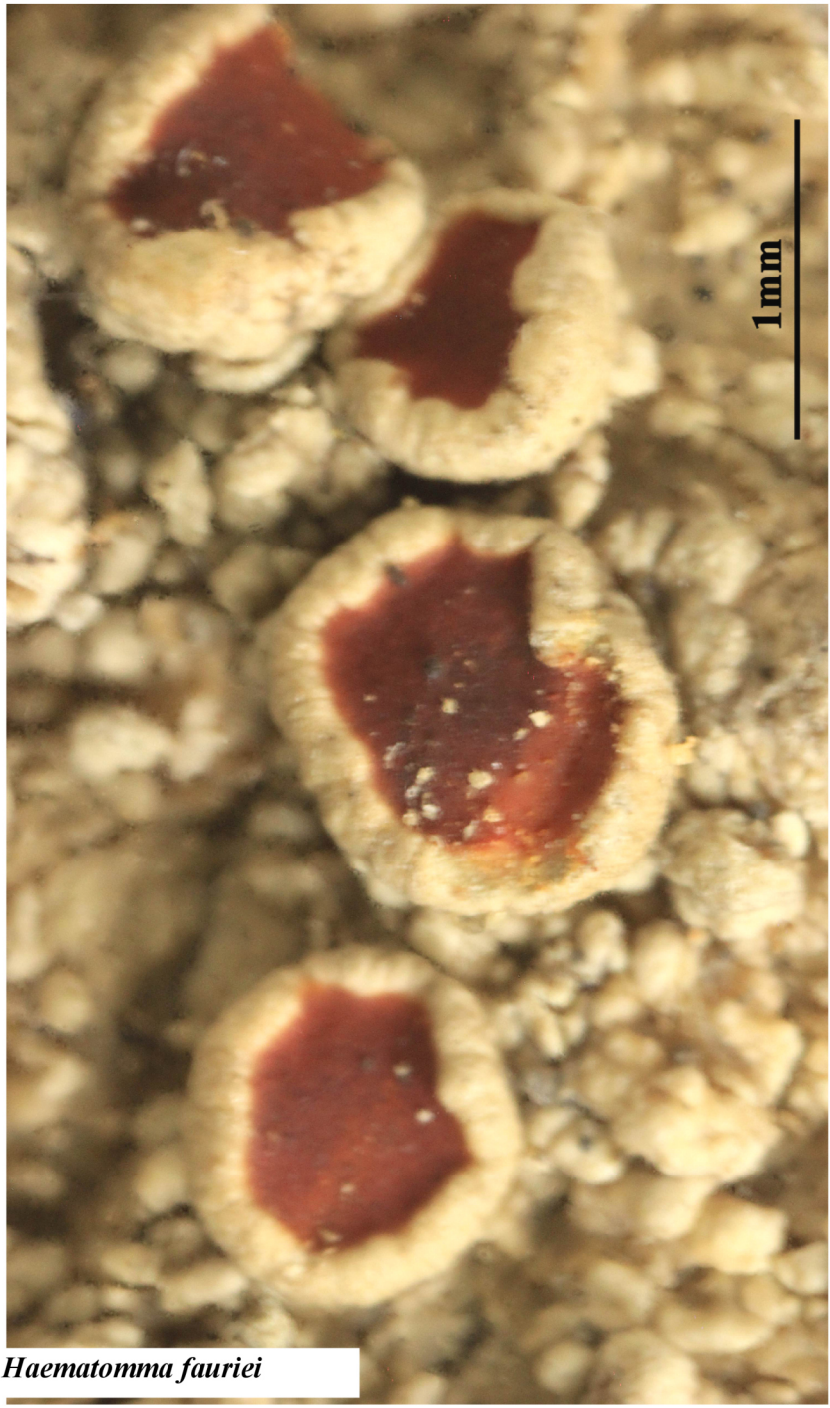
Haematomma fauriei Zahlbr., Annls mycol. 14(1/2): 59, 60 (1916)

[KU364], Japan. Honshu. Prov. Musashi: Mt. Ryogami. On bark of *Fagus crenata*, 1400 m. Leg. H. Kashiwadani (no. 14596), H. Shibuichi, and K. Yoshida., 10.07.1978, det. H. Kashiwadani. EX S. KUROKAWA AND H. KASHIWADANI: LICHENES RARIORTES ET CRITICI EXSICCATI NR. 364. - Chemistry anal. B. Staiger: Atranorin, Usninsäure, Psoromsäure, 2'-*O*-Demethylpsoromsäre, Russulone, unbekannte Fettsäure, 8.2.1994.

Thallus gelblich, grünlich oder schmutziggrau, unregelmäßig kleinwarzig oder uneben, leicht rissig, ca. 0.3-0.5 mm dick, ohne Sorale. Apothecien aufsitzend, meist 1-2 mm im Durchmesser, Scheibe dunkel scharlachrot oder ziegelfarbig, nackt, meist gewölbt, Rand dünn, glatt oder wenig crenuliert. Oft wachsen auf großen älteren Apothecien jüngere nach.Sporen 8/Ascus, 7 bis 10 (bis14) zellig, gerade oder leicht sigmoid gekrümmt, 50-(61.2)-70 (-75) x 5-(5.5)-6 µm. Spermatien länglich, gekrümmt, 13-18 x 0.8-1 µm. Chemie: Atranorin, Usninsäure, Psoromsäure, 2'-O-Demethylpsoromsäure, Russulon, unbekannte Fettsäure. Endemisch in Japan.



Haematomma fauriei



Haematomma fauriei

Haematomma fauriei Zahlbr., Annls mycol. 14(1/2): 59, 60 (1916)

[KU127], Japan. Honshu. Prov. Musashi: Karisaka Pass, Chuchubu. Ontrunk of Fagus crenata, 1770 m. Leg. S. Kurokawa (no. 70120) 23.05.1970, det. S. Kurokawa. Ex S. Kirokawa: Lichenes Rariores Et Critici Exsiccati Nr. 127. -Chemistry anal. V. Staiger: Atranorin, Usninsäure, Psoromsäure, 2'-*O*-Demethylpsoromsäre, Russulone, unbekannte Fettsäure, 8.2.1994.

Thallus gelblich, grünlich oder schmutziggrau, unregelmäßig kleinwarzig oder uneben, leicht rissig, ca. 0.3-0.5 mm dick, ohne Sorale. Apothecien aufsitzend, meist 1-2 mm im Durchmesser, Scheibe dunkel scharlachrot oder ziegelfarbig, nackt, meist gewölbt, Rand dünn, glatt oder wenig crenuliert. Oft wachsen auf großen älteren Apothecien jüngere nach.Sporen 8/Ascus, 7 bis 10 (bis14) zellig, gerade oder leicht sigmoid gekrümmt, 50-(61.2)-70 (-75) x 5-(5.5)-6 µm. Spermatien länglich, gekrümmt, 13-18 x 0.8-1 µm. Chemie: Atranorin, Usninsäure, Psoromsäure, 2'-O-Demethylpsoromsäure, Russulon, unbekannte Fettsäure. Endemisch in Japan.



Haematomma fauriei

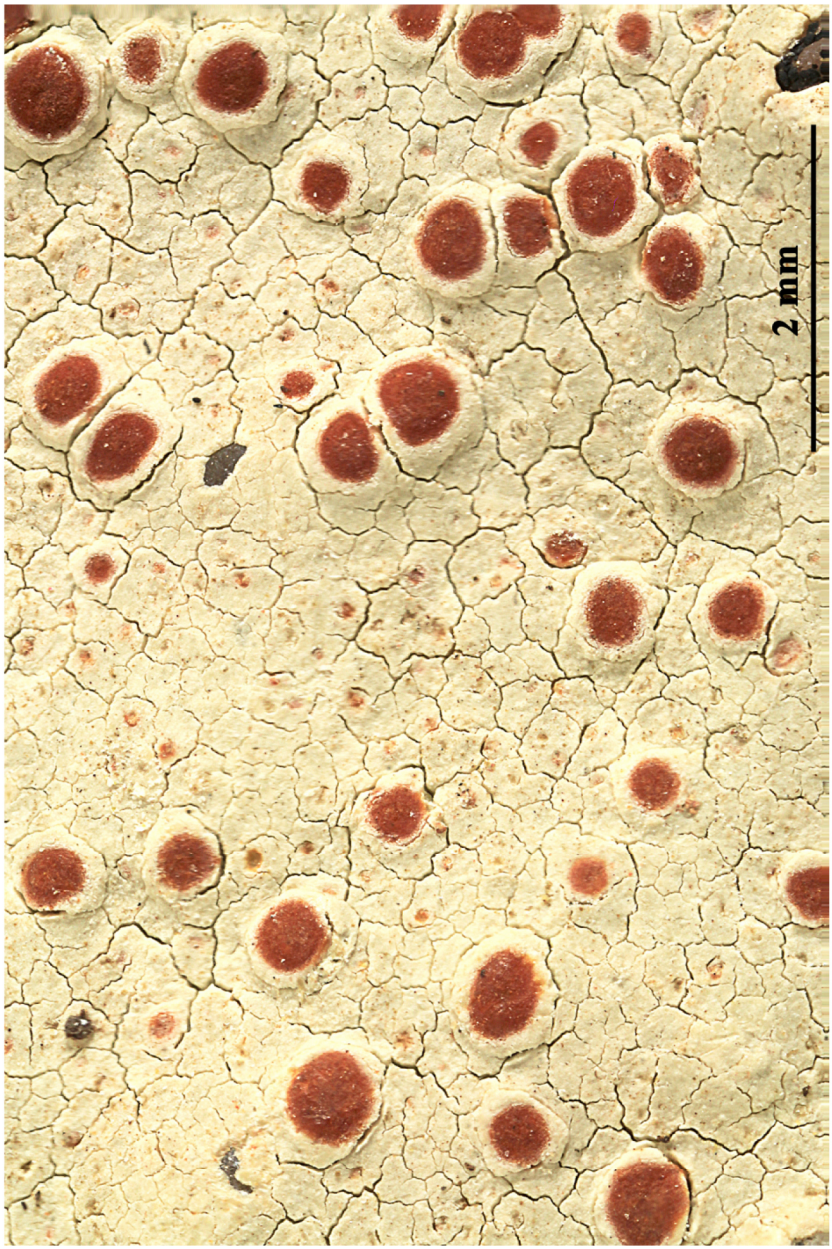


Haematomma fauriei

Haematomma fenzlianum A. Massal., Mem. Imp. Reale Ist. Veneto 10: 58 (1861)
= *Haematomma campanaense* Redón & Walkowiak, An. Mus. Hist. Nat. Valparaiso 11: 30 (1978)
= *Haematomma saxicola* R.W. Rogers, in Rogers & Bartlett, Lichenologist 18(3): 254 (1986)
= *Lecanora fenzliana* (A. Massal.) Stizenb., Ber. Tät. St Gall. naturw. Ges.: 229 (1890) [1888-89]

[ABL79407], Brazil, Rio Grande do Sul, Cangaçu, Baixada do Rodeio, Rio Pantanoso, on exposed siliceous rock. 31°14'20" S, 52°43'57" W, 260 m. Leg. A. Aptroot (no 79407), 16 July 2019, det. A. Aptroot 2019. - Thallus on siliceous rock, lacing soredia. Apothecia immersed. Spores 8/ascus, 3-7-septate, 20-30 x 3.5-6 µm. Chemistry: atranorin, ± sphaerophorin, psoromic acid, russulone

Thallus yellowish white or yellowish grey to greenish grey, rarely brownish to pale orange, rugose, continuous, rimose to rimose-areolate, (0.25-) 0.5-1.0 mm thick, soredia and isidia lacking. Apothecia immersed or semi-immersed in the thallus, disc level with thallus, or sessile, flat when mature, scattered, singly or in groups, (0.5-)0.8-3 mm diam.; disc dark red to dark reddish orange or reddish brown, epruinose or rarely pruinose, thalline margin developed, rather thick and prominent, entire, smooth. Ascospores fusiform, straight or more or less curved, sigmoid or sinuous, (2-)3-7-septate, 20-30(-39) x 3.5-5(-8) µm. Conidia not observed. Chemistry. Thallus K+ yellow, C-, KC-, Pd± yellow; disc K+ red to purple-red (russulone). The following secondary compounds were detected by HPTLC and HPLC analysis: atranorin (major), chloroatranorin (minor), placodiolic acid (minor), psoromic acid (minor) and russulone (trace).



Haematomma fenzlianum



Haematomma fenzlianum

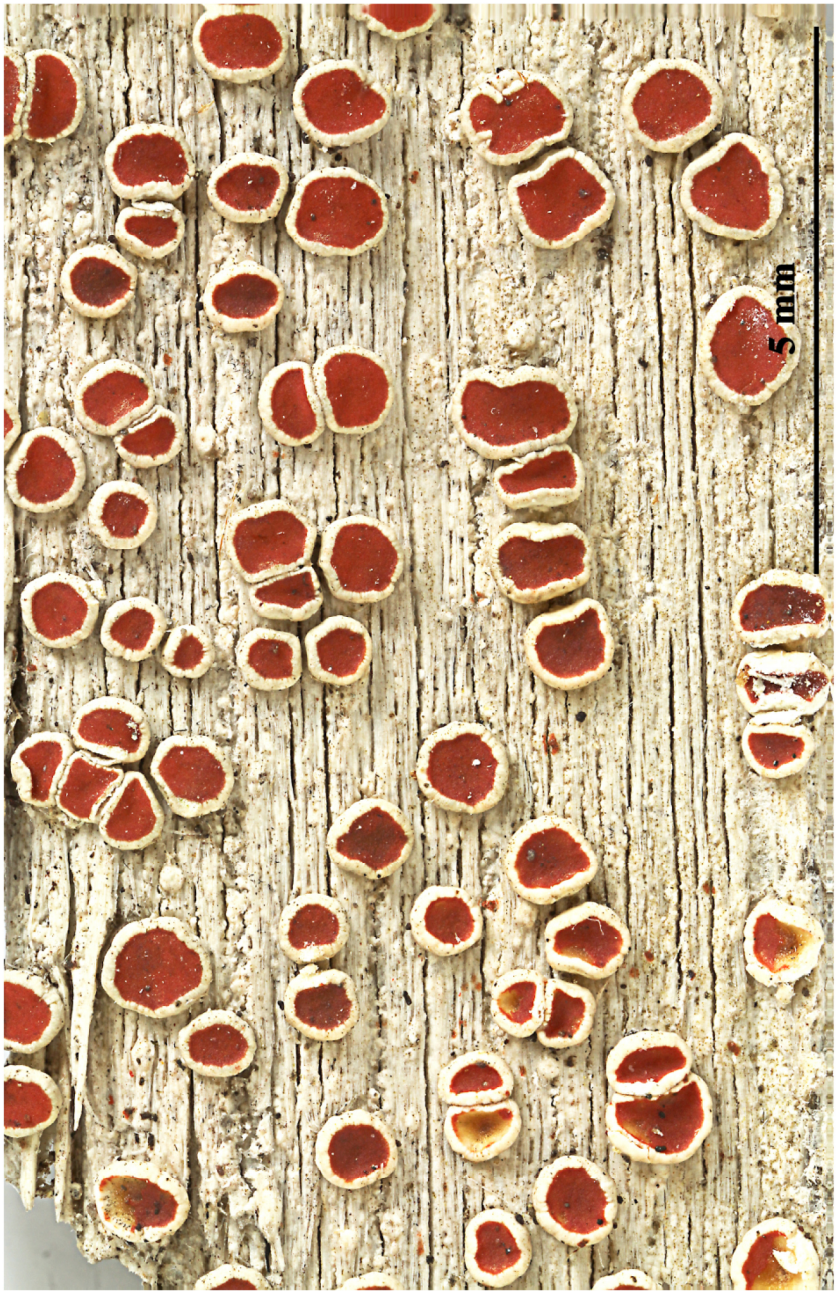


Haematomma fenzlianum

Haematomma flexuosum Hillmann, Reprium nov. Spec. Regni veg. 49: 35 (1938)

[ABL42612], Brazil, Alagoas, Quebrangulo, Pedra Talhada private area. In in Atlantic rain forest on wood. 9°15' S, 36°25'35" W, 500-700 m. Leg. M. Cáceres & A. Aptroot (no 42612), 21-23.10.2017. Det. A. Aptroot, 2017. - Thallus UV-, spores hyaline, c. 7-septate, 35 x 3.5 µm.

Thallus cream-coloured to pale grey or greenish grey, variable but usually ±rugose and warty, ±rimose, 0.3–0.5 mm thick, corticate, esorediate. Apothecia sessile, 0.5–1.5 mm diam., not confluent; disc crimson to purple-red, epruinose; thalline margin prominent, smooth, becoming swollen and crenulate in large apothecia. Ascospores fusiform, straight or slightly curved, 5–9-septate, 35–55 × 3.5–5.0 µm. Conidia bacilliform, 7–8 × 1.5–2.0 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ violet; containing isoplacodiolic acid (major), atranorin (minor), isopseudoplacodiolic acid (minor) and haematommone (minor).



Haematomma flexuosum



Haematomma flexuosum

Haematomma fluorescens Kalb & Staiger, in Staiger & Kalb, Biblthca Lichenol. 59: 114 (1995)

= *Haematomma fluorescens var. longisporum* Nelsen, Lücking & E. Navarro, in Nelsen, Lücking, Chaves, Sipman, Umaña & Navarro, Lichenologist 38(3): 255 (2006)

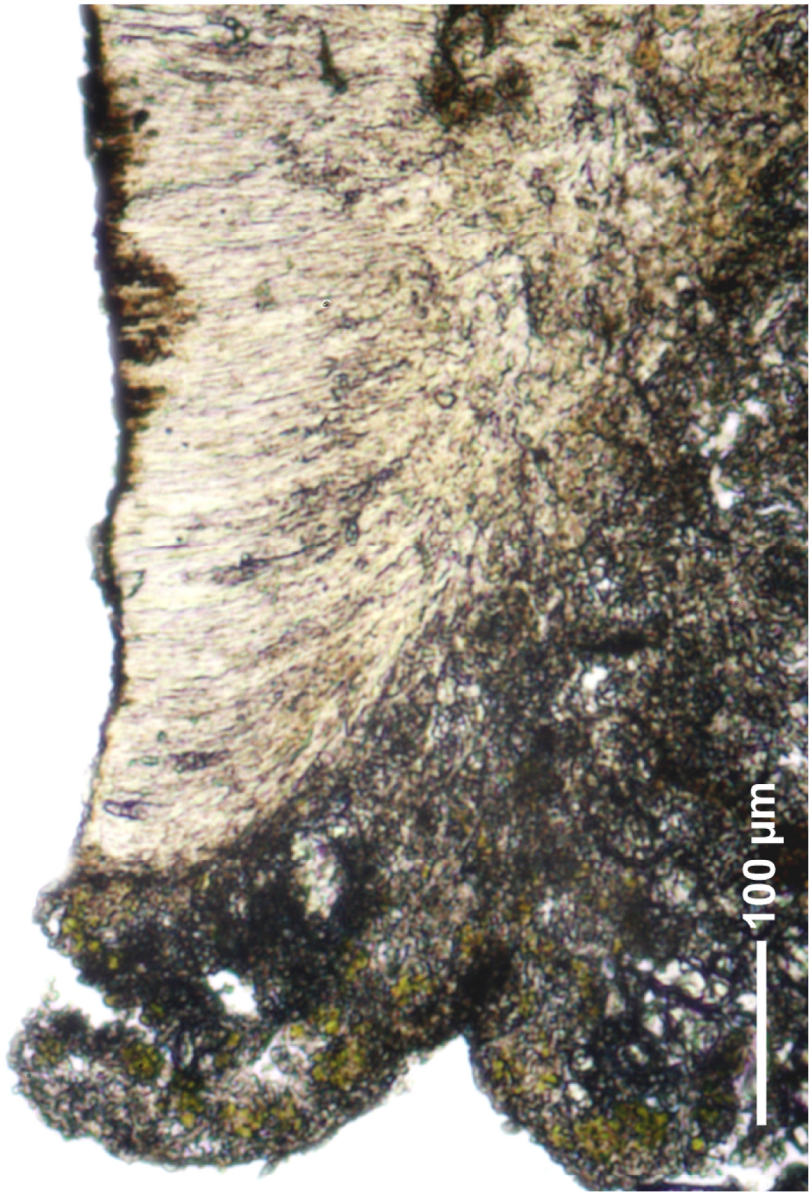
[17972], S-America, Brasilien, Pernambuca, Posao, (Pesqueira), Eingang des Kalvarienberges, corticol, 8°11'61" S, 36°42'17" W. Leg. E. Stocker-Wörgötter (ohne Jahr und Nummer) -
Ascospores hyaline, 8/ascus, c. 9-15-septate. Chemistry: Haematommone (red pigment with KOH blue then qick fading), UV+ intense yellow. Lit.: Staiger & Kalb (1995)

Thallus corticolus, cremeus vel griseus, + verrucosus, areolatus, ca. 0,5 mm crassus, non sorediatus, UV+ aurantiacus. Apothecia late sessilia, 0,5-1,5 mm in diametro, disco cinnabarino scarlatino, margine laevi vel crenulato. Hymenium dense inspersum. Sporae 8nae, 9- ad 14septatae, (50 -) 55 - (66,3) - 75 x 4,5 - (5,4) - 6 µm. Materia chimica: Lichexanthonum (maior), russulonum (maior); sphaerophorinum et acidum isosphaericum (solum paufulum) adsunt.

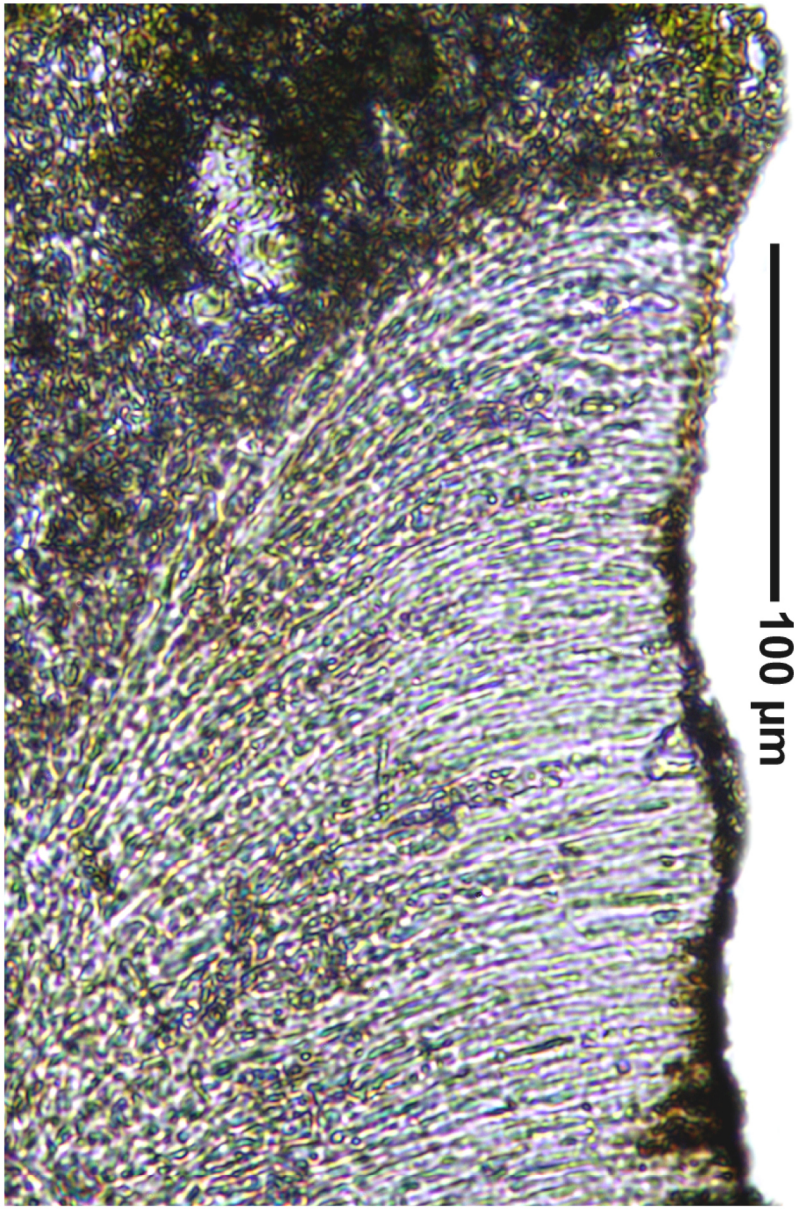
Thallus cremefarben bis griünlichgrau, + warzig, rissig, ca. 0,2-0,5 dick, z. T. mit kleinen Kristallnadeln aus Lichexanthon, ohne Sorale, goldgelb. Apothecien sitzend, Basis nicht deutlich eingeschnüirt, 0,5-1,5 mm Durchmesser, Scheibe zinnober- bis scharlachrot, Rand lagerfarben, glatt, bei älteren Apothecien oft crenuliert. Im Bereich des Hymeniums kommen stets Oltropfen vor. Sporen zu 8 im Ascus, 10- bis 14zellig, gerade oder leicht sigmoid gebogen, (50 -} 55 - (66,3) - 75 x 4,5 - (5,4) - 6 um. Spermatien lang, gebogen, 17-22 x 1 µm. Chemie: Lichexanthon, Russulon sowie eine unbekannte Fettsdäure, Atranorin und Sphaerophorin kommen nur in Spuren vor.



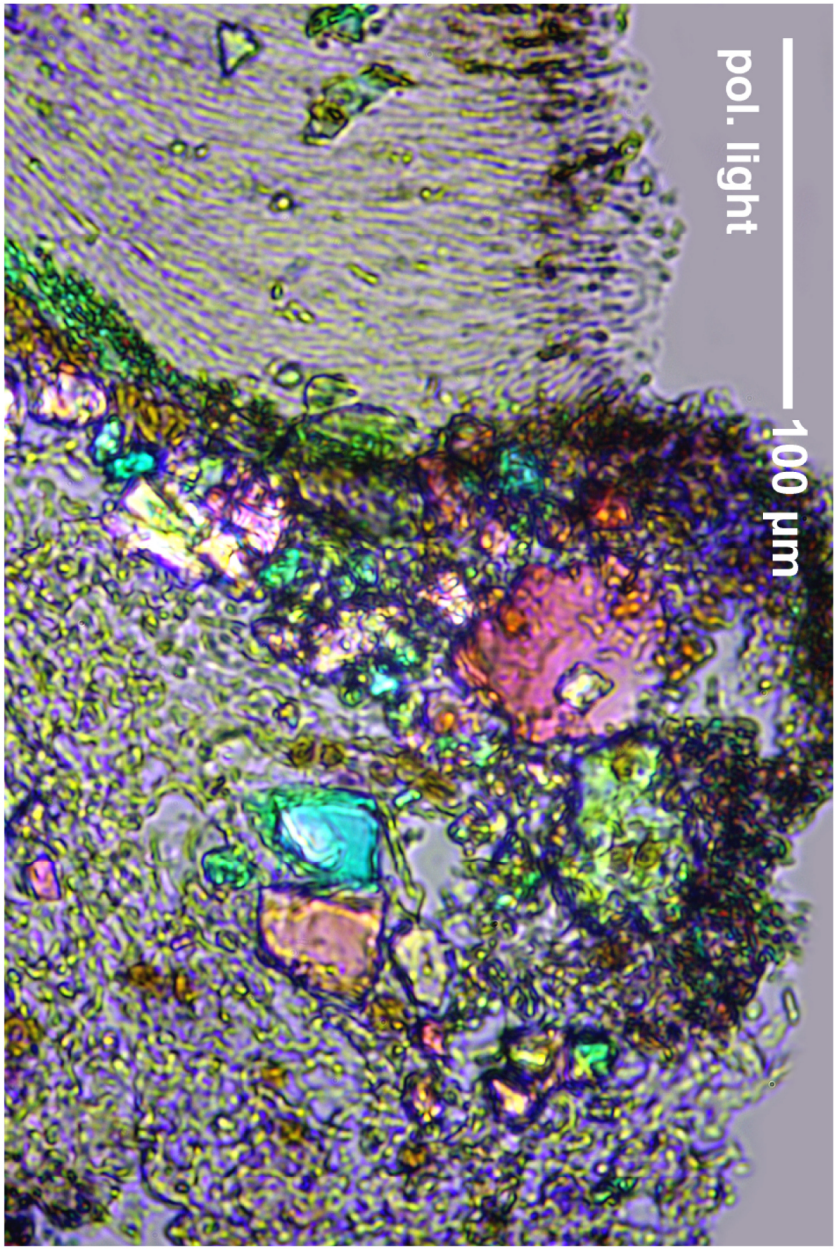
Haematomma fluorescens



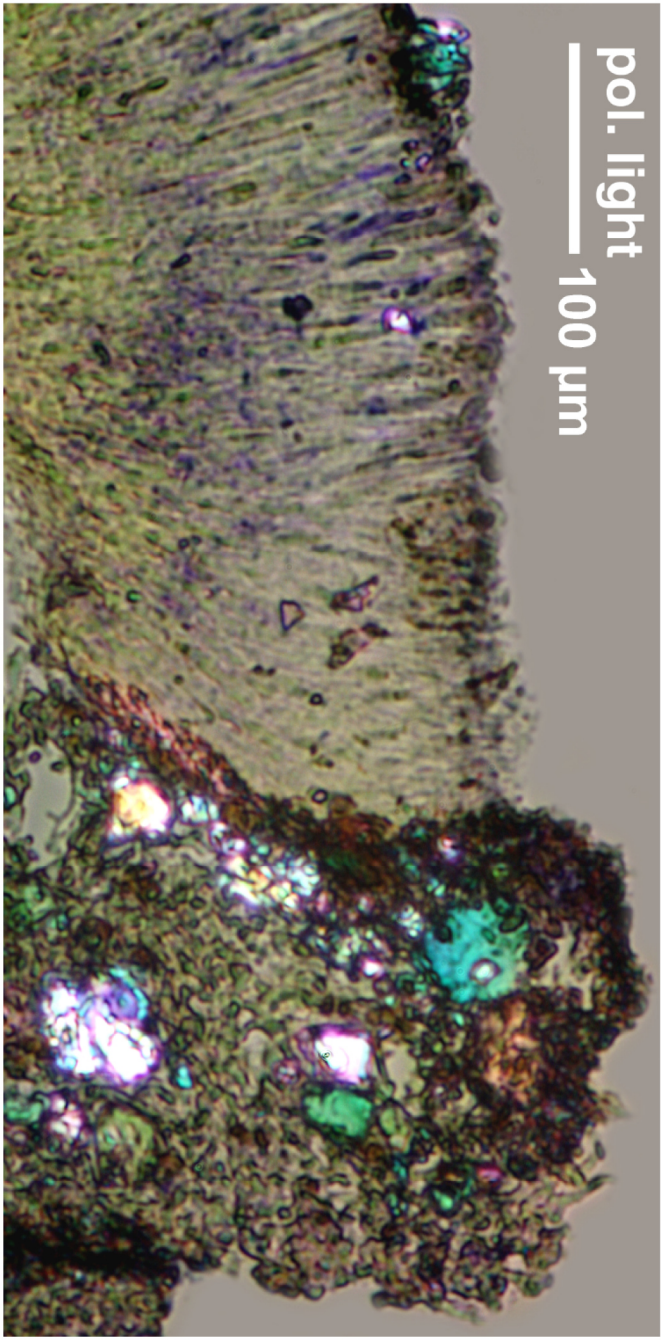
Haematomma fluorescens



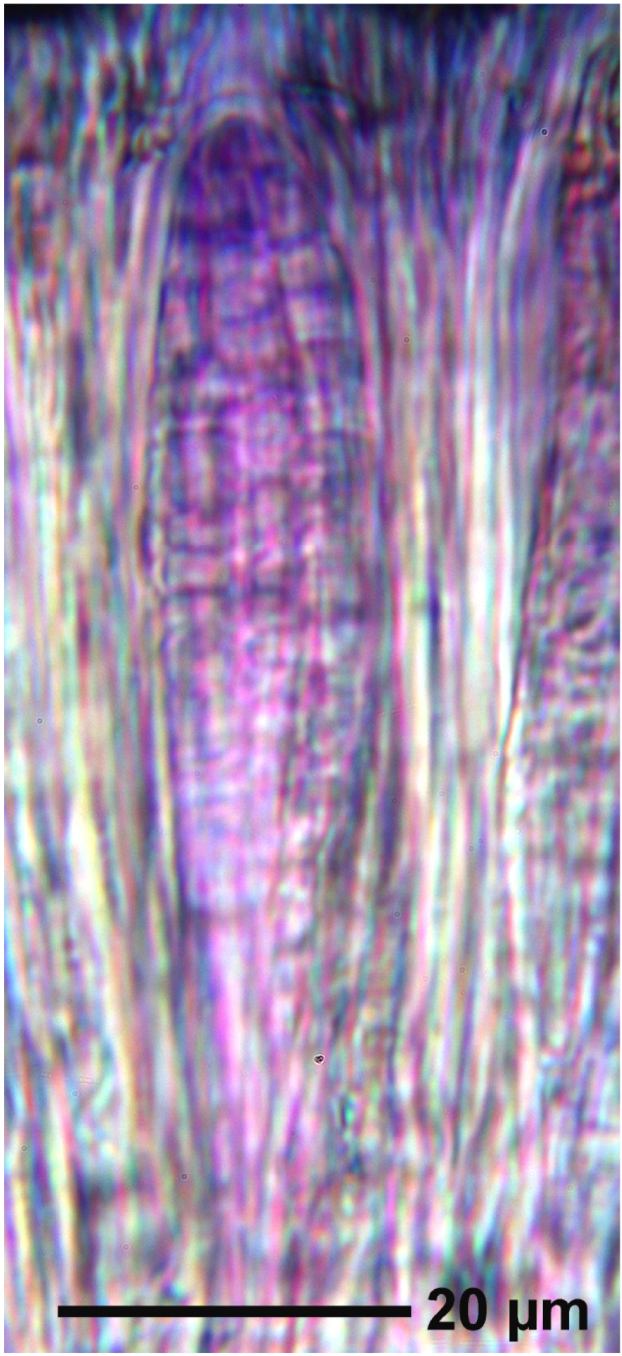
Haematomma fluorescens



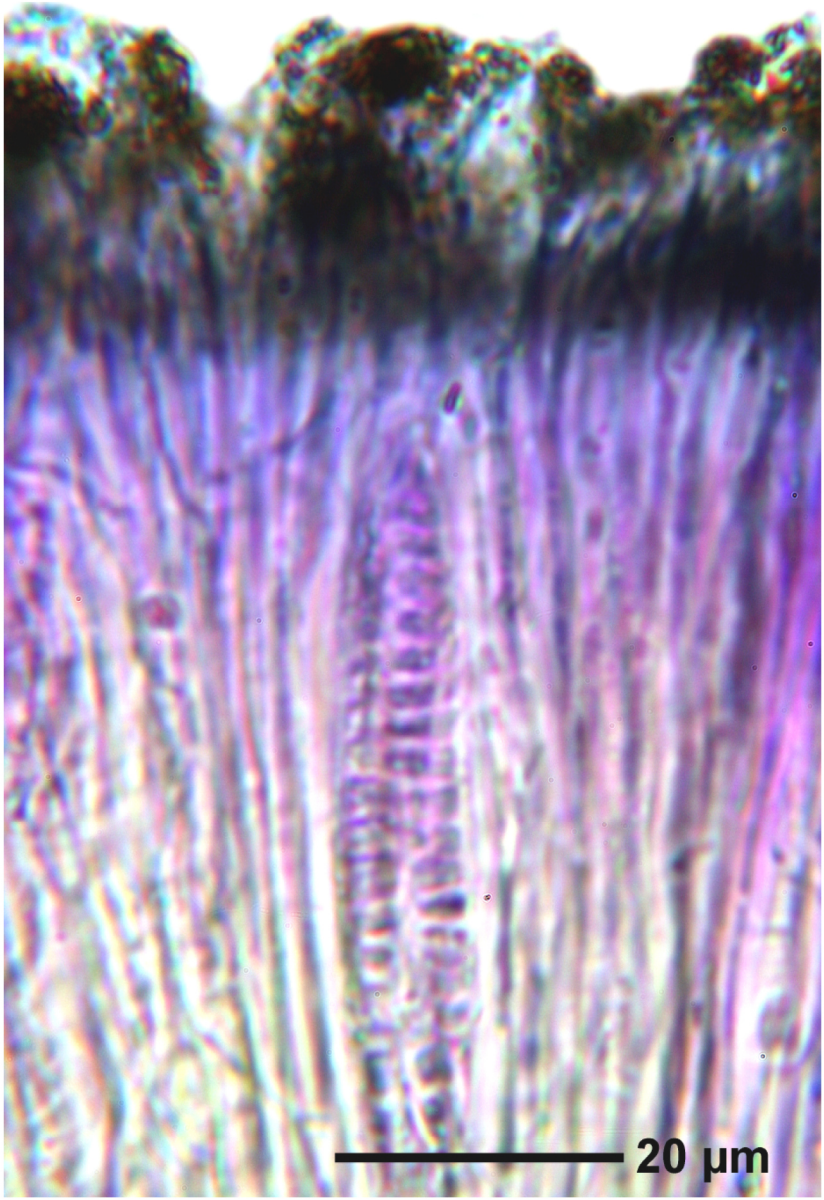
Haematomma fluorescens



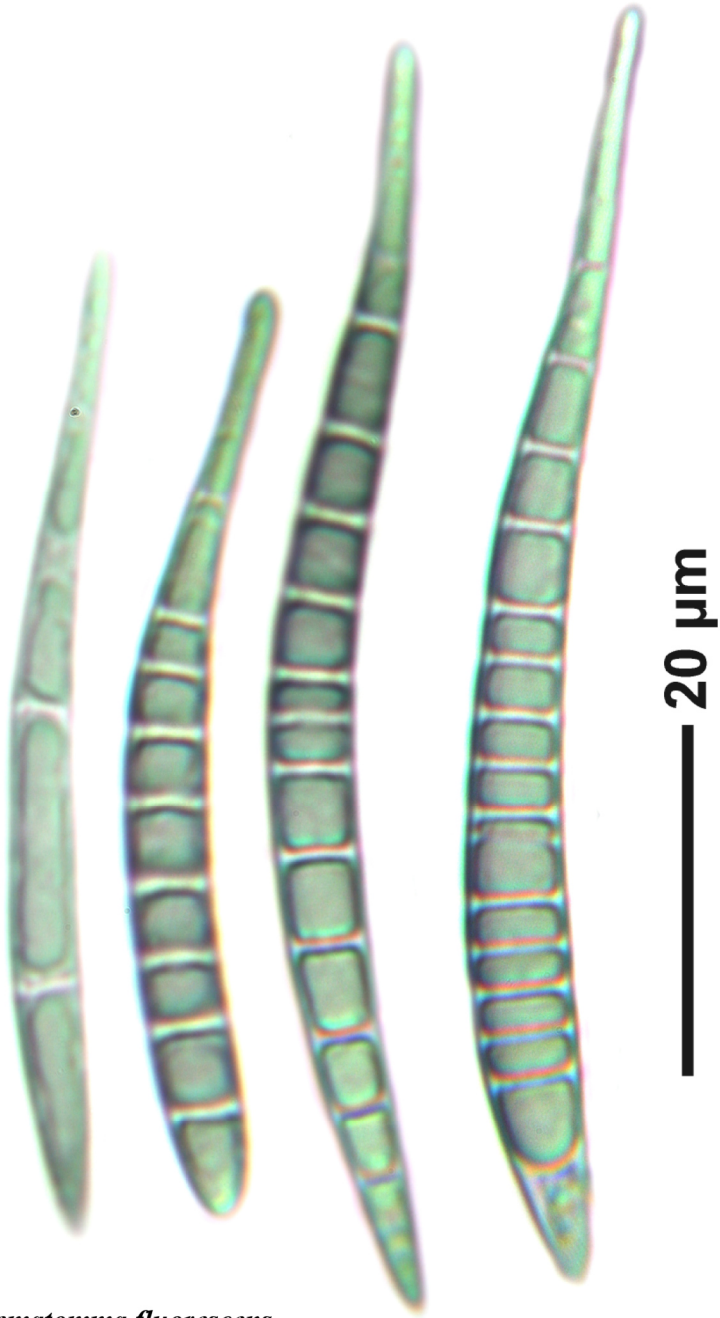
Haematomma fluorescens



Haematomma fluorescens



Haematomma fluorescens



Haematomma fluorescens

Haematomma matogrossense Kalb & Staiger, in Staiger & Kalb, Biblthca Lichenol. 59: 133 (1995)

[ABL77796], Brazil, Mato Grosso do Sul, Morraria do Sul, Bodoquena, Fazenda Santa Laura, in Atlantic rain forest on wood. 20°47'10" S, 56°43'48" W, 450 m. Leg. A. Aptroot (no 77796), 7.11.2018, det. A. Aptroot, 2019 - Spores 8/ascus, 7-13-septate, 40-57 x 4.5-6 µm, apothecia with haematomon.

