



Fungal Planet description sheets: 1868–1920

P.W. Crous^{1,2,3}, W. Akram⁴, G.M.R. Albuquerque⁵, A.C. Alfenas⁶, R.F. Alfenas⁶, A. Altés⁷, P. Alvarado⁸, A.R. Amirmijani⁹, E. Arumugam¹⁰, M. Asif⁴, D. Bandini¹¹, G.G. Barreto¹², R.W. Barreto⁶, V.E.C. Batista⁶, J.D.P. Bezerra¹³, P. Bilański¹⁴, E. Bizio¹⁵, R.F. Castañeda-Ruiz¹⁶, J. Chaves^{17,18}, T.O. Condé¹⁹, M.M. Costa²⁰, F.A. Custódio⁶, P.-E. Courty²¹, P. Czachura²², U. Damm²³, V. Darmostuk²², J. Dearnaley²⁴, S. De la Peña-Lastra²⁵, G. Delgado²⁶, N.I. de Silva²⁷, F. Dovana²⁸, A. Drummond-Herdman²⁹, U. Eberhardt³⁰, F. Esteve-Raventós⁷, G. Ferisin³¹, R.J. Ferreira³², L.O. Ferro¹³, A.L. Firmino³³, A. Flakus²², J. Fournier³⁴, A. Gardiennet²¹, P. Gerbeau-Pissot²¹, M. Ghobad-Nejhad³⁵, G. Gruhn³⁶, F.E. Guard³⁷, K. Harms³⁸, J. Heilmann-Clausen³⁹, S. Hongsanan²⁷, T. Hülsewig⁴⁰, E.M. Inokuti⁴¹, R. Jankowiak¹⁴, M. Kaliyaperumal¹⁰, T. Kehlet³⁹, S.R. Lacerda³², E. Larsson⁴², A.F. Leão¹⁹, T. Lebel⁴³, A.A. Lima⁴⁴, Á. López-Villalba^{7,45}, J.G. Maciá-Vicente⁴⁶, A. Mateos⁴⁷, L.C. Mejía⁴⁸, D.R. Mendes³³, L. Möller⁴⁹, A. Mombert⁵⁰, M.B.N. Monteiro³², G. Moreno⁷, L. Nagy^{51,52}, T. Niskanen⁵³, P.T.S. Nogueira⁶, J.A. Oliveira¹⁹, P.H.F. Oliveira¹³, D.A. Ortiz^{17,54}, F. Pancorbo⁵⁵, A. Paz⁵⁶, D.A. Pazmiño¹⁷, O.L. Pereira⁶, M. Piątek²², O. Plata⁵⁷, A. Pordel⁵⁸, J.M. Raaijmakers^{59,60}, A.B. Ralaiveloarisoa⁶¹, D.O. Ramos⁶, S. Ravikumar¹⁰, A. Rigueiro-Rodríguez²⁵, G.F. Rivas-Torres^{17,54,62}, J.G. Rodrigues³³, P. Rodríguez-Flakus²², M. Romero⁶³, M. Saba⁴, A. Sánchez⁷, G. Sánchez-Dueñas⁶⁴, J.S. Santana¹⁹, M. Serrano²⁵, J.A.S. Silva³², H. Stępniewska¹⁴, M. Stryjak-Bogacka²², D.S. Tennakoon²⁷, P. van 't Hof^{17,61}, N.I. van Vuuren², T. Varga³⁵, J. Vauras⁶⁵, B.S. Vieira³³, C.M. Visagie², D. Wipf²¹, R. Woods³⁵, J.Z. Groenewald¹

Key words:

ITS nrDNA barcodes
LSU
new taxa
systematics

Abstract: Novel species of fungi described in this study include those from various countries as follows: **Australia**, *Marasmius ballator* on leaf litter in subtropical rainforest, *Marasmius carbinensis* on litter and twigs of *Hyptis suaveolens*, *Marasmius clocca* on leaf litter of regenerating subtropical rainforest. **Bolivia**, *Aggregatorygma saraanense* on trunk of *Trichilia inaequilatera*. **Brazil**, *Arthropolymorpha endophytica* (incl. *Arthropolymorpha* gen. nov.), from healthy roots of *Coffea arabica*, *Didymella digitariae* on *Digitaria insularis*, *Geastrum baseiae* on soil, *Magnibotryascoma souzamotoae* as endophyte from cladodes of *Tacinga inamoena*, *Neoleptospora agapanthi* from stalks of *Agapanthus praecox*, *Penicillifer endoradicis* as endophyte from roots of *Musa acuminata*, *Sirastachys cavernicola* from leaf litter, *Toxicocladosporium atratum* as root endophyte of *Cattleya locatellii*. **China**, *Fasciatispora citri* on dead twig of *Citrus maxima*. **Denmark**, *Inocybe leucantheana* on wet ground with *Alnus*, *Betula* and *Picea*. **Ecuador (Galapagos Islands)**, *Fusarium cristobalense* on *Scalesia gordilloi*, *Fusarium scalesiae* on *Scalesia pedunculata*. **Finland**, *Inocybe ranaria* on mull soil, near *Betula pendula* and *Abies* sp. **France**, *Bullatosporium pinophilum* on the bark of *Pinus nigra* subsp. *nigra*, *Dialonectria eutypicicola* on *Eutypella prunastri*, on branches of *Prunus spinosa*, *Mycobernardia involucriformis* on dead *Bambusa* sp., *Pseudocosmospora perforaticola* on dead stromata of *Hypoxylon perforatum* on *Fraxinus*, *Stylonectria colleeniae* on *Trimmatostroma scutellare*, with *Lophium mytilinum*, on dead branch of *Larix decidua*. **French Guiana**, *Neocosmospora duolechatii* on dead bark of *Bauhinia* sp. **Germany**, *Inocybe giovannii* on soil under *Abies alba*, *Fagus sylvatica* and *Picea abies*, *Triseptosporium fallopiae* (incl. *Triseptosporium* gen. nov.) on *Fallopia japonica*. **India**, *Phylloporia bharatavarsa* on living tree of *Phyllanthus emblica*. **Iran**, *Fusarium phoenicis* on roots of *Phoenix dactylifera*. **Italy**, *Inosperma confusum* on soil under *Quercus ilex* and *Pinus halepensis*, *Inosperma subinodorum* on calcareous soil in *Picea abies* forest. **Madagascar**, *Oudemansiella viscida* on dead wood or branches. **Netherlands**, *Colletotrichum urticicola* from leaf spots on *Urtica dioica*. **Pakistan**, *Agrocybe punjabensis* on soil on fallen remains of *Saccharum officinarum*. **Panama**, *Ijuhya panamaensis* and *Sarcopodium panamaense* on twig litter of angiosperm. **Poland**, *Cytospora tatrensis* from dead stems of *Pinus mugo*, *Myxotrichum flavum* on resin of *Picea abies*, *Symphoricola tarnoviensis* (incl. *Symphoricola* gen. nov.) from sooty mould community on *Symphoricarpos albus*. **Portugal**, *Hypoxylon azoricum* on fallen branch of *Laurus azorica*, *Tuber honstrassii* in clayey and calcareous soil under *Quercus rotundifolia* and *Arbutus unedo*. **South Africa**, *Paraphaeosphaeria*

