



IJM – Italian Journal of Mycology, Vol. 55 (2026): 134-145

<https://doi.org/10.60923/issn.2531-7342/24519>



Supplementary material

***Pseudaleuria fibrillosa* (Pezizales), a little-known and often confused species from the Umbria region (Italy)**

Giovanni Guidi¹, Martina De Mattheis²

¹Gruppo Micologico Cingoli “Balcone delle Marche”, Via Filati 4, 62011 Cingoli, Italy

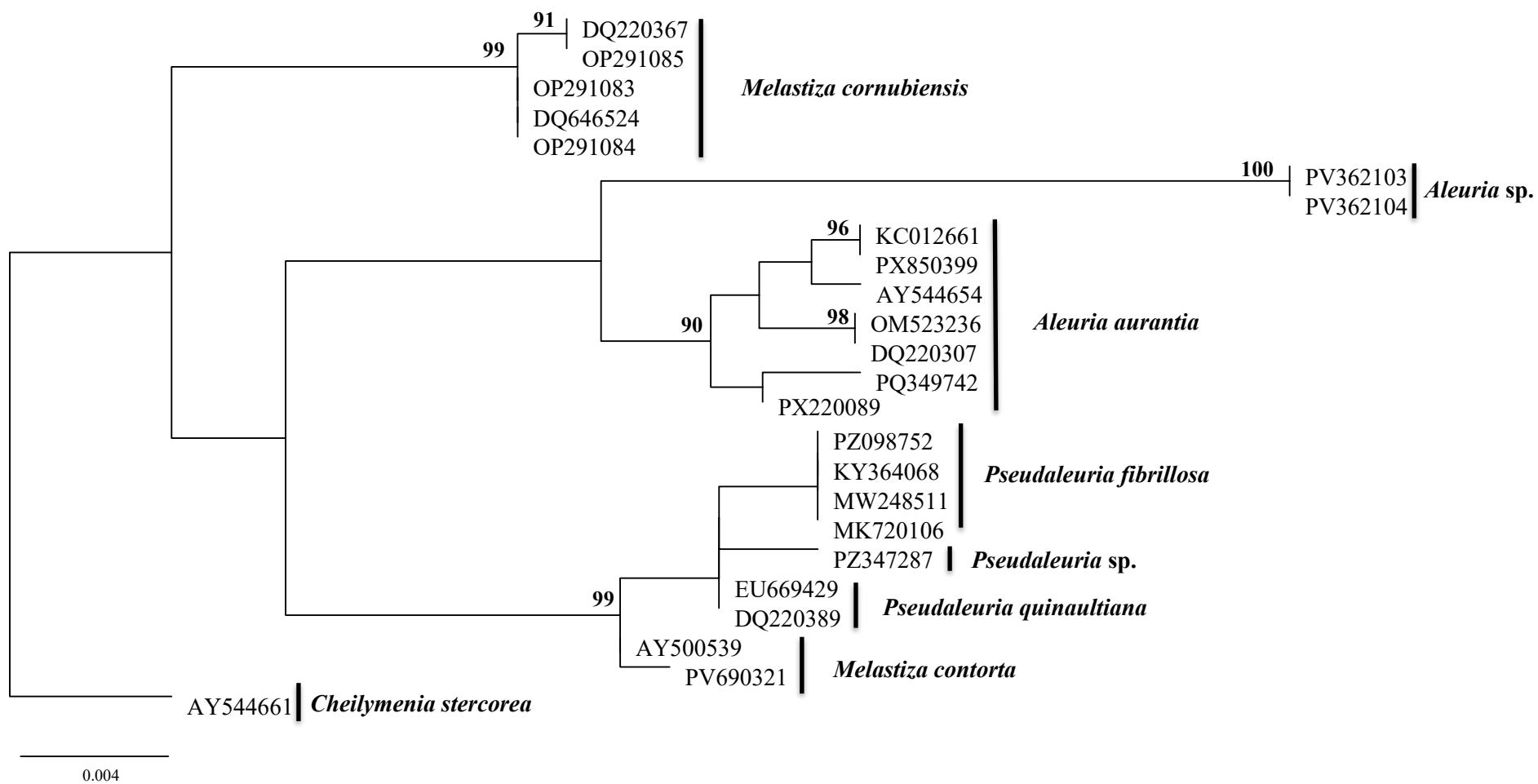
²Department of Life, Health and Environmental Sciences, University of L’Aquila, via Vetoio, Coppito, 67100 L’Aquila, Italy

Corresponding author e-mail: martina.demattheis@graduate.univaq.it

Supplementary Table S1. Taxa included in the phylogenetic analyses, with corresponding ITS and LSU GenBank accession numbers, voucher information, and geographic origin. Specimens represented by both ITS and LSU sequences are reported in a single row. Newly generated sequences obtained in this study are indicated in bold. Environmental sequences retrieved from the UNITE database are based on soil samples and therefore lack associated fruit-body vouchers.