Thallus corticolus, cinereus vel murinus, minutissime verrucosus, ca. 0,3-0,5 mm crassus, esorediatus. Apothecia sessilia, basi plusminusve constricta, 0,5-1,5 (ad 2) mm in diametro, disco obscure cinnabarino vel purpureo, non pruinoso, margine laevi vel crenulato, undulato. Sporae 8/ascus, 7-13septatae, 40 - (47,2) - 55 (-57) x 4,5 - (5,1) - 6 µm. Spermatia, 5-6 x 1-1,2 µm. Materia chimica: Atranorinum, acidum methylisoplacodiolicum, acidum isopseudoplacodiolicum, acidum isoplacodiolicum (minimum), haematommonum.



Haematomma matogrossense

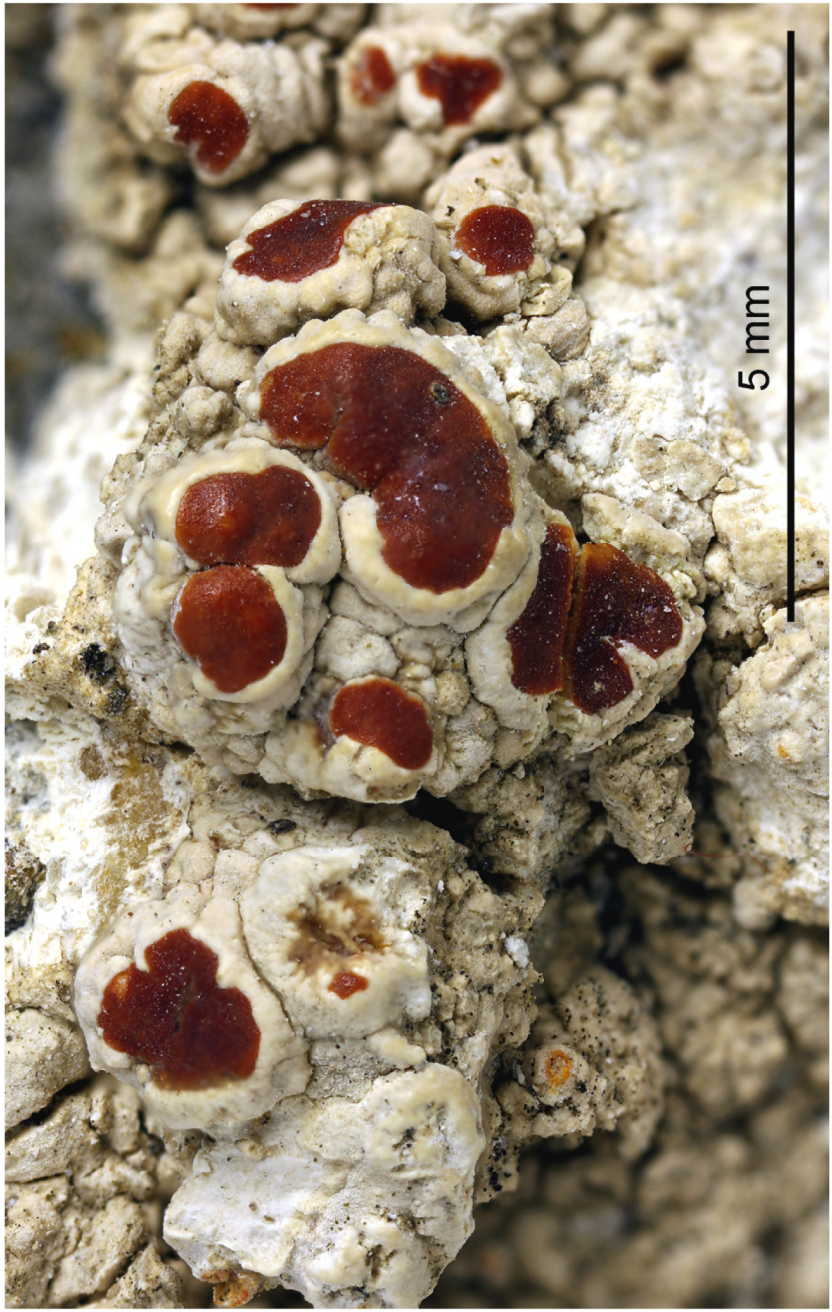


Haematomma matogrossense

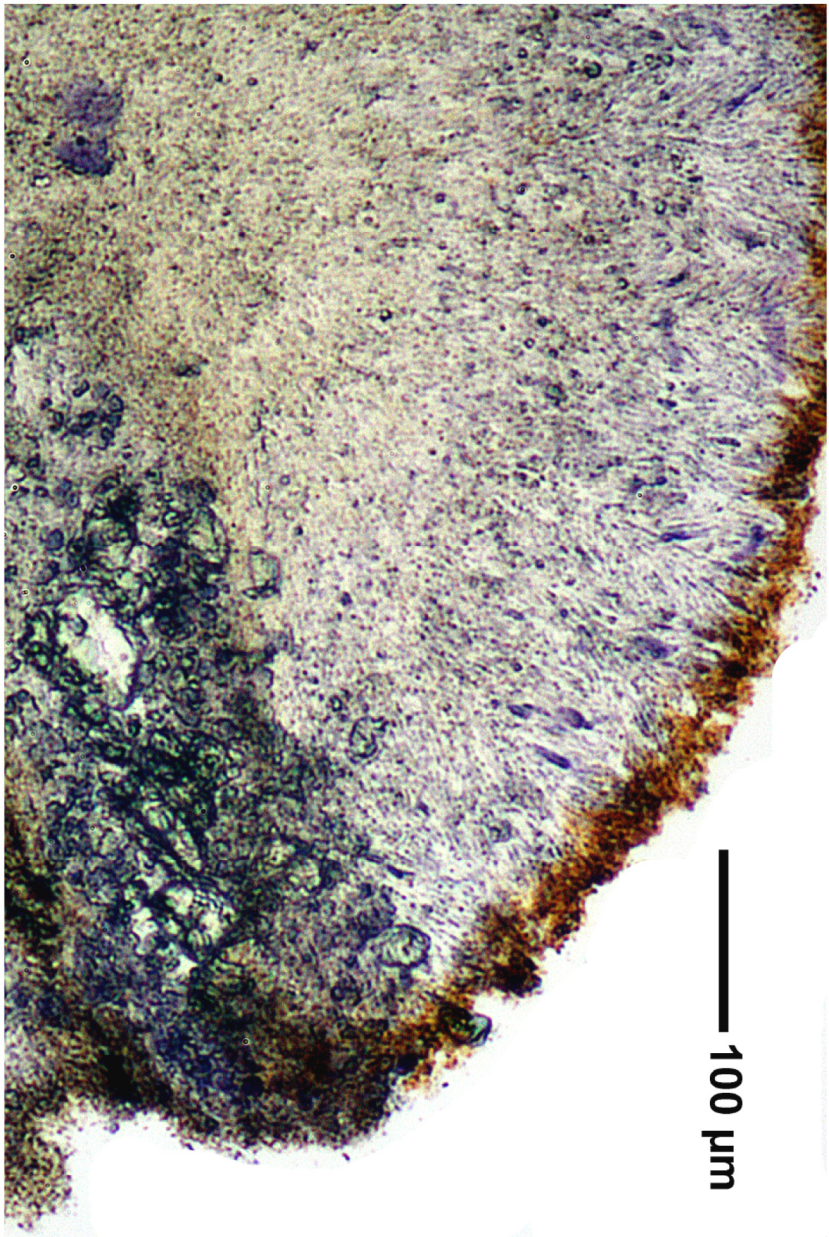
Haematomma nemetzii J. Steiner, in Fritsch, Denkschr. Kaiserl. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 68: 230, tab. I, fig. 4, a-c (1899)

[11974], Türkei, Southwest Anatolia, Province of Mugla, Pinus nigra dominated pinewood in the fog-belt around Kosantepe Pass at Besparmak Dag between Narhisar and Cukurköy, covering larger rain-protected, overhanging gneissose rocks, 850 m. Leg. V. John 03.1983, det. V. John. Ex G. Follmann: Lichenes Exsciccati Selecti Ab Instituto Botanico Universitatis Coloniensis Editi Nr. 547. - (test TLC Schumm).

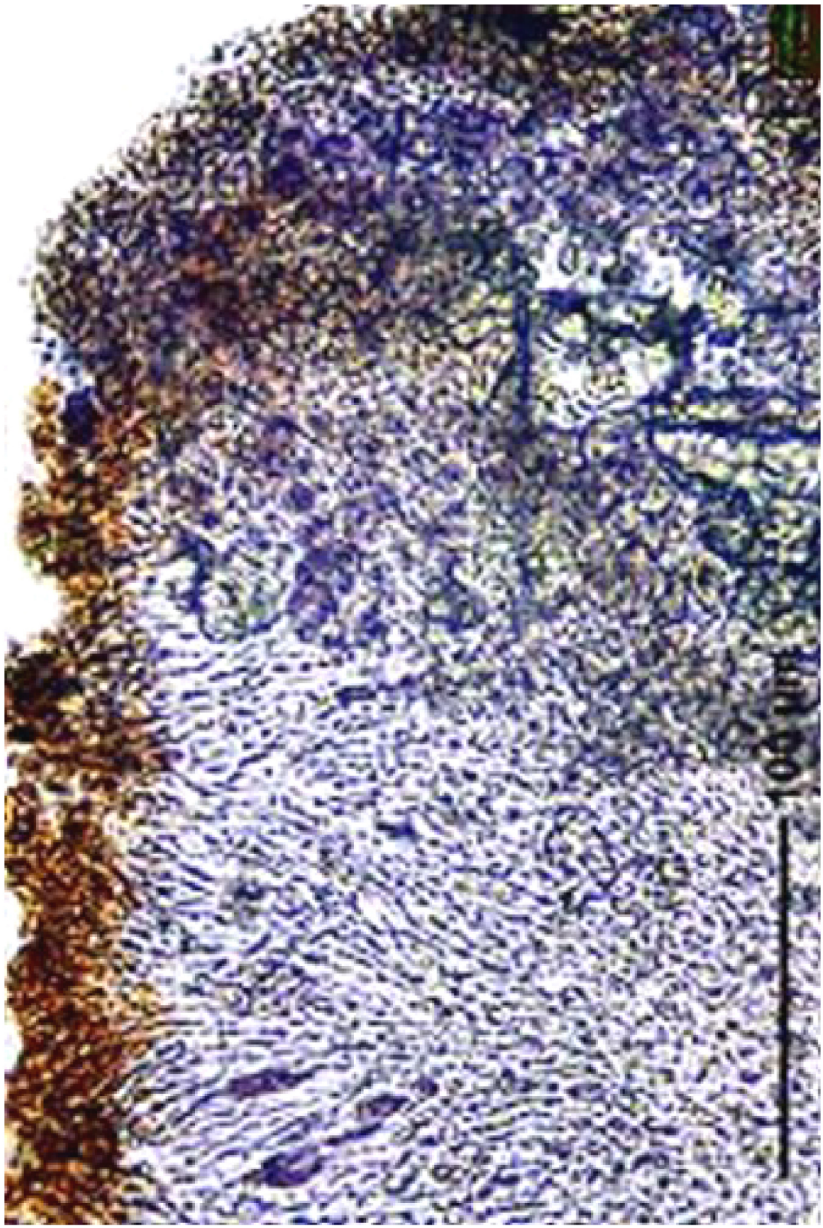
Thallus grey, greenish grey, warty, deeply cracked. Soredia and isidia absent. Apothecia red, not pruinose, bulging, 0.5-3 mm, somewhat immersed. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 3-7-septate, straight or curved, 25-50 x 4.5-8 µm. Saxicolous. Chemistry: atranorin, psoromic acid, russulone, roccelic acid (tr), 2'-O-demethylpsoromic acid (± tr). Lit.: Staiger & Kalb (1995)



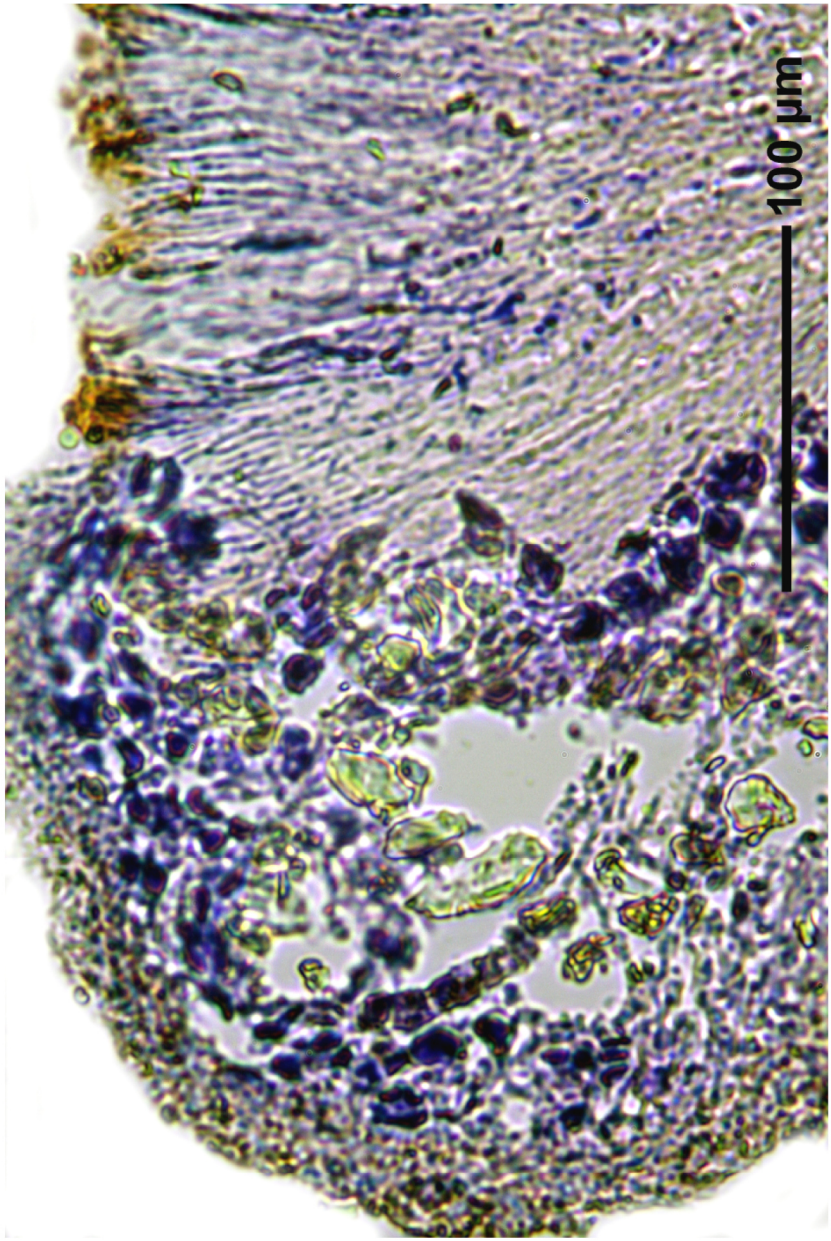
Haematomma nemetzii



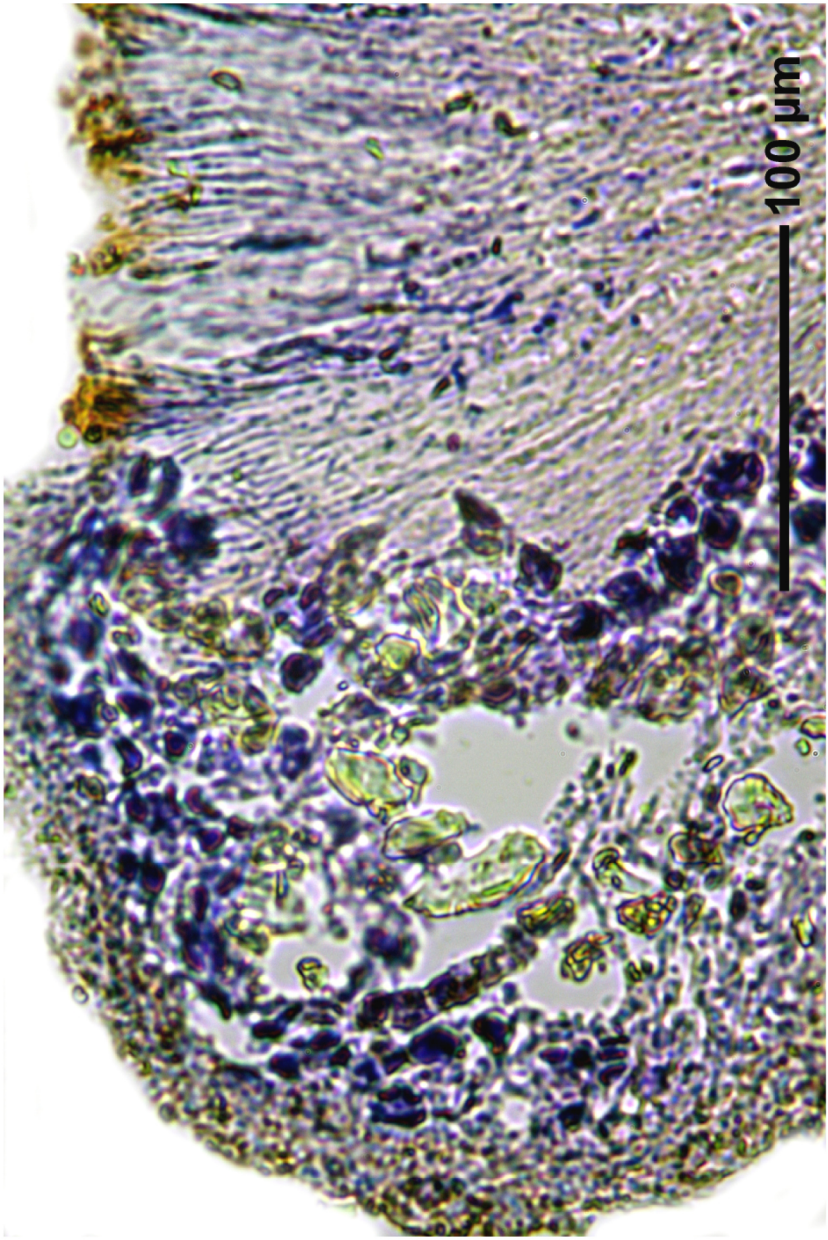
Haematomma nemetzii



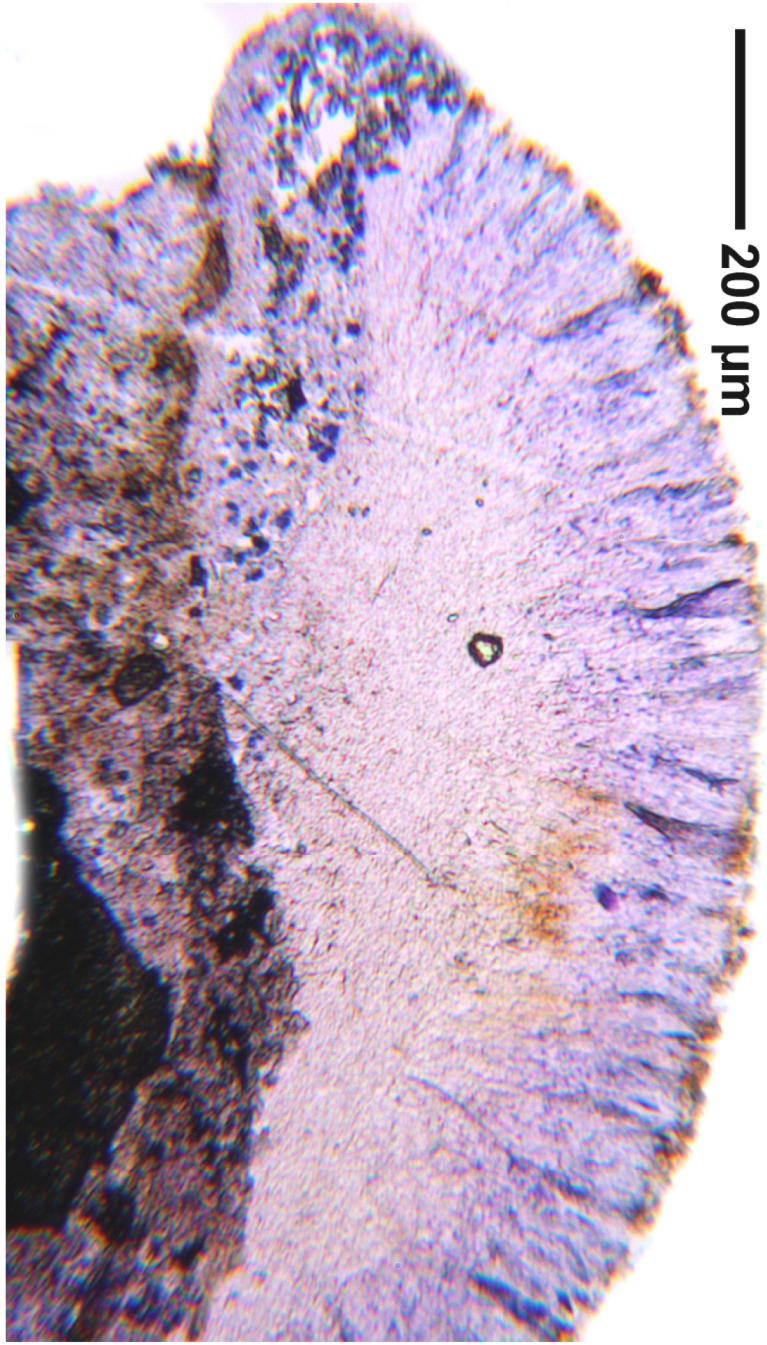
Haematomma nemetzii



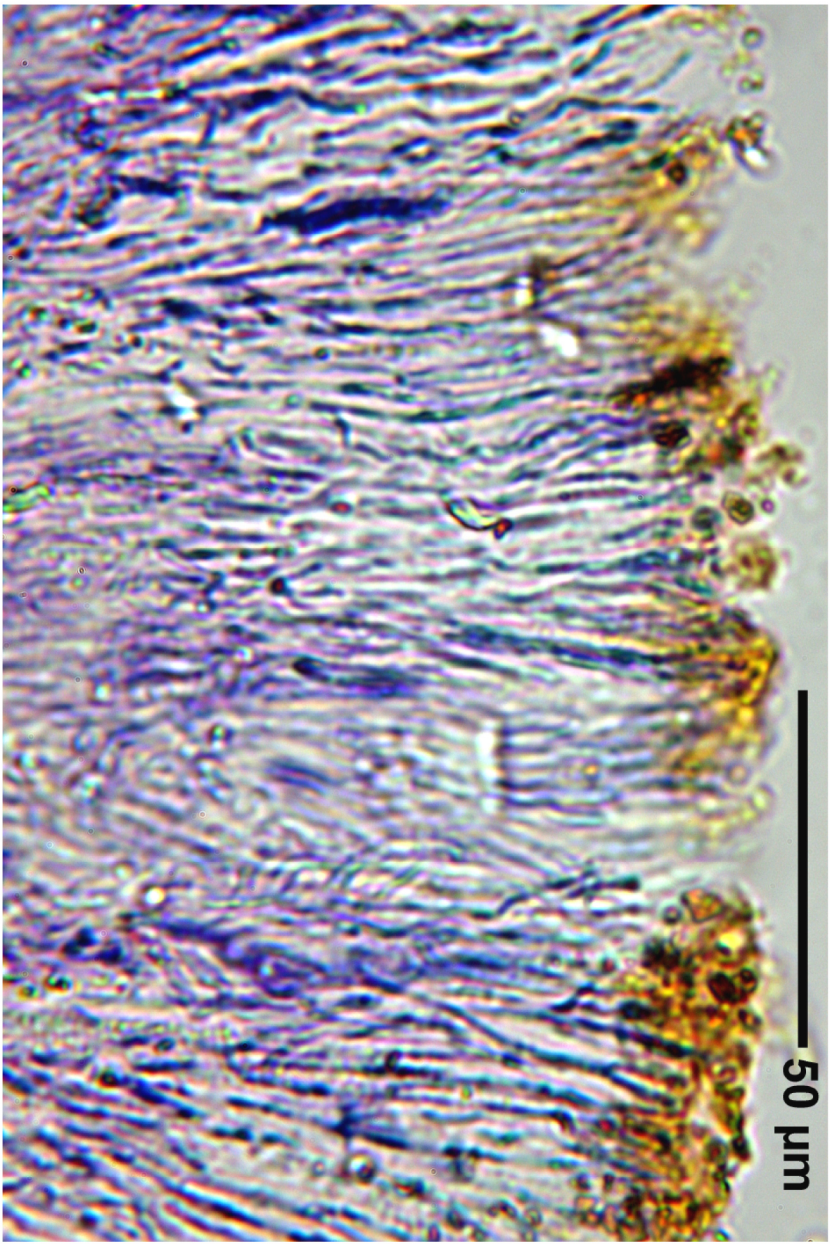
Haematomma nemetzii



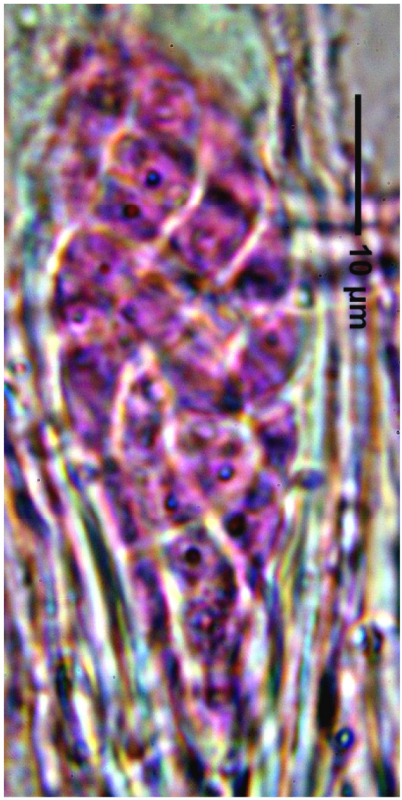
Haematomma nemetzii

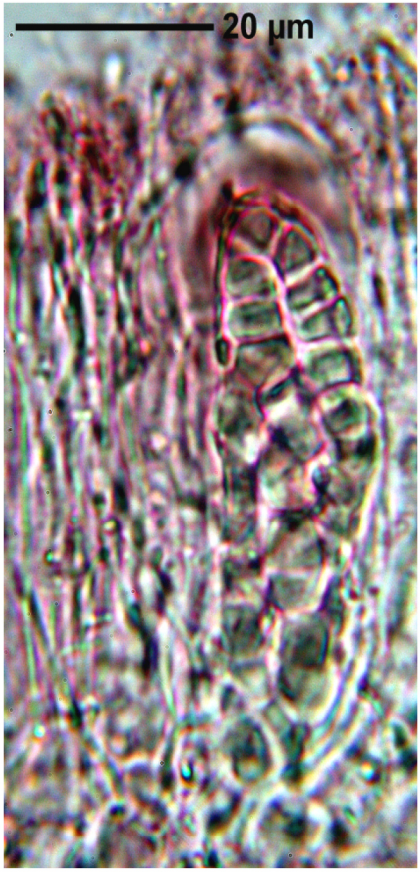


Haematomma nemetzii

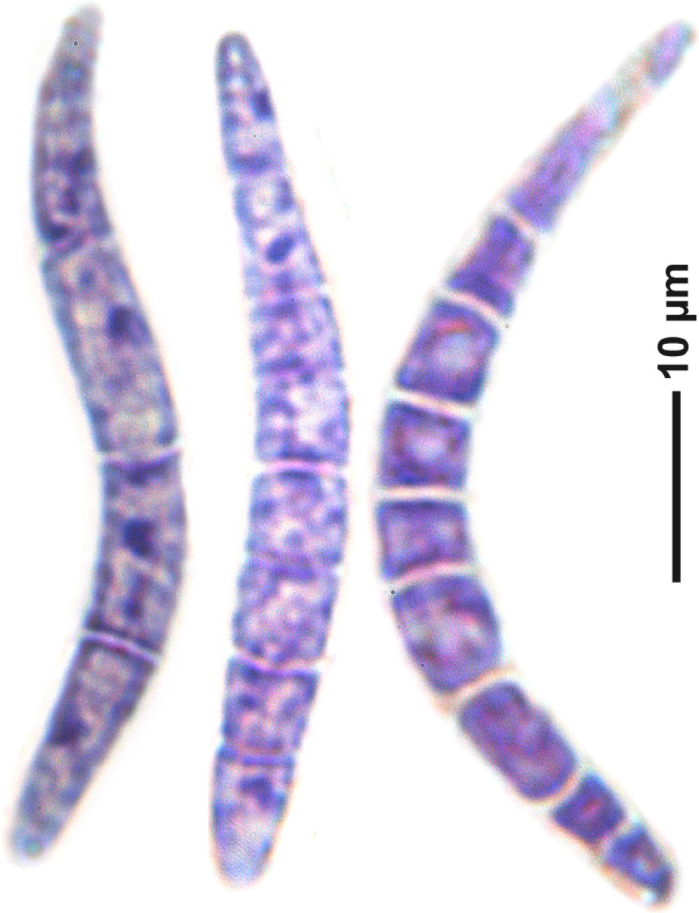


Haematomma nemetzii





Haematomma nemetzii



Haematomma nemetzii

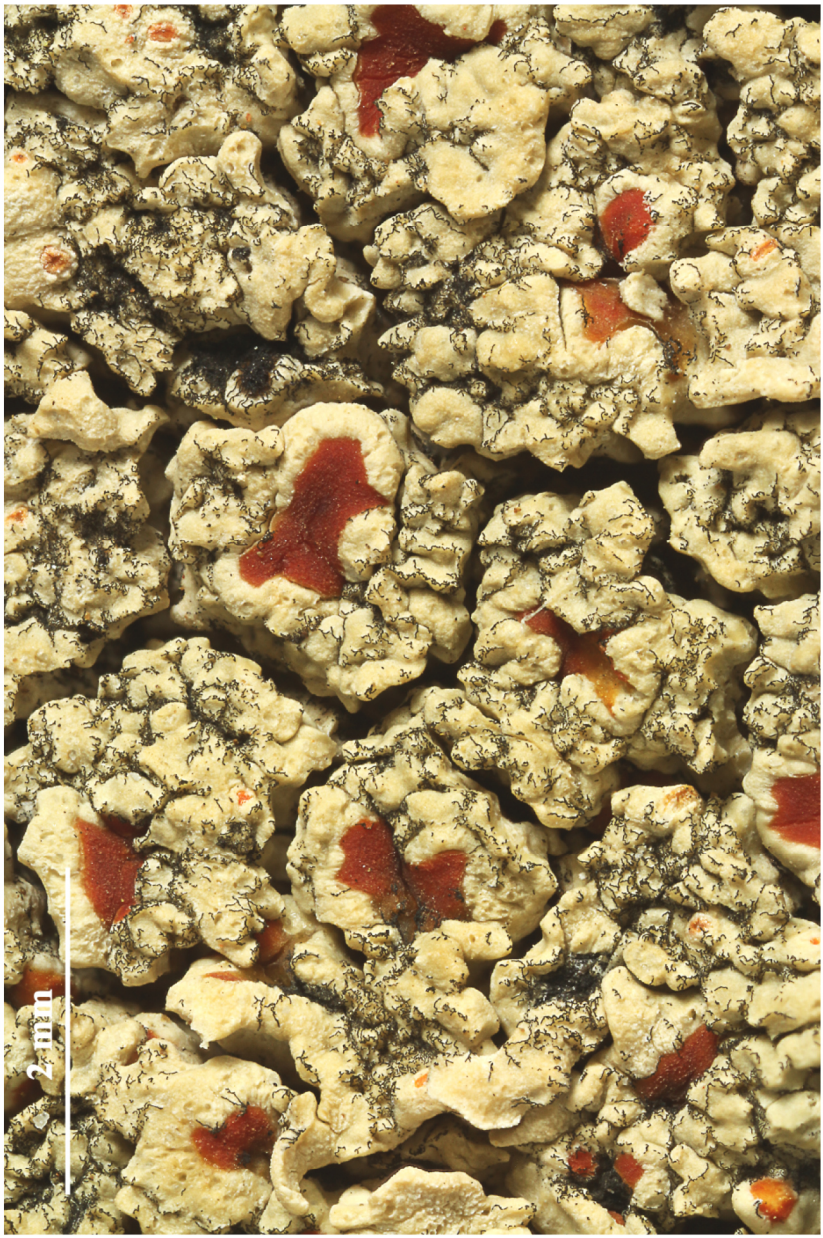
Haematomma nemetzii J. Steiner, in Fritsch, Denkschr. Kaiserl. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 68: 230, tab. I, fig. 4, a-c (1899)

[13552], Griechenland, S-Kreta, Asteroussia Berge, an der Straße 2 km hinter Miamou in Richtung Platanos, 500 m, Felsen in Oleahain. Leg. F. Schumm & R. Düll, 23.10.2007, det. K. Kalb 7.7.2018.

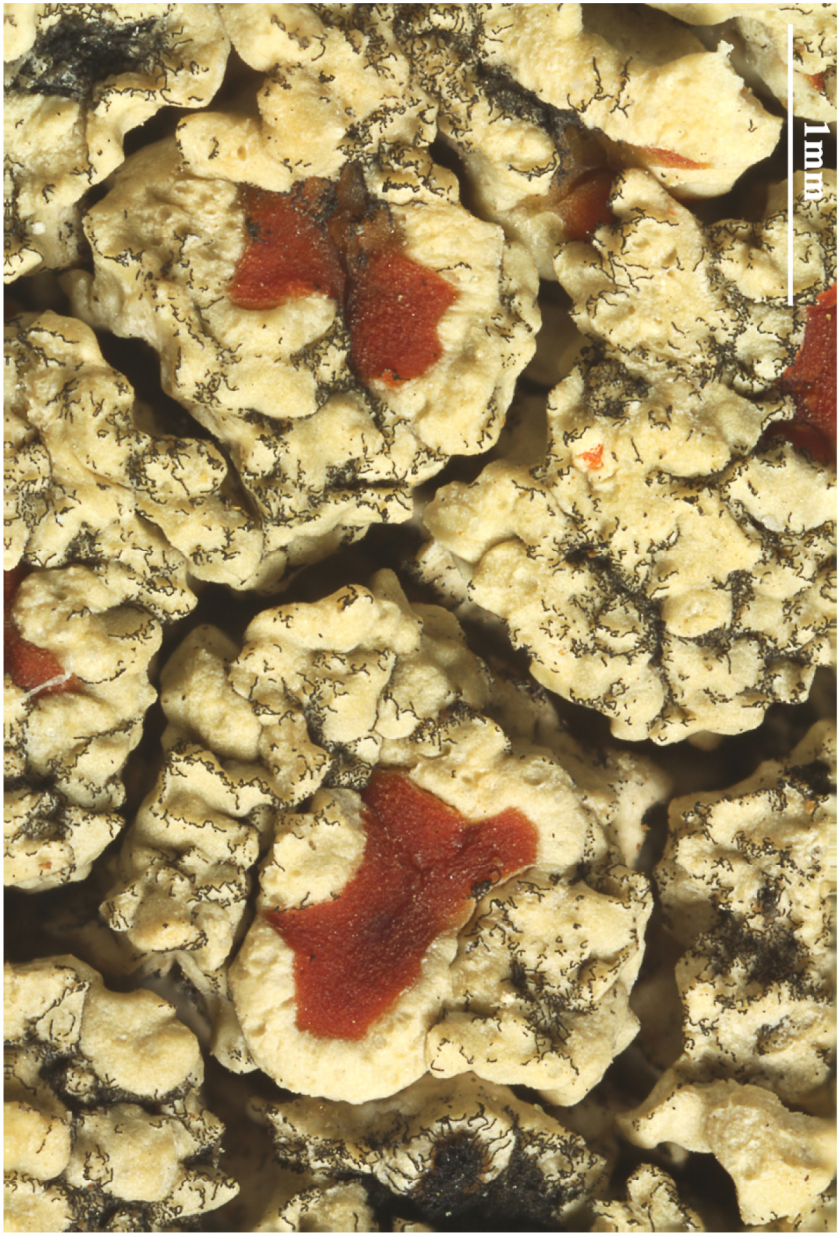
Thallus grey, greenish grey, warty, deeply cracked. Soredia and isidia absent. Apothecia red, not pruinose, bulging, 0.5-3 mm, somewhat immersed. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 3-7-septate, straight or curved, 25-50 x 4.5-8 µm. Saxicolous. Chemistry: atranorin, psoromic acid, russulone, roccelic acid (tr), 2'-O-demethylpsoromic acid (± tr). Lit.: Staiger & Kalb (1995)