Citation: Crous PW, Akram W, Albuquerque GMR, Alfenas AC, Alfenas RF, Altés A, Alvarado P, Amirmijani AR, Arumugam E, Asif M, Bandini D, Barreto GG, Barreto RW, Batista VEC, Bezerra JDP, Bilański P, Bizio E, Castañeda-Ruiz RF, Chaves J, Condé TO, Costa MM, Custódio FA, Courty P-E, Czachura P, Damm U, Darmostuk V, Dearnaley J, De la Peña-Lastra S, Delgado G, de Silva NI, Dovana F, Drummond-Herdman A, Eberhardt U, Esteve-Raventós F, Ferisin G, Ferreira RJ, Ferro LO, Firmino AL, Flakus A, Fournier J, Gardiennet A, Gerbeau-Pissot P, Ghobad-Nejhad M, Gruhn G, Guard FE, Harms K, Heilmann-Clausen J, Hongsanan S, Hülsewig T, Inokuti EM, Jankowiak R, Kaliyaperumal M, Kehlet T, Lacerda SR, Larsson E, Leão AF, Lebel T, Lima AA, López-Villalba Á, Maciá-Vicente JG, Mateos A, Mejía LC, Mendes DR, Möller L, Mombert A, Monteiro MBN, Moreno G, Nagy L, Niskanen T, Nogueira PTS, Oliveira JA, Oliveira PHF, Ortiz DA, Pancorbo F, Paz A, Pazmiño DA, Pereira OL, Piątek M, Plata O, Pordel A, Raaijmakers JM, Ralaiveloarisoa AB, Ramos DO, Ravikumar S, Rigueiro-Rodríguez A, Rivas-Torres GF, Rodrigues JG, Rodríguez-Flakus P, Romero M, Saba M, Sánchez A, Sánchez-Dueñas G, Santana JS, Serrano M, Silva JAS, Stępniewska H, Stryjak-Bogacka M, Tennakoon DS, van 't Hof P, van Vuuren NI, Varga T, Vauras J, Vieira BS, Visagie CM, Wipf D, Woods R, Groenewald JZ (2026). Fungal Planet description sheets: 1868–1920. *Persoonia* 56: 1–173. doi: 10.3114/persoonia.2026.56.01

Received: 15 September 2025; **Accepted:** 15 October 2025; **Effectively published online:** 21 January 2026

Corresponding editor: X.L. Fan

**Abstract:**

andropogonicola on leaves of *Andropogon eucomus*, *Talaromyces armstrongii* from soil, **Spain**, *Geoglossum martinae* on soil under *Quercus ilex* and *Cistus ladanifer*, *Inocybe percastanea* on sandy, acidic soils under *Cistus ladanifer* and *Pinus pinaster*, *Lamproderma stephensonii* on twigs of *Pinus sylvestris*, *Ramariopsis albviolacea* on soil under *Prunus lusitanica* subsp. *lusitanica*, *Russula olivaceopinorum* on acidic sandy soil among *Pinus sylvestris* needles, *Scolecobasidium endophyticum* from root-associated soil collected in a grassland, *Tuber danielis* in acidic soil beneath *Cistus ladanifer*, *Quercus ilex*, and *Genista scorpius*. **Sweden**, *Inocybe adusticans* on soil, in snow bed area with *Salix herbacea* and *Bistorta vivipara*, *Inosperma friesii* on soil in mixed deciduous forest, **Switzerland**, *Stylonectria stoeckliana* on *Cytospora* sp. on twigs of *Salix* sp. **Thailand**, *Neoleptospora camporesiana* on dead branch of unidentified plant. **Uganda**, *Bjerkandera ugandensis* on a rotting log. **UK (Scotland)**, *Narcissea scotica* on decaying dung of *Lagopus scotica*. Morphological and culture characteristics are supported by DNA barcodes.

¹Westerdijk Fungal Biodiversity Institute, Uppsalalaan 8, 3584 CT Utrecht, The Netherlands

²Department of Biochemistry, Genetics and Microbiology, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Private Bag X20, Hatfield 0028, Pretoria, South Africa

³Microbiology, Department of Biology, Utrecht University, Padualaan 8, Utrecht, 3584 CH, The Netherlands

⁴Department of Plant Sciences, Faculty of Biological Sciences, Quaid-i-Azam University, 45320, Islamabad, Pakistan

⁵Departamento de Micologia Prof. Chaves Batista, Universidade Federal de Pernambuco, Recife, Pernambuco, Brazil

⁶Departamento de Fitopatologia, Universidade Federal de Viçosa, 36570-900, Viçosa, MG, Brazil

⁷Universidad de Alcalá, Facultad de Ciencias, Departamento de Ciencias de la Vida (Botánica), 28805 Alcalá de Henares, Madrid, Spain

⁸ALVALAB, Dr. Fernando Bongera st. Severo Ochoa bldg. S1.04, 33006 Oviedo, Spain

⁹Department of Plant Protection, Faculty of Agriculture, University of Jiroft, Jiroft, Iran

