

NOTES AND SCHEDAE
TO LICHENES DELICATI EXSICCATI EDITAE
IN MEMORIAM ANTONÍN VĚZDA
(1920–2008), FASC. 1

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A new exsiccate, *Lichenes Delicati Exsiccati Editae* – of little, fine, special lichens and lichenicolous fungi – dedicated to the famous lichenologist Antonín Vězda (1920–2008), is compiled and issued. The lichenicolous fungus *Keratosphaera antoniana* is described from Bolivia and named after him on the occasion of the 90th anniversary of his birth. The first fascicle is consisted of 15 species and distributed to 12 lichen herbaria worldwide (BM, BP, F, hb. Flakus, hb. Kalb, HO, KRAM, PRA-V, SAV, STU, UPS, VBI).

Key words: exsiccate, *Keratosphaera antoniana*, lichenicolous fungi, lichens, new species

The purpose of the current exsiccate series is to honour and express our gratitude to the late Dr Antonín Vězda (1920–2008), the Moravian lichenologist – our Toni – who died two years ago and would have been 90 years old on 25 November 2010. His life and contribution to lichenology have been discussed elsewhere in details (Farkas *et al.* 1995, 2010*a, b*, Kärnefelt 2009, Wirth 2009).

Two exsiccate sets have already been dedicated to him, one on neotropical lichens (Kalb 1982) and another one exclusively on foliicolous lichens (Lücking 2000).

The exsiccate presented here has been contributed by his colleagues and friends who work on foliicolous lichens or other taxonomic groups in which he was interested. The taxa selected, considering his favourite groups are little, fine, special lichenised and lichenicolous fungi, “solche scheene, kleine Dinge”, as he often said (in German) and also explained it by his gesticulation (cf. Fig. 1). These are what we regard here as delicate lichens.

Most of them are foliicolous (6) or corticolous (6), others are saxicolous (1) and terricolous (1). Furthermore one species is a representative of lichenicolous fungi, since Toni also paid special attention to this group.

They originate from places where Antonín Vězda also collected specimens (Bohemia, Bulgaria) or would have enjoyed to visit (Australia, Bolivia, Brazil, Costa Rica, Malaysia, Namibia, Poland, Tasmania, USA).

The title of the exsiccate is intended to be similar to and yet different from *Lichenes selecti exsiccati* and *Lichenes rariores exsiccati* (cf. Vězda 1964, 2004, 2008).

The contributors are collectors and determinators in alphabetical order: Urszula Bielczyk (Kraków, Poland), Attila Borhidi (Pécs, Hungary), Marcela Cáceres (Aracaju, Brazil), Edit Farkas (Vácrátót, Hungary), Adam Flakus (Kraków, Poland), David Hawksworth (London, United Kingdom), Klaus Kalb (Neumarkt, Germany), Gintaras Kantvilas (Hobart, Tasmania), Jana Kocourková (Praha, Czech Republic), László Lőkös (Budapest, Hungary), Robert Lücking (Chicago, USA), Thomas Nash III (Tempe/Madison, USA), Heinar Streimann† (Canberra, Australia), Pamela Rodriguez (La Paz, Bolivia), Dirk Wessels (Pietersburg, South Africa), Volkmar Wirth (Karlsruhe, Germany).

The 15 specimens of the first fascicle have been distributed to the following 12 herbaria (for herbarium acronyms see Index Herbariorum online



Fig. 1. Antonín Vězda driving his car Škoda and explaining about lichens (E. Farkas, 1986)

(Thiers 2010) at <http://sweetgum.nybg.org/ih/>): 1. BM, London, United Kingdom; 2. BP, Budapest, Hungary; 3. F, Chicago, USA; 4. hb. Flakus, Kraków, Poland; 5. hb. Kalb, Neumarkt, Germany; 6. HO, Hobart, Tasmania/Australia; 7. KRAM, Kraków, Poland; 8. PRA-V, Průhonice, Czech Republic; 9. SAV, Bratislava, Slovakia; 10. STU, Stuttgart, Germany; 11. UPS, Uppsala, Sweden; 12. VBI, Vácraátót, Hungary.