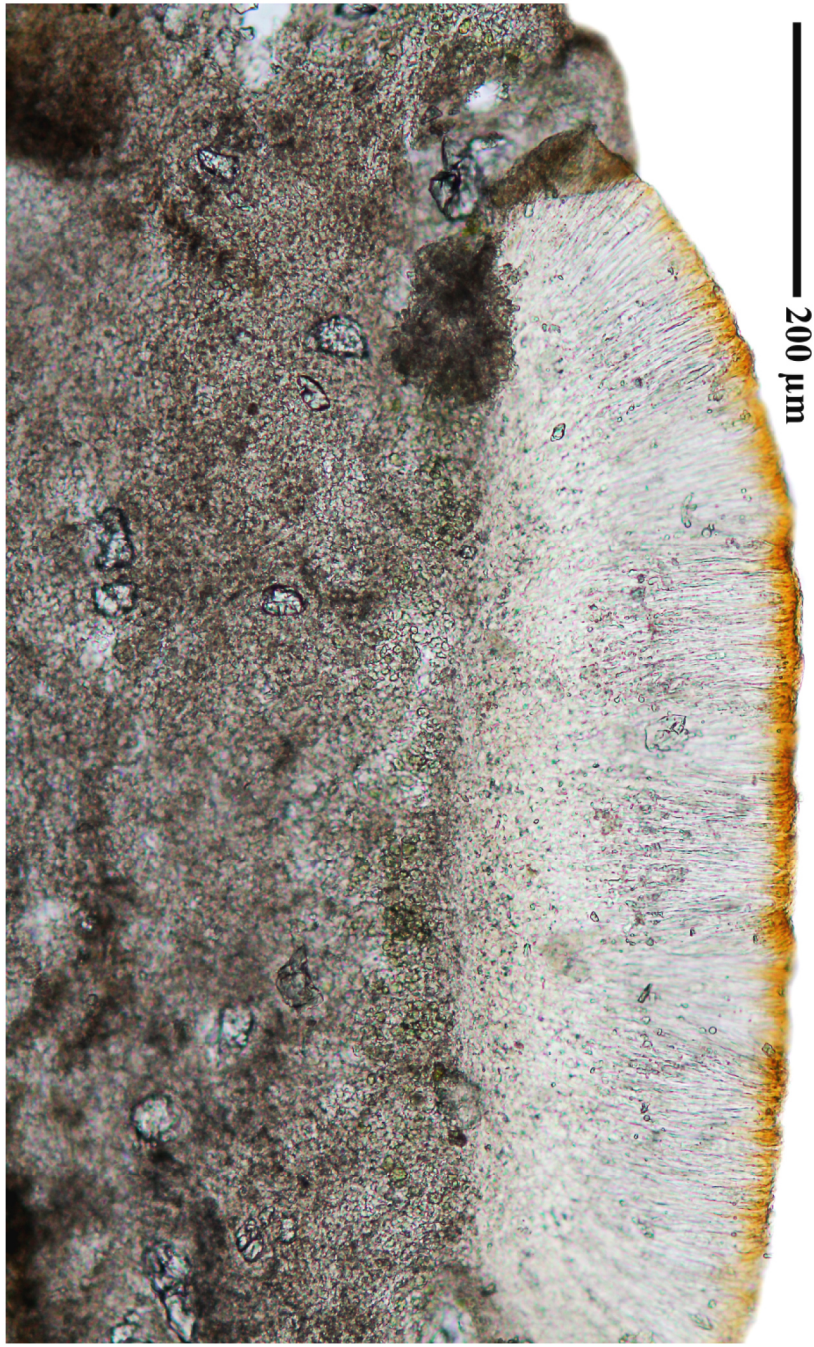
Haematomma nemetzii



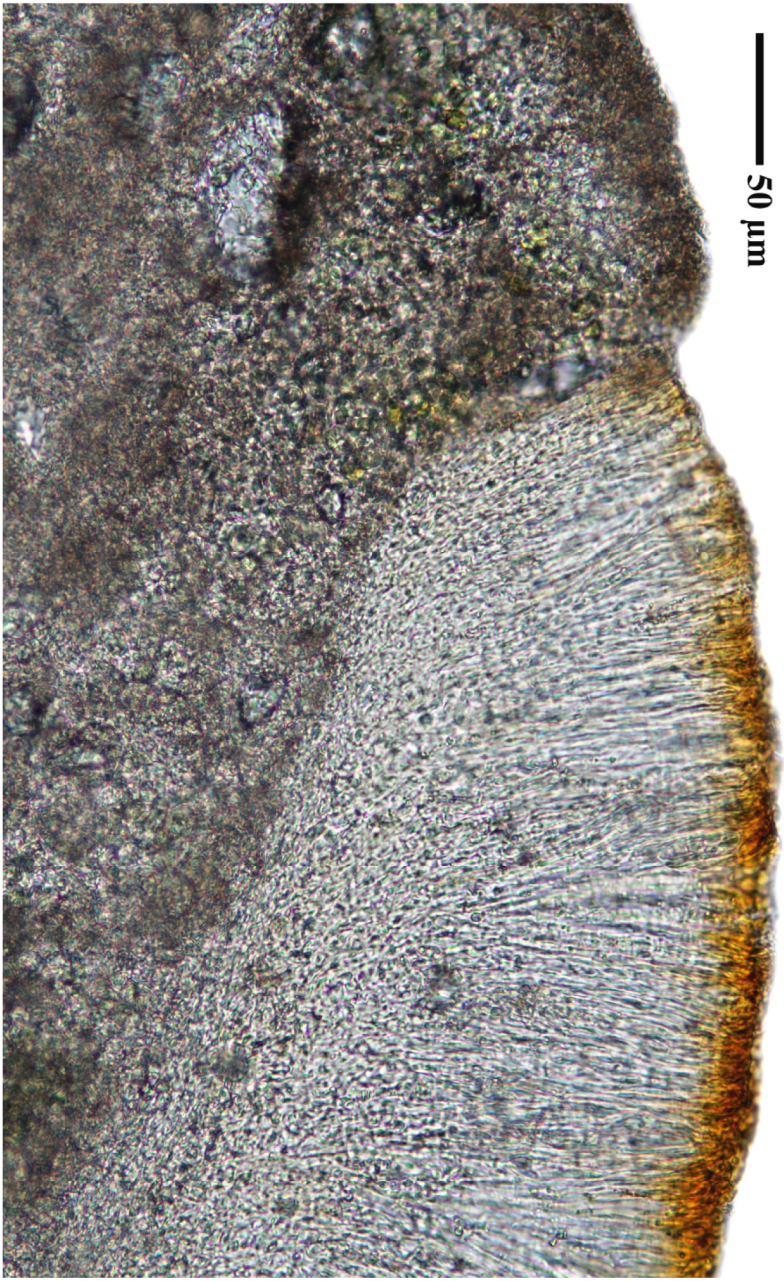
Haematomma nemetzii



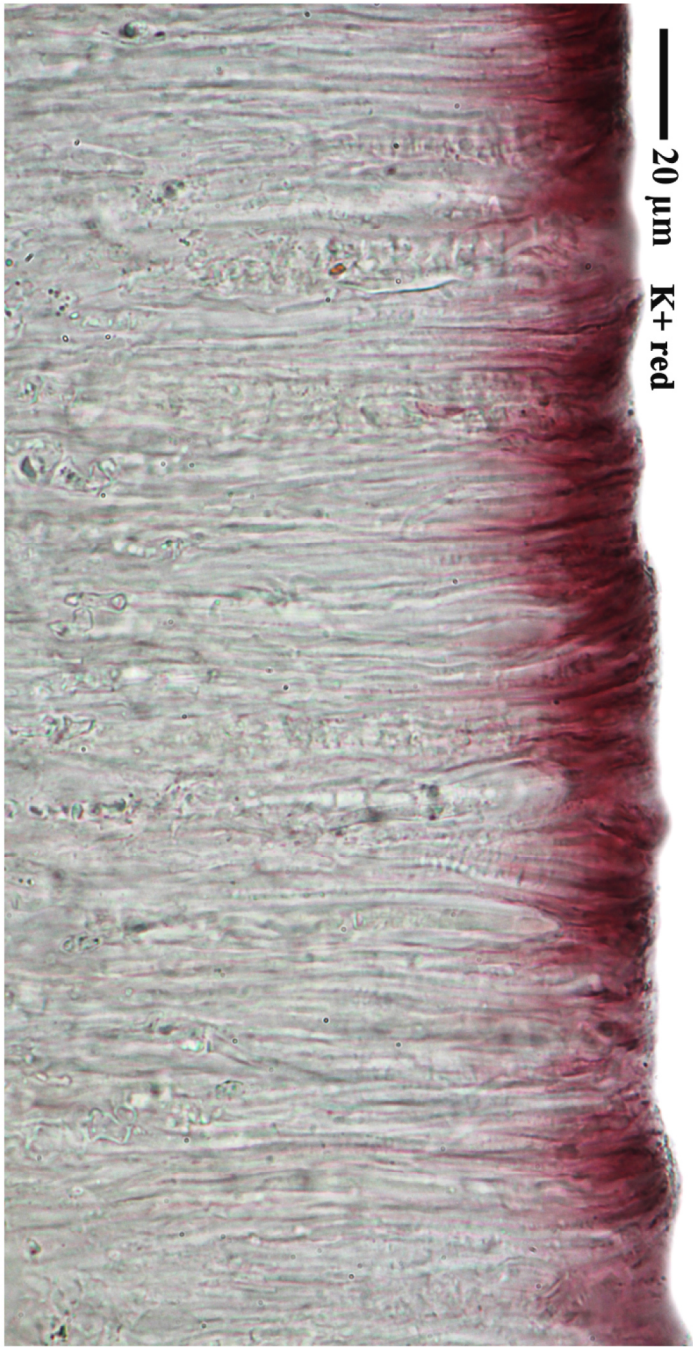
Haematomma nemetzii



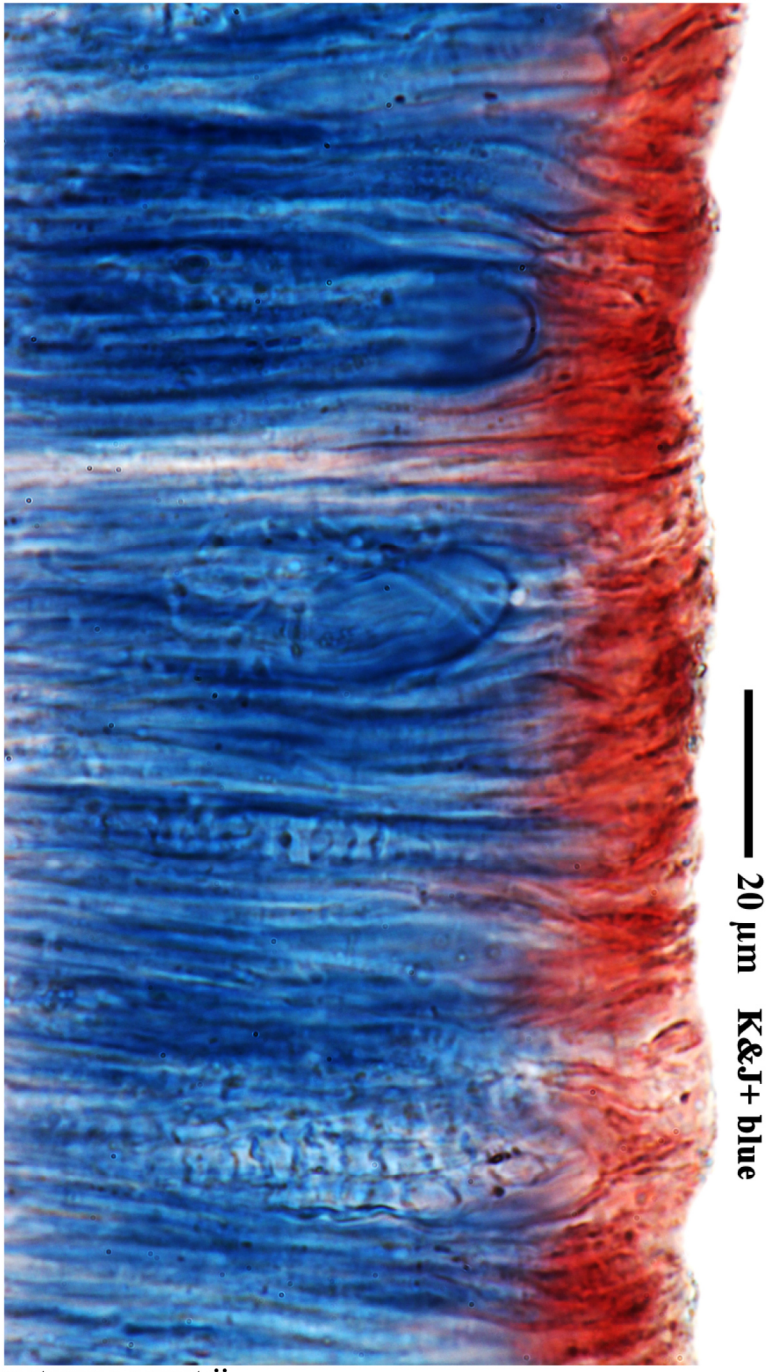
Haematomma nemetzii



Haematomma nemetzii



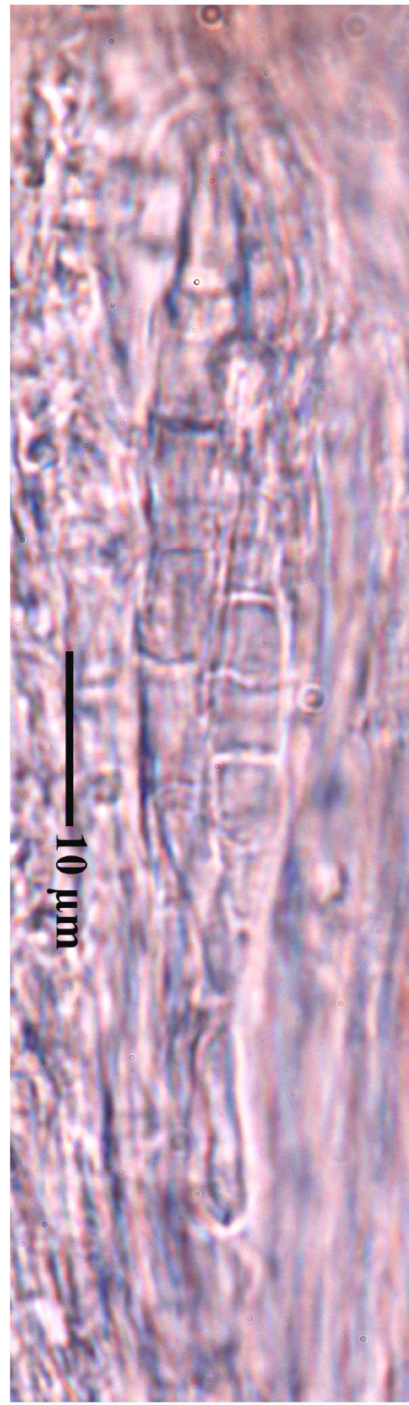
Haematomma nemetzii



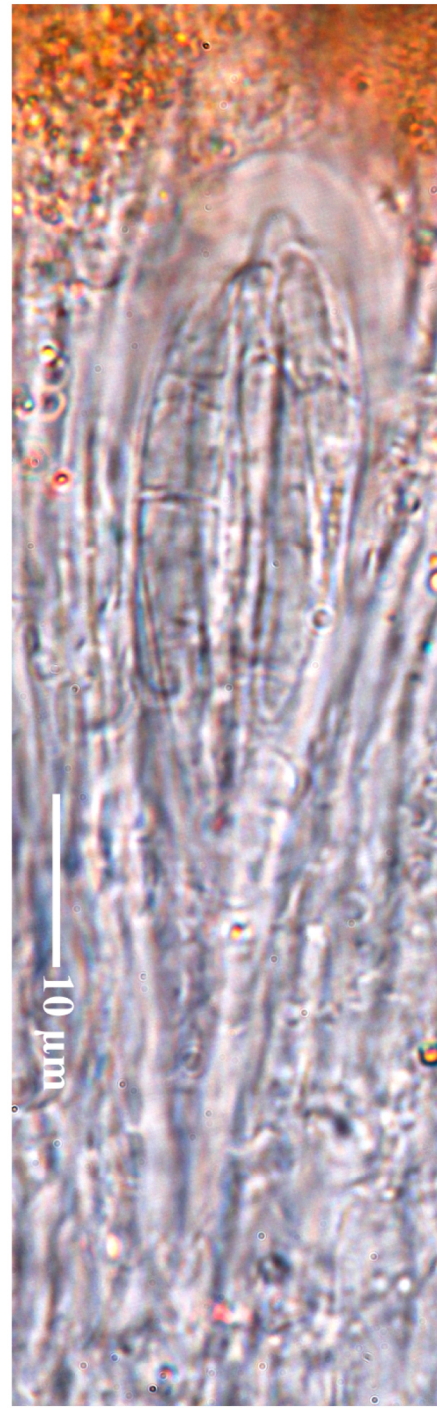
Haematomma nemetzii



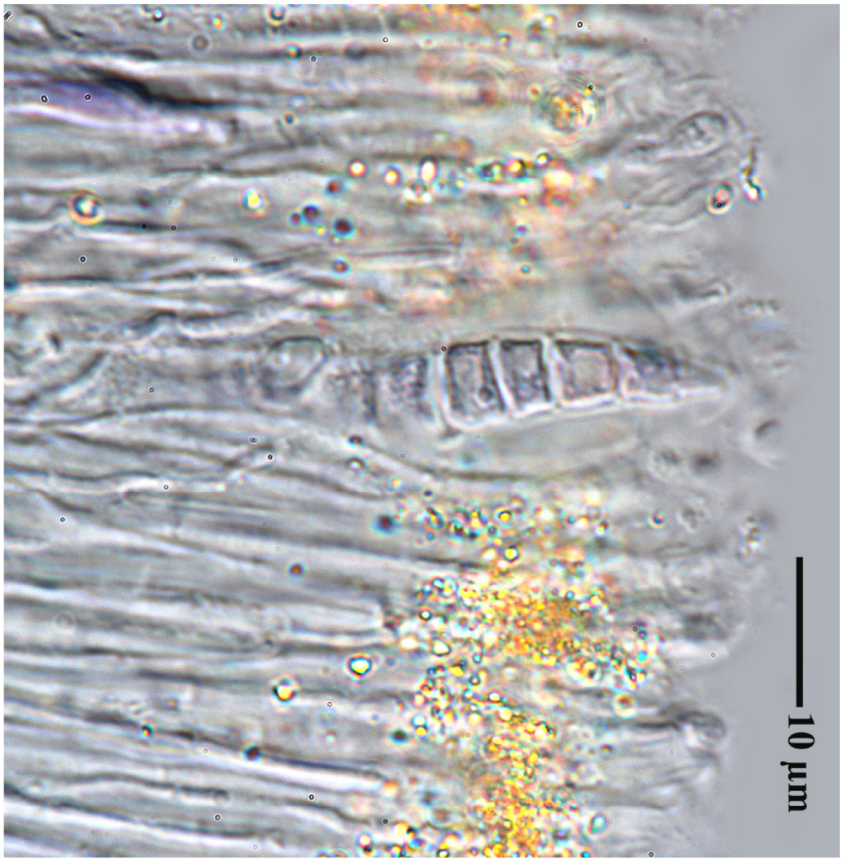
Haematomma nemetzii



Haematomma nemetzii



Haematomma nemetzii



Haematomma nemetzii

Haematomma ochroleucum var. ***porphyrium*** (Pers.) J.R. Laundon, Lichenologist 4(4): 301 (1970)

= *Haematomma ochroleucum* (Neck.) J.R. Laundon, Lichenologist 4(4): 299 (1970)

= *Haematomma coccineum* (Dicks.) Körb., Syst. lich. germ. (Breslau): 153 (1855)

= *Haematomma coccineum* f. *porphyrium* (Pers.) Arnold [as 'porphyria'], Flora, Regensburg 68(11): 236 (1885)

= *Haematomma coccineum* var. *porphyrium* (Pers.) Th. Fr., Lich. Scand. (Upsaliae)(1): 297 (1871)

= *Haematomma leiphaemum* (Ach.) Zopf, Justus Liebigs Annln Chem. 346: 111 (1906)

= *Haematomma porphyrium* (Pers.) Zopf, Justus Liebigs Annln Chem. 346: 111 (1906)

= *Haematomma vulgare* A. Massal., Ric. auton. lich. crost. (Verona): 32 (1852)

= *Haematomma vulgare* var. *leiphaema* (Ach.) Zwackh [as 'leiphaemia'], Flora, Regensburg 45(31): 483 (1862)

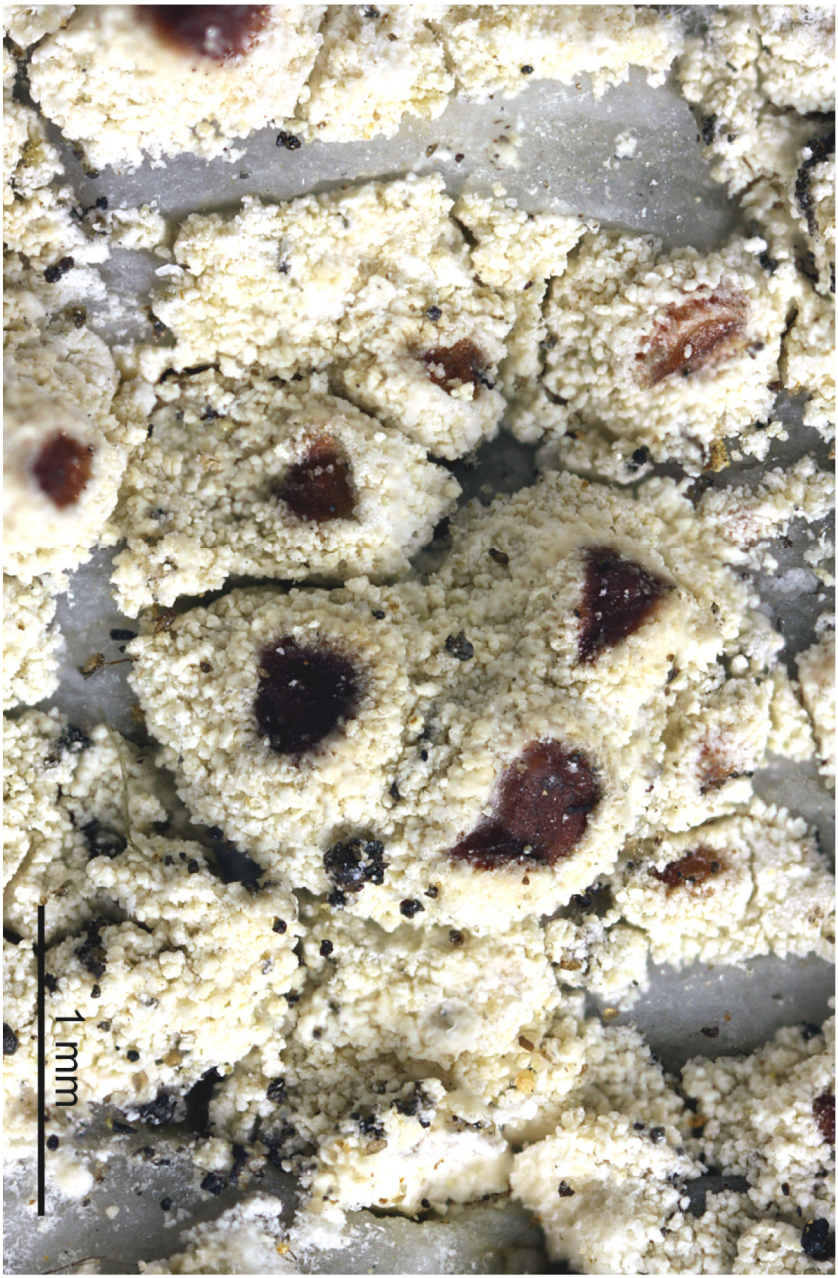
[2297], Österreich, Zillertaler Alpen, Schwarzachtal, an schwach überhängender Nordseite eines Gneisblocks auf der Talsohle in Bachnähe, ca. 1300 m. Leg. F. Schumm & Ralf Erben, 12.08.1976, det. F. Schumm, conf. V. Wirth, 10.1976). Chemistry p241/1: atranorin (maj), zeorin (maj), Russulon (maj), porphyrilic acid (min). Thallus: P+ gelb, C-, K+ gelb, KC+ orange; Ap. K+ rotviolett.

Thallus crustose to subleprose, episubstratic, white to pale grey-white, forming large patches delimited by a cottony, fimbriate, whitish prothallus. Soredia abundant, granulose, 30-120 µm across, finally covering almost the entire thallus surface, giving it a subleprose appearance. Apothecia rare in epiphytic samples, more common in epilithic ones, lecanorine, 0.5-3 mm diam., at first immersed in the thallus, then subsessile and finally often immarginate, with a scarlet red disc and a sorediate thalline margin. Proper exciple very thin; epithecium scarlet red, K+ violet-red; hymenium colourless; paraphyses richly branched, especially in upper part; hypothecium colourless. Asci 8-spored, with an amyloid apical dome, approaching the Lecanora-type. Ascospores 3-7-septate, hyaline, fusiform, 30-70 x 5-7 µm. Pycnidia immersed, red in upper part, c. 0.2 mm diam. Conidia thread-like, strongly curved, 12-20 x 0.5-0.7 µm. Photobiont: chlorococcoid. Spot tests: thallus and soredia K+ pale yellow then brownish, C-, KC-, P+ pale yellow, UV-;

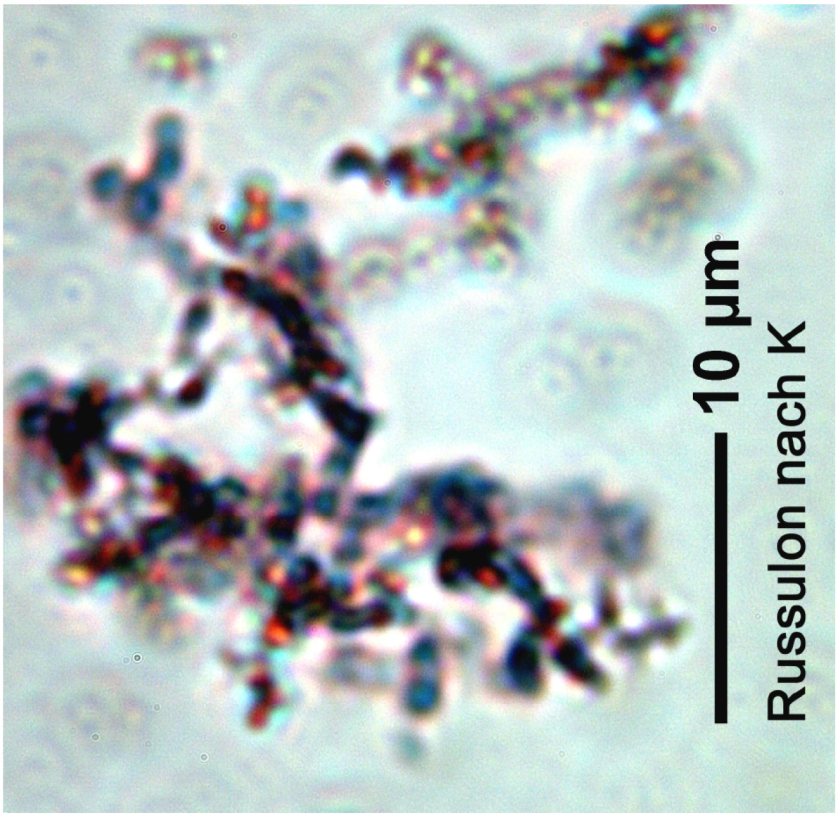
disc of apothecia and top of pycnidia K+ dark purple-red. Chemistry: thallus with atranorin, zeorin, and porphyrilic acid; apothecia and pycnidia with anthraquinones (haematommone). - Note: a mild-temperate taxon, much rarer on bark than the typical variety, and perhaps slightly less photophytic most frequent on more or less base-rich siliceous rocks.



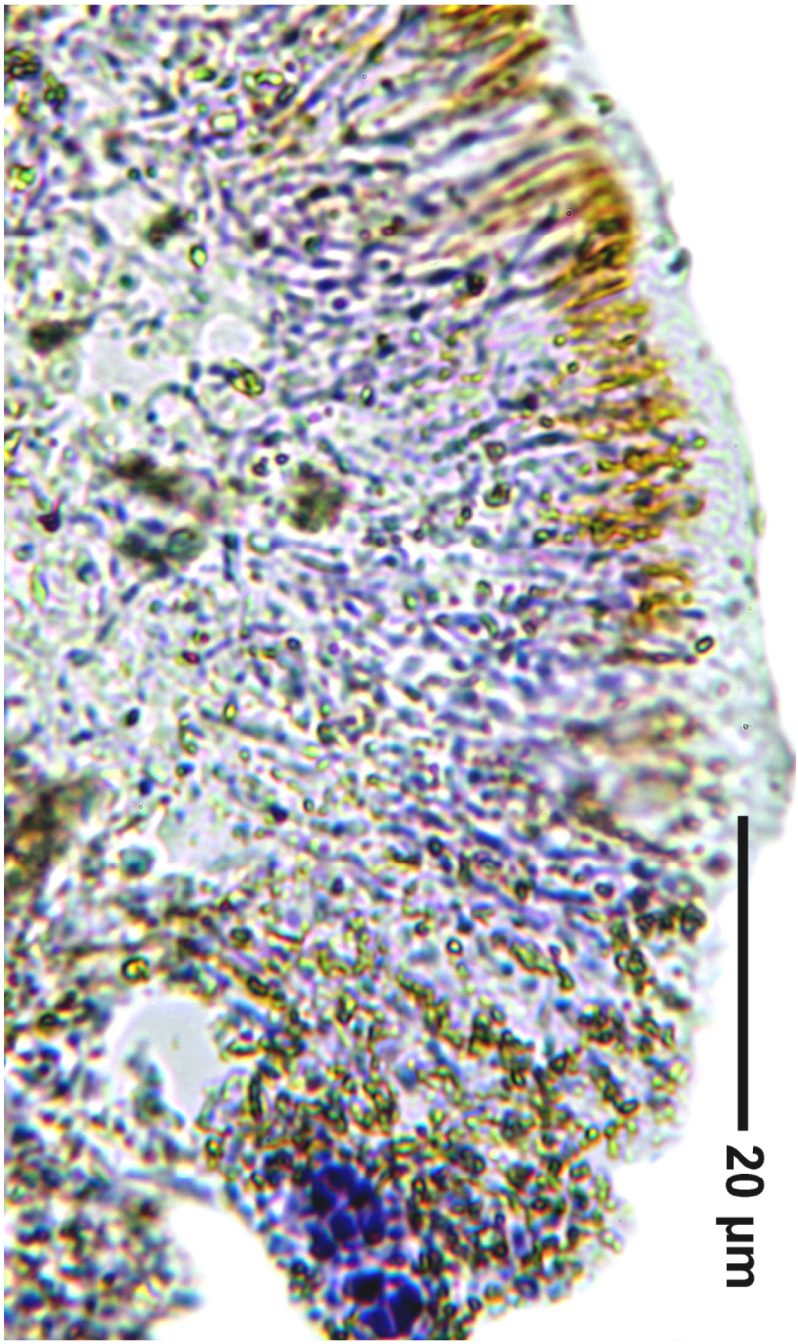
Haematomma ochroleucum var. ***porphyrium***



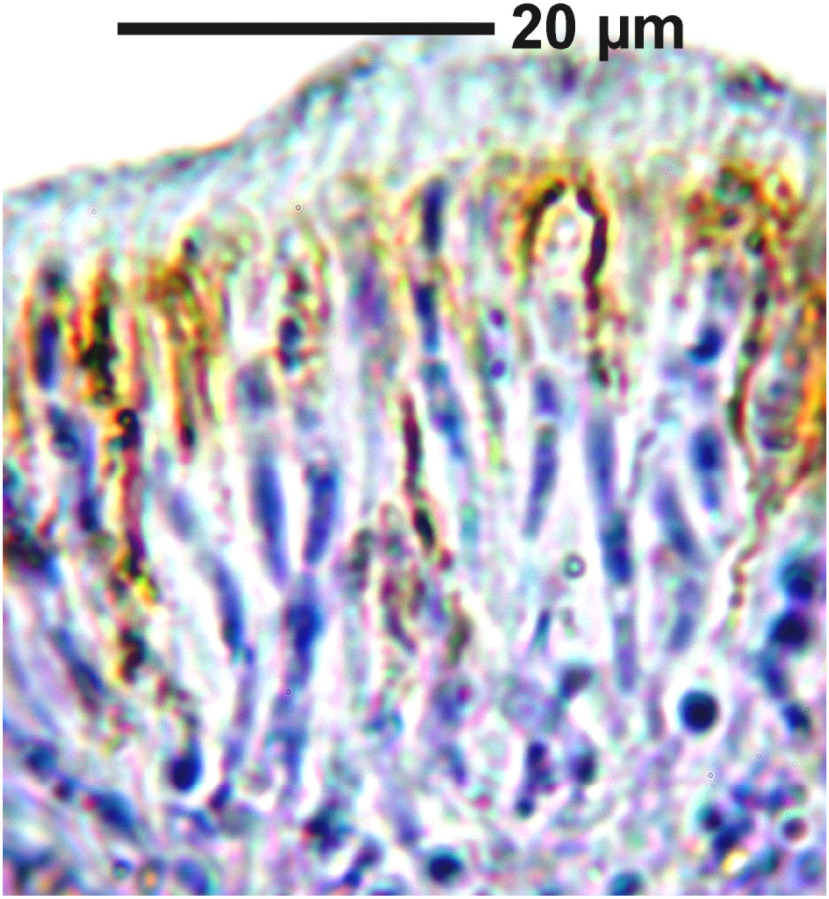
Haematomma ochroleucum var. ***porphyrium***



Haematomma ochroleucum var. ***porphyrium***



Haematomma ochroleucum var. ***porphyrium***



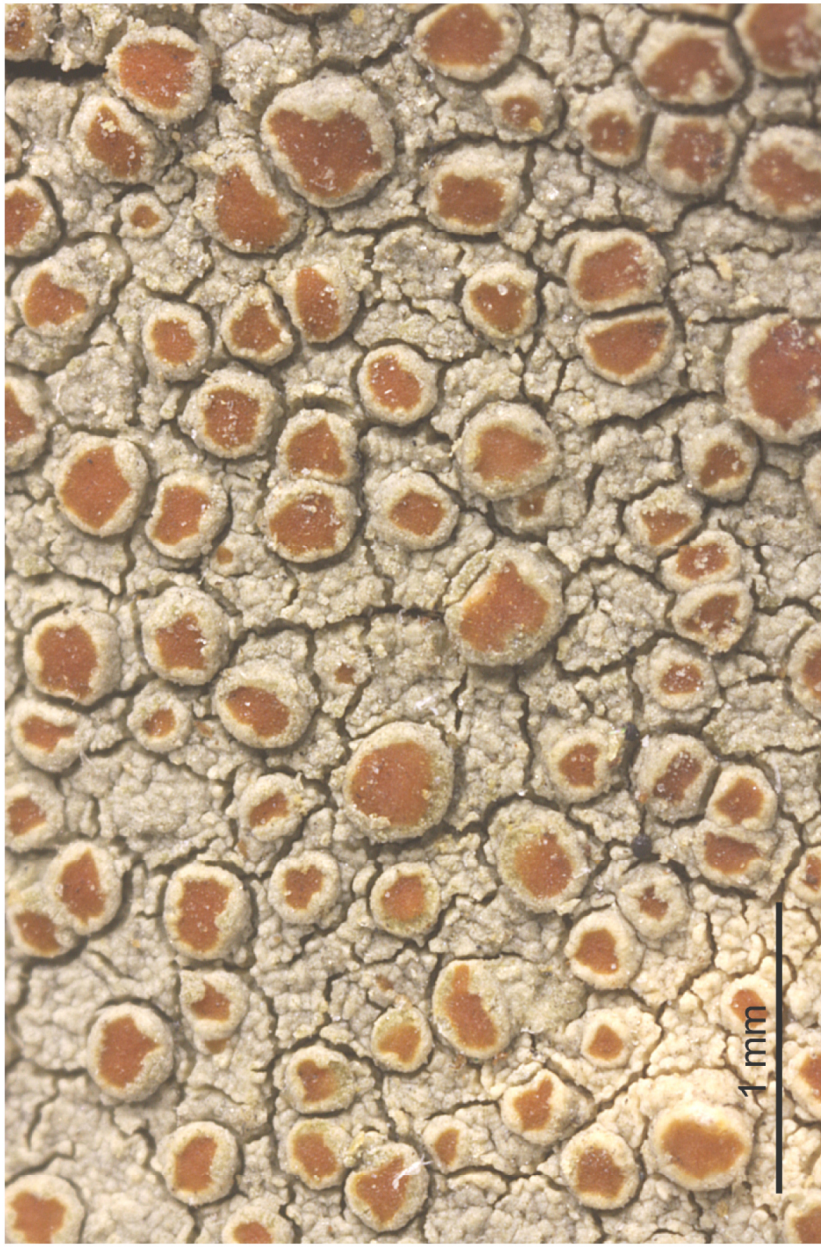
Haematomma ochroleucum var. ***porphyrium***

Haematomma persoonii (Fée) A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

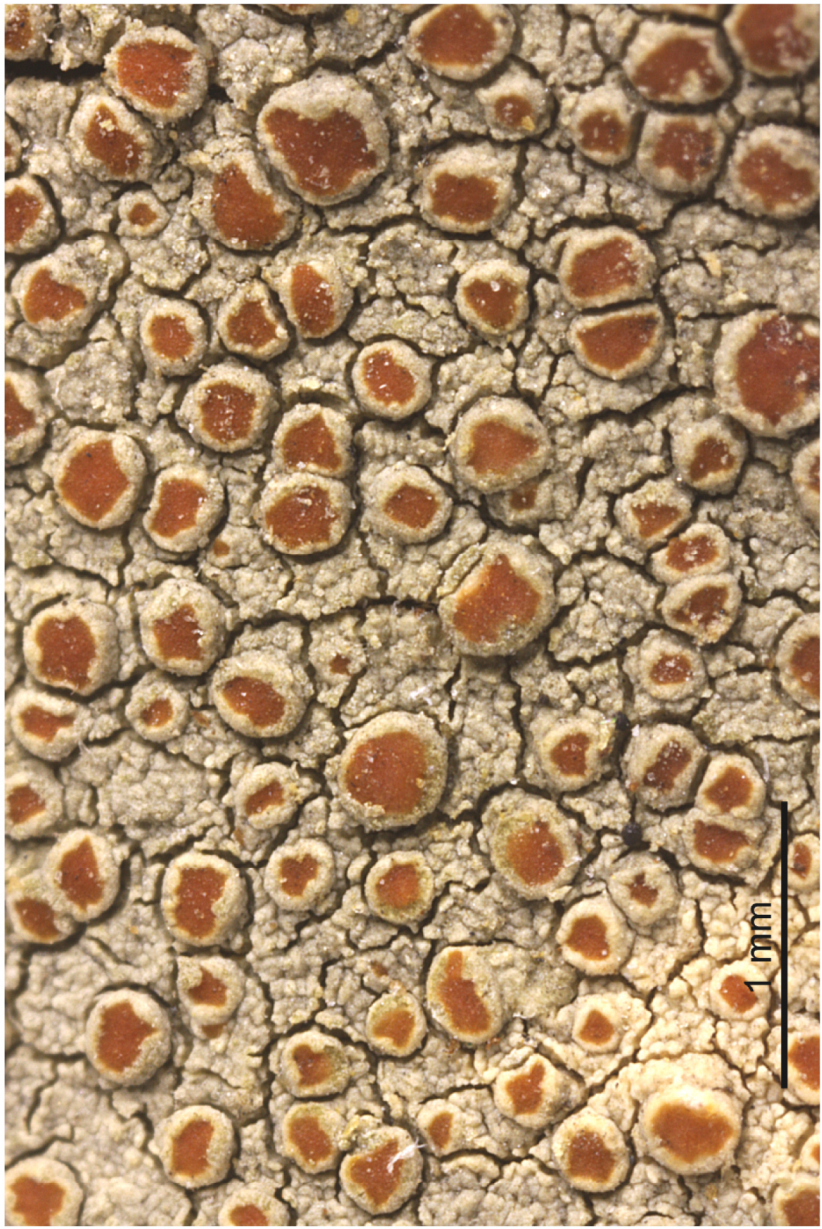
[2313], USA, Louisiana, East Baton Rouge, Parish: Grey-green crust & rim, rust-red disk. Common on branches of hickory and oak. Leg. Shirley C. Tucker, 20.11.1966 (Nr. 6678), Chemistry anal. Schumm, 1.2009: p241/2: atranorin (min), Russulon (min), isophaeric acid. - Sporen 7-8 zellig, 36-47 x 4,4 µm. dieses Exsiccat auch bei Staiger (1995, S.156) bei H. personii genannt.