Taxon	ITS accession number	LSU accession number	Voucher	Provenance	Reference
<i>P. fibrillosa</i>	PZ095248	PZ098752	AGMT15291	Italy, Umbria	This study
<i>P. fibrillosa</i>	KY364035	KY364068	U.L.182	Germany	Van Vooren et al. (2017)
<i>P. fibrillosa</i>	MK720105	MK720106	MCVE:30135	Italy	Saitta (2019)
<i>P. fibrillosa</i>	MW248487	MW248511	RM-2479	Spain	Olariaga et al. (2020)
<i>P. quinaultiana</i>	EU669386	–	p712i	Pacific Northwest, USA	Unpublished
<i>P. quinaultiana</i>	EU669387	EU669429	p713i/p713L	Pacific Northwest, USA	Unpublished
<i>P. quinaultiana</i>	ON408373	–	iNAT:41396844	Thurston County, Washington, USA	Unpublished
<i>P. quinaultiana</i>	OP315021	–	116021075	Sweet Creek Falls, Lane County, Oregon, USA	Unpublished
<i>P. quinaultiana</i>	OP315022	–	119955552	Mount Baker–Snoqualmie National Forest, near Lake Serene, Washington, USA	Unpublished
<i>P. quinaultiana</i>	–	DQ220389	NSW1707(OSC)	North America	Perry and Pfister (2008)
<i>Pseudaleuria</i> sp.	UDB05274559	–	TUE001092	Colombia	UNITE environmental sequence
<i>Pseudaleuria</i> sp.	UDB05275012	–	TUE002447	Mexico	UNITE environmental sequence
<i>Pseudaleuria</i> sp.	–	PZ347287	CORS:FNC/TF/24110701	France, Corsica	Unpublished
<i>A. aurantia</i>	MW448649	–	PUL F27067	Madison, Dane County, Wisconsin, USA	Unpublished
<i>A. aurantia</i>	OQ921803	–	SSYPS_07	India	Mehmood et al. (2024)
<i>A. aurantia</i>	PX215336	–	JAC18154	New Zealand	Unpublished
<i>A. aurantia</i>	MZ159655	–	K(M):234329	UK	Unpublished
<i>A. aurantia</i>	MH225453	–	JLF3810	Oregon, USA	Unpublished
<i>A. aurantia</i>	–	PX220089	JAC16137	New Zealand, Southland	Unpublished
<i>A. aurantia</i>	–	AY544654	AFTOL-ID65	USA	Unpublished
<i>A. aurantia</i>	–	KC012661	KH.04.81(FH)	Denmark	Hansen et al. (2013)

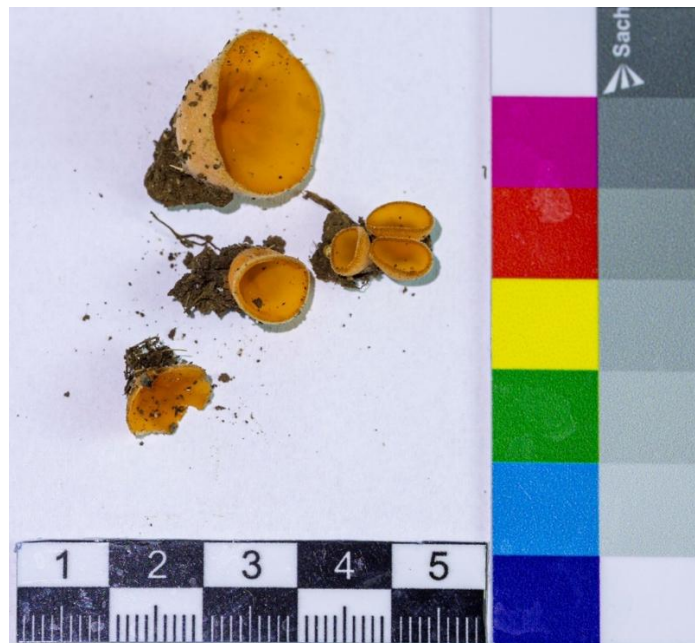
<i>A. aurantia</i>	–	PQ349742	HKAS135671	China	Unpublished
<i>A. aurantia</i>	–	PX850399	M39	Unknown	Unpublished
<i>A. aurantia</i>	–	DQ220307	BAP 426 (FH)	California, USA	Perry et al. (2007)
<i>Aleuria</i> sp.	–	OM523236	FLAS-F-68423	Florida, USA	Unpublished
<i>Aleuria</i> sp.	–	PV362103	HKAS146449	China	Unpublished
<i>Aleuria</i> sp.	–	PV362104	HKAS146450	China	Unpublished
<i>M. contorta</i>	PV690295	PV690321	HFRG_SC250125_1_FRDBI40119786	UK	Unpublished
<i>M. contorta</i>	PV690279	–	HFRG_EJ241201_2_FRDBI39457774	UK	Unpublished
<i>M. contorta</i>	–	AY500539	KH 01.06(C)	Denmark	Hansen et al. (2006)
<i>M. cornubiensis</i>	MW540956	–	PM513	Italy	Angelini et al. (2023)
<i>M. cornubiensis</i>	MZ159634	–	K(M):232790	UK	Unpublished
<i>M. cornubiensis</i>	–	DQ646524	KH.03.43(FH)	Denmark	Hansen and Pfister (2006)
<i>M. cornubiensis</i>	–	OP291085	HKAS124379	China	Zeng et al. (2022)
<i>M. cornubiensis</i>	–	OP291083	HKAS104702	China	Zeng et al. (2022)
<i>M. cornubiensis</i>	–	OP291084	HKAS104703	China	Zeng et al. (2022)
<i>M. cornubiensis</i>	–	DQ220367	KH.01.017(C)	Denmark	Perry et al. (2007)
<i>T. gilva</i>	MZ159509	–	K(M):191640	UK	Unpublished
<i>C. stercorea</i>	MZ159404	AY544661	K(M):165615	UK / USA	Unpublished