Specimens of incomplete sets have been presented to LG (Belgium), URM (Brazil) and some other herbaria (e.g. LPB, Bolivia).

A new species of lichenicolous fungus is distributed together with most of the *Trichothelium argenteum* specimens (nr. 14+). The description of that is as the following:

Keratosphaera antoniana Flakus, Farkas et Lücking, spec. nova
(Fig. 2A–D)

Mycobank no. MB 518784

Fungus lichenicola in thallis epiphyllis specierum generis Trichothelio vigens. Similis speciei Keratosphaera dimerellae, sed setae ascimatorum valde verruculosae, apicibus acutis et hospite differt.

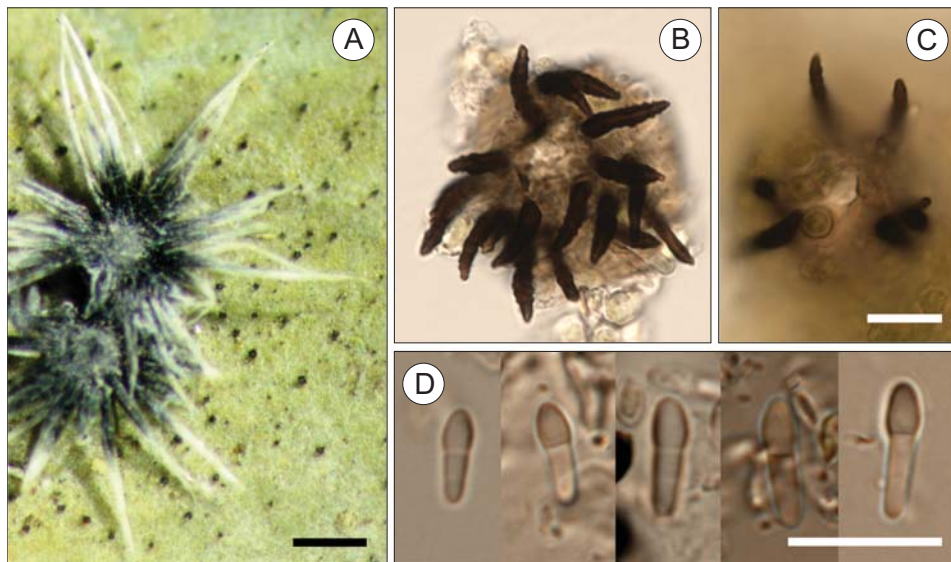


Fig. 2A–D. *Keratosphaera antoniana* (holotype). A = habit of ascomata growing on the thallus of *Trichothelium argenteum*; B–C = ascomata; D = ascospores. Scales: A = 0.2 mm; B–D = 10 μ m

Typus: Bolivia, Dept. Santa Cruz, Prov. Guarayo, Plan de Manejo AISU, Reserva de Vida Silvestre Ríos Blanco y Negro, 15° 01' 49" S, 62° 46' 36" W, alt. 236 m, on the thallus of *Trichothelium argenteum* growing on palm leaf, lowland Amazon forest. Leg. A. Flakus 14291 and P. Rodriguez, 25 July 2009. Holotype: KRAM-L; isotypes: BM, F, HO, LG, LPB, PRA-V, UPS, VBI, hb. Flakus, hb. Kalb.

Ascomata lichenicolous, perithecioid, subglobose to almost globose, 20–35 μm in diam., pale brown to brown (under dissecting microscope), with up to about 20 setae above, sessile on the host thallus (Fig. 2A), numerous, K–. *Setae* oblique to incurved, up to 15(–17) μm long and up to 3(–4) μm wide, unbranched, non-septate, tapering from the base, distinctly pointed at the tips (acute), dark brown, strongly warted (Fig. 2B). *Ostiole* apical, ca. 5 μm in diam. (Fig. 2C). *Periphyses* absent. *Interascal hyphae* gelatinising, K/I–. *Asci* bitunicate, broadly clavate, ascus apex K/I–, 8-spored, 15–20 \times 5–7 μm . *Ascospores* hyaline, 1-septate, narrowly ellipsoid, with rounded ends, upper cell slightly thicker than lower one, without a gelatinous perispore, smooth, slightly constricted at the septum, 6–8.5 \times 1.5–2.5 μm (Fig. 2D). *Vegetative hyphae* not distinct. *Conidiomata* not seen.