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S"-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

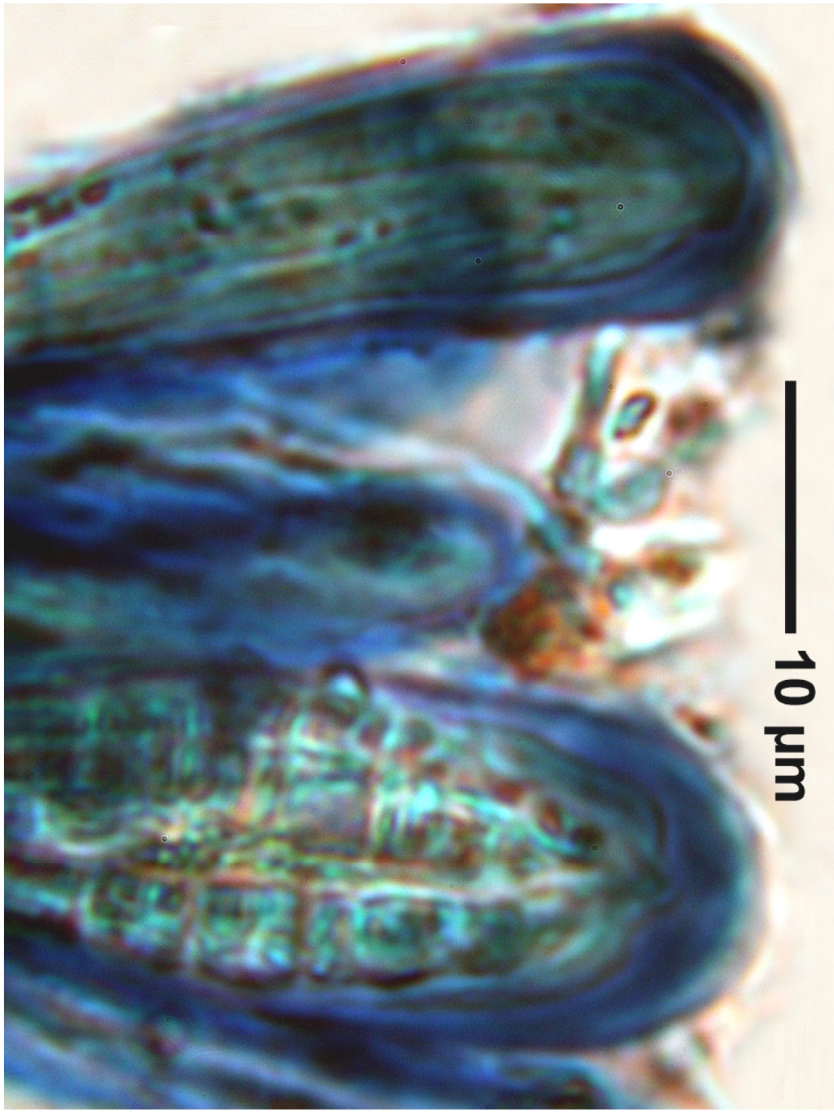
Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



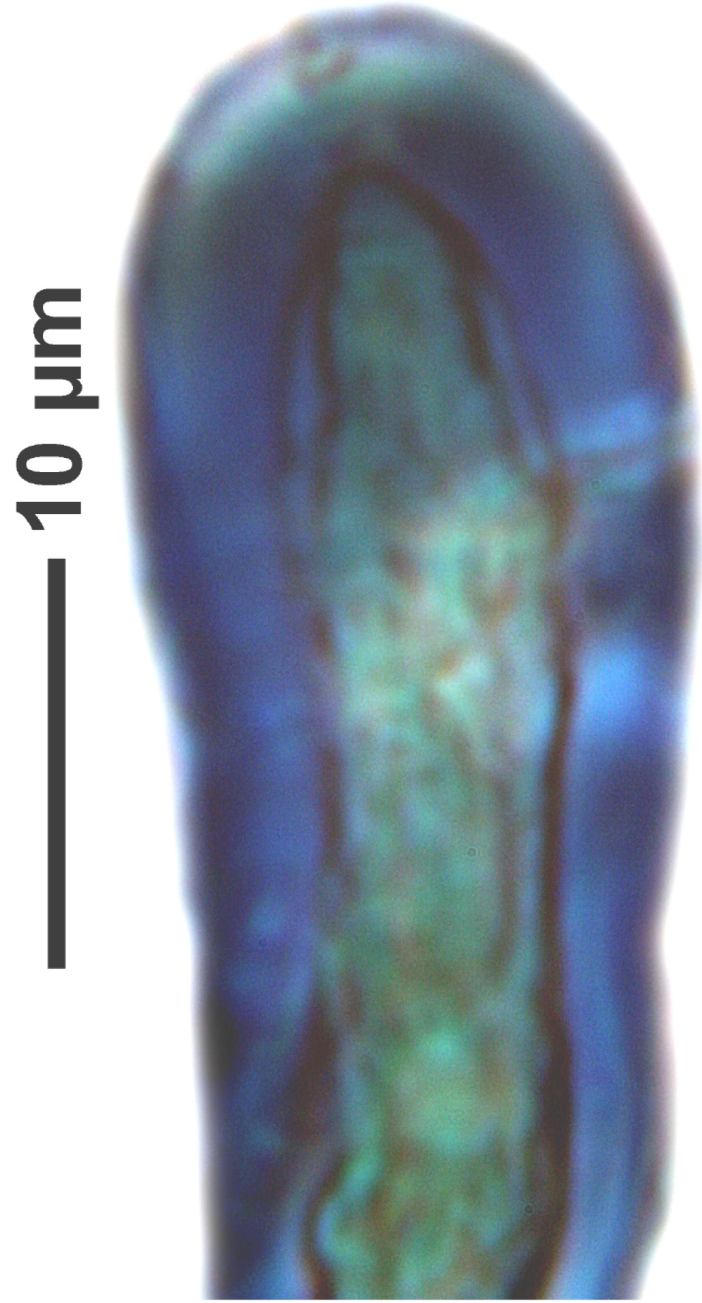
Haematomma persoonii



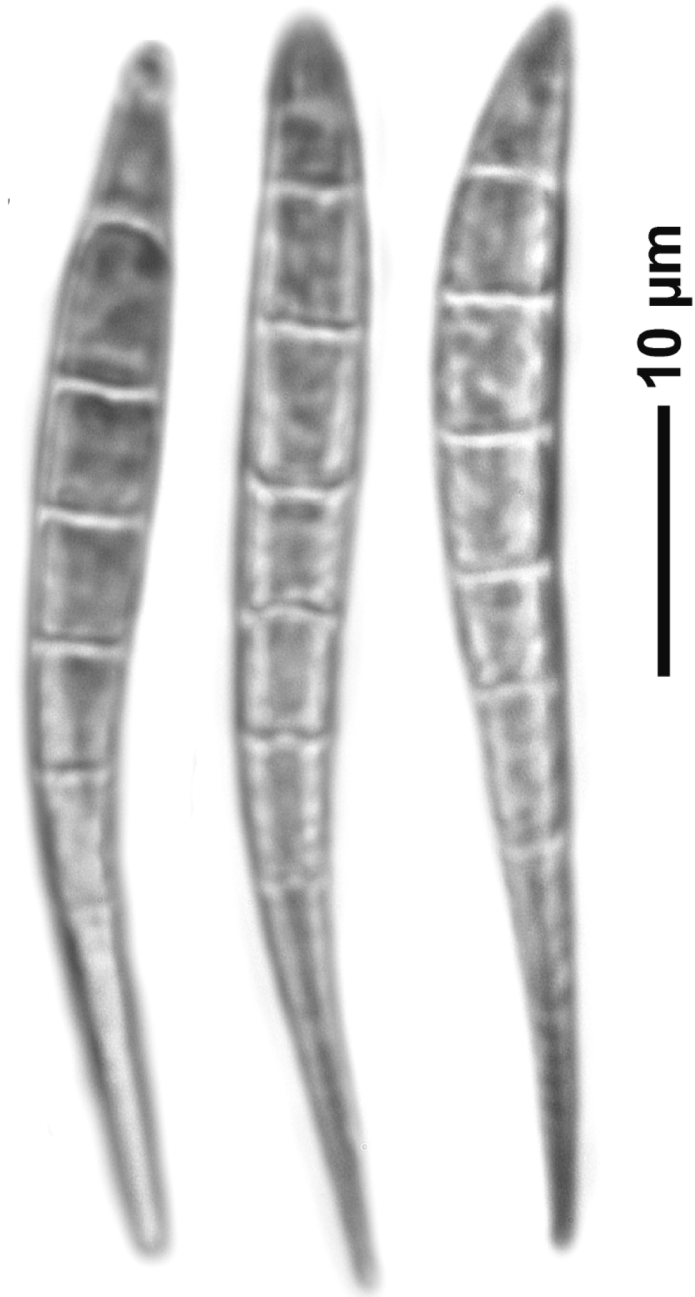
Haematomma persoonii



Haematomma persoonii



Haematomma persoonii



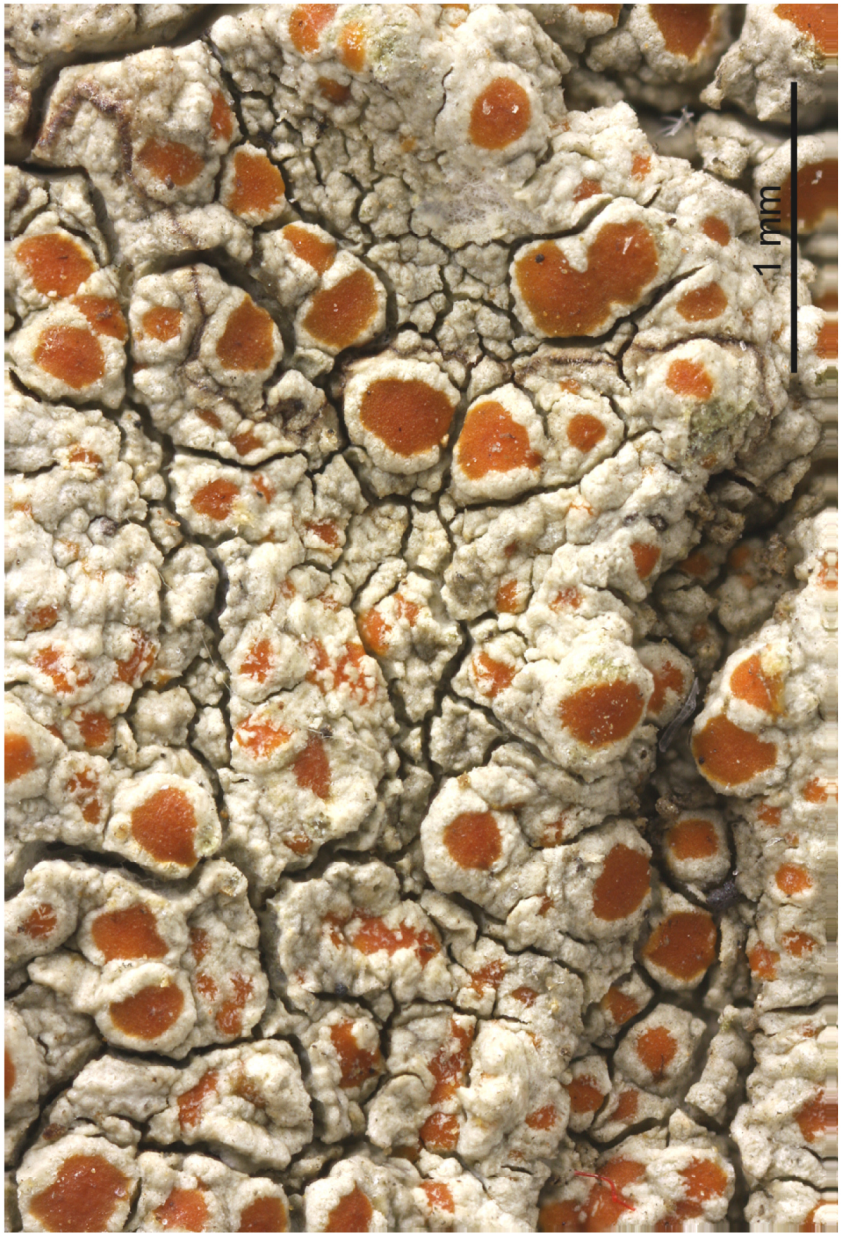
Haematomma persoonii

Haematomma persoonii (Fée) A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

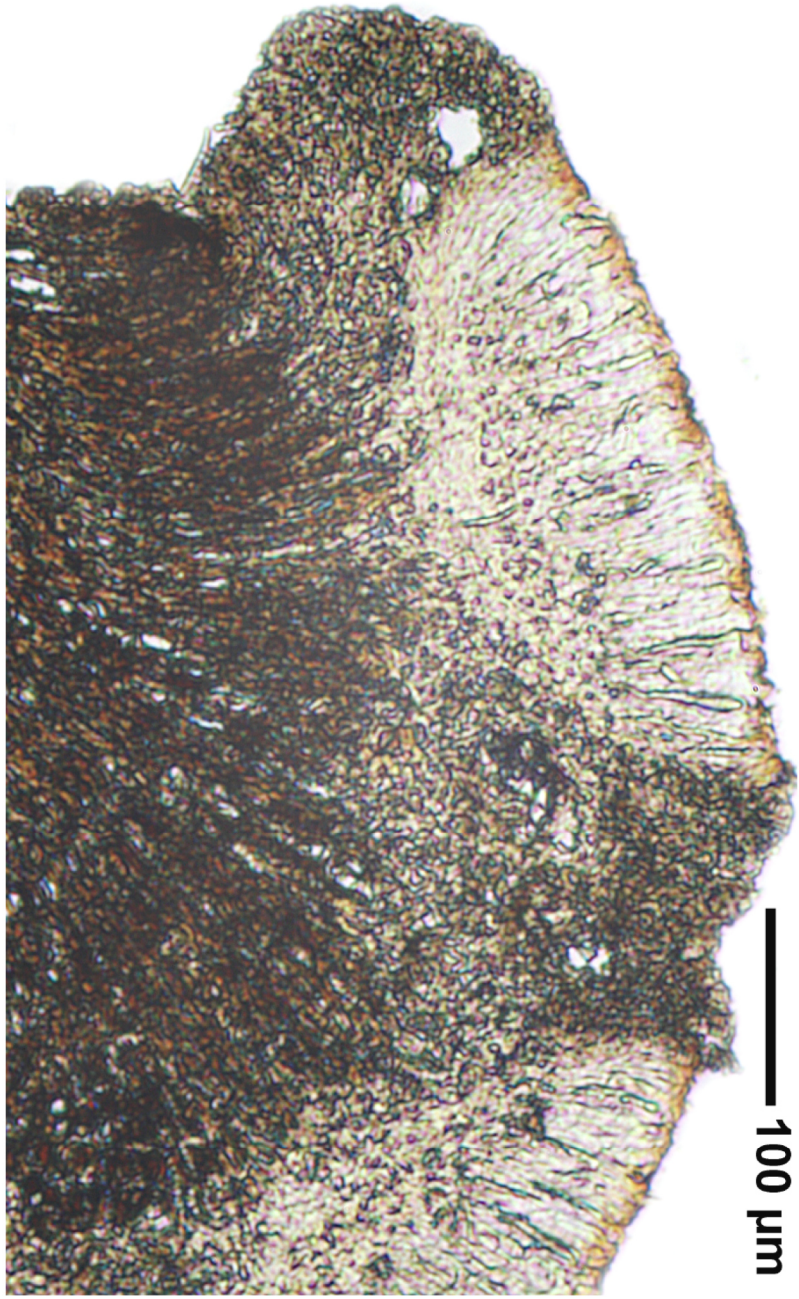
[2891], Nordargentinien, Prov. Corrientes: kleinflächig an verhältnismäßig glatten Borkenschollen halbschattiger Mittelstämme älterer Laubbäume im offenen Regenwald im Ochrolechietum austroamericanae, 300 m, pH 6,5, Tabay im Departamento Conceptión. Leg. M.M. Arbo, 09.1980, wrong. det. L. Ferraro 10.1980. Own TLC:p240/5: Atranorin, Russulon, Isosphaersäure. Ex G. Follmann: Lichenes Exsiccati Selecti Ab instituto Museo Historiae Naturalis Casselensi Editi Nr 346, verteilt als *H. puniceum*, korrigiert nach Staiger 1995. S. 157.

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S"-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

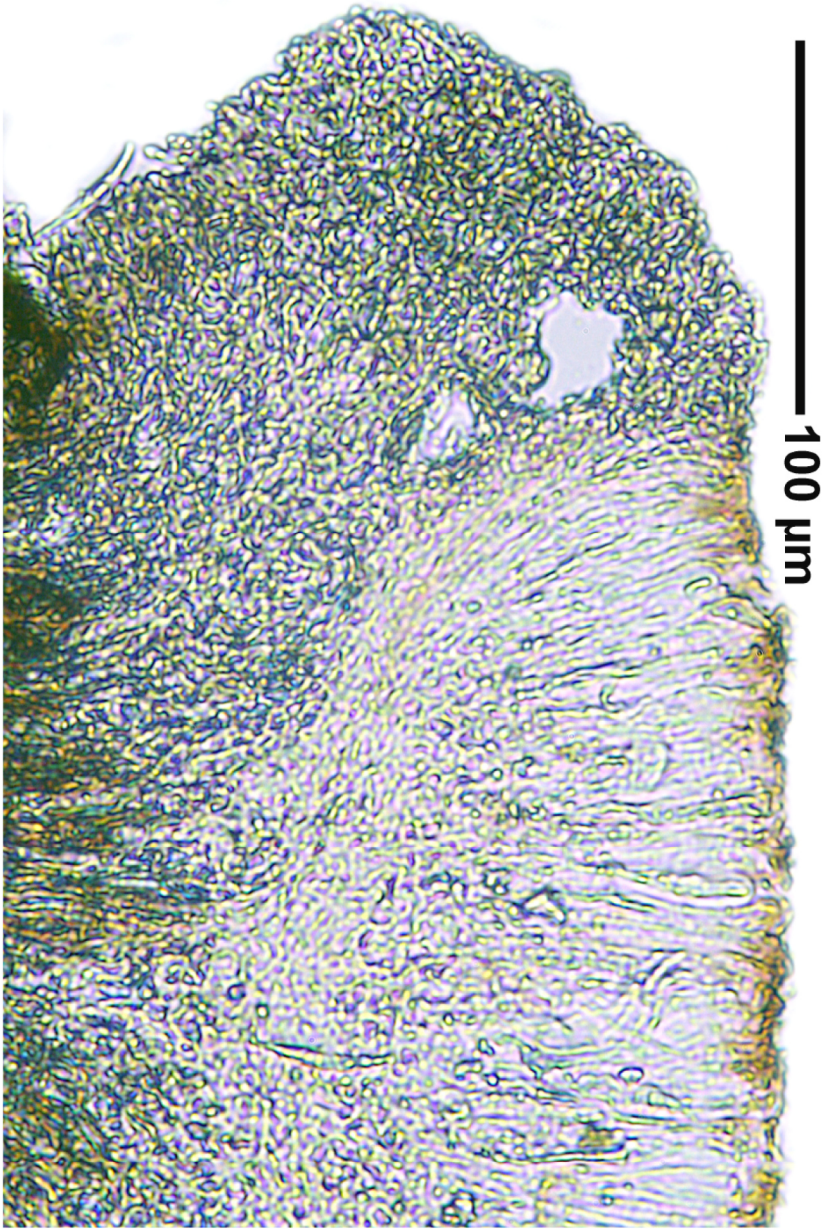
Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



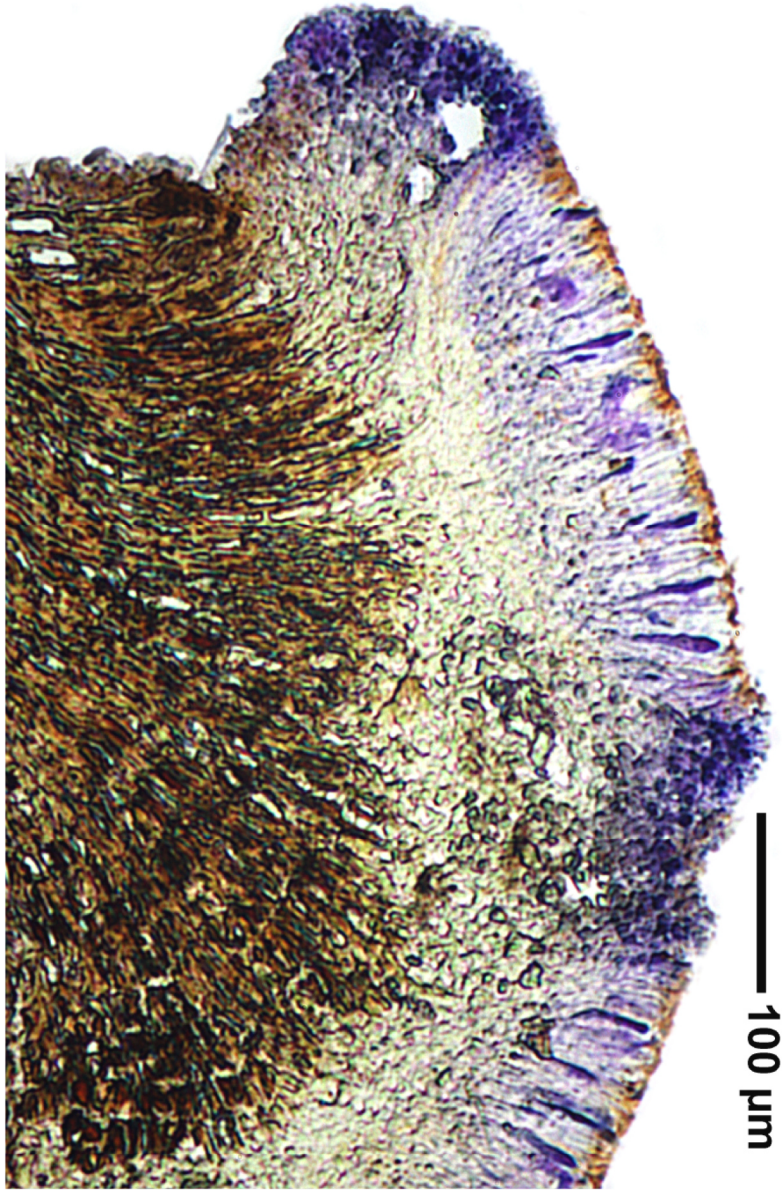
Haematomma persoonii



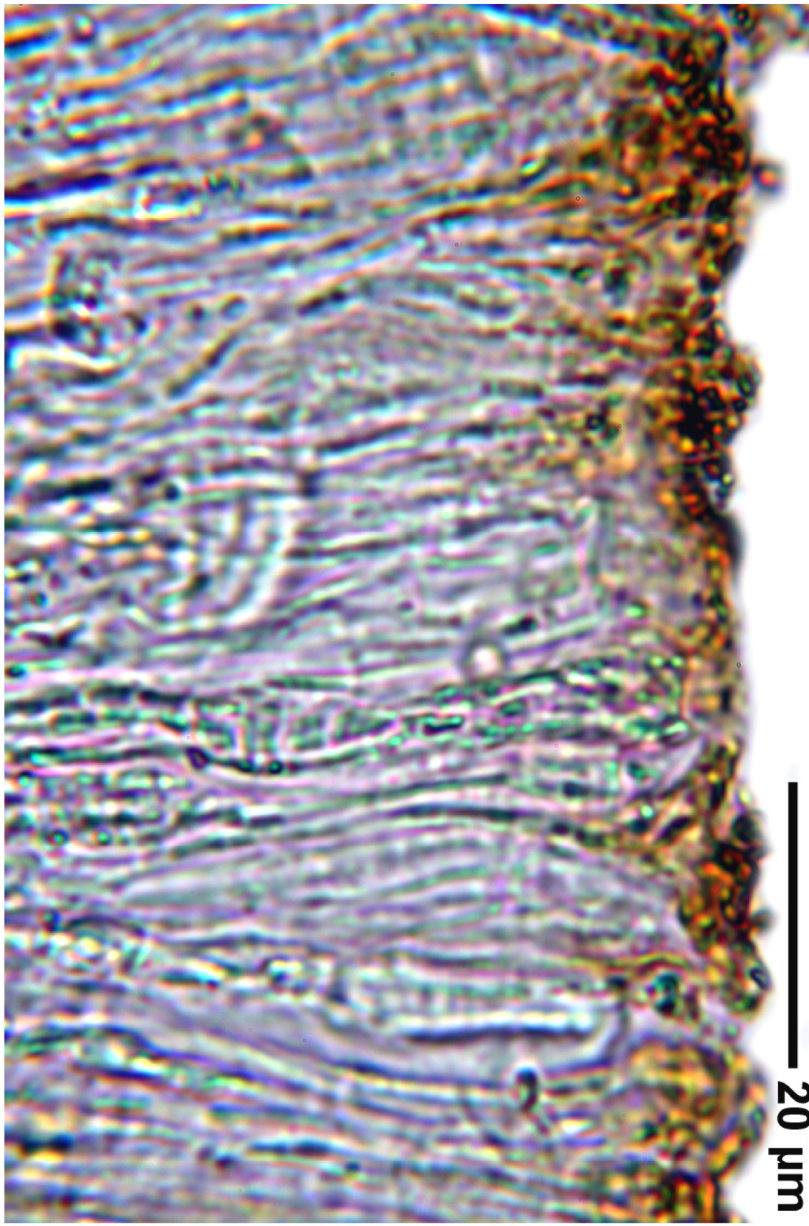
Haematomma persoonii



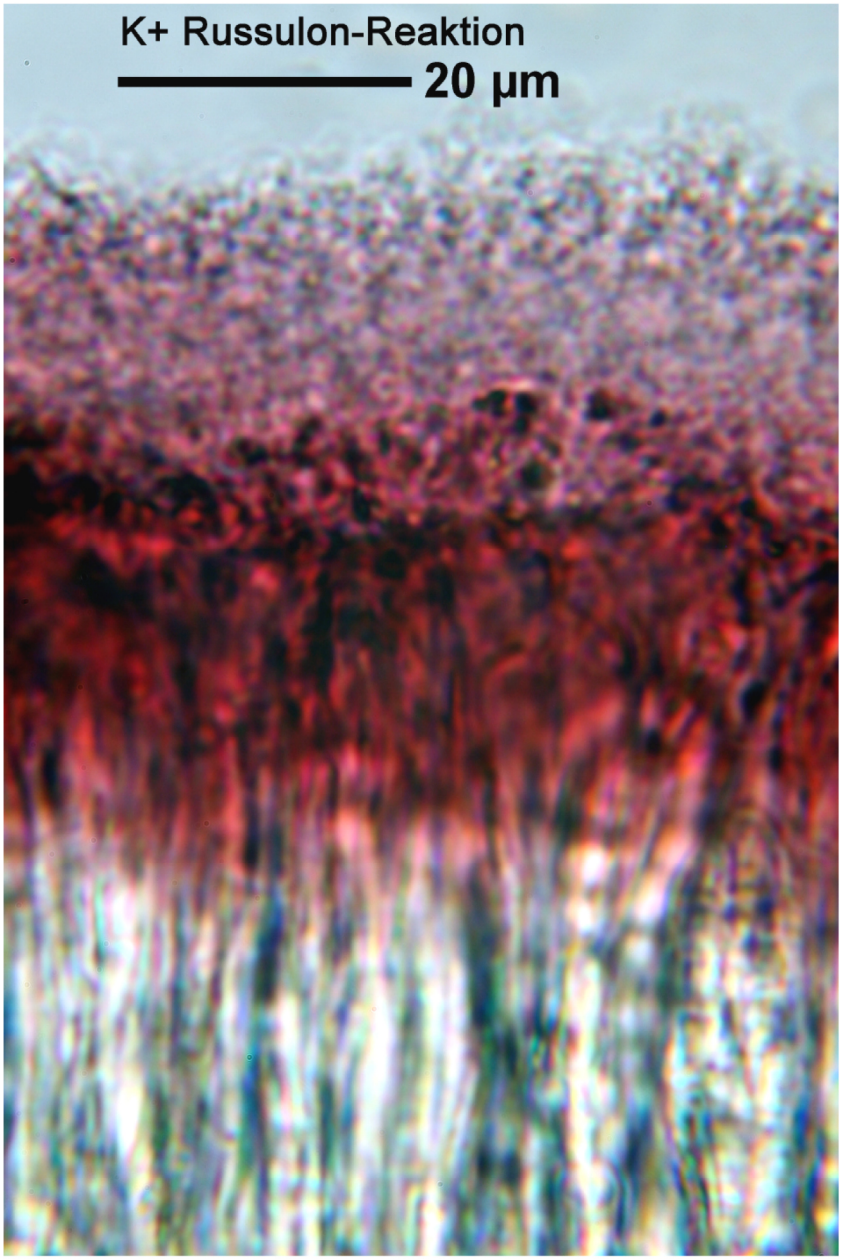
Haematomma persoonii



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Haematomma persoonii



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Haematomma persoonii

Haematomma persoonii (Fée) A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

[5801], Madagaskar, Süd-Madagaskar, Berenti Park, an Eucalyptus, ca. 100 m alt. Leg. F. Schumm, 28.12.1992, det. F. Schumm 2010´- Sporen bis 6-sptiert, 36-37 x 4,2 µm. Chemistry p252/9: Atranorin, Sphaerophorin, Russulon (Pigment mit K+ dauerhaft violett). - Zusammen mit Glyphis cicatricosa, Glyphis scyphuliferum.

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S"-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



Haematomma persoonii



Haematomma persoonii



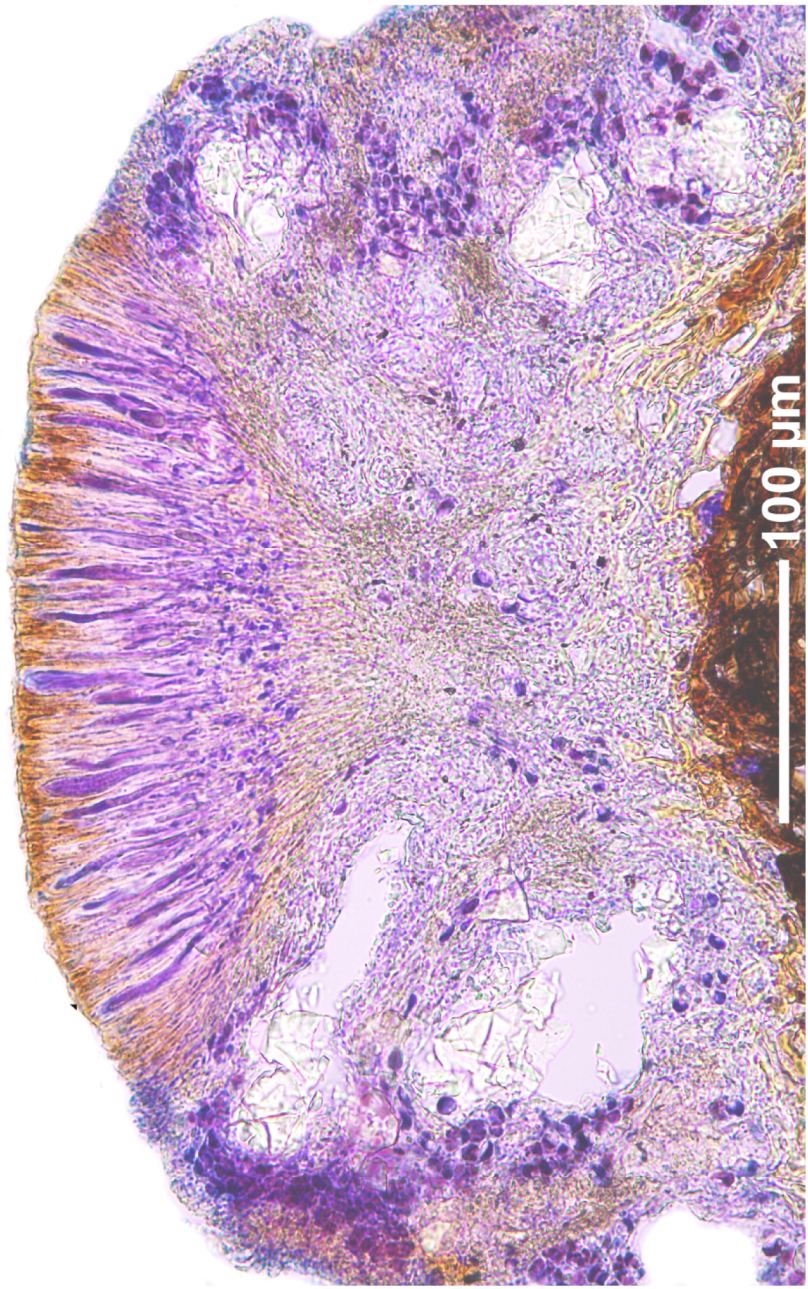
Haematomma persoonii



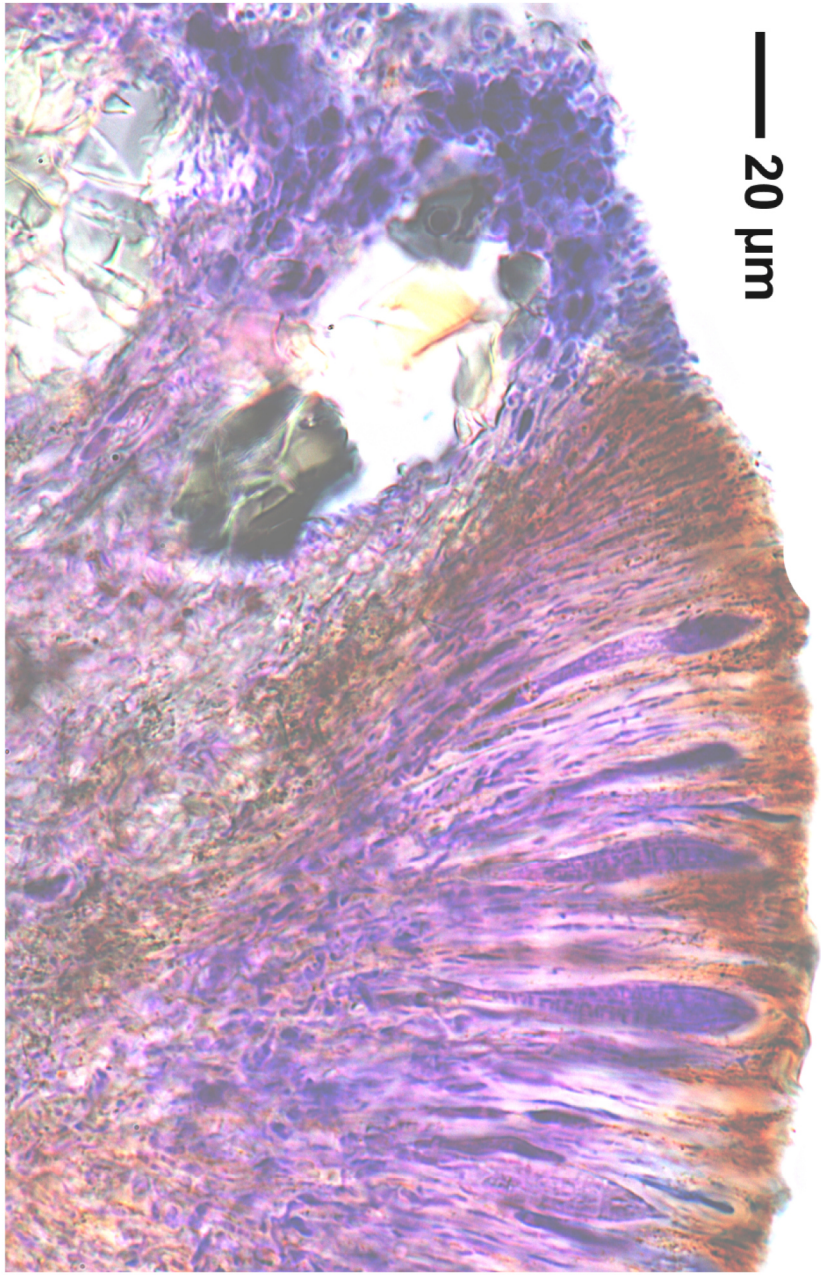
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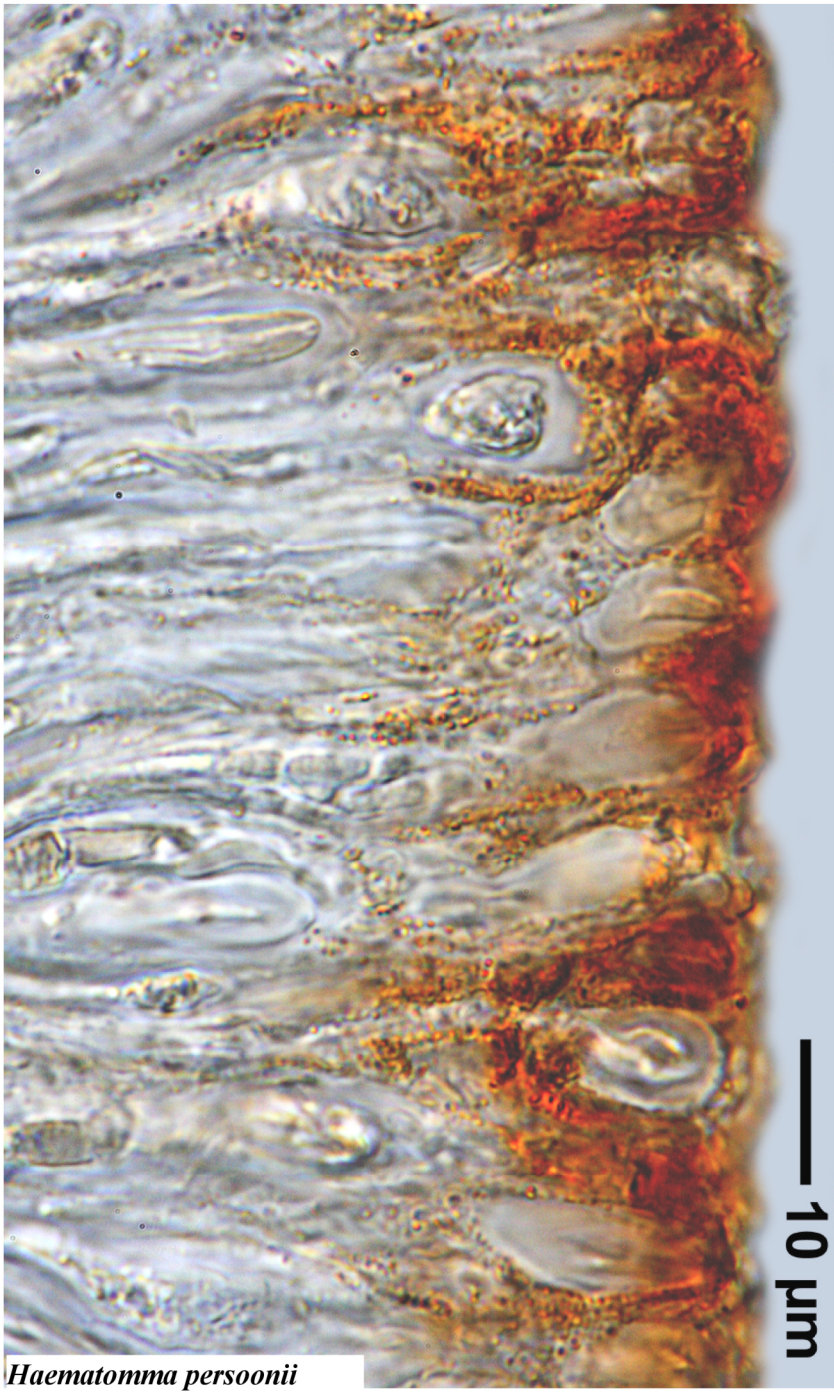
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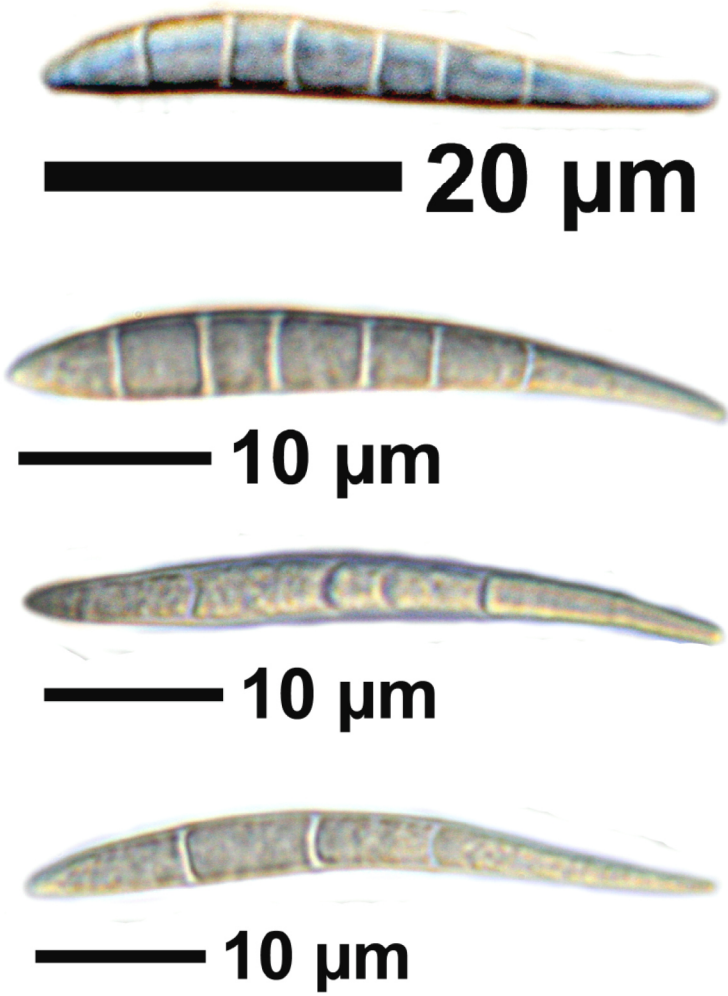
Haematomma persoonii



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Haematomma persoonii



Haematomma persoonii

Haematomma persoonii (Fée) A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

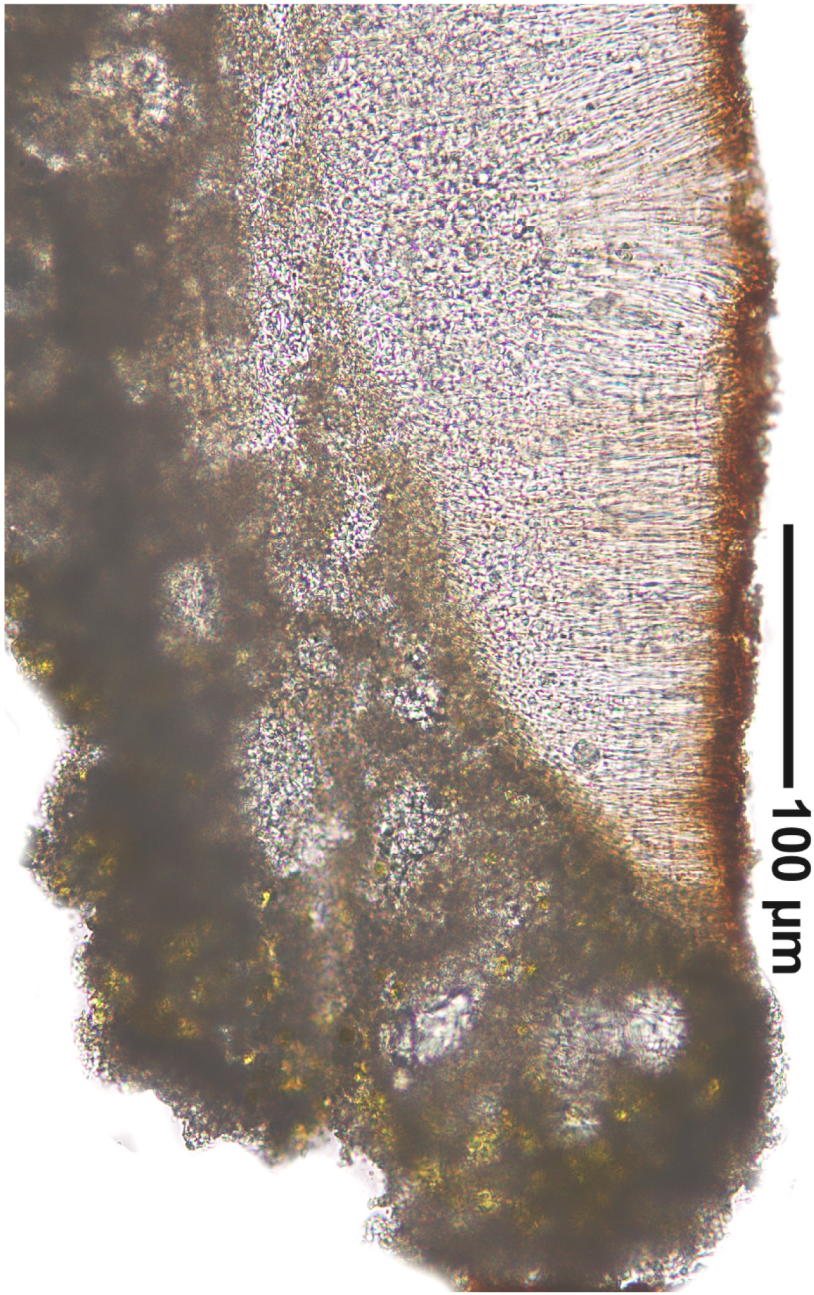
[15516], La Reunion, Anse des Cascades, meist auf Cocos-Palmen; 21,18511°S, 55,82711°E, 0 m. Leg. F. Schumm & J.-P. Frahm, 14.09.2009, det. F. Schumm, 2009. - UVL:+ Apoth.ränder strahlend weiß, +Thallus düster grau. Rotes Pigment: Russulon (K+ dauerhaft rotviolett, körnig kristallin). Sporen (35-45)50 x 5 µm, (4-)7 septiert. Thallus rissig areoliert, Areolen körnig, ohne Sorale. Ap.rand einfach. - Chemie: p252/5: Atranorin (min), Russulon, Sphaerophorin (maj), Isosphaersäure.