¹⁰Centre for Advanced Studies in Botany, University of Madras, Chennai, Tamil Nadu, India

¹¹Panoramastrasse 47, 69257 Wiesenbach, Germany

¹²Universidade Federal da Paraíba, Departamento de Biociências, Areia, Paraíba, Brazil

¹³Laboratório de Micologia (LabMicol), Instituto de Patologia Tropical e Saúde Pública, Universidade Federal de Goiás, Goiânia, Goiás, Brazil

¹⁴Department of Forest Ecosystems Protection, University of Agriculture in Krakow, Al. 29 Listopada 46, 31-425 Krakow, Poland

¹⁵Società Veneziana di Micologia, c/o Museo di Storia Naturale di Venezia, Fontego dei Turchi, S. Croce, 1730 - IT 30135 Venezia, Italy

¹⁶Instituto de Investigaciones de Sanidad Vegetal (INISAV), Cuba

¹⁷Universidad San Francisco de Quito USFQ, Colegio de Ciencias Biológicas y Ambientales, Diego de Robles s/n, 170901, Quito, Ecuador

¹⁸San Francisco State University, Department of Biology, 1600 Holloway Av, San Francisco CA 94132, USA

¹⁹Departamento de Microbiologia, Universidade Federal de Viçosa, 36570-900, Viçosa, Minas Gerais, Brazil

²⁰Netherlands Institute for Vectors, Invasive plants and Plant health (NIVIP), NVWA Wageningen

²¹Université Bourgogne Europe, Institut Agro Dijon, INRAE, Agroécologie, Dijon, France

²²W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, PL-31-512 Kraków, Poland

²³Department of Botany, Senckenberg Museum of Natural History

Görlitz, PF 300 154, 02806 Görlitz, Germany

²⁴School of Agriculture & Environmental Science, University of Southern Queensland, Toowoomba 4350, Queensland, Australia

²⁵University of Santiago de Compostela, Spain

²⁶Laboratory of Mycology, Eurofins Built Environment, 5200 Mitchelldale St # E15, Houston, TX 77092, USA

²⁷Shenzhen Key Laboratory of Microbial Genetic Engineering, College of Life Science and Oceanography, Shenzhen University, Shenzhen 518060, China

²⁸Dipartimento di Bioscienze, Biotecnologie e Ambiente (DBBA), Campus Universitario "Ernesto Quagliariello", Università degli Studi di Bari "Aldo Moro", Via Orabona 4, 70125, Bari, Italy

²⁹Coprophilous Fungi Research Group, Edinburgh, Scotland

³⁰Staatliches Museum f. Naturkunde Stuttgart, 70191 Stuttgart, Germany

³¹Associazione Micologica Bassa Friulana, via Vespucci 7, 33052 Cervignano del Friuli, Italy

³²Departamento de Ciências Biológicas, Universidade Regional do Cariri, Rua Coronel Antônio Luíz, 63105-010, Crato, Brazil

³³Instituto de Ciências Agrárias, Universidade Federal de Uberlândia, campus Monte Carmelo, Rodovia LMG 746, km 1, S/N, 38500-000, Monte Carmelo, Brazil

³⁴Las Muros, 09420 Rimont, France

³⁵Royal Botanic Gardens Kew, London, TW9 3DS, UK

³⁶Office National des Forêts (ONF), 5 avenue Mirandol, F-48000 Mende, France

³⁷Maleny 4552, Queensland, Australia

³⁸Helmholtz Centre for Infection Research GmbH (HZI), Department Microbial Drugs, Inhoffenstrasse 7, 38124 Braunschweig, Germany
Institute of Microbiology, Technische Universität Braunschweig, Spielmannstraße 7, 38106 Braunschweig, Germany

³⁹Center for Macroecology, Evolution and Climate, University of Copenhagen, Universitetsparken 15, 2100 Copenhagen, Denmark

⁴⁰Brink 9, 58452 Witten, Germany

⁴¹Koppert do Brasil, Rodovia Margarida da Graça Martins s/n - Km 17.5, 13400-970, Piracicaba, São Paulo, Brazil