Etymology: the new species is named in honour of the prominent lichenologist Dr Antonín Vězda (Brno, Czech Republic) on the occasion of the 90th anniversary of his birth.

Remarks: *Keratosphaera antoniana* is characterised by small, brown perithecioid ascomata (up to 35 μm) lichenicolous on thalli of foliicolous *Trichothelium* species, dark brown, acute, and strongly warted setae (up to 17 μm long and 4 μm wide), and 1-septate ascospores (6–8.5 \times 1.5–2.5 μm). *K. dimerellae* Matzer the most closely resembles to the new species in the size of ascomata and setae. It differs clearly from the new species by having setae of smooth surface, only slightly tapering from the base with rounded rather than acute apices, as well as by different host type, *Coenogonium* species (Matzer 1996).

Host: *Trichothelium argenteum* Lücking et Ferraro (thallus).

Distribution: so far the species is known from the type collection only, where it has been collected from one palm leaf in the lowland Bolivian Amazon forest.

Other investigated specimen: *Keratosphaera dimerellae* Matzer. Costa Rica, Cartago province: Florencia S of the city of Turrialba, forest near to coffee plantations, ca 800 m, 09° 53' N, 83° 41' W. Tropical rain forest. On *Dimerella* cf. *subzonata*. Leg. M. Matzer 1403 and B. Pelzmann, 05.VIII.1991. Holotype: GZU.

Schedae containing names of species, their authors with further annotations, collecting data and remarks (e.g. chemical content):

EDIT FARKAS: LICHENES DELICATI EXSICCATI EDITAE
In memoriam Antonín Vězda (1920–2008)

Fasc. 1 (No. 1–15)

Autumn 2010

1. *Buellia follmannii* C. W. Dodgein *Nova Hedwigia* **12**: 350, 1967 [1966].

NAMIBIA. District Omaruru, Central Namib Desert, Laguneberg, approx. 2–3 km N of mile 72. On basic rock.

Leg.: V. Wirth and D. Wessels
Det.: V. Wirth**Alt.:** ca 25–60 m s. m.
Dat.: 25 February 1989**2. *Chapsa dilatata* (Müll. Arg.) Kalb**in Frisch, A. and Kalb, K., *Biblioth. Lichenol.* **99**: 140, 2009. – Basionym: *Ocellularia dilatata* Müll. Arg., *J. Linn. Soc., London* **30**: 452, 1895.

BRAZIL. Sergipe. Serra de Itabaiana, Município Areia Branca, street from BR 235 to Pedrinha, “Mata da Fazenda Cafuz”, ca 30 km NE of Aracaju, in bushy remnants of a tropical rainforest (Mata Atlântica). Corticolous.

Lat.: 10° 48' 59" S; **Long.:** 37° 16' 26" W
Leg.: M. Cáceres and K. Kalb
Det.: K. Kalb**Alt.:** ca 140 m s. m.
Dat.: 16 April 2010

Stictic acid (major), constictic acid (major), hypoconstictic acid (minor), cryptostictic acid (minor), menegazziaic acid (minor) present (TLC: K. Kalb, 2010).

3. *Chroodiscus homchantarae* Papong et Lückingin Papong, K., Lücking, R., Thammathaworn, A. and Boonpragob, K., *Bryologist* **112**: 155, 2009.

MALAYSIA. Negeri Sembilan. Pasoh Forest Reserve, lowland dipterocarp forest. Foliicolous on palm leaf.

Lat.: 02° 58' N; **Long.:** 102° 18' W
Leg.: D. L. Hawksworth
Det.: E. Farkas**Alt.:** ca 100–150 m s. m.
Dat.: 27 November 1997

Stictic acid present (HPTLC: E. Farkas and K. Molnár, 2010).

4. *Chrysothrix sulphurella* (Räsänen) Kantvilas et Elix

in Elix, J. and Kantvilas, G., *Lichenologist* **39**(4): 365, 2007. – Basionym: *Lepraria sulphurella* Räsänen, *Suom. Eläin- ja Kasvit. Seuran Van. Tiedon. Pöytäkirjat* **3**: 188, 1949.