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S“-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

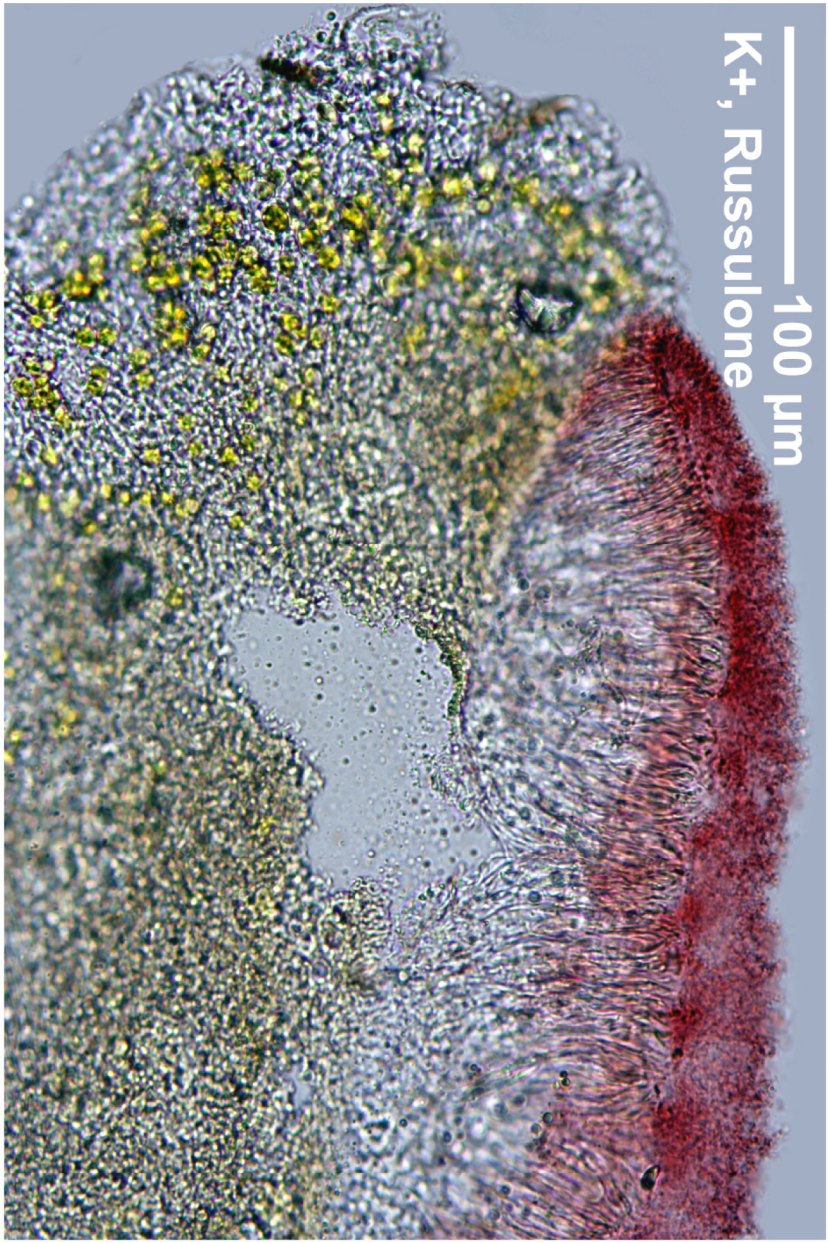
Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



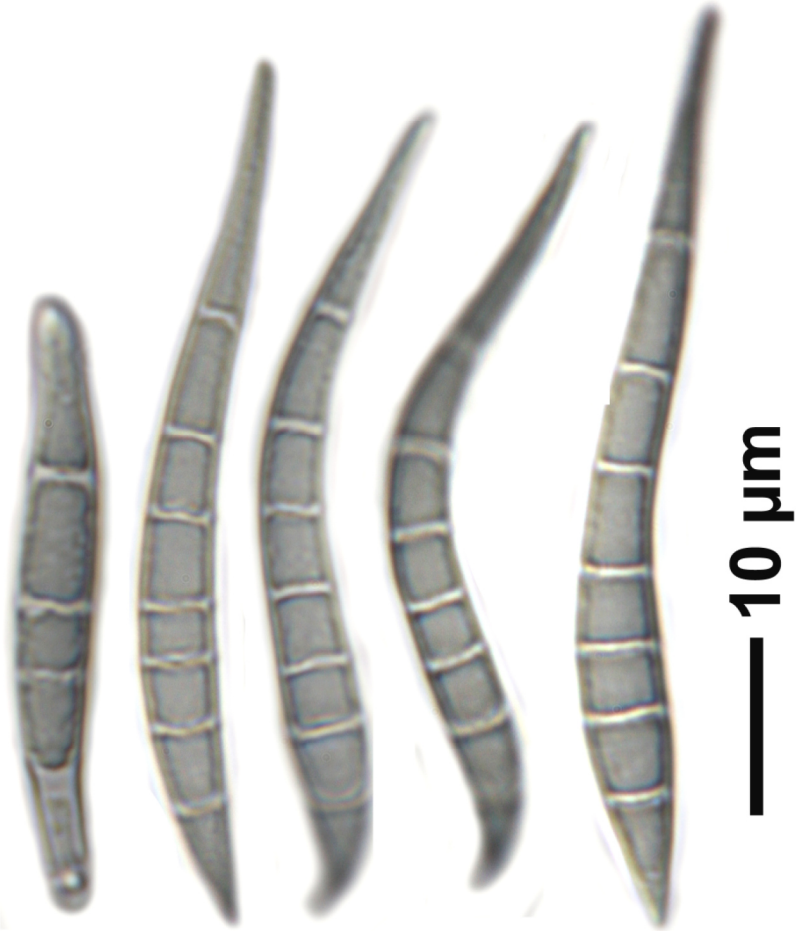
Haematomma persoonii



Haematomma persoonii



Haematomma persoonii



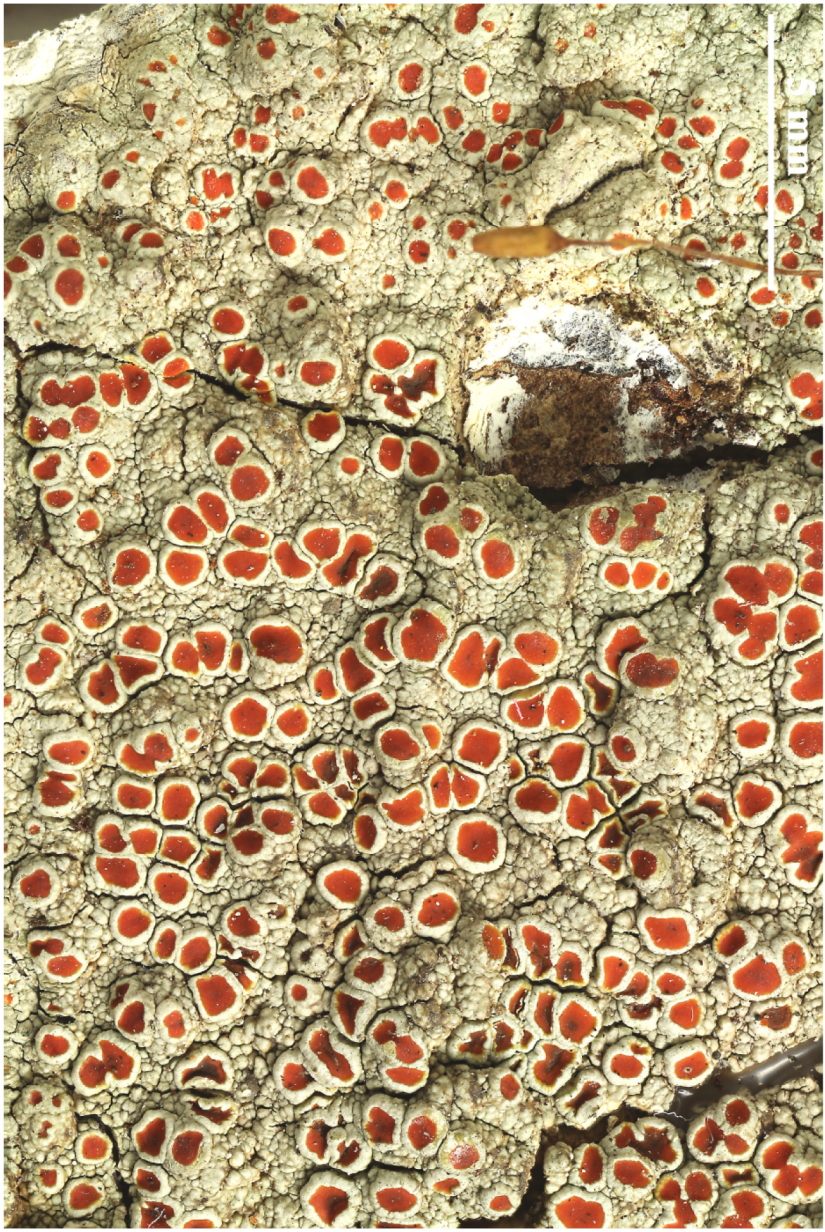
Haematomma persoonii

Haematomma persoonii (Fée) A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

[20525], Thailand, Chiang Mai, Fang district. Tambon Mae Nyon: Campsite area of Doi Angkhang, on bark of freestanding deciduous trees of Pinus sp., 1565 m, 19°53'42" N, 99°02'44" E. Leg. J. & K. Kalb (41768), 3.12.2016, det. K .Kalb. -Atranorin (major), isosphaeric acid (major), russulone (minor), anal. K. Kalb (418/4191).

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S"-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

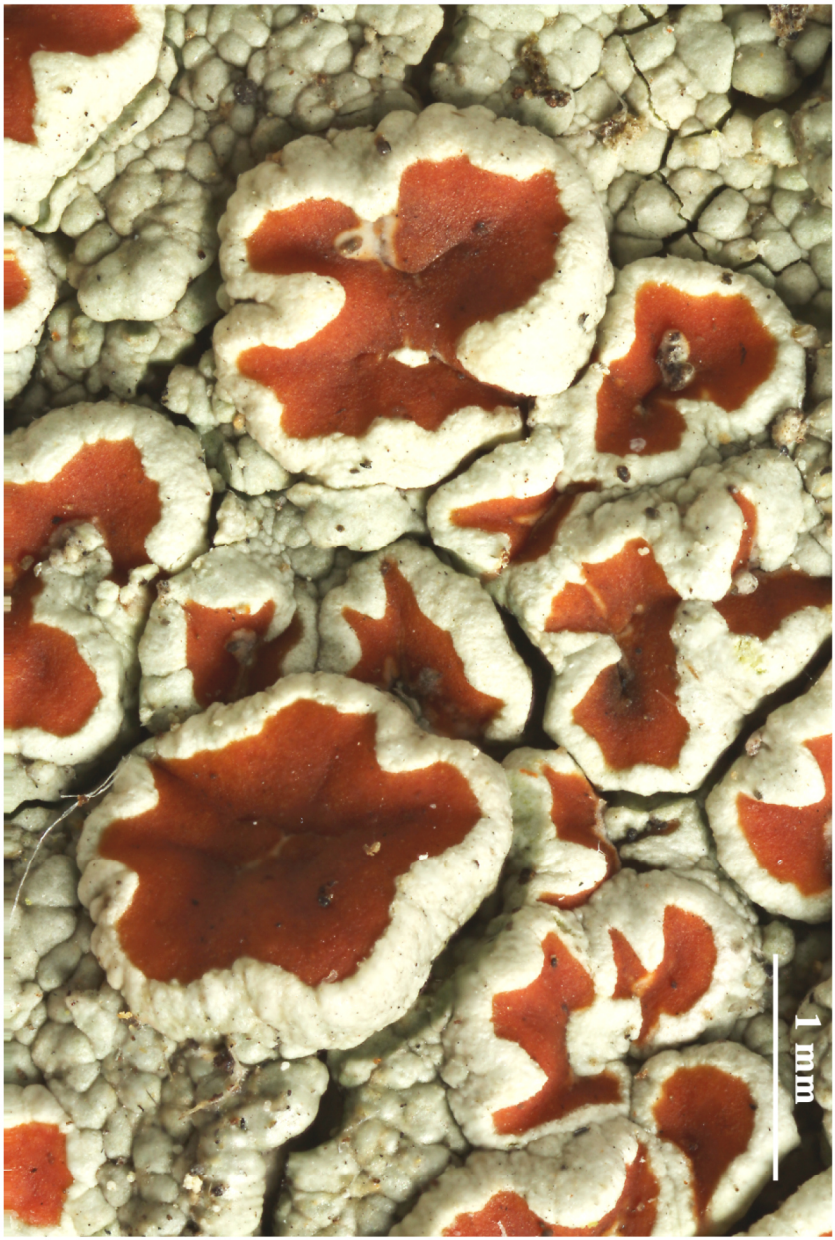
Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



Haematomma persoonii



Haematomma persoonii



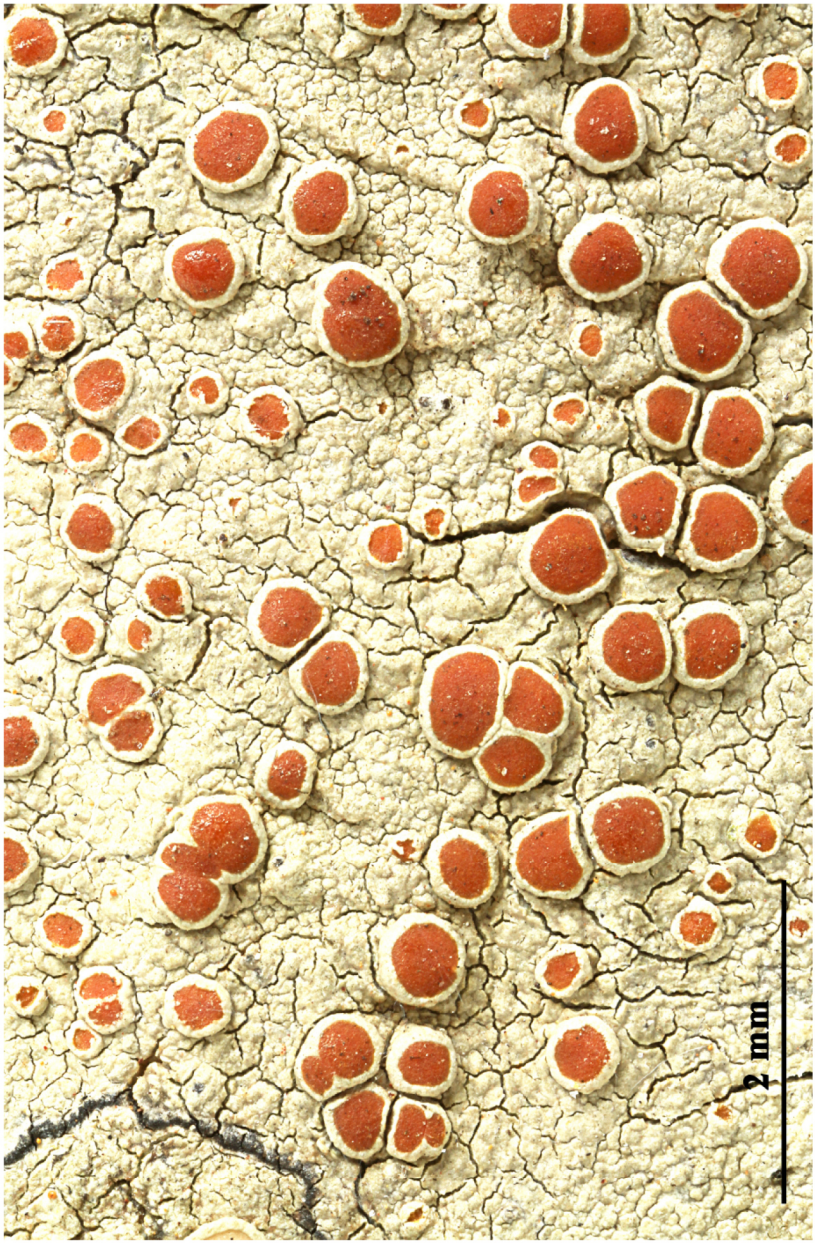
Haematomma persoonii

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= *Lecanora persoonii* Fée, Essai Crypt. Exot. (Paris): 119 (1825) [1824]

[ABL78019], Brazil, Mato Grosso do Sul, Morraria do Sul, Bonito, outskirts, near tower in disturbed cerrado forrest on tree bark. 21°07'44" S, 56°30'41" W, 475 m. Leg. A. Aptroot (no 78019), 9.11.2018, det. A. Aptroot, 2019. - Spores hyaline, 8/ascus, traversely 6-7-septate, 30-55 x 3.5-5 µm; TLC: atranorin, sphaerophorin, russulone, UV-.

Thallus whitish to greenish grey, even to warty, ± cracked, 0,3-0,5 mm thick. Soredia and isidia absent. Apothecia broad sessile to immersed, 0.3-1.5 mm wide. Disc red, not pruinose. Thalline margin simple to somewhat crenulate. Epithecium K+ durable red (russulone). Ascospores hyaline, 8/ascus, 7-8-cellular, straight or somewhat „S"-curved, 30-50 x 3.5-5 µm. Chemistry: atranorin, russulone, sphaerophorin (±), isosphaeric acid (±). Thallus K+ gelb, UV-, apothecium margin UVL+ bluish white. Corticolous, pantropical. Lit. Staiger & Kalb (1995)

Thallus white to cream-coloured or pale grey to greenish grey, smooth to rugulose and weakly warted, ±rimose and areolate, 0.3–0.5 mm thick, corticate, esorediate. Apothecia immersed and aspicilioid, rarely becoming sessile, 0.3–1.5 mm diam., sometimes confluent; disc scarlet-red to dark cinnabar-red or reddish brown, epruinose; thalline margin very poorly developed in immersed apothecia, but becoming distinct, smooth or weakly crenulate in sessile apothecia. Ascospores fusiform, 5–7-septate, 30–50 × 3.5–5.0 µm. Conidia curved-filiform, 16–20 × c. 1 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing atranorin, sphaerophorin (major), isosphaeric acid (minor to major) and russulone (minor). - Also in North, Central and South America, South and East Africa, Réunion, the Philippines and New Caledonia.



Haematomma persoonii



Haematomma persoonii

Haematomma pluriseptatum R. Tang, in Miao, Tang, Dong, Ren & Zhao, Mycotaxon 134(4): 638 (2020) [2019]

[20572], ISOTYPUS. China, Yunnan, Diqing Co., Shangri-La, Tianbao Mt, 3790 m, 27°36'36.59" N, 99°53'36.64" E. Leg. C. Wang, X. Zhang, S. Yan, Z. Wang & J. Fu, 17.8.2018, det. K. Kalb. - Chemistry: Atranorin, russulone, pseudoplacodiolic acid, anal. K. Kalb.

Thallus crustose, corticolous, pale greyish to greenish grey, rugose rimoseareolate to areolate, continuous, thickness 0.6 mm. Soredia and isidia absent. Apothecia scattered, 0.3-0.95(-1.0) mm diam., sessile, convex, constricted at the base, smooth when young, red. Disc orange-yellow to brownish yellow, white pruina present when young but absent when mature; Thalline margin well developed; amphithecium present, 70-90 µm thick. Epihymenium orange, K+ red, 9-20 µm thick. Hymenium hyaline, 70-95 µm high. Hypothecium hyaline or slightly brown. Paraphyses branched and anastomosing. Asci clavate, containing 8 spores. Ascospores twisted in ascus, filiform, straight or slightly curved, (19-)20-26(-27)-septate, 70-95 x 5-6.5(-7) µm. Conidia absent. CHEMISTRY—Cortex K+ yellow, C-, KC-. Atranorin, russulone, and pseudoplacodiolic acid detected by TLC. - COMMENTS: Haematomma pluriseptatum is characterized by the large number of septa (20-27) in each ascospore and the presence of atranorin, russulone and pseudoplacodiolic acid in the thallus. It is morphologically similar to *H. rufidulum* (Fée) A. Massal., which differs by the occurrence of slightly irregular, white, convex to hemispherical soredia and elongate-fusiform, 8-25-celled, 50-72(-85) x (3.5-)4-6(-7) µm ascospores. The metabolites also differ: *H. pluriseptatum* contains *pseudoplacodiolic acid*, while H. rufidulum contains placodiolic acid. *Haematomma pluriseptatum* may also be confused with *H. dolichosporum* which also produces twisted spores in the asci, but *H. dolichosporum* is readily distinguished by its shorter (42-62 µm) spores with fewer (7—9(-11)) septa and the production of placodiolic acid.



Haematomma pluriseptatum



Haematomma pluriseptatum

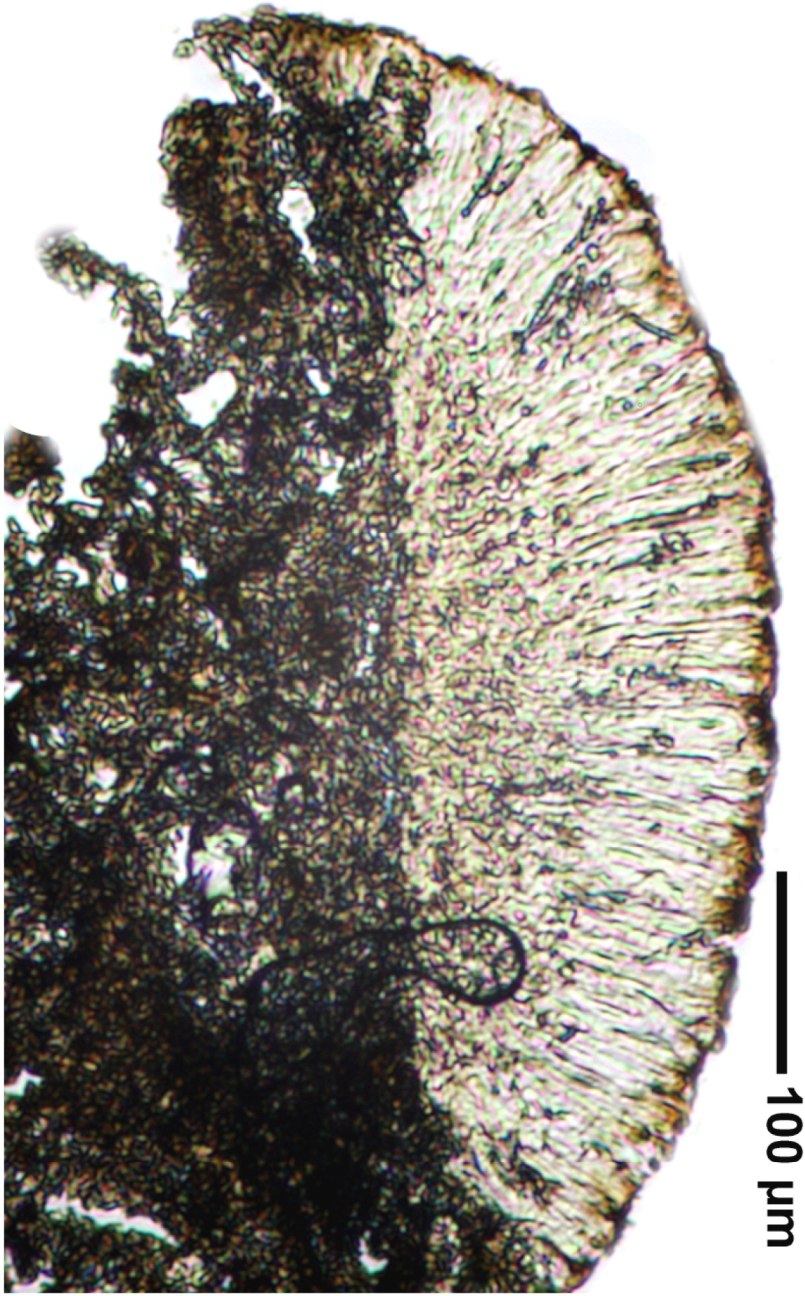
Haematomma rufidulum (Fée) A. Massal. [as 'ruficulum'], Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora rufidula* Fée, Essai Crypt. Exot., Suppl. Révis. (Paris): 116 (1837)

[6221], Philippinen, Mindanao, Provinz Bukidnon, westlich Malabalay in Intavas am Fuß des Mt. Kitanglad, N 11.883' N, 124°56.721' E, alt.: 1270 m; Leg. F. Schumm & U. Schwarz, 18.08.1999. - Sporen zu 8, hyalin, 9-11 septiert, im Ascus verwunden, 51-63 x 4,5-5,5 µm; Epith. 6-10 µ, Hym. ca. 110 µm. - Chemistry p240/4: Atranorin, Placodiolsäure, Russulon; , K+ rotviolette, dauerhaft; ; Th. UV- (nur etwas düster orange). -Nach B. Staiger in lit. 08.04.2000 vieleicht auch H. infuscum.

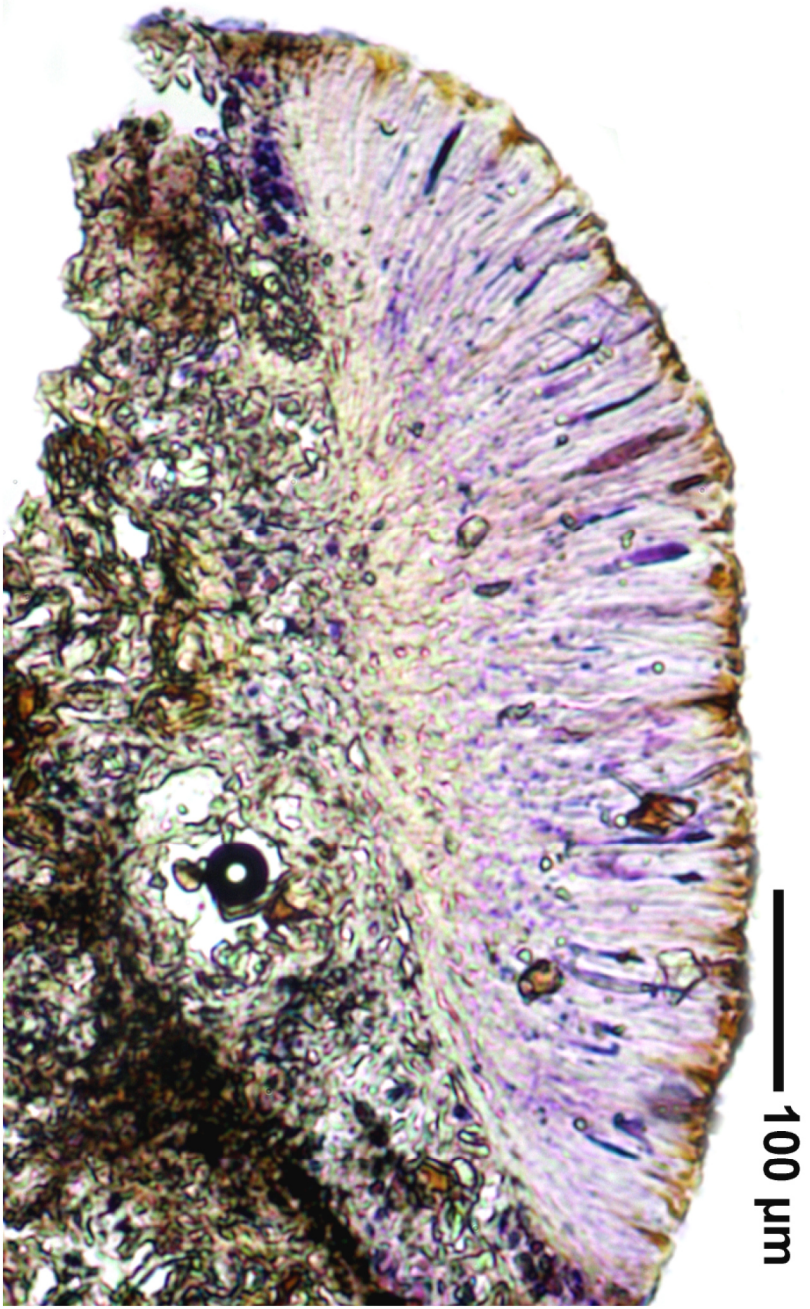
Thallus cream-coloured to pale grey or greenish grey, uneven to rugose, rimose, 0.3–0.5 mm thick, corticate, esorediate. Apothecia sessile and constricted at the base, 1.0–2.0 mm diam., not confluent; disc dark scarlet-red to cinnabar-red, epruinose; thalline margin prominent, smooth or crenulate, sometimes swollen. Ascospores fusiform, straight or slightly curved, 7–24-septate, 50–80 × 4.0–6.0 µm. Conidia curved-filiform, 12–19 × 0.6–0.8 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing placodiolic acid (major), atranorin (minor) and russulone (minor). - This pantropical species also occurs in North, Central and South America, Africa, India, Malaysia and Papua New Guinea.



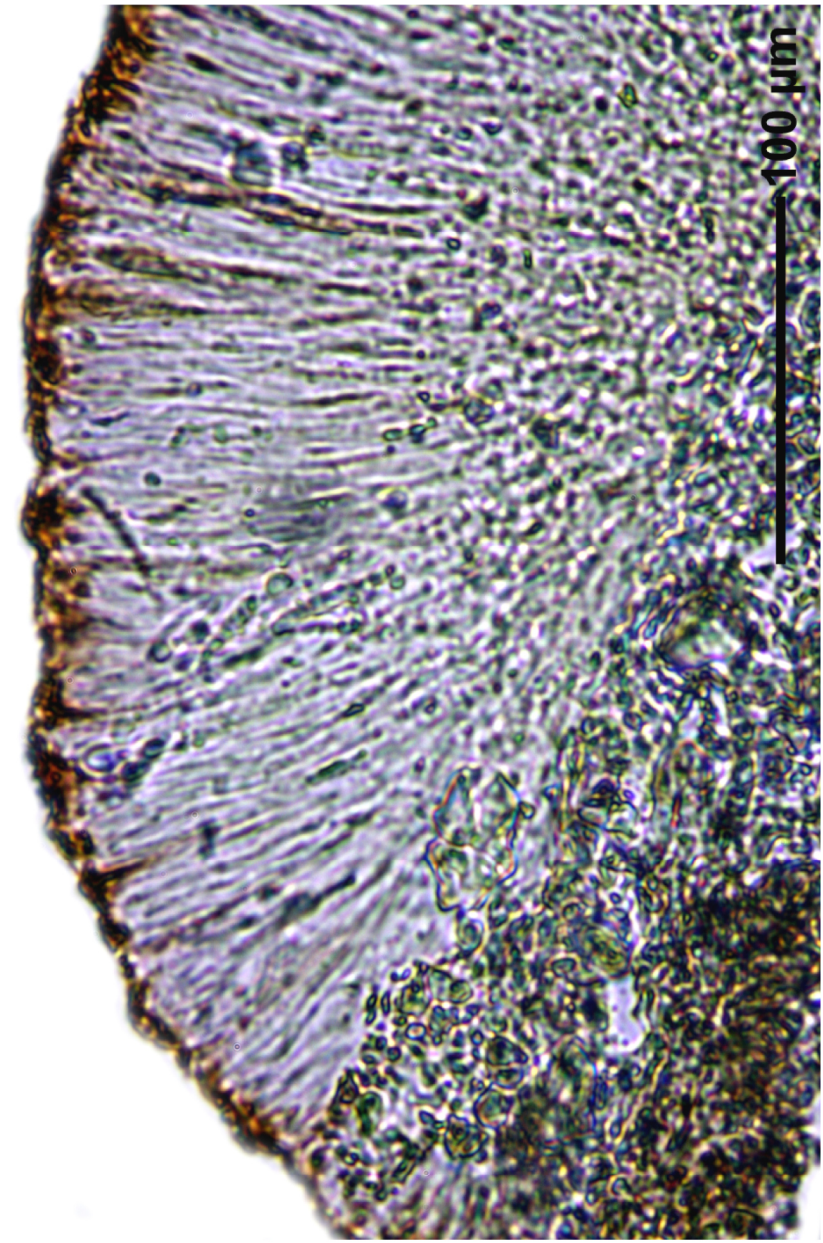
Haematomma rufidulum



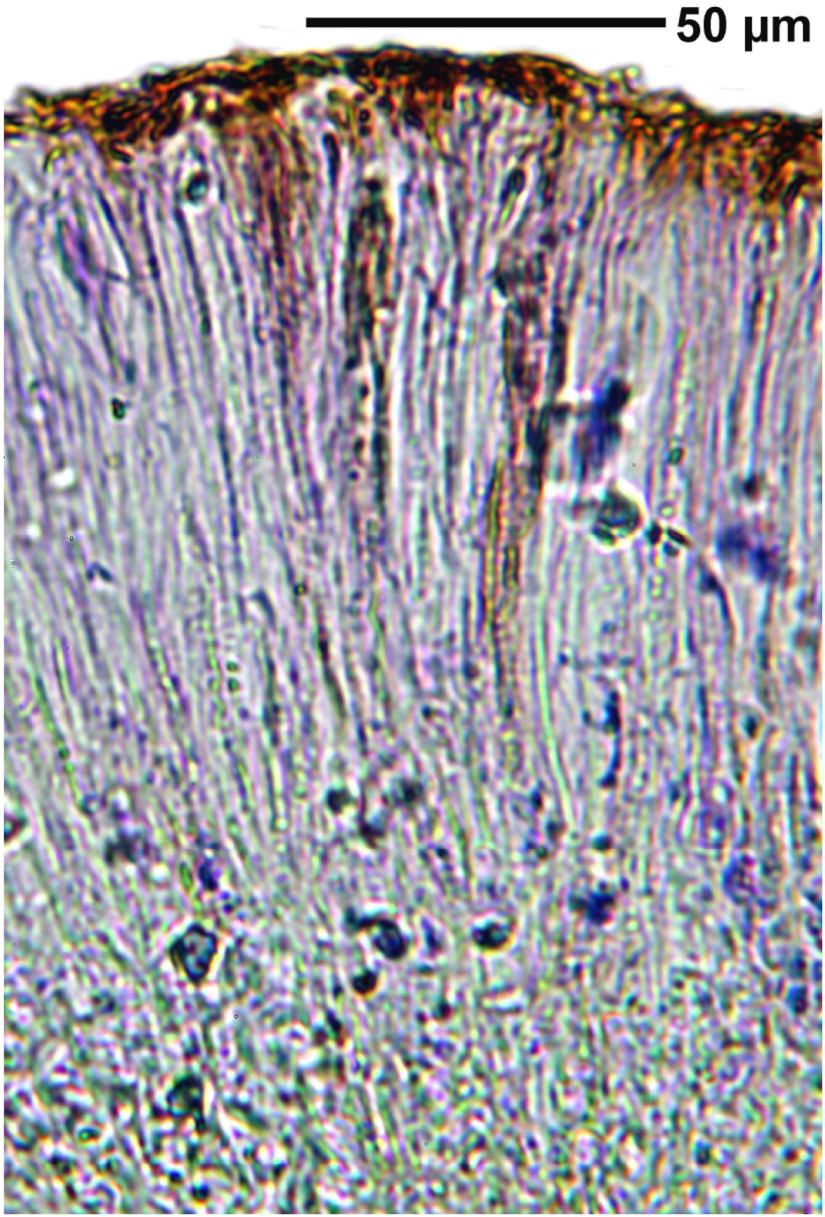
Haematomma rufidulum



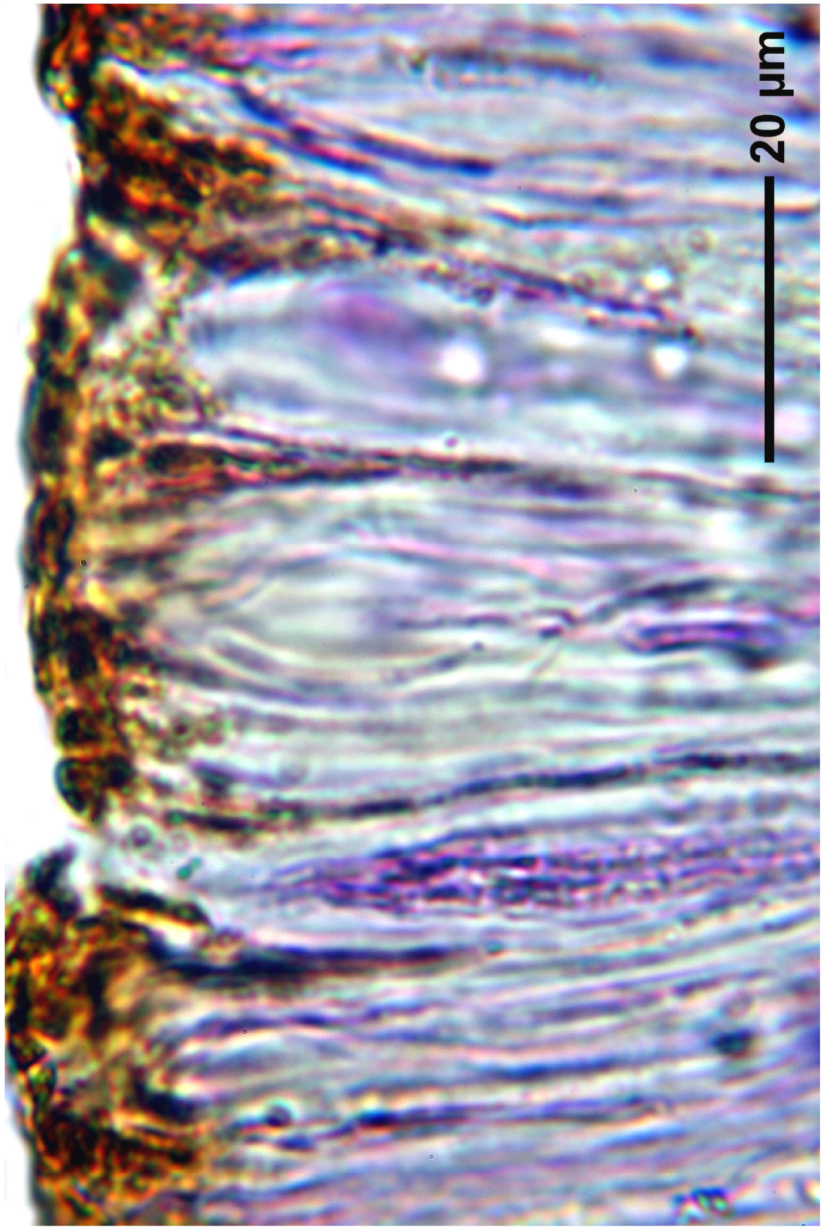
Haematomma rufidulum



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Haematomma rufidulum

Haematomma rufidulum (Fée) A. Massal. [as 'ruficulum'], Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora rufidula* Fée, Essai Crypt. Exot., Suppl. Révis. (Paris): 116 (1837)

[20526], Thailand, Chiang Mai, Tan district. Tambon Yang Hom:Phaya Pipak Forest Park, in a dry evergreen forest, on bark of unidentified decidous trees, 1185 m, 19°51'52" N, 100°20'04" E. Leg. J. & K. Kalb (nr. 42084), 10.12.2016, det. K. Kalb- ChemistryAtranorin (major), placodiolic acid (major), russulone (minor), anal. K. Kalb (418/4192).