⁴²Biological and Environmental Sciences, University of Gothenburg, and Gothenburg Global Biodiversity Centre, Box 463, SE40530 Göteborg, Sweden

⁴³Botanic Gardens & State Herbarium, Hackney Road, Adelaide, 5000, South Australia

⁴⁴Secretaria de Estado da Educação, do Esporte e do Lazer de Rio Grande do Norte, Av. Senador Salgado Filho, 59064-901, Natal, Brazil

⁴⁵General and Special Botany, Institute of Botany and Landscape Ecology, University of Greifswald, Soldmannstr. 15, 17489 Greifswald, Germany

⁴⁶Department of Marine Sciences and Applied Biology, University of



Alicante, P.O. Box 99, 03080 Alicante, Spain

⁴⁷Sociedad Micológica Extremeña, C/ Sagitario 14, 10001 Cáceres, Spain

⁴⁸Centro de Biodiversidad y Descubrimiento de Drogas, Instituto de Investigaciones Científicas y Servicios de Alta Tecnología (INDICASAT–AIP), Panamá

⁴⁹Carvoeiro Clube C101, Rua Do Ourico, 8400-562 Carvoeiro/Lagoa, Portugal

⁵⁰Conservatoire botanique national de Franche-Comté - Observatoire régional des Invertébrés | 9 rue Jacquard - BP 61738 - 25043 Besançon Cedex, France

⁵¹HUN-REN Biological Research Centre, Institute of Biochemistry, Temesvári körút 62, H-6726 Szeged, Hungary,

⁵²Korea University, Seoul, Republic of Korea

⁵³Botany and Mycology Unit, Finnish Museum of Natural History, University of Helsinki, P.O. Box 7, 00014, Helsinki, Finland

⁵⁴Universidad San Francisco de Quito USFQ, Galapagos Science Center, GSC, San Cristóbal 200101, Galápagos, Ecuador

⁵⁵Sociedad Micológica de Madrid, Real Jardín Botánico. C/ Claudio Moyano 1, 28014 Madrid, Spain

⁵⁶Aptdo. Post Office No. 6, 17455, Caldes de Malavella, Girona, Spain

⁵⁷Museo Nacional de Historia Natural, Herbario Nacional de Bolivia (LPB), La Paz, Bolivia

⁵⁸Plant Protection Research Department, Baluchestan Agricultural and Natural Resources Research and Education Center, AREEO, Iranshahr, Iran

⁵⁹Department of Microbial Ecology, Netherlands Institute of Ecology (NIOO-KNAW), Wageningen, The Netherlands

⁶⁰Institute of Biology, Leiden University, Leiden, The Netherlands

⁶¹Royal Botanic Gardens Kew, Lot VA 19 L Tsiadana, 101, Antananarivo, Madagascar

⁶²Geography, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA

⁶³C/ Don Juan de la Máquinas 5, 06450 Quintana de la Serena, Spain

⁶⁴C/ Puerto Rico 6C 4ªA, E–28016, Madrid, Spain

⁶⁵Biological Collections of Åbo Akademi University, Herbarium, Biodiversity Unit, FI-20014 University of Turku, Finland

ACKNOWLEDGEMENTS

The work of P.W. Crous, K. Harms and C.M. Visagie were supported by funding from the European Union's Horizon 2020 research and innovation program (RISE) under the Marie Skłodowska-Curie grant agreement 101008129, project acronym "Mycobiomics". The study of V. Darmostuk, A. Flakus and P. Rodriguez-Flakus was supported by statutory funds of the W. Szafer Institute of Botany, Polish Academy of Sciences. A. Flakus and P. Rodriguez-Flakus are greatly indebted to colleagues and all staff of the Herbario Nacional de Bolivia, Instituto de Ecología, Universidad Mayor de San Andrés, La Paz, for their generous long-term cooperation. They also thank SERNAP (<http://sernap.gob.bo>), and the staff of all protected areas for granting permits for scientific studies, as well as their assistance and logistical support during the field work. J.A. Oliveira and colleagues are grateful to the Brazilian Coffee Research and Development Consortium (Consórcio Pesquisa Café, CBP&D/Café), Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG), and Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Their study was also

financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001. M. Ghobad-Nejhad and colleagues acknowledge E. Gaya for providing resources for this work through the Plant and Fungal Trees of Life Project (PAFTOL) at the Royal Botanic Gardens Kew funded by the Evolution Education Trust (EET), I. Miles-Bunch, and M. Kumar-Mahto (RBG Kew) for technical assistance. U Damm acknowledges W. Quaedvlieg (Royal Van Zanten, Lisse, The Netherlands), for collecting the material, and the curator of the fungarium at the U.S. National Fungus Collections (BPI), Beltsville, Maryland, USA, for providing access to historical specimens. S. De la Peña-Lastra and colleagues would like to thank Secretaria Regional do Ambiente e Alterações Climáticas Açores for the permission granted for the sampling (16/2021/DRAAC). To the ECOTOX group for co-funding the trip. J.D.P. Bezerra and colleagues are grateful to the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq, process numbers 404989/2021-7; 303939/2022-2; 445649/2024-0; 151166/2024-2; 316103/2025-0), Fundação de Amparo à Pesquisa do Estado de Goiás (FAPEG, 202310267000226; 202510267001150), and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES, 88881.986045/2024-01; 88887.198277/2025-00) for providing the funds and scholarships for this research. They also thank the team of the Centro Multiusuário de Pesquisa de Bioinsumos e Tecnologias em Saúde (CMBiotecs-IPTSP-UFG) for DNA sequencing. L.G. Nagy and colleagues are grateful to National Research Development and Innovation Office for providing the funds for this research (OTKA 142188). A. Drummond-Herdman and L. G. Nagy are grateful for S. Jakob for conducting DNA extraction and PCR on the newly generated sequences for this study; M. Richardson for encouraging the study of the fungi on red grouse dung and providing helpful comments and advice in such study; P. Voto for some comments on the micromorphology; M. Coburn for collecting one of the collections of hare dung (NH1) used for this study; and G. Routledge for reviewing the ecological component of the article. J.S. Santana and colleagues were supported by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES) - Finance Code 001. They are also grateful to the Universidade Federal de Viçosa (UFV) for providing additional resources for this study and Sítio Barreiras Fruticultura LTDA for support in field works, transit and use of facilities. K. Bensch is acknowledged for help with the Latin name of the new taxon. S. Ravikumar and M. Kaliyaperumal acknowledge the Arumbu project (ABS202422) RUSA 2.0 ECH for financial support. A. Mateos and his colleagues would like to thank A. Gutiérrez for his collaboration, company and cooperation in the surveys. G. Moreno and colleagues wish to express their gratitude to N. Sánchez-Bielma and A. Pueblas of the Department of Drawing and Scientific Photography at the University of Alcalá for their help in the digital preparation of the photographs, J.A. Pérez and A. Priego from the "Servicio de Microscopía Electrónica of the Universidad de Alcalá" for their invaluable help with the SEM, and J. Rejos, curator of the AH herbarium for his assistance with the specimens examined in the present study. Á. López-Villalba wants to thank M. Meyer, E. Richard and F. Hairie for their infinite kindness during collection trips. The molecular