TASMANIA. Sandspit River. Corticolous on *Acacia riceana* (Fabaceae) in wet eucalypt forest.

Lat.: 42° 43' S; **Long.:** 147° 51' E

Alt.: ca 170 m s. m.

Leg.: G. Kantvilas, 100/10

Dat.: 16 June 2010

Det.: G. Kantvilas

5. *Echinoplaca lucernifera* Kalb et Vězda

in *Biblioth. Lichenol.* **29**: 24, 1988.

COSTA RICA. Cartago Province. Tapantí National Wildlife Refuge, about 35 km ESE of San José, 15 km SE of Cartago, Atlantic slope of the Cordillera de Talamanca, upper montane rainforest zone, secondary vegetation (forest margin) at the road after the waterfall, about 8 km after the park entrance. On leaves.

Lat.: 09° 45' N; **Long.:** 83° 47' W

Alt.: ca 2,000 m s. m.

Leg.: R. Lücking, 92-4266

Dat.: February 1992

Det.: R. Lücking

For illustration of hyphophores see plates 8–9 of Kalb and Vězda, 1988.

6. *Gyalecta ulmi* (Sw.) Zahlbr.

in *Annl. K.K. naturh. Hofmus. Wien* **5**: 43, 1890. – Basionym: *Lichen ulmi* Sw., *Nova Acta Acad. Upsal.* **4**: 247, 1784.

BULGARIA. Strandzha Mts, Trionski dol, ca 2.3 km N of Bulgari village, on bark (*Quercus*).

Lat.: 42° 06' 26.1" N; **Long.:** 27° 43' 26.9" E

Alt.: ca 280 m s. m.

Leg.: L. Lőkös

Dat.: 4 June 2009

Det.: E. Farkas and L. Lőkös

7. *Lichenochora obscuroides* (Linds.) Triebel et Rambold

in *Biblioth. Lichenol.* **48**: 168, 1992. – Basionym: *Lecidea obscuroides* Linds., *Trans. R. Soc. Edinb.* **22**: 247 + pl. XIII, figs 36–38, 1859.

CZECH REPUBLIC. Central Bohemia. Distr. Beroun, Srbsko, 0.5 km S of village, road to Karlštejn village. Lichenicolous on *Phaeophyscia orbicularis* (Neck.) Moberg on bark of *Juglans regia*.

Lat.: 49° 55' 53.875" N; **Long.:** 14° 08' 13.122" E **Alt.:** ca 215 m s. m.
Leg.: J. Kocourková, JK 6473 **Dat.:** 1 July 1998
Det.: J. Kocourková

8. *Loflammia epiphylla* (Fée) Lücking et Vězda

in Lücking, *Phyton* (Horn, Austria) **39**: 141, 1999. – Basionym: *Lecanora epiphylla* Fée., *Essai Crypt. Exot.* (Paris) **1**: xciii, xcix, 1825 [1824].

COSTA RICA. Cartago Province. Guayabo National Monument, about 40 km E of San José near Turrialba, SE slope of Turrialba volcano, Cordillera Central, montane rainforest zone, primary forest on steep trail down to the Rio Guayabo. On leaves.

Lat.: 09° 59' N; **Long.:** 83° 43' W **Alt.:** ca 1,400 m s. m.
Leg.: R. Lücking, 2192 **Dat.:** May 1992
Det.: R. Lücking

9. *Ocellularia soreðiigera* Kalb

in *Herzogia* **22**: 39, 2009.

BRAZIL. Sergipe. A few km SE of Capela, ca 85 km ENE of Aracaju, "Mata do Junco", in a tropical rainforest (Mata Atlântica). Corticolous.

Lat.: 10° 31' 49" S; **Long.:** 37° 03' 33" W **Alt.:** ca 185 m s. m.
Leg.: M. Cáceres and K. Kalb **Dat.:** 19 April 2010
Det.: K. Kalb

Protocetraric acid present (TLC: K. Kalb, 2010).

10. *Opegrapha filicina* Mont.

in Sagra, R., *Histoire de l'île de Cuba* 9: 184, 1842 [1838–1842].