Thallus cream-coloured to pale grey or greenish grey, uneven to rugose, rimose, 0.3–0.5 mm thick, corticate, esorediate. Apothecia sessile and constricted at the base, 1.0–2.0 mm diam., not confluent; disc dark scarlet-red to cinnabar-red, epruinose; thalline margin prominent, smooth or crenulate, sometimes swollen. Ascospores fusiform, straight or slightly curved, 7–24-septate, 50–80 × 4.0–6.0 µm. Conidia curved-filiform, 12–19 × 0.6–0.8 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing placodiolic acid (major), atranorin (minor) and russulone (minor). - This pantropical species also occurs in North, Central and South America, Africa, India, Malaysia and Papua New Guinea.



Haematomma rufidulum



Haematomma rufidulum



Haematomma rufidulum

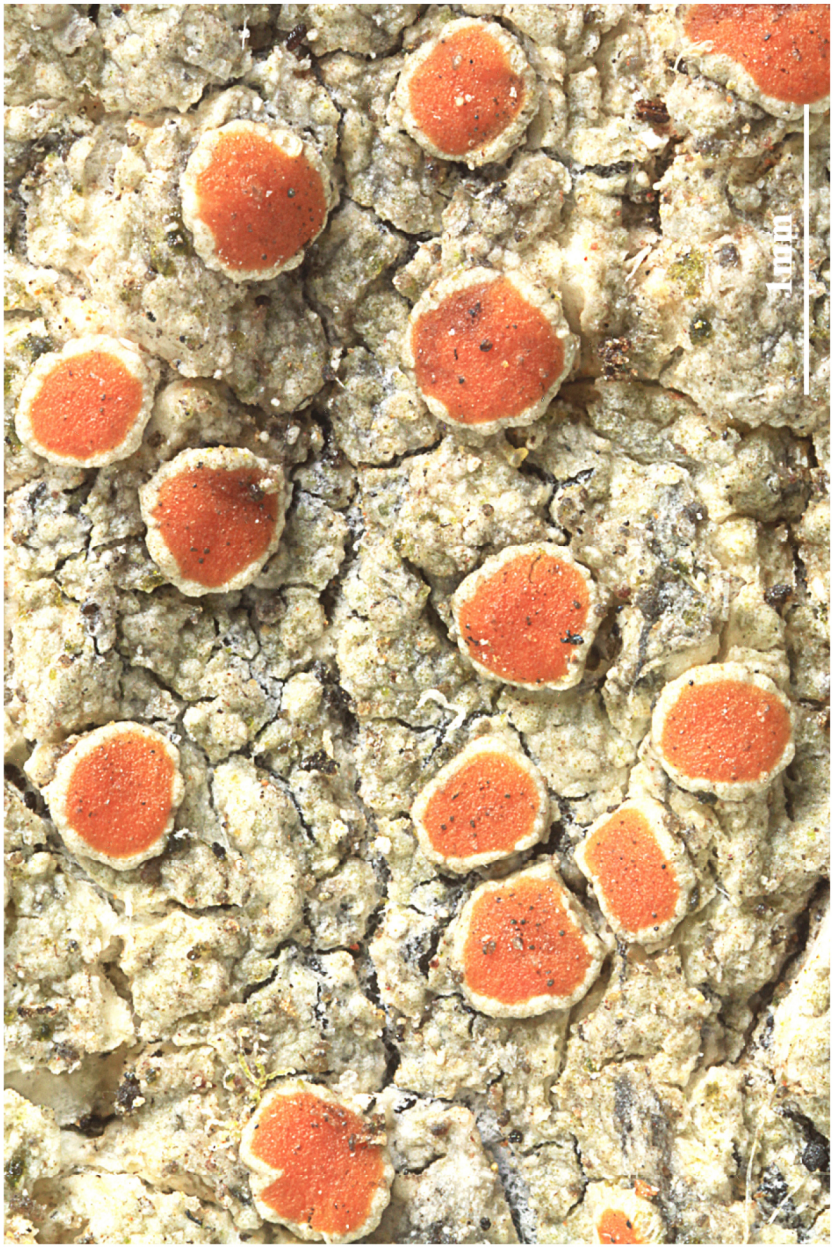
Haematomma rufidulum (Fée) A. Massal. [as 'ruficulum'], Atti Inst. Veneto Sci. lett., ed Arti, Sér. 3 5: 253 (1860) [1859-1860]
= *Lecanora rufidula* Fée, Essai Crypt. Exot., Suppl. Révis. (Paris): 116 (1837)

[ABL42165A], Brazil, Bahia, Chapada Diamantina, Lençois, Serrano, Rio de Lençois, 12°34' S, 41°23'56" W, 450-500 m. On tree bark near river. Leg. A. Menezes & A. Xavier-Barreto, 24. July 2017, det A. Aptroot (no 42165A), 2017. - Spores 8/ascus, transversely 7-24-septate, 45-80 x 4-6 µm. TLC: atranorin, placodiolic acid, russulone.

Thallus cream-coloured to pale grey or greenish grey, uneven to rugose, rimose, 0.3–0.5 mm thick, corticate, esorediate. Apothecia sessile and constricted at the base, 1.0–2.0 mm diam., not confluent; disc dark scarlet-red to cinnabar-red, epruinose; thalline margin prominent, smooth or crenulate, sometimes swollen. Ascospores fusiform, straight or slightly curved, 7–24-septate, 50–80 × 4.0–6.0 µm. Conidia curved-filiform, 12–19 × 0.6–0.8 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ red; containing placodiolic acid (major), atranorin (minor) and russulone (minor). - This pantropical species also occurs in North, Central and South America, Africa, India, Malaysia and Papua New Guinea.



Haematomma rufidulum



Haematomma rufidulum

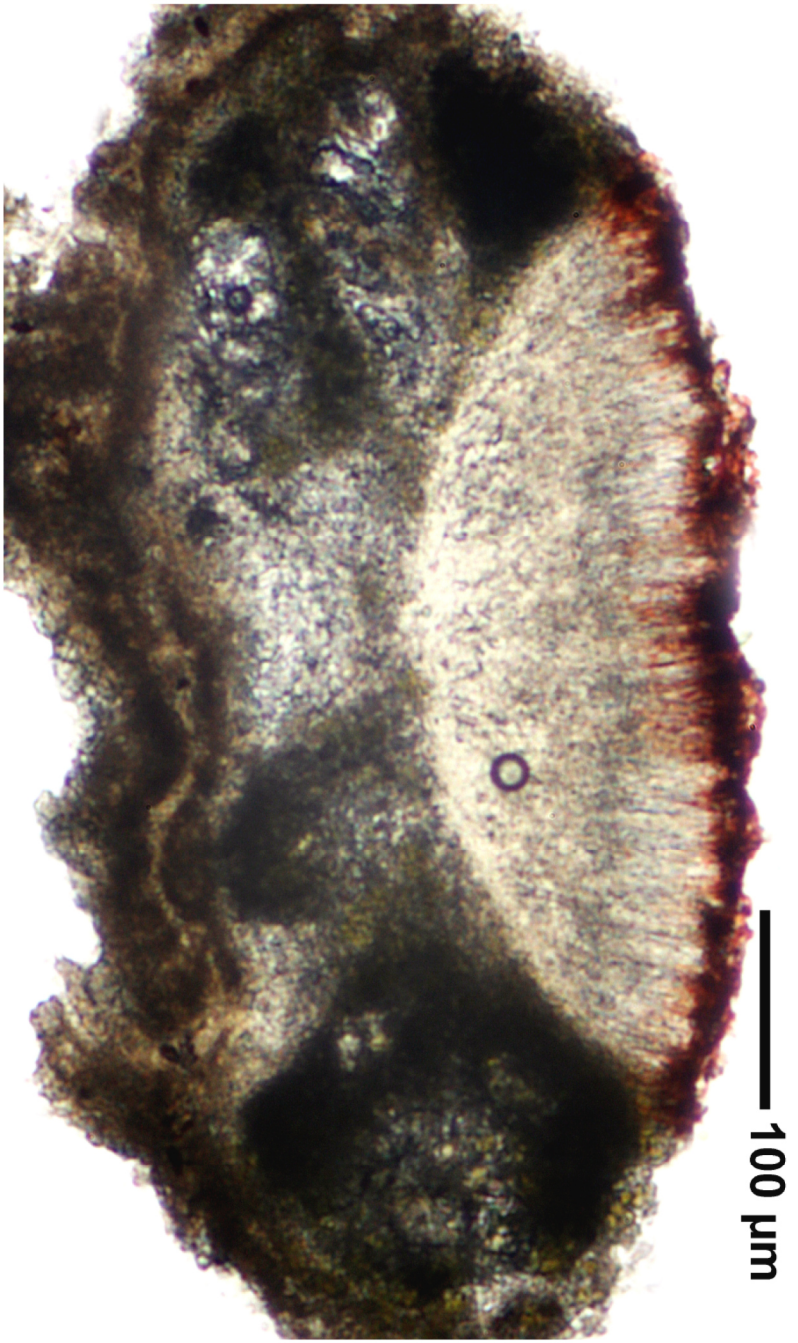
Haematomma sorediatum R.W. Rogers, Lichenologist 14(2): 128 (1982)
= *Haematomma neglectum* Lumbsch & Feige, Mycotaxon 52(2): 430 (1994)

[11487], PORTUGAL, MADEIRA: Südlich von Porto da Cruz bei Portela, im Lorbeerwald am Anfang der Levada zwischen Portela und Laceimeiros; 32°45' N, 16°50' W, 630 m . Leg. F. Schumm, 28.12.2003, det. F. Schumm. 01.2004. - Amphithecium mit großen in K unlöslichen Kristallen; Th K gelb, P- bis schwach gelblich, UV-; p240/1: Atranorin, Placodiolsäure, Haematommon. Epith.mit roten Pigment, K+ erst blauviolett, dann rasch farblos.

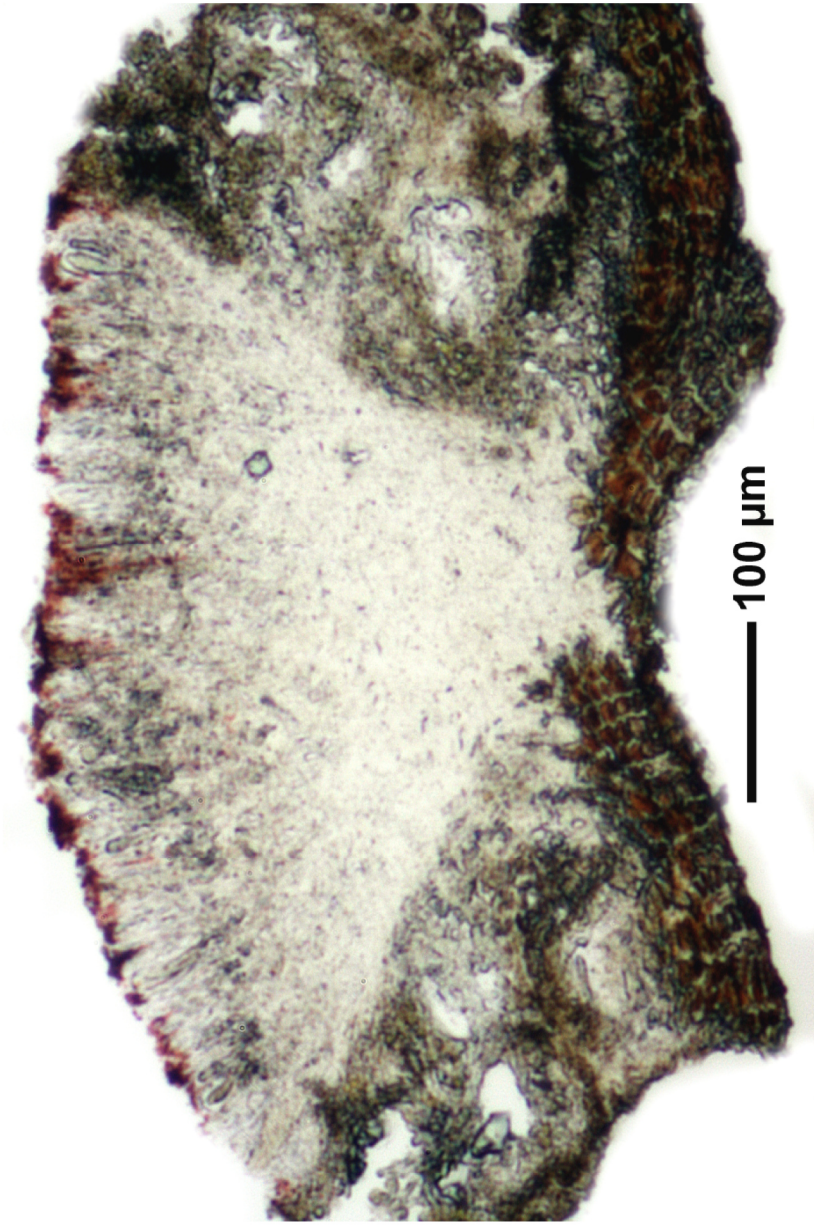
Thallus white to cream-coloured, yellow-grey, pale grey or greenish grey, smooth to rugulose and weakly warty, ±rimose to areolate, to 0.4 mm thick, corticate, sorediate. Soralia often ±globose, 0.5–2.0 mm wide, rarely diffuse, but then the thallus with irregular sorediate areas. Apothecia sessile, constricted at the base, 0.5–2.0 mm diam., not confluent; disc orange-red to cinnabar-red, with or without pale golden pruina; thalline margin prominent, smooth to weakly crenulate; in older apothecia the disc becoming undulate and the margin sorediate. Ascospores fusiform, straight or slightly curved, 9–19-septate, 45–70 × 4–6 µm. Conidia bacilliform, 7–8 × 0.8–1.0 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ violet; containing atranorin, haematommone (minor) and placodiolic acid (minor or trace). - . This warm-temperate to tropical species also occurs in Australia, South America, southern Europe, Madeira and India.



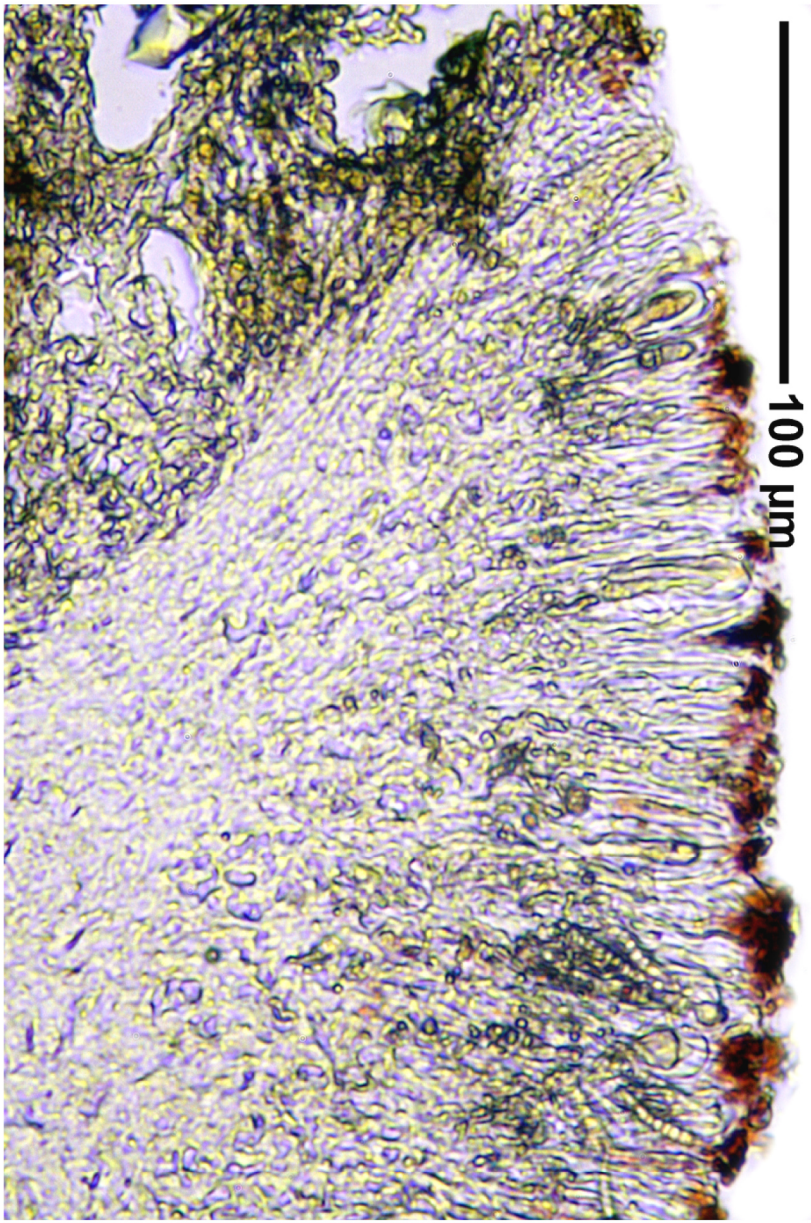
Haematomma sorediatum



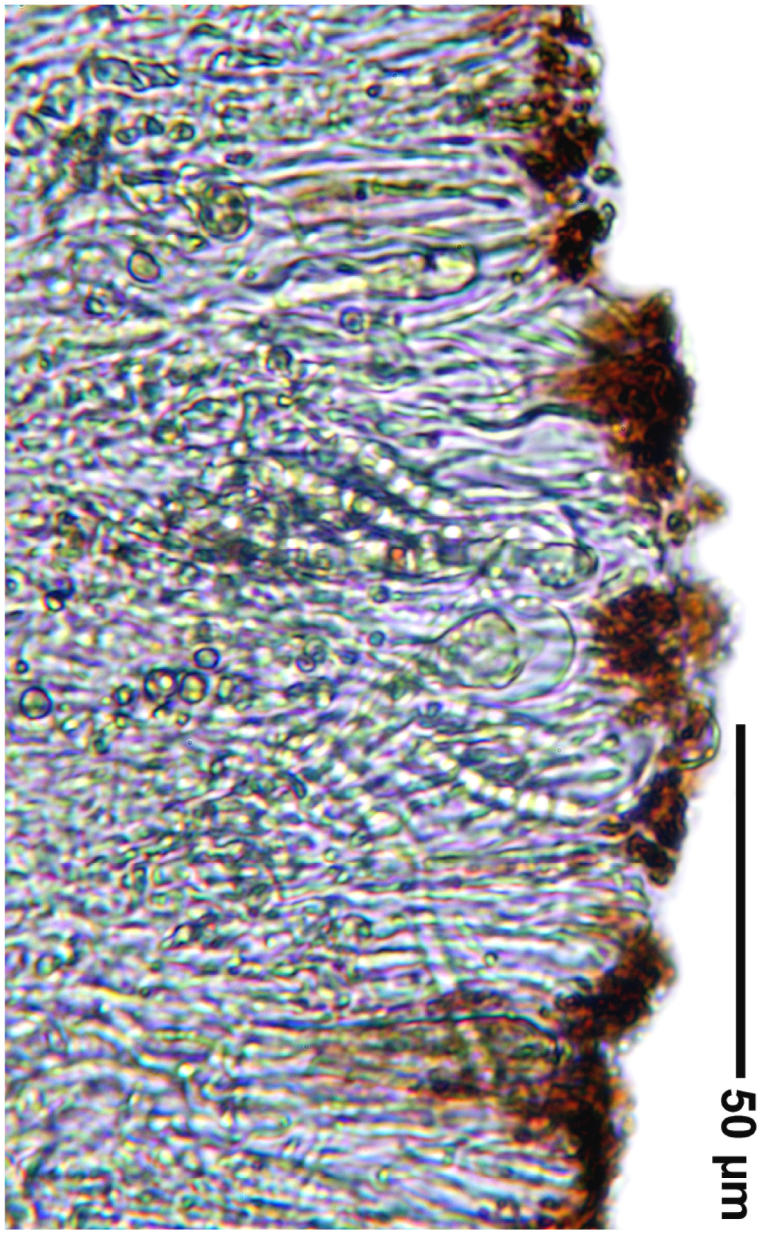
Haematomma sorediatum



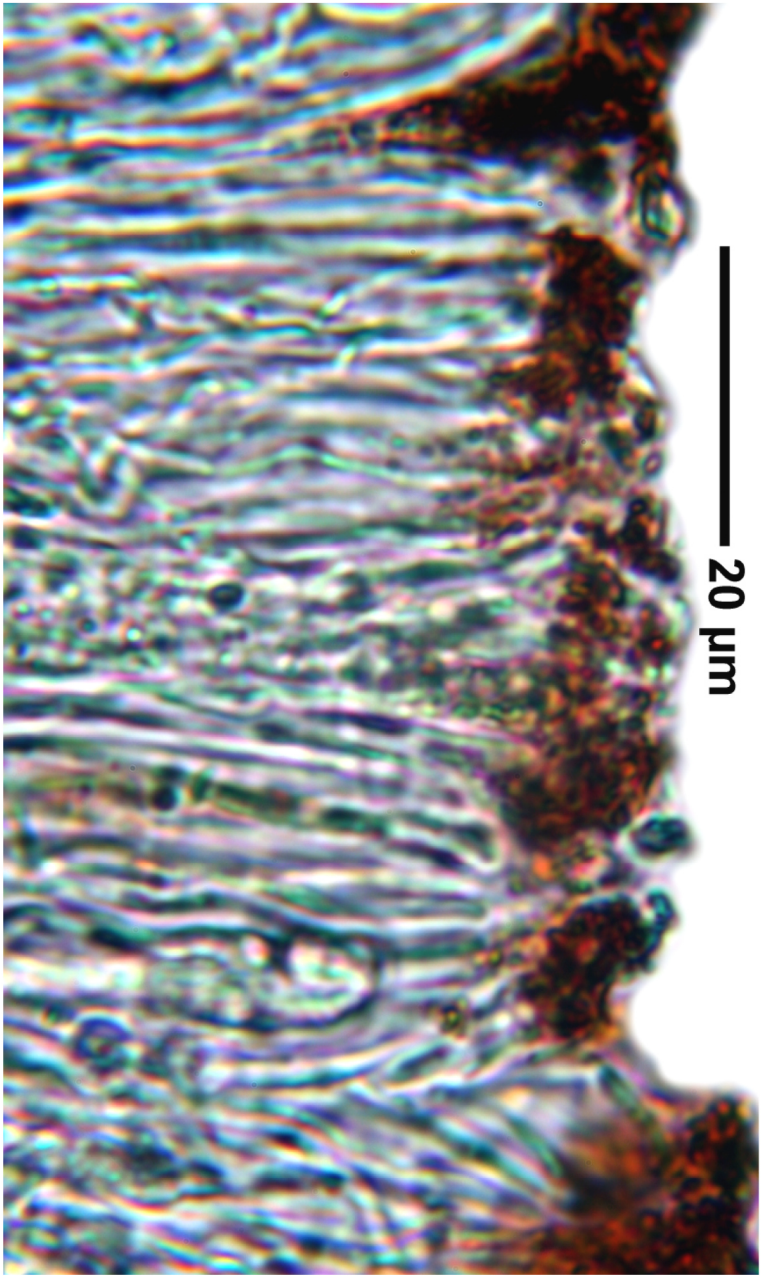
Haematomma sorediatum



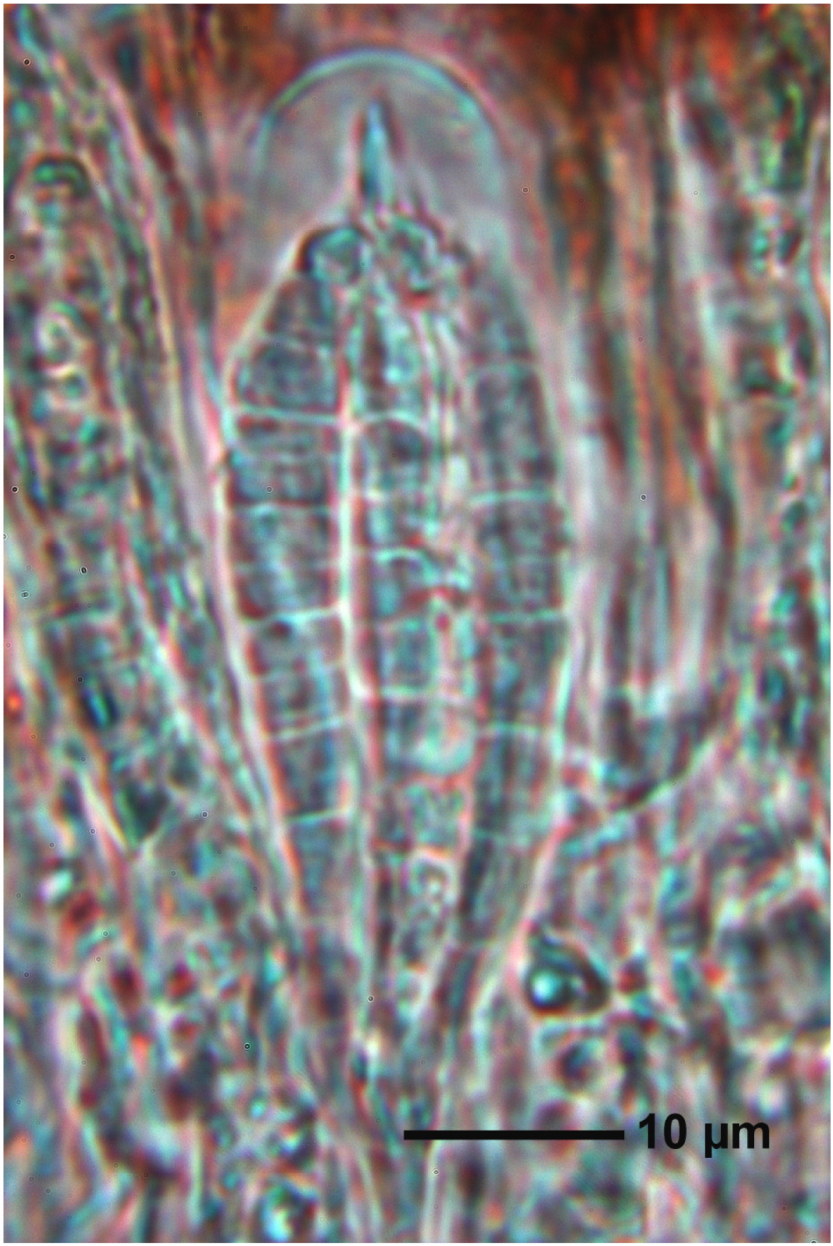
Haematomma sorediatum



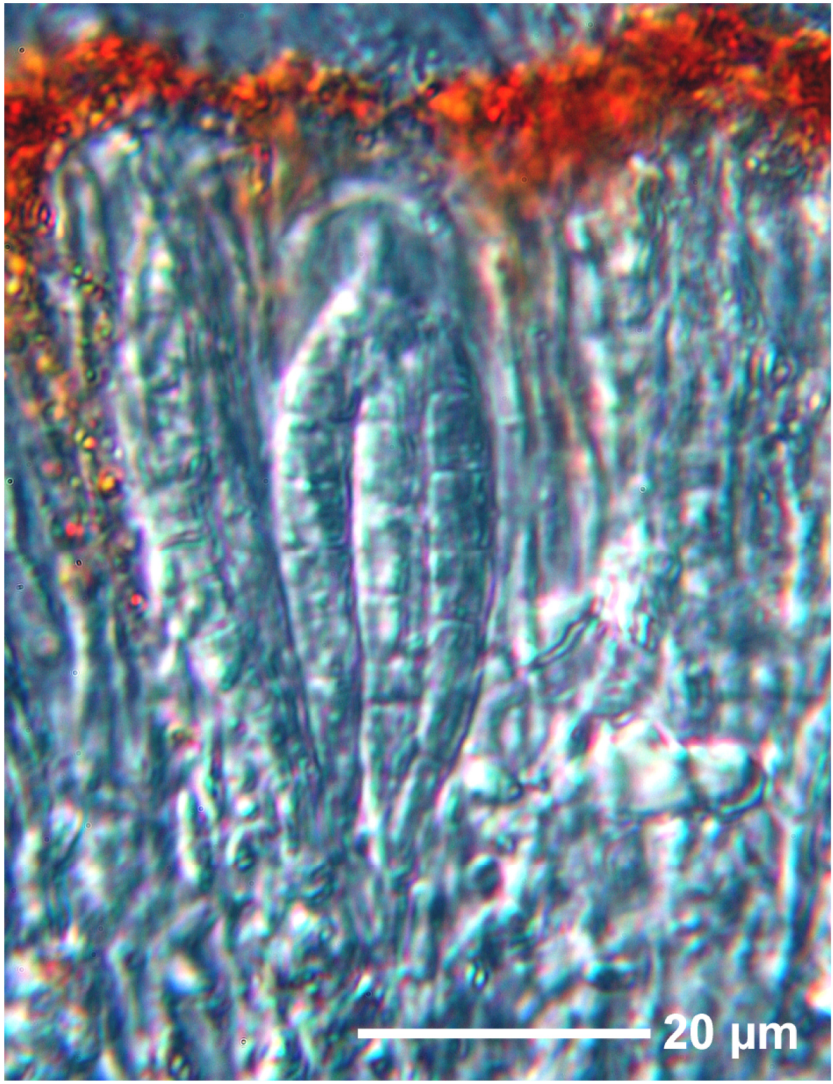
Haematomma sorediatum



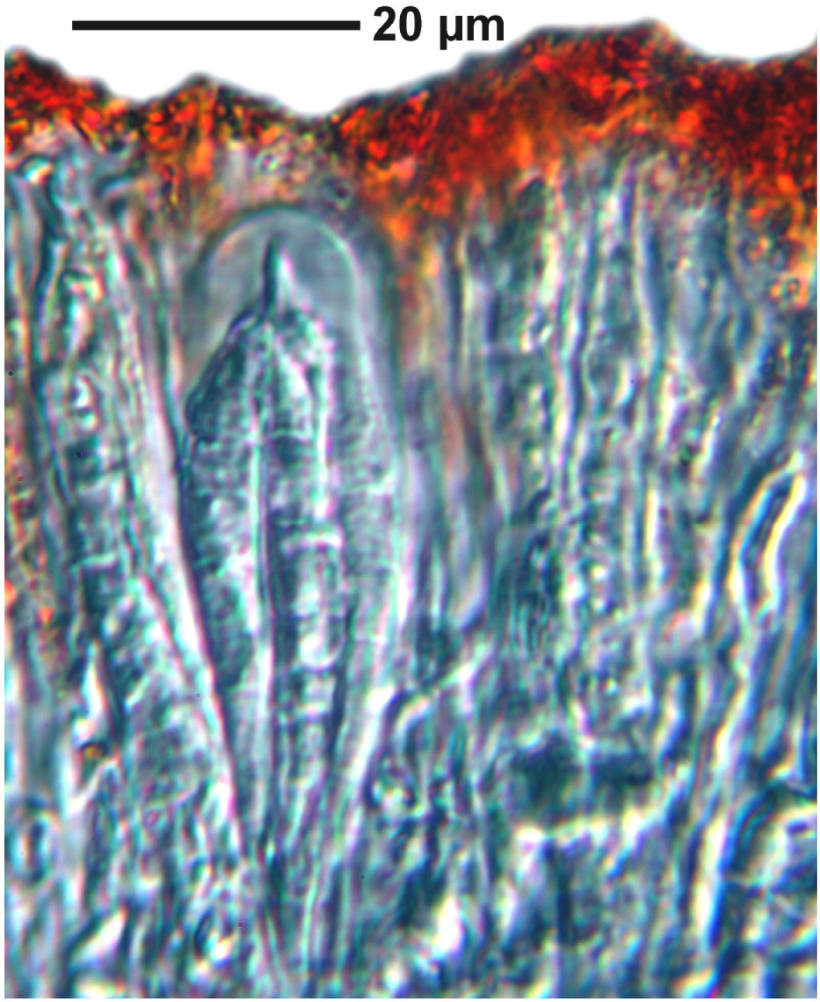
Haematomma sorediatum



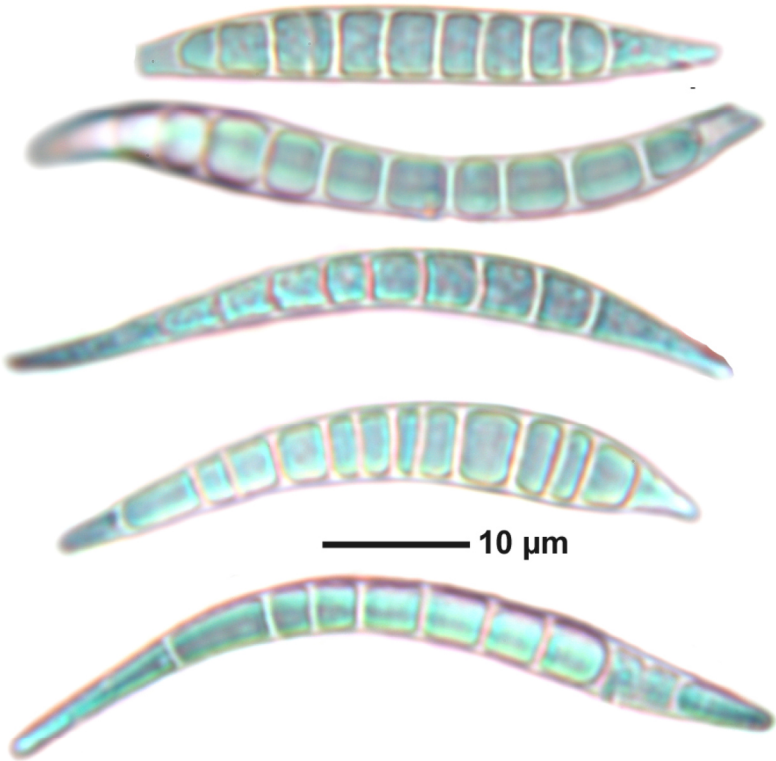
Haematomma sorediatum



Haematomma sorediatum



Haematomma sorediatum



Haematomma sorediatum

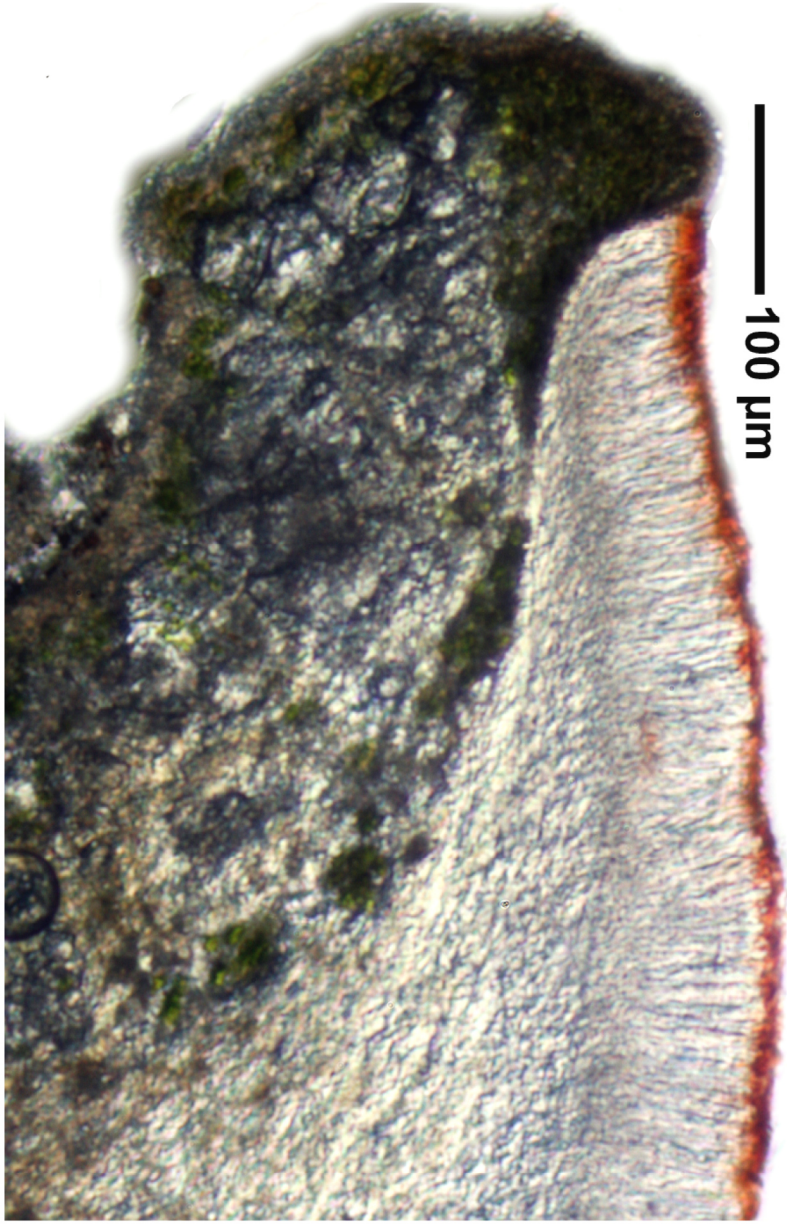
Haematomma sorediatum R.W. Rogers, Lichenologist 14(2): 128 (1982)
= *Haematomma neglectum* Lumbsch & Feige, Mycotaxon 52(2): 430 (1994)

[17973], S-Amerika, S-Argentinien, Rio Negro, Pierto Blest, 41°2'55" S, 71°47'45" W, temperierter Regenwald. Leg. E. Stocker-Wörgötter (ohne Jahr und Nummer) - Thallus weiß, feinkörnig sorediös. Sporen hyalin 8/Ascus, ca. 5 septiert, 40-50 x 2,4-4,5 µm. Chemie Haematommon (mit K rasch entfärbt). Th UVL+ gelblich.