portion of the study was supported by M. Schnittler (University of Greifswald, Germany). D. Bandini and U. Eberhardt are grateful to K. Hansen and C. Loup for making available type material of *Inocybe muricellata* and *I. scabelliformis*, respectively, to D. Triebel for the loan of the holotypes of *I. cinnamomeiceps* and *I. fissuratula*, and to the Staatliches Museum of Naturkunde and H. Thüs for their support. Part of U. Eberhardt's work was supported by the German Barcode of Life (GBOL) project, supported by the German Federal Ministry of Education and Research (BMBF FKZ 01LI1501I) as research for sustainable development (FONA, <https://www.fona.de>). B.S. Vieira and colleagues are grateful to Koppert Brasil and Finep for providing research funding. The study of P. Czachura was funded by the National Science Centre, Poland, under the project 2019/35/N/NZ9/04173. G. Delgado is grateful to W. Colbert and S. McGrew (Eurofins Built Environment) for provision of laboratory facilities. J.G. Maciá-Vicente acknowledges support from the German Research Foundation under grant MA7171/1-1, and from the Spanish Ministry of Science, Innovation and Universities (MICIU) through a Beatriz Galindo grant (BG23/00164). Thanks are also due to the authorities of the Cabañeros National Park, Los Alcornocales Natural Park, and Natuurmonumenten (<https://www.natuurmonumenten.nl/>) for granting collection permits and support during sampling. A.F. Leão and colleagues are grateful to the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001, Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG) and the Fundação Arthur Bernardes (FUNARBE/FUNARDOC) for financial support. This work is part of the project "Um tesouro inexplorado da Serra do Espinhaço Meridional: levantamento taxonômico e uso sustentável de fungos cavernícolas" financed through the Public Call Notice 01/2023, Item XXI of Clause Two of the TCCE (01/2022/ICMBio). The TCCE ICMBio/Vale 01/2022 is a speleological compensation commitment term signed between the Vale S.A. e o Instituto Chico Mendes de Conservação para a Biodiversidade (ICMBio), with operational management carried out by Instituto Brasileiro de Desenvolvimento e Sustentabilidade (IABS). The study of M. Piątek and co-authors was funded by the National Science Centre, Poland, under the project 2017/27/B/NZ9/02902. The research of R. Jankowiak and co-authors was co-financed by the forest fund grant provided by the State Forests to the Tatra National Park in 2023. The study was also partly supported financially by the Ministry of Science and Higher Education of the Republic of Poland (SUB/040013-D019). P. van 't Hof and co-authors thank the Galapagos Genetic Barcode project, supported by UK Research and Innovation, Global Challenges Research

Fund, Newton Fund, University of Exeter, Galapagos Science Center, Universidad San Francisco de Quito, Galapagos Conservation Trust, the Direction of the National Park Galapagos (DPNG), and Biosecurity Agency of Galapagos (ABG). *Scalesia* sample collection was performed in compliance with the research permit MAATE-DBI-CM-2021-0174 granted by the Ecuadorian Ministry of Environment - MAATE. Financial support was provided to R.J. Ferreira and colleagues by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES for Project 88887.691989/2022-00 – Semiarid Northeastern's Biodiversity; 2756/2022). E. Larsson acknowledges the Swedish Taxonomy Initiative, SLU Artdatabanken, Uppsala, Sweden. J. Vauras acknowledges the association Kuopion Luonnon Ystäväin Yhdistys r.y. F.E. Guard and colleagues thank K. Millichamp and C. Marciniak for collections and images of the species and its habitat. They also thank the Herbaria, (BRI, MEL and DAR) for permission to examine relevant specimens in the series *Purpureostriati*. V.E.C. Batista and colleagues acknowledge the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001, Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG) for their financial support and the Núcleo de Pesquisa e Conservação de Orquídeas da UFV (NPCO) for the use of facilities. F. Esteve-Raventós and colleagues are grateful to J.L. Siquier, C.E. Hermosilla, J.C. Campos and M. Heykoop for collecting the samples and his field notes. They also thank Y. Turégano and L. Plaza for generating most of the sequences for *Inosperma subinodorum*, and thank A. Altés for his help with SEM and sequencing. A. Ralaivelarisoa and T. Niskanen were supported by the Today's Flora for Tomorrow project funded by a generous donor through Kew Foundation, as well as by a grant from the Bentham-Moxon Trust and support from International Association for Plant Taxonomy. A. Gardienet and co-authors would like to thank B. Norden and A. Polhorsky for their collaborative exchanges, the curators of the herbaria in Oslo and Padua, P.-A. Moreau for his assistance with taxonomy and A. Bonnotte from the DIImaCell Imaging Facility (Université Bourgogne Europe, Institut Agro Dijon, INRAE, Agroécologie, Dijon, France) for the access and expertise in scanning electron microscopy. L.C. Mejía acknowledges the SENACYT SNI Program for financial support.

Declaration on conflict of interest The authors include members of the Editorial Board of Persoonia. They were not involved in the journal's review of, or decisions related to, this manuscript.