BRAZIL. Estado São Paulo. Ilhabela, Parque Municipal de Natureza, in humid submontane rainforest. On leaves.

Leg.: A. Borhidi, BB29

Det.: E. Farkas and A. Flakus

Alt.: ca 350 m s. m.

Dat.: 15 February 1995

11. *Pertusaria wulfenioides* B. de Lesd.

in *Annal. Cryptog. Exot.* 2: 239, 1929.

USA. Arizona. Cochise Co., Chiricahua Mts, Long Park area. Corticolous.

Lat.: 31° 53' 30" N; **Long.:** 109° 17' W

Leg.: V. Wirth and T. Nash III

Det.: V. Wirth and T. Nash III

Alt.: ca 2,650 m s. m.

Dat.: 4 October 1981

12. *Ramboldia brunneocarpa* Kantvilas et Elix

in *Bryologist* 97(3): 297, 1994.

TASMANIA. Forestier Peninsula, McGuinness Creek. Corticolous on *Exocarpos strictus* (Santalaceae) in open eucalypt woodland.

Lat.: 42° 56' S; **Long.:** 147° 57' E

Leg.: G. Kantvilas, 89/10

Det.: G. Kantvilas

Alt.: ca 70 m s. m.

Dat.: 16 June 2010

13. *Sporopodium flavescens* (R. Sant.) Vězda

in *Sched. Lich. sel. exs.*, Fasc. LXXXVIII: 5, no. 2193, 1988. – Basionym: *Sporopodium phyllocharis* var. *flavescens* R. Sant., *Symb. bot. upsal.* 12(1): 518, 1952.

AUSTRALIA. New South Wales. Macquarie Pass National Park, 19 km NW of Kiama. Remnant temperate forest beside stream. Foliicolous on shaded treelet (*Baloghia inophylla*).

Lat.: 34° 34' S; **Long.:** 150° 41' E **Alt.:** ca 80 m s. m.
Leg.: H. Streimann, 53092 **Dat.:** 14 October 1993
Det.: R. Lücking

14. *Trichothelium argenteum* Lücking et Ferraro

in *Lichenologist* **29**: 217, 1997.

BOLIVIA. Dept. Santa Cruz, Prov. Guarayo, Plan de Manejo AISU, Reserva de Vida Silvestre Ríos Blanco y Negro, lowland Amazon forest. On palm leaf.

Lat.: 15° 01' 49" S; **Long.:** 62° 46' 36" W **Alt.:** ca 236 m s. m.
Leg.: A. Flakus 14290 and P. Rodriguez **Dat.:** 25 July 2009
Det.: A. Flakus

14+. *Keratosphaera antoniana* Flakus, Farkas et Lücking, spec. nova
on *Trichothelium argenteum* Lücking et Ferraro

in *Acta Bot. Hung.* **52**(3–4): 333, 2010. (Holotype: KRAM-L; isotypes: BM, F, HO, LG, LPB, PRA-V, UPS, VBI, hb. Flakus, hb. Kalb)

BOLIVIA. Dept. Santa Cruz, Prov. Guarayo, Plan de Manejo AISU, Reserva de Vida Silvestre Ríos Blanco y Negro, lowland Amazon forest. On palm leaf.

Lat.: 15° 01' 49" S; **Long.:** 62° 46' 36" W **Alt.:** ca 236 m s. m.
Leg.: A. Flakus 14291 and P. Rodriguez **Dat.:** 25 July 2009
Det.: A. Flakus, E. Farkas and R. Lücking

15. *Vezdaea leprosa* (P. James) Vězda

in *Bot. Jb.* **96**(1–4): 345, 1975. – Basionym: *Micarea leprosa* P. James, *Lichenologist* **5**(1–2): 133, 1971.

POLAND. Southern Poland. Silesian–Kraków Upland, Bukowno, NE side of the Bolesław zinc smelter, in thermophilous grassland on sand with *Festuca ovina*. On plant debris.

Lat.: 50° 16' 45.6" N; **Long.:** 19° 29' 06.9" E **Alt.:** ca 327 m s. m.
Leg.: U. Bielczyk **Dat.:** 18 June 2010
Det.: U. Bielczyk

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