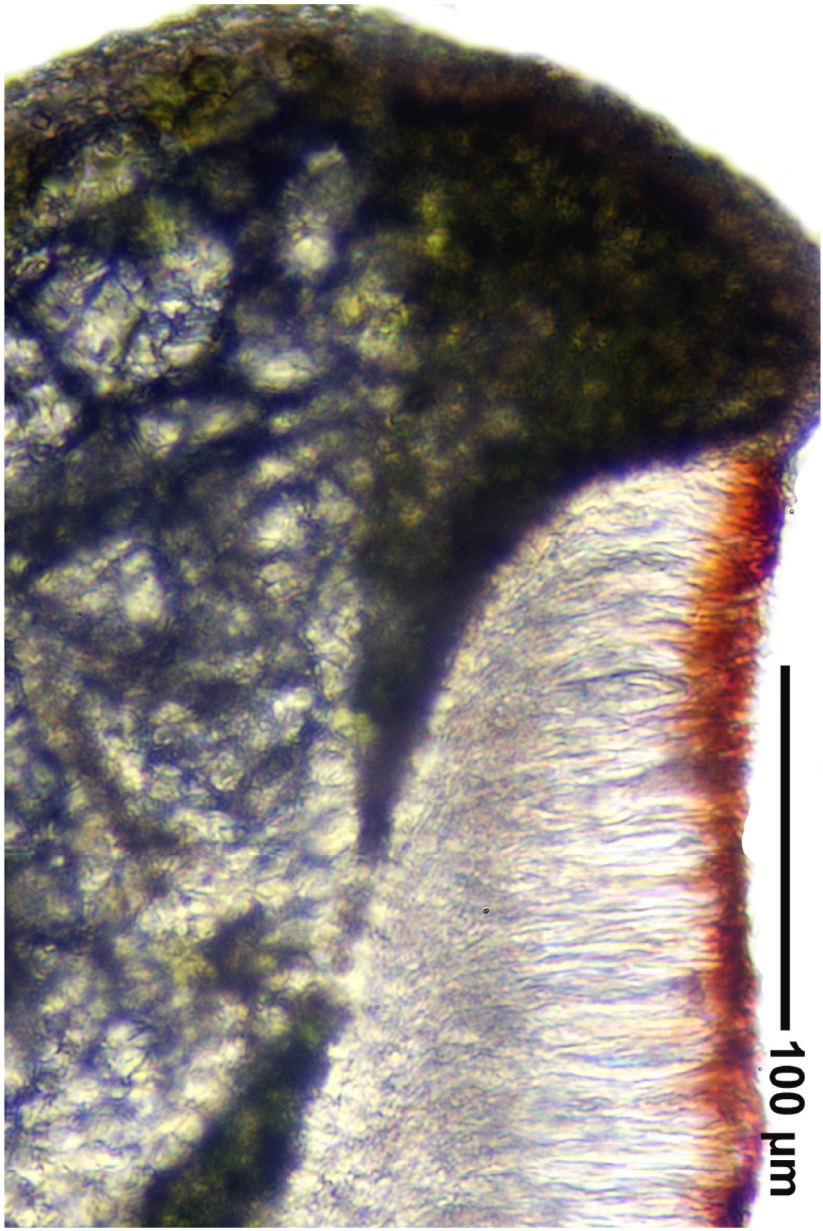
Thallus white to cream-coloured, yellow-grey, pale grey or greenish grey, smooth to rugulose and weakly warty, ±rimose to areolate, to 0.4 mm thick, corticate, sorediate. Soralia often ±globose, 0.5–2.0 mm wide, rarely diffuse, but then the thallus with irregular sorediate areas. Apothecia sessile, constricted at the base, 0.5–2.0 mm diam., not confluent; disc orange-red to cinnabar-red, with or without pale golden pruina; thalline margin prominent, smooth to weakly crenulate; in older apothecia the disc becoming undulate and the margin sorediate. Ascospores fusiform, straight or slightly curved, 9–19-septate, 45–70 × 4–6 µm. Conidia bacilliform, 7–8 × 0.8–1.0 µm. CHEMISTRY: Thallus K+ yellow, C–, KC–, Pd+ yellow; disc K+ violet; containing atranorin, haematommone (minor) and placodiolic acid (minor or trace). - . This warm-temperate to tropical species also occurs in Australia, South America, southern Europe, Madeira and India.



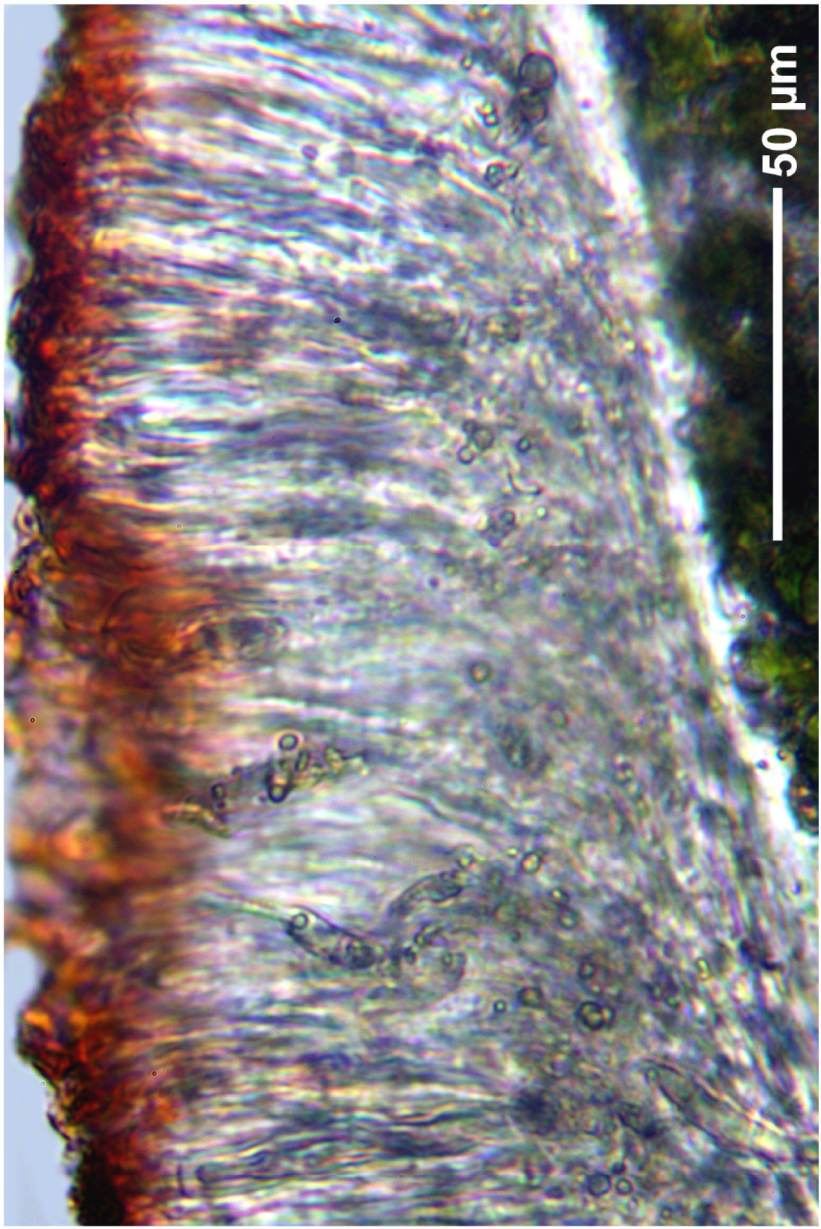
Haematomma sorediatum



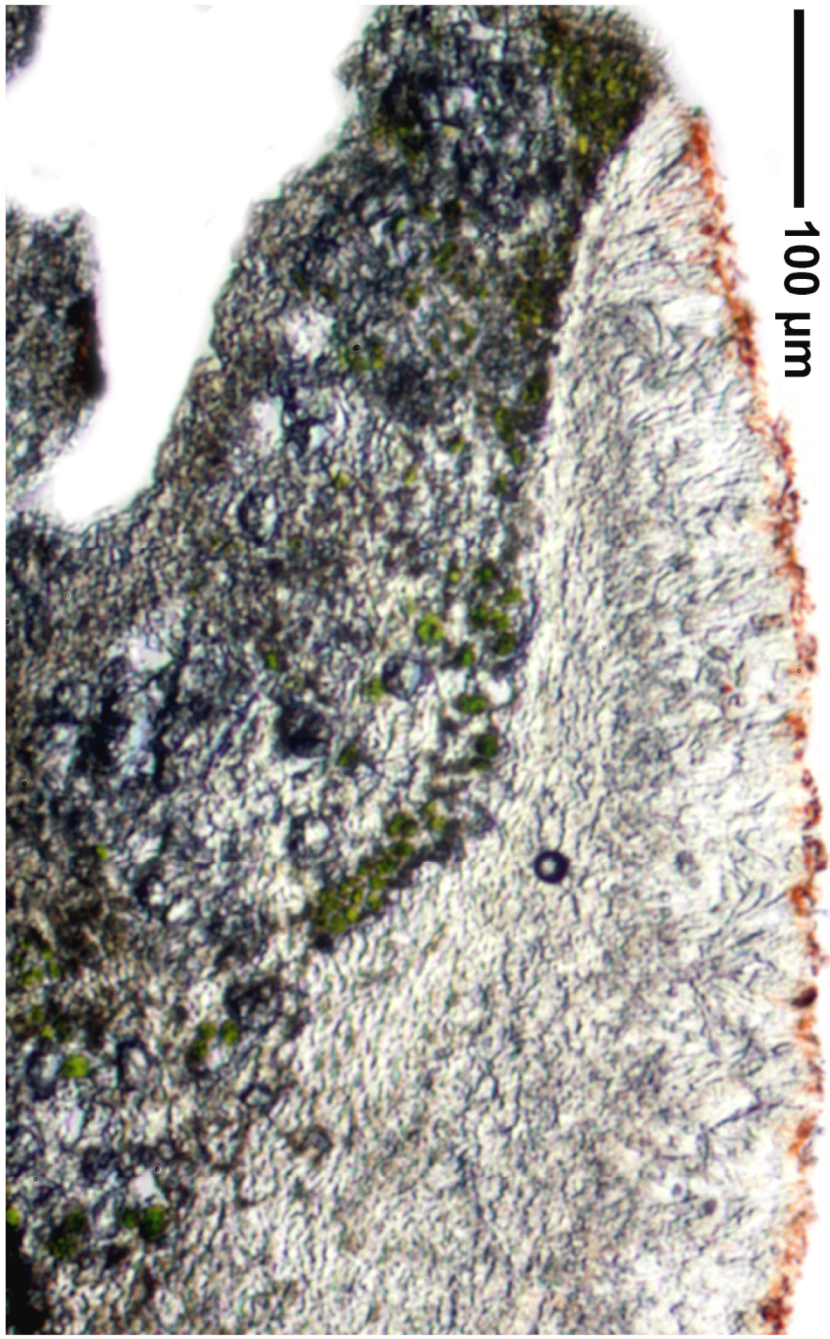
Haematomma sorediatum



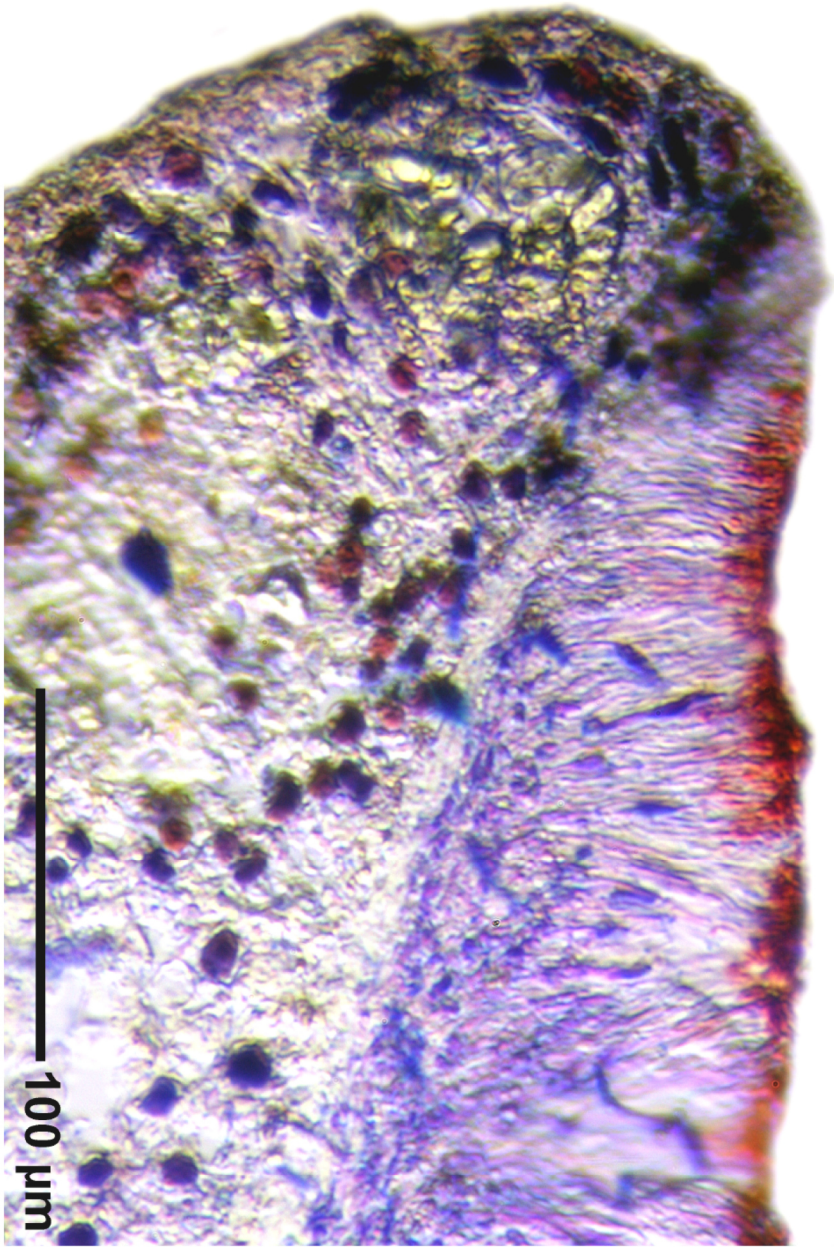
Haematomma sorediatum



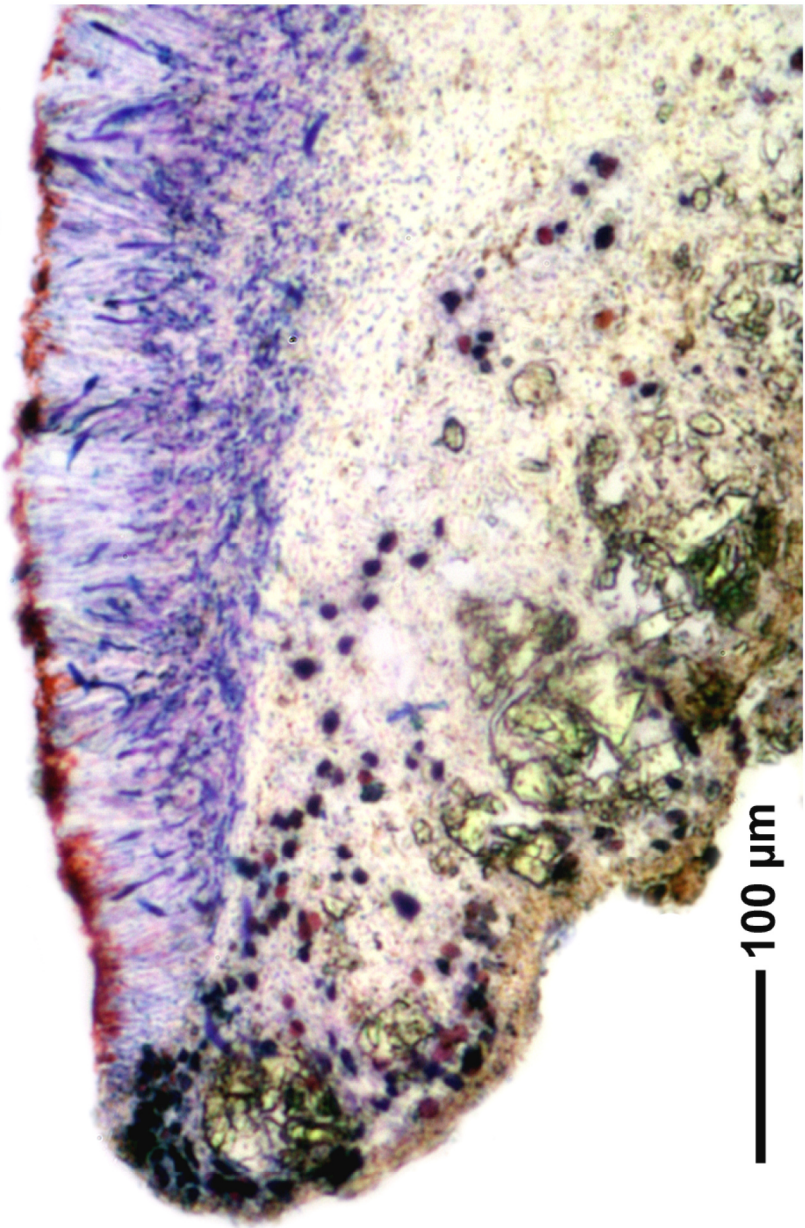
Haematomma sorediatum



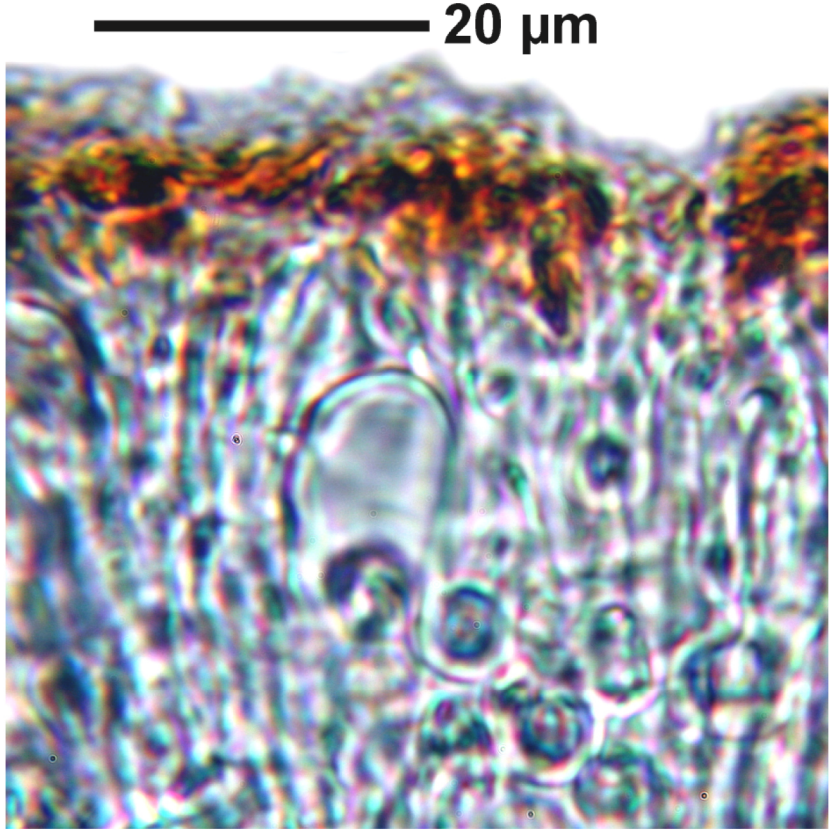
Haematomma sorediatum



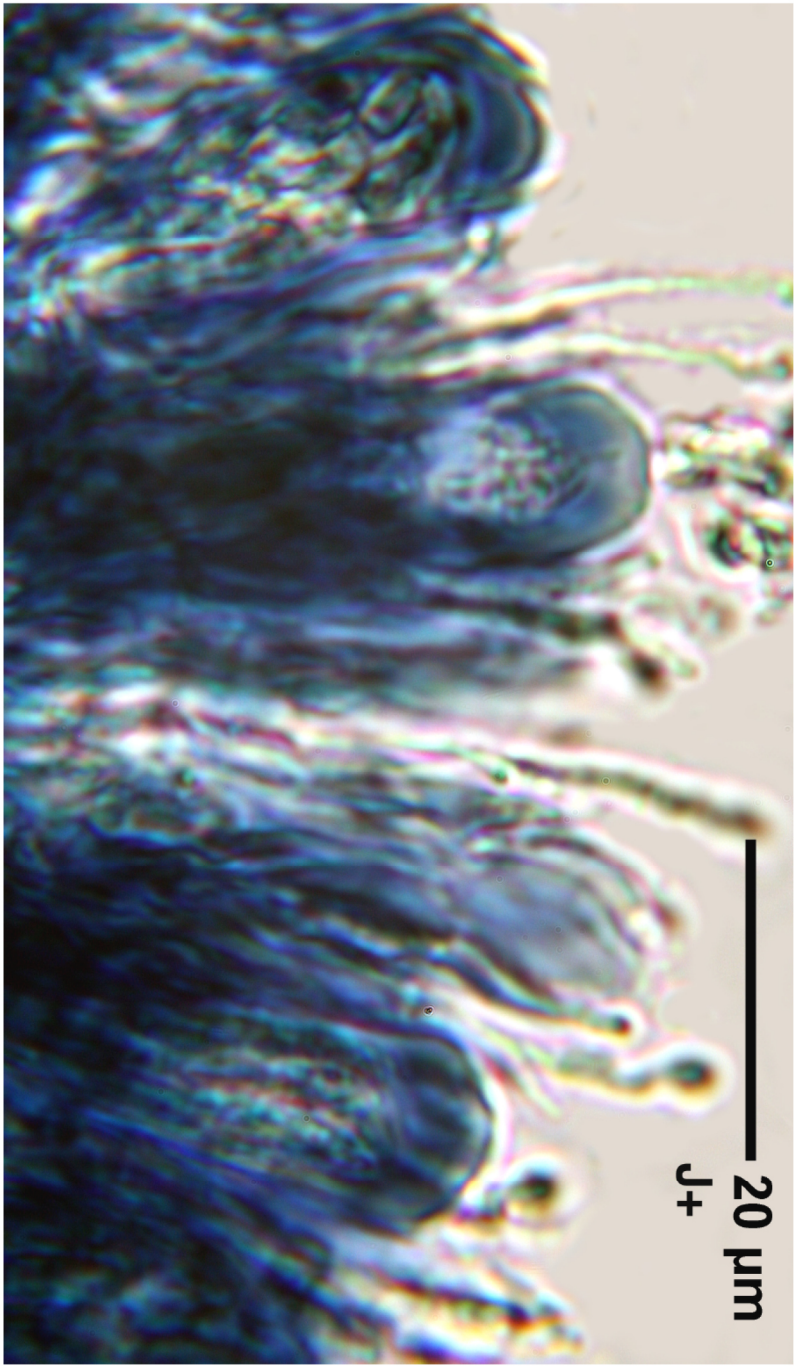
Haematomma sorediatum



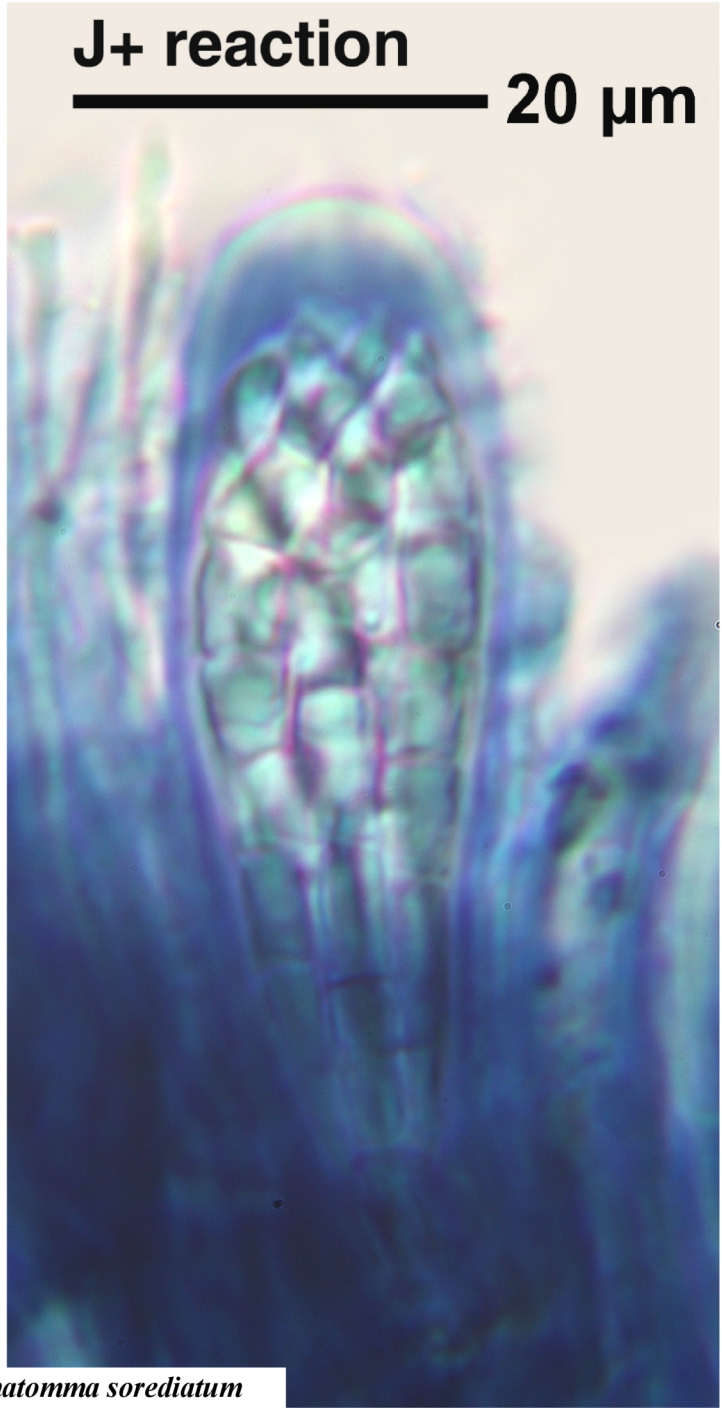
Haematomma sorediatum



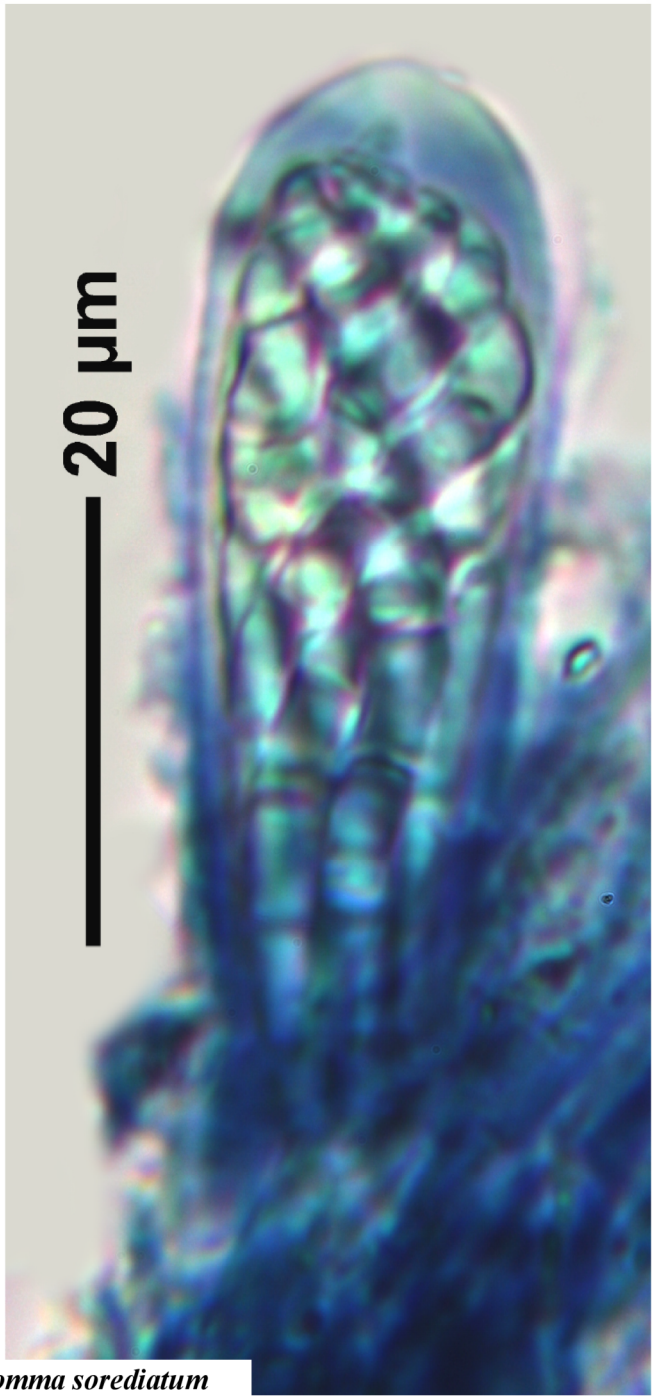
Haematomma sorediatum



Haematomma sorediatum



Haematomma sorediatum



Haematomma sorediatum



Haematomma sorediatum

Haematomma subinnatum (Malme) Kalb & Staiger, Biblthca Lichenol. 59: 171 (1995)
= *Haematomma puniceum* var. *subinnatum* Malme 1937

[ABL77661], Brazil, Mato Grosso do Sul, Morraria do Sul, Morraria do Sul Fazenda Sol de Maio, in Atlantic rain forest on tree bark. 20°35'33" S, 56°51'40" W, 525 m. Leg. A. Aptroot (no 77661), 5.11.2018, det. A. Aptroot, 2019.

Thallus without soralia, UV+ yellow; apothecia immersed in the thallus, 0.5-1.5 mm; spores 8/ascus, 5-7 septate, 30-50 x 4-6 µm; Chemistry: lichexanthon, atranorin, russulone, ± psoromic acid, ± demethylpsoromic acid



Haematomma subinnatum



Haematomma subinnatum

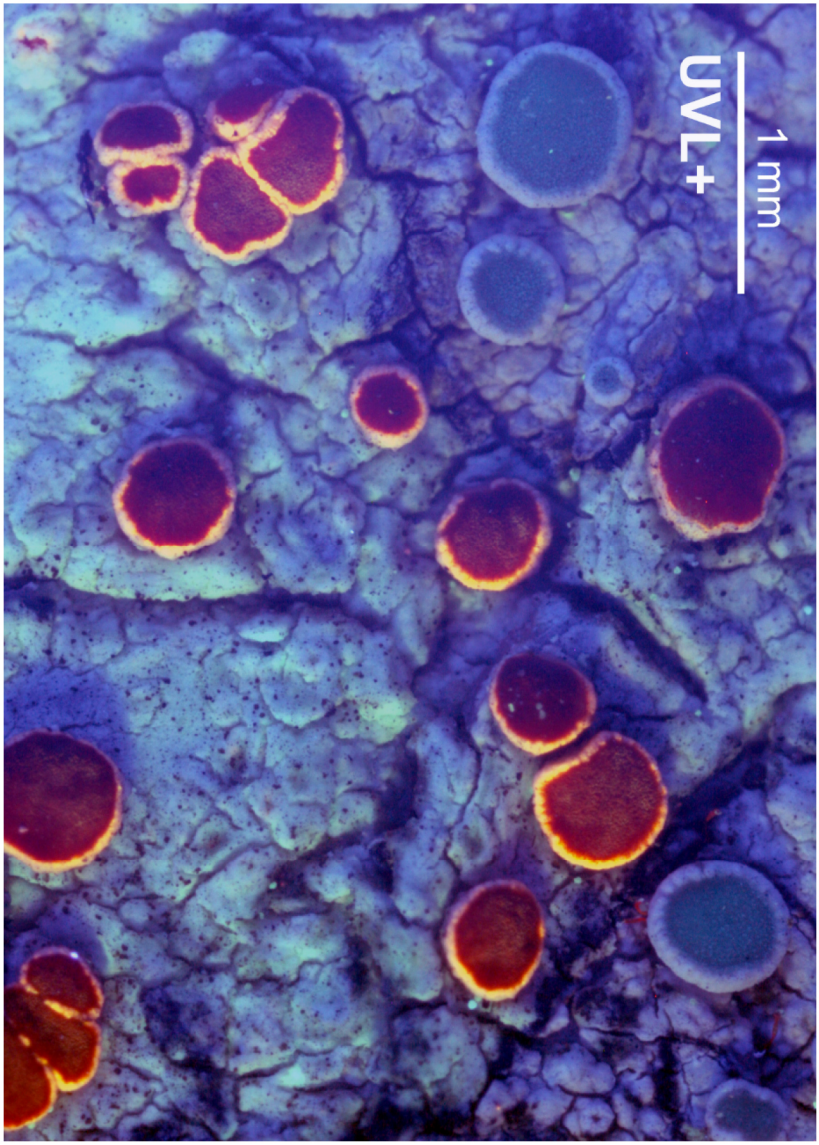
Haematomma sulphureum (Müll. Arg.) Kalb & Staiger, in Staiger & Kalb, Biblthca Lichenol. 59: 174 (1995)
= *Lecania punicea* var. *sulphurea* Müll. Arg. 1881

[15059], La Reunion, an der Straße von La Petite France zum Piton Maido bei Caverne du Maido; 21,06201°S, 55,37890°E, 1950 m. Leg. F. Schumm & J.-P. Frahm, 07.09.2009, det. F. Schumm, 02.2010. - Chemistry p252/7: Atranorin (min), Haematommon (maj), Lichexanthon. Apothecienrand (nicht der Thallus!!) UVL+ goldgelb. Rotes Scheibenpigment Haematommon (in K violett, rasch ausbleichend). Sporen sigmoid, 65 x 5 µm, 11-14-septiert.

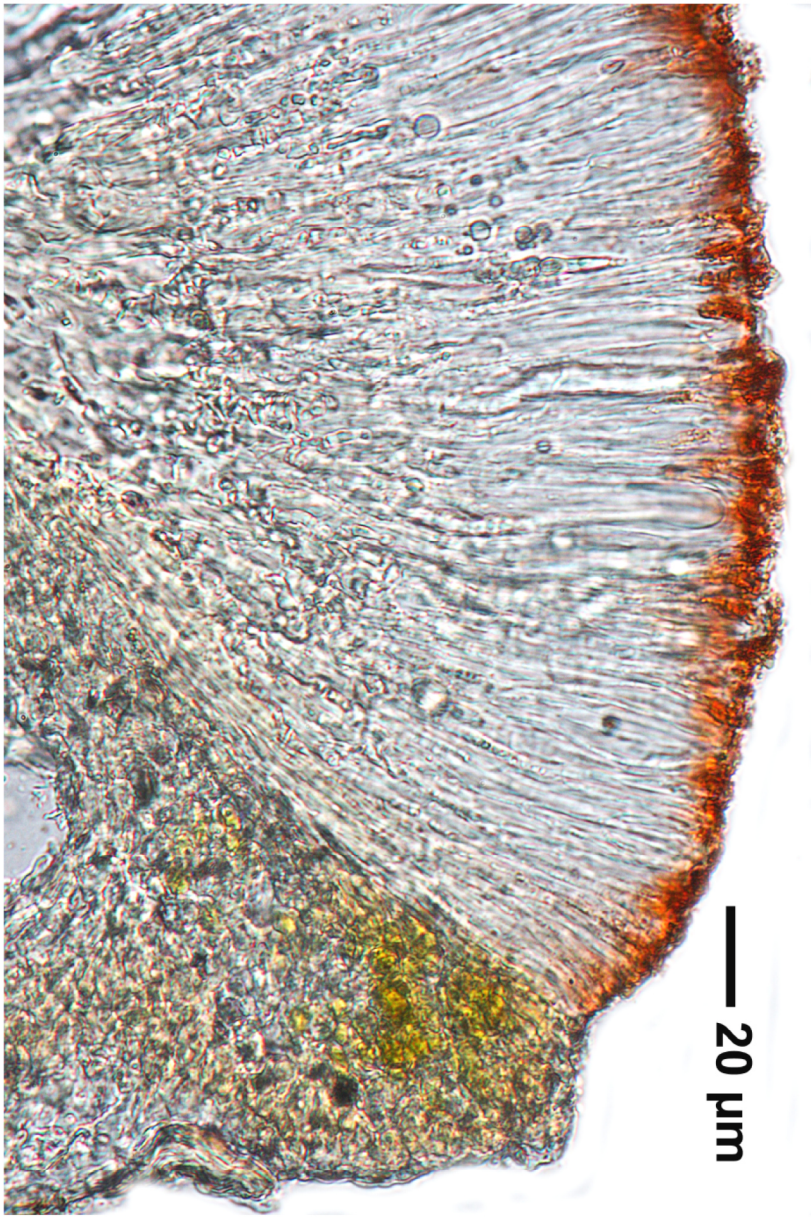
Thallus cremefarben, hell- bis griinlichgrau, meist uneben oder warzig, leicht rissig, durchsichtig diinn bis ca. 0,5 mm dick, z. T. mit eingelagerten Kristallhaufen, ohne Sorale, UV-. Apothecien sitzend, an der Basis eingeschniirt, 0,5-1,5 (bis 2) mm im Durchmesser, Scheibe scharlachrot oder griinlichgelb bereift (die Bereifung kann so stark sein, daB die rote Firbung der Scheibe nicht mehr zu sehen ist), Rand meist heller als der Thallus, weißlich bis cremefarben, UV+ goldgelb , meist glatt. Sporen zu 8 im Ascus, 12- bis 20zellig, meist sigmoid, 55 - (64,9) - 75 x 4,5 -(5,1) - 6 µm. Spermatien kurz und gerade, 6-8 x 1-1,3 µm. Chemie: Placodiolsiure, Lichexanthon, Haematommon, Atranorin (meist wenig). Verbreitung: neotropisch. Costa Rica, Jamaica, Puerto Rico, Brasilien.



Haematomma sulphureum



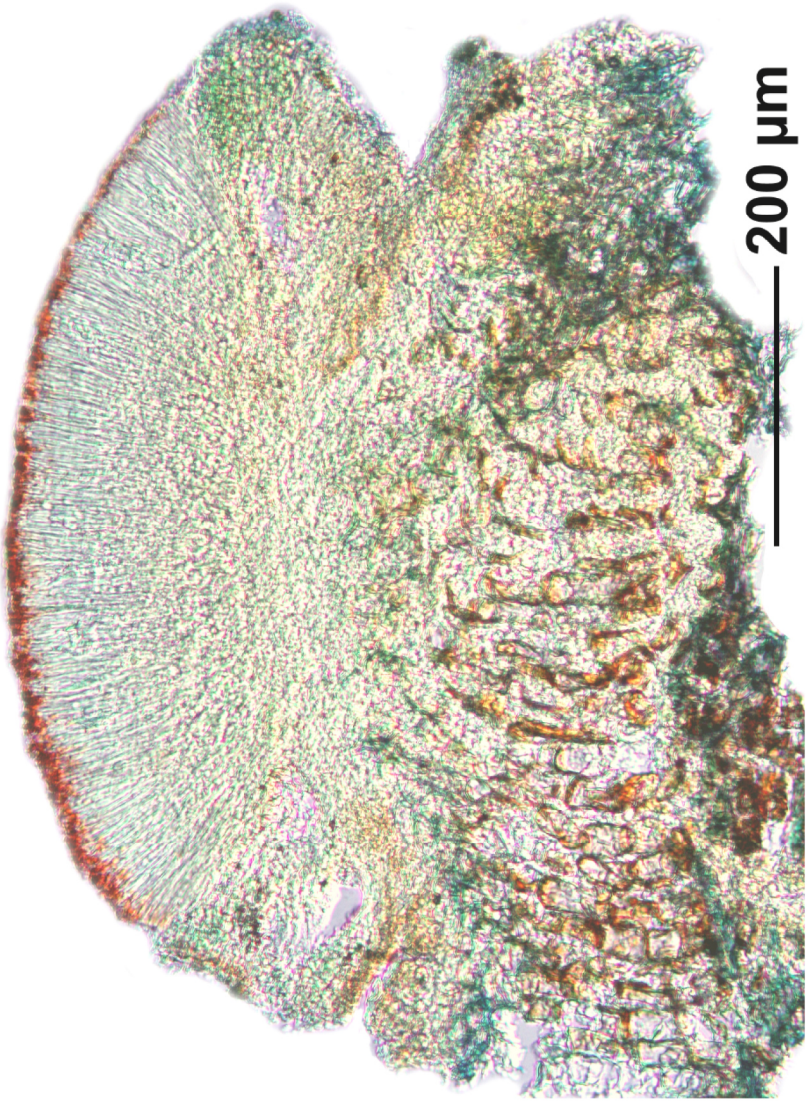
Haematomma sulphureum



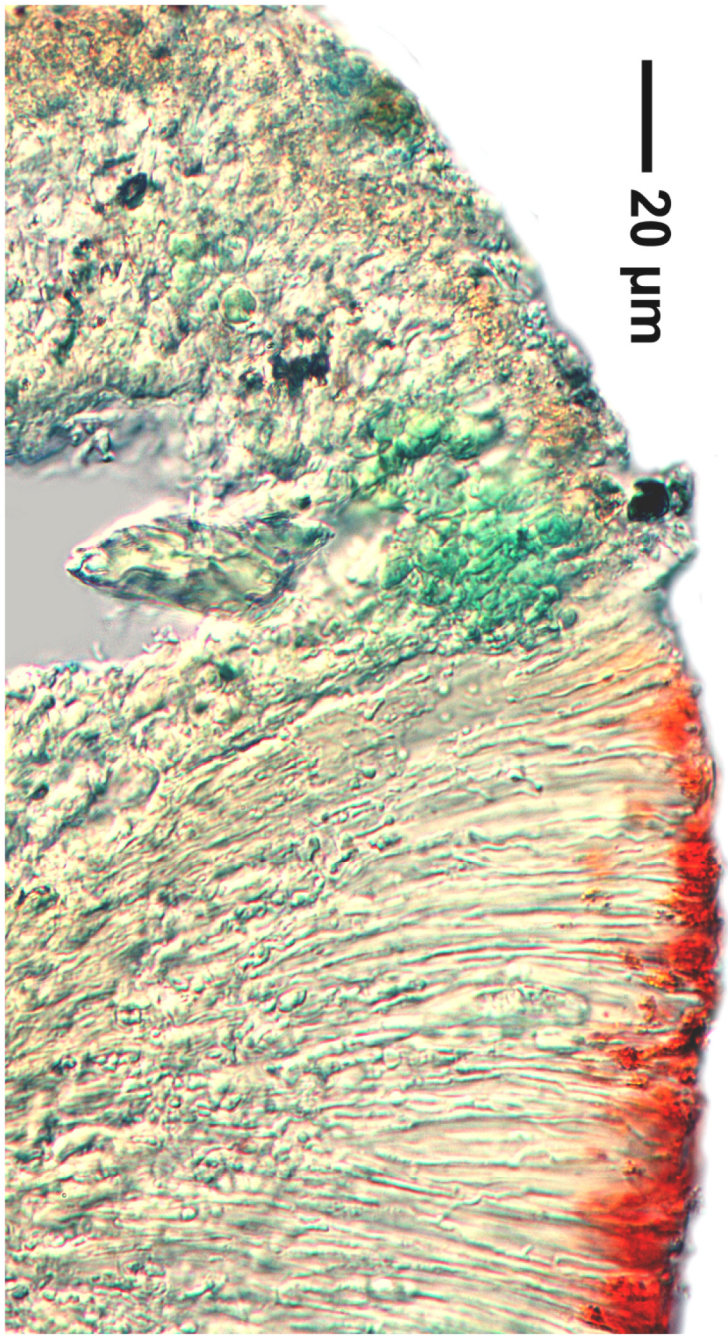
Haematomma sulphureum



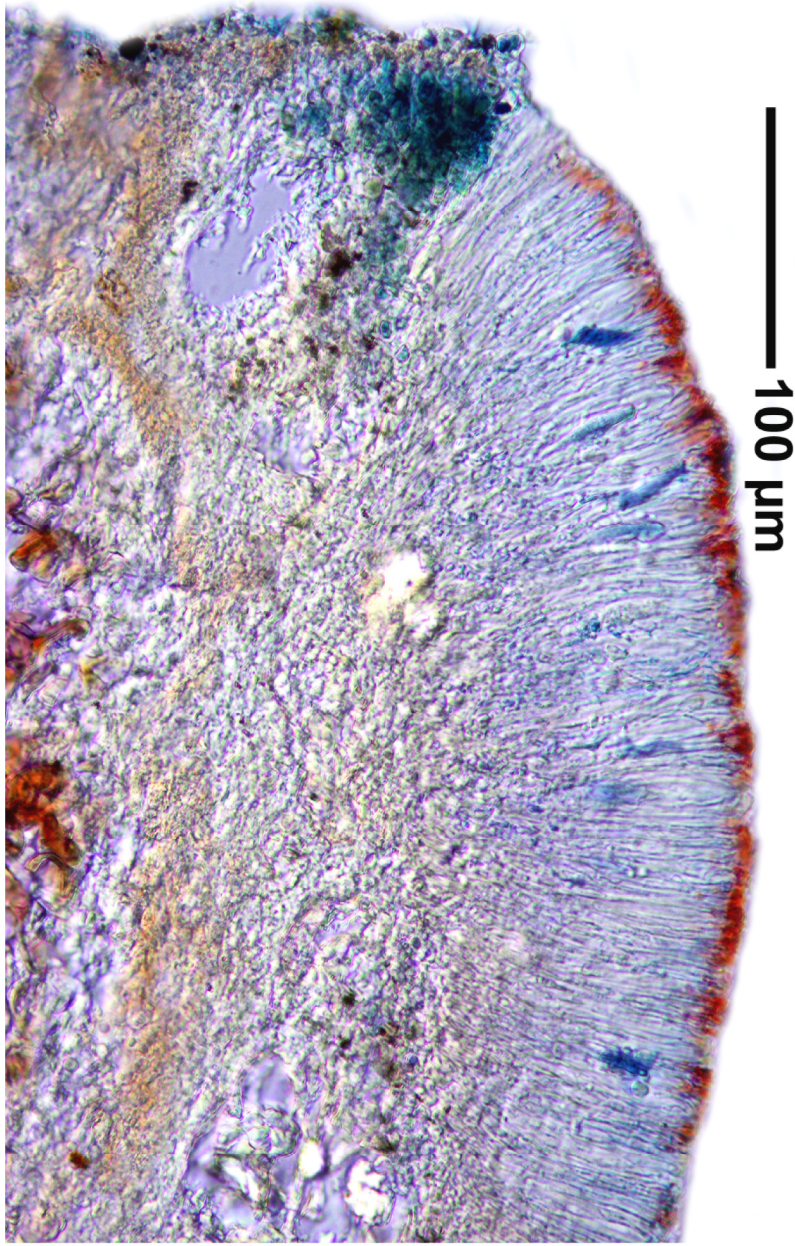
Haematomma sulphureum



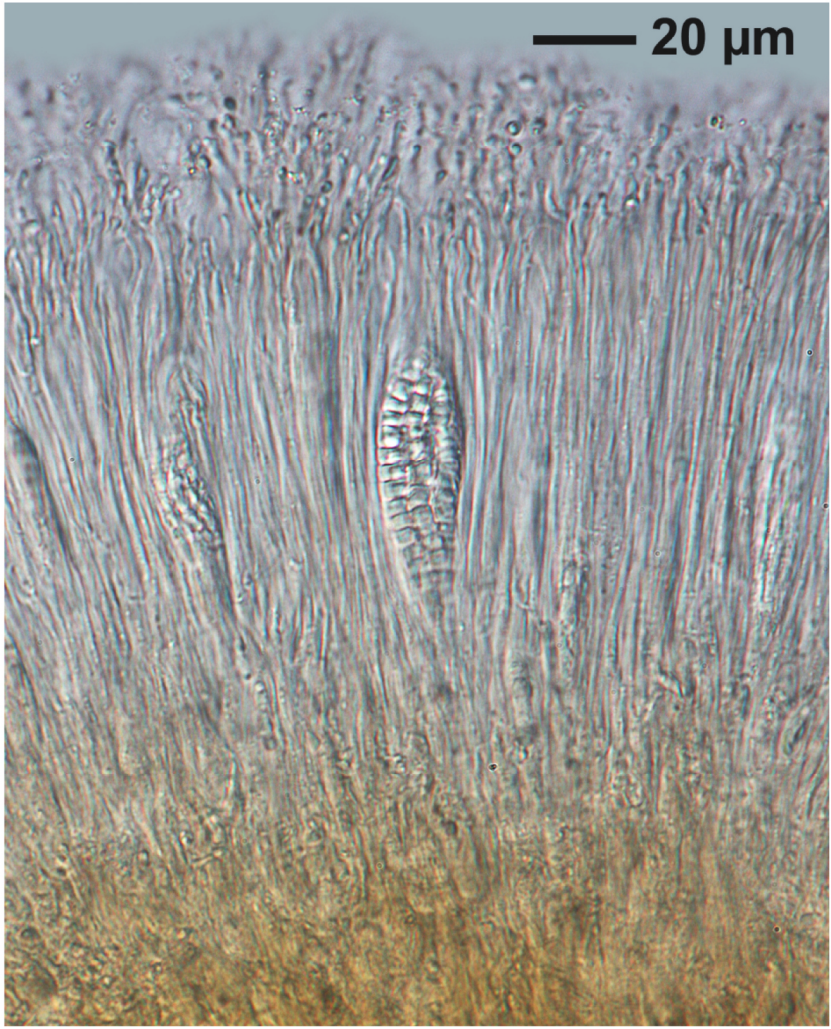
Haematomma sulphureum



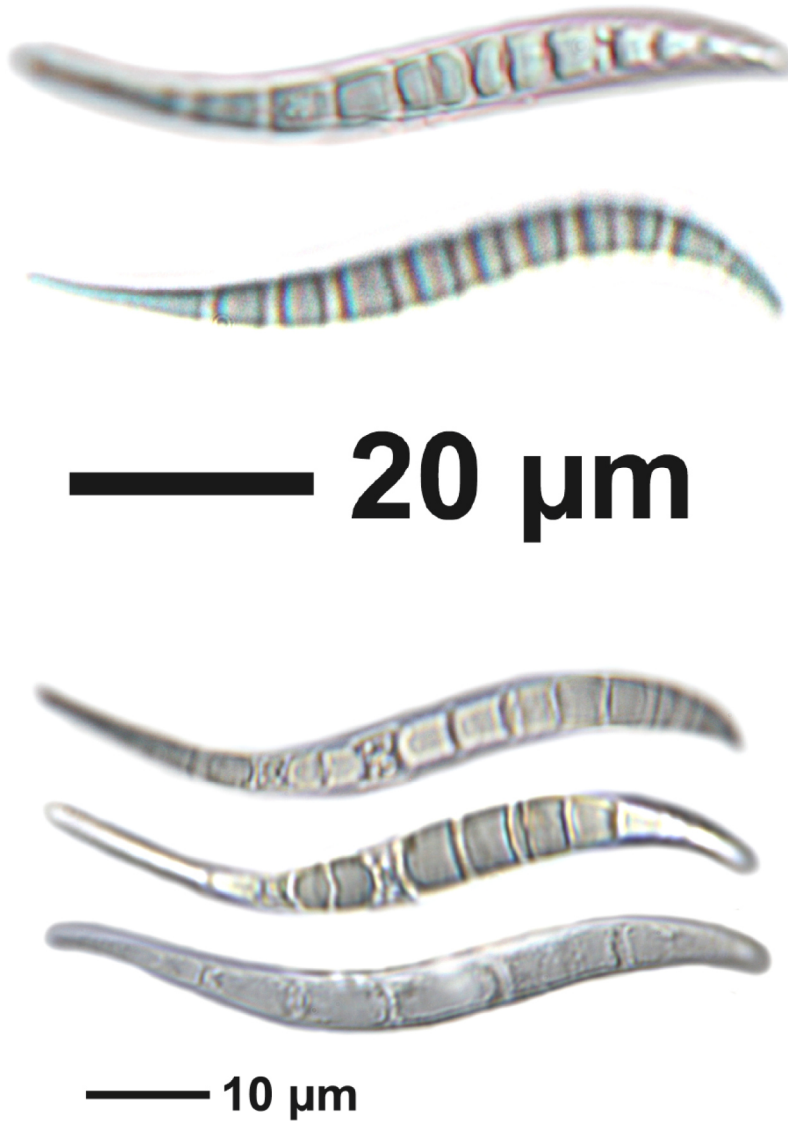
Haematomma sulphureum



Haematomma sulphureum



Haematomma sulphureum



Haematomma sulphureum

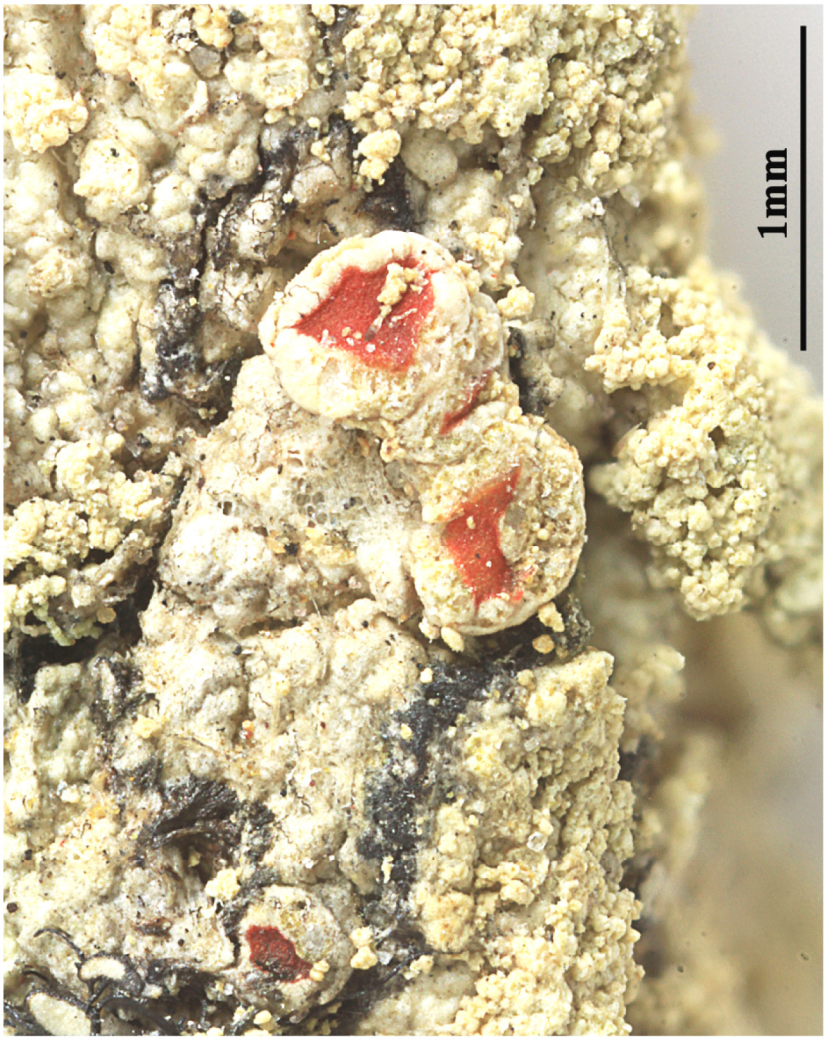
Haematomma sulphureum (Müll. Arg.) Kalb & Staiger, in Staiger & Kalb, Biblthca Lichenol. 59: 174 (1995)
= *Lecania punicea* var. *sulphurea* Müll. Arg. 1881

[ABL42171], Brazil, Bahia, Chapada Diamantina, Palmeiras, Morro do Pai Inácio. On tree on table mountain. 12°27'24" S, 41°28'20" W, 1050 -1140 m. Leg. M. Cáceres & A. Aptroot (no 42171), 23.07.2017, det. A. Aptroot, 2017. - Spore 8/ascus, transversely 11-19-septate, 55-75 x 4.5-6 µm. Thallus UV+ yellow. TLC: Lichexanthone, haematommon, placodiolic acid, atranorin.

Thallus cremefarben, hell- bis griinlichgrau, meist uneben oder warzig, leicht rissig, durchsichtig diinn bis ca. 0,5 mm dick, z. T. mit eingelagerten Kristallhaufen, ohne Sorale, UV-. Apothecien sitzend, an der Basis eingeschnürt, 0,5-1,5 (bis 2) mm im Durchmesser, Scheibe scharlachrot oder griinlichgelb bereift (die Bereifung kann so stark sein, daB die rote Firbung der Scheibe nicht mehr zu sehen ist), Rand meist heller als der Thallus, weißlich bis cremefarben, UV+ goldgelb , meist glatt. Sporen zu 8 im Ascus, 12- bis 20zellig, meist sigmoid, 55 - (64,9) - 75 x 4,5 -(5,1) - 6 µm. Spermatien kurz und gerade, 6-8 x 1-1,3 µm. Chemie: Placodiolsäure, Lichexanthon, Haematommon, Atranorin (meist wenig). Verbreitung: neotropisch. Costa Rica, Jamaica, Puerto Rico, Brasilien.



Haematomma sulphureum



Haematomma sulphureum



Haematomma sulphureum

Haematomma wattii (Stirt.) Zahlbr., Cat. Lich. Univers. 5: 776 (1928)
= *Lecanora wattii* Stirt. 1898

[6275], Philippinen, Mindanao, Provinz Bukidnon, westlich Malabalay, tropischer Regenwald am Mt. Kitanglad ab Zwischen-Campsite, 08°09.637' N, 124°55.871' E, 1870-2800 m. Leg. F. Schumm & U. Schwarz,19.08.1999, det. B. Staiger, 08.04.2000.

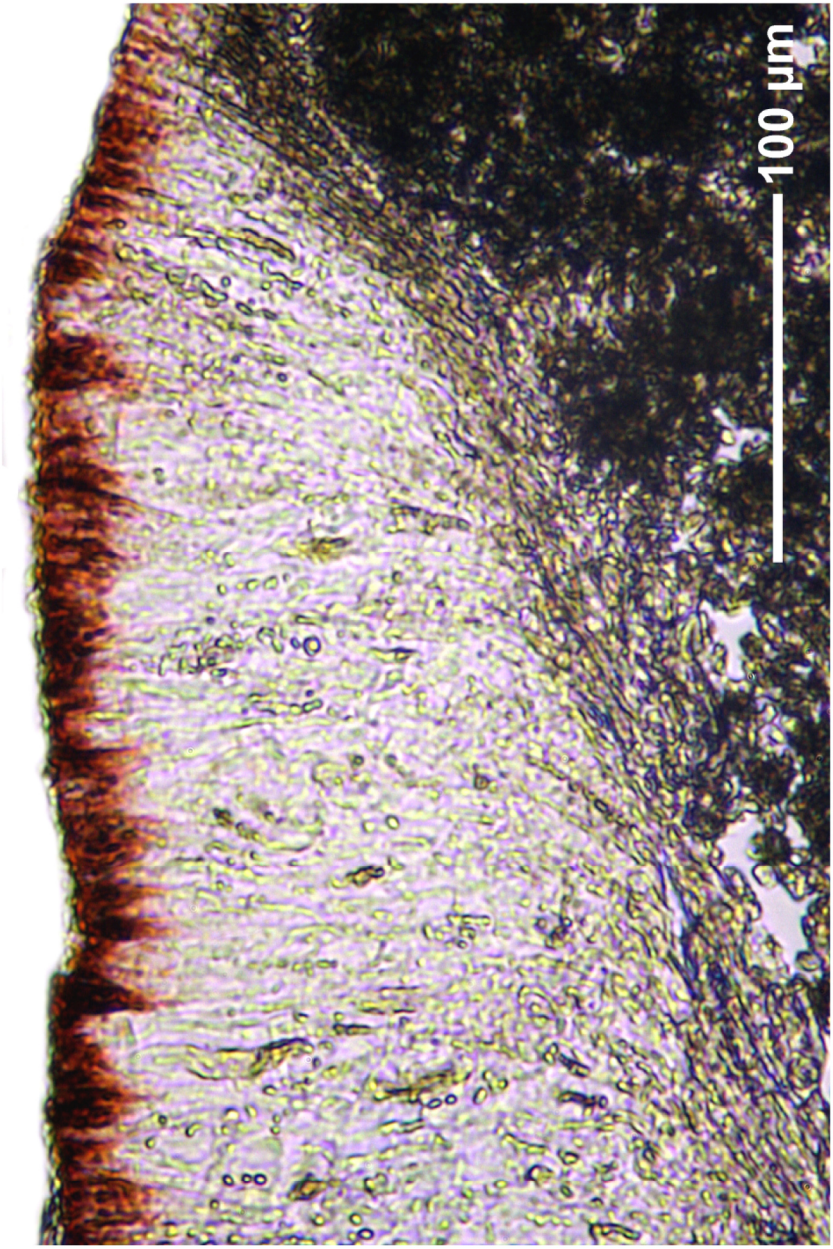
Thallus pale to greenish grey, smooth or uneven to warty cracked. Isidia and soredia absent. Apothecia sessile, 0.5-2 mm, disc red, thalline margin mostly simple but also crenulate. Epithecium with red pigment, K+ violet, quickly fading (haematommone). Ascospores finaly muriform, transverse 18-septate (variable!), segments with 1-3 longitudinal septae, 50-95 x 6.5-10 µm, mostly 4/ascus. Corticolous. Chemistry: thallus and margin of Apothecia UV+ yellow, atranorin, placodiolic acid, haematommone. Lit. Staiger & Kalb (1995)



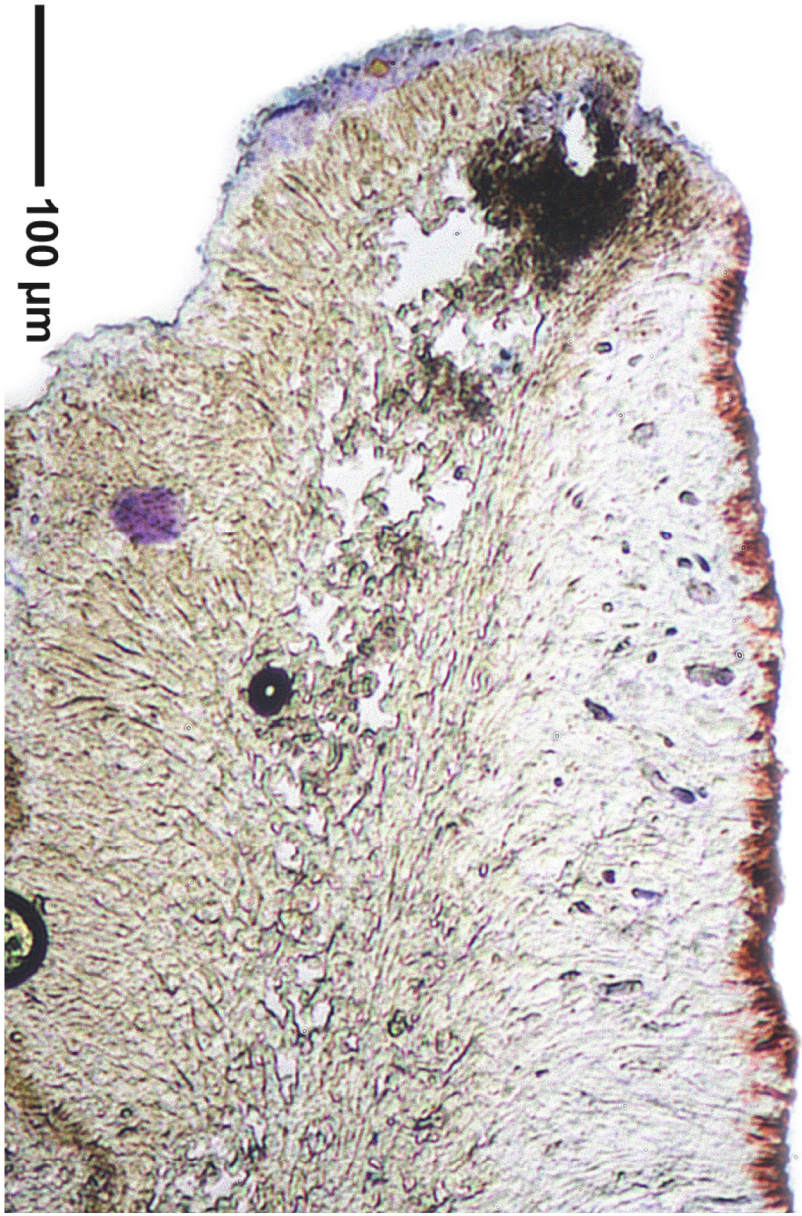
Haematomma wattii



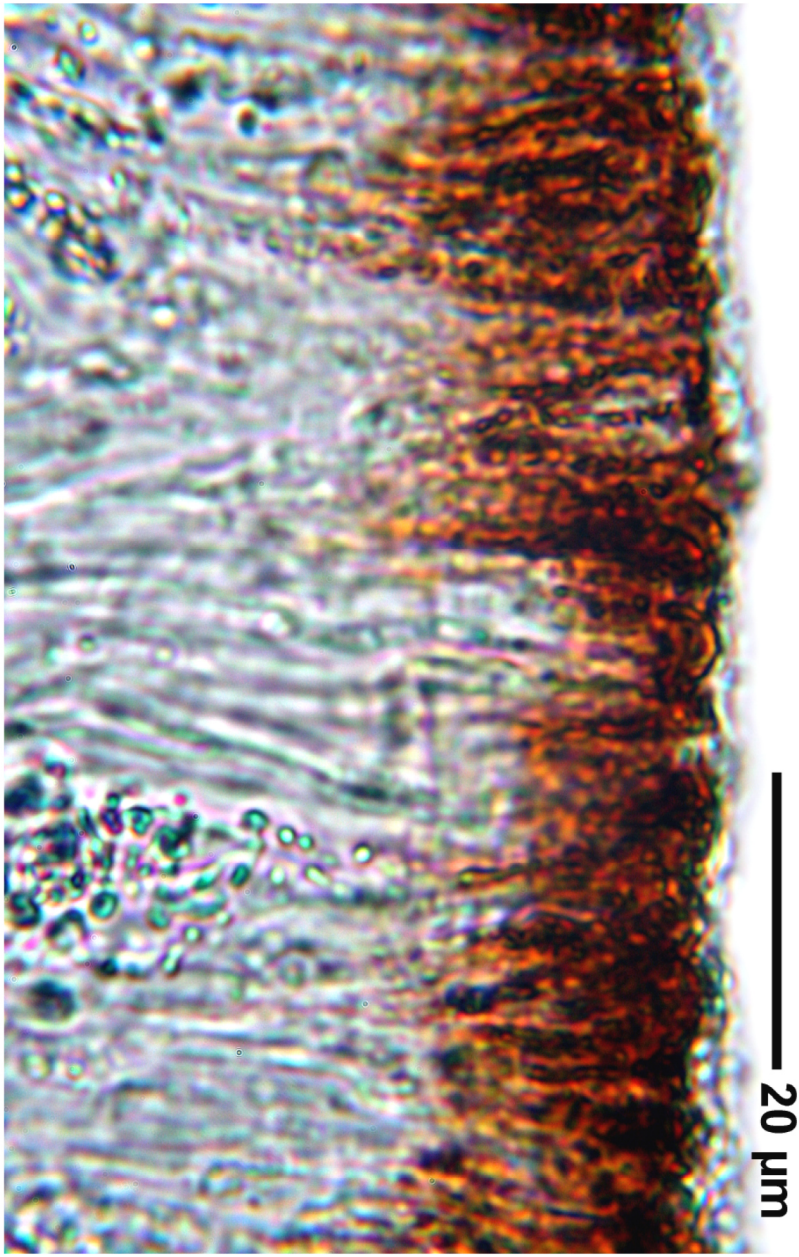
Haematomma wattii



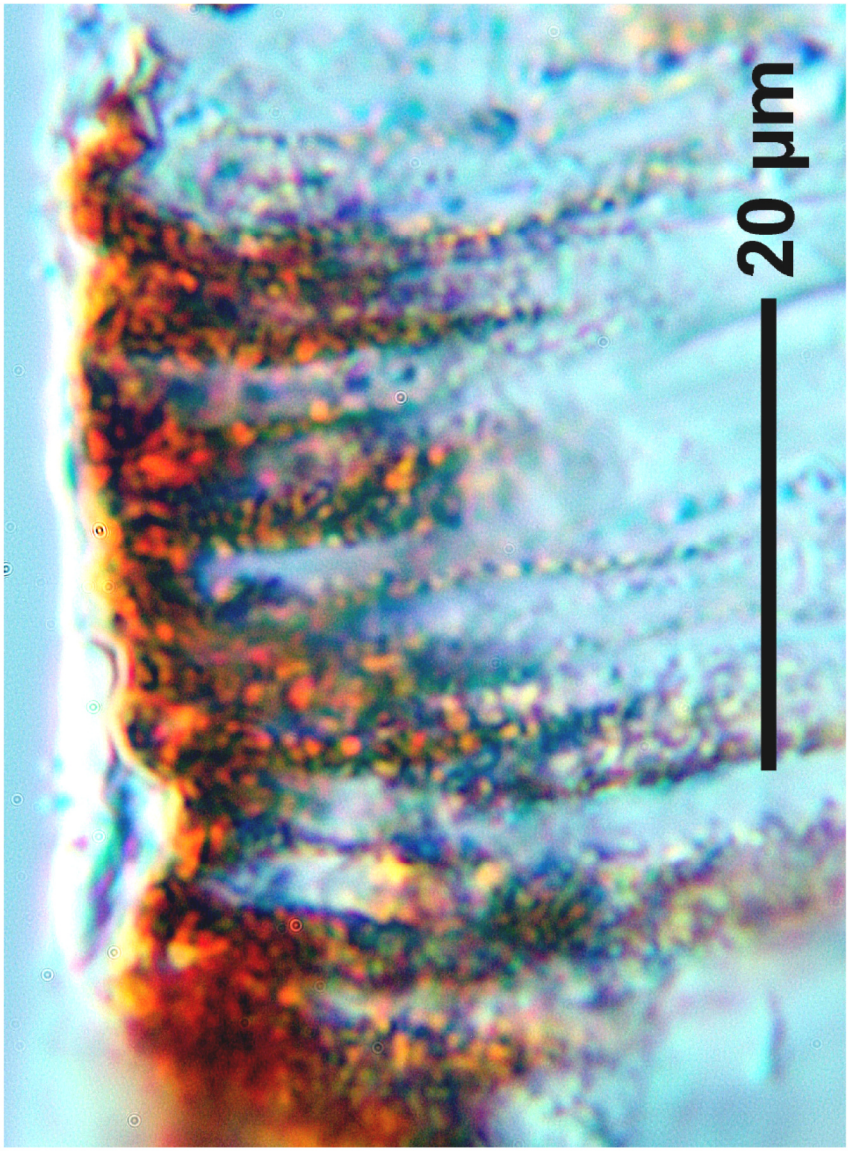
Haematomma wattii



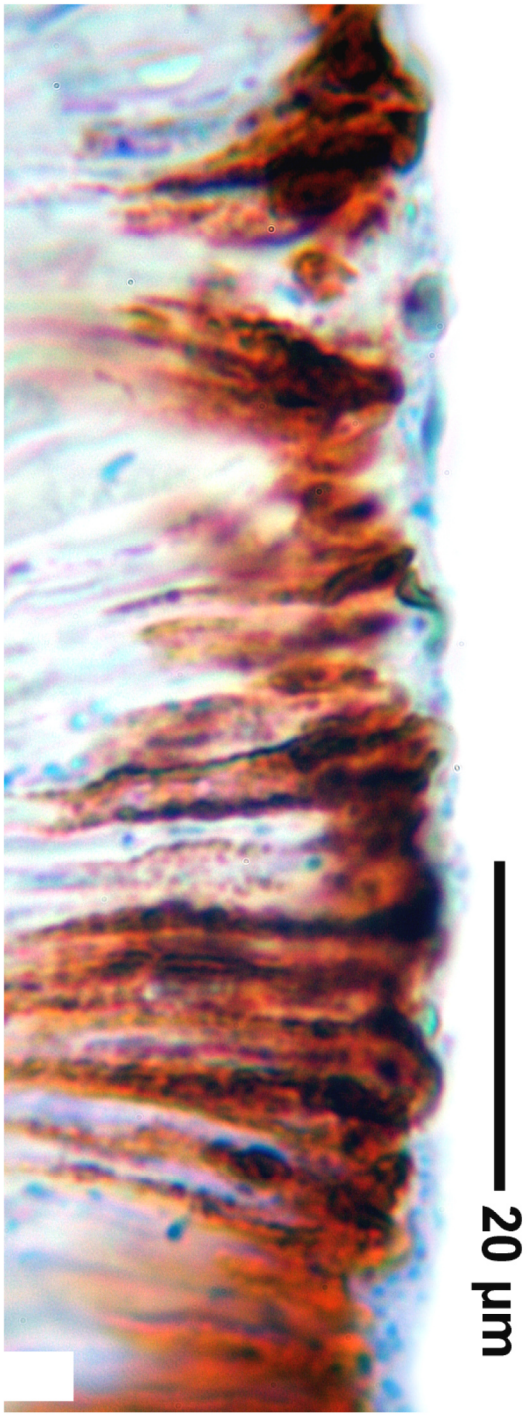
Haematomma wattii



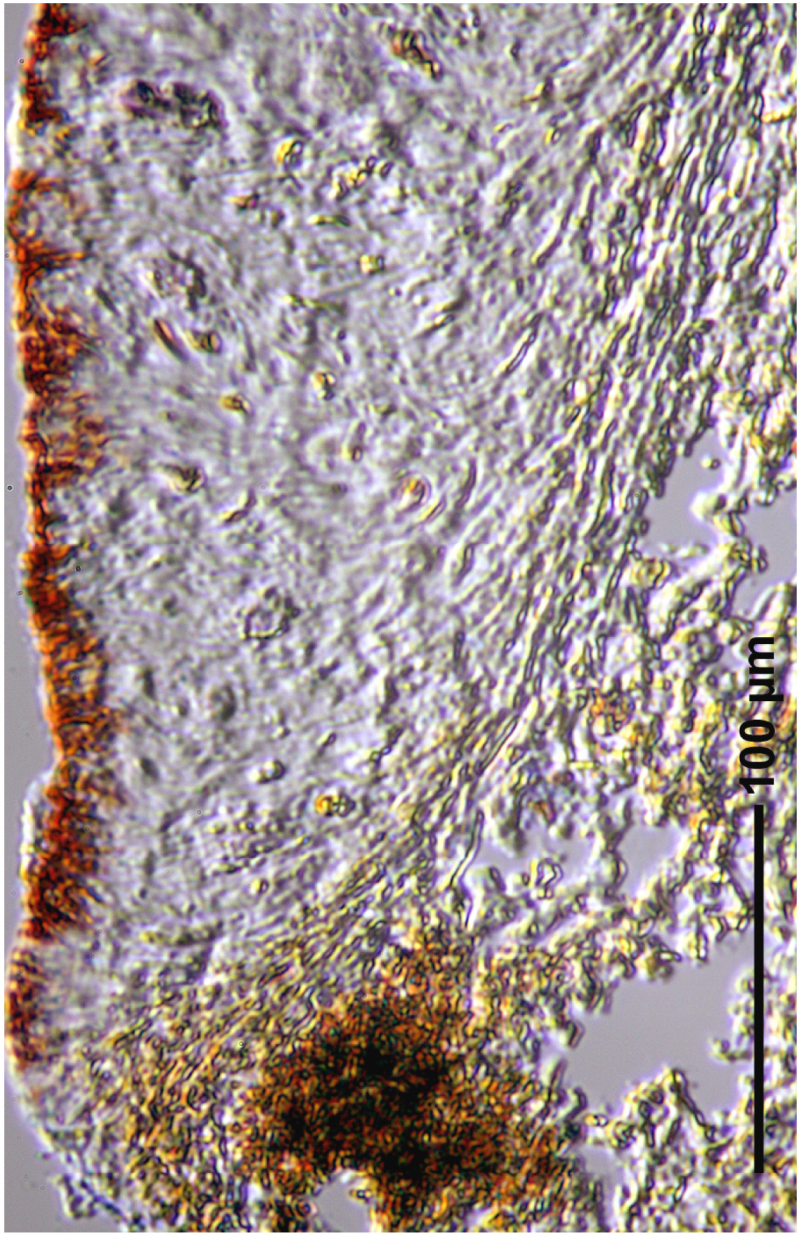
Haematomma wattii



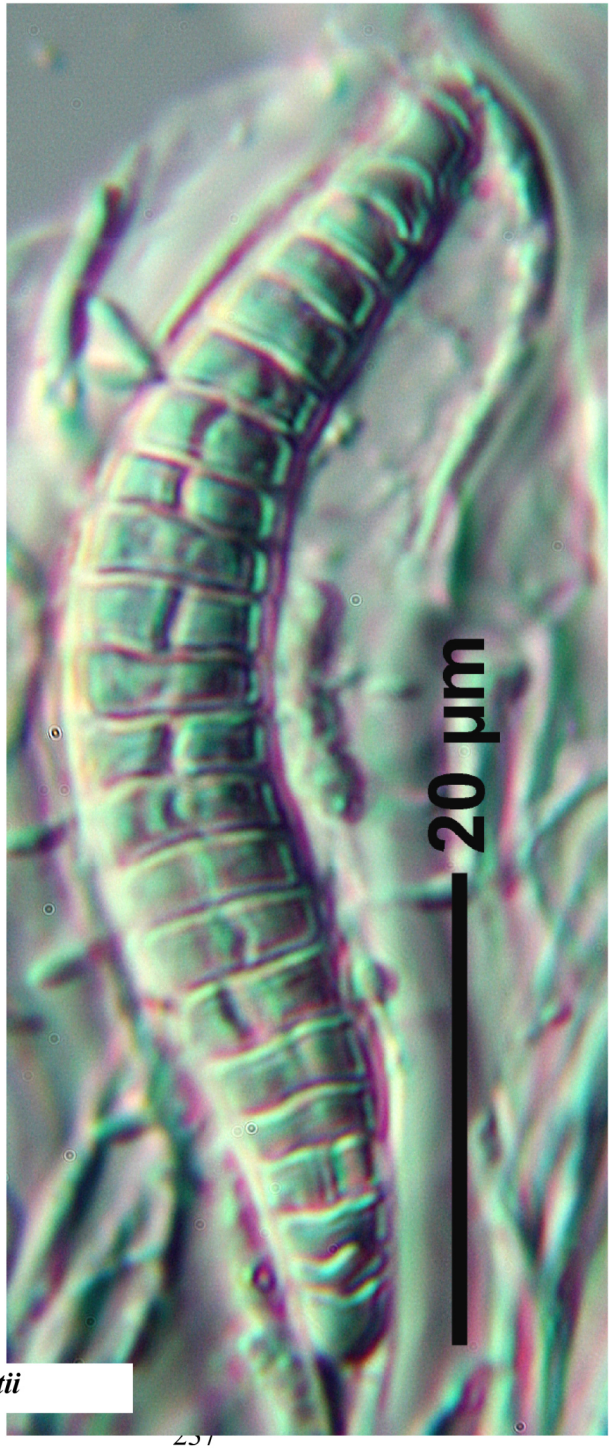
Haematomma wattii



Haematomma wattii



Haematomma wattii



Haematomma wattii



Haematomma wattii



Haematomma wattii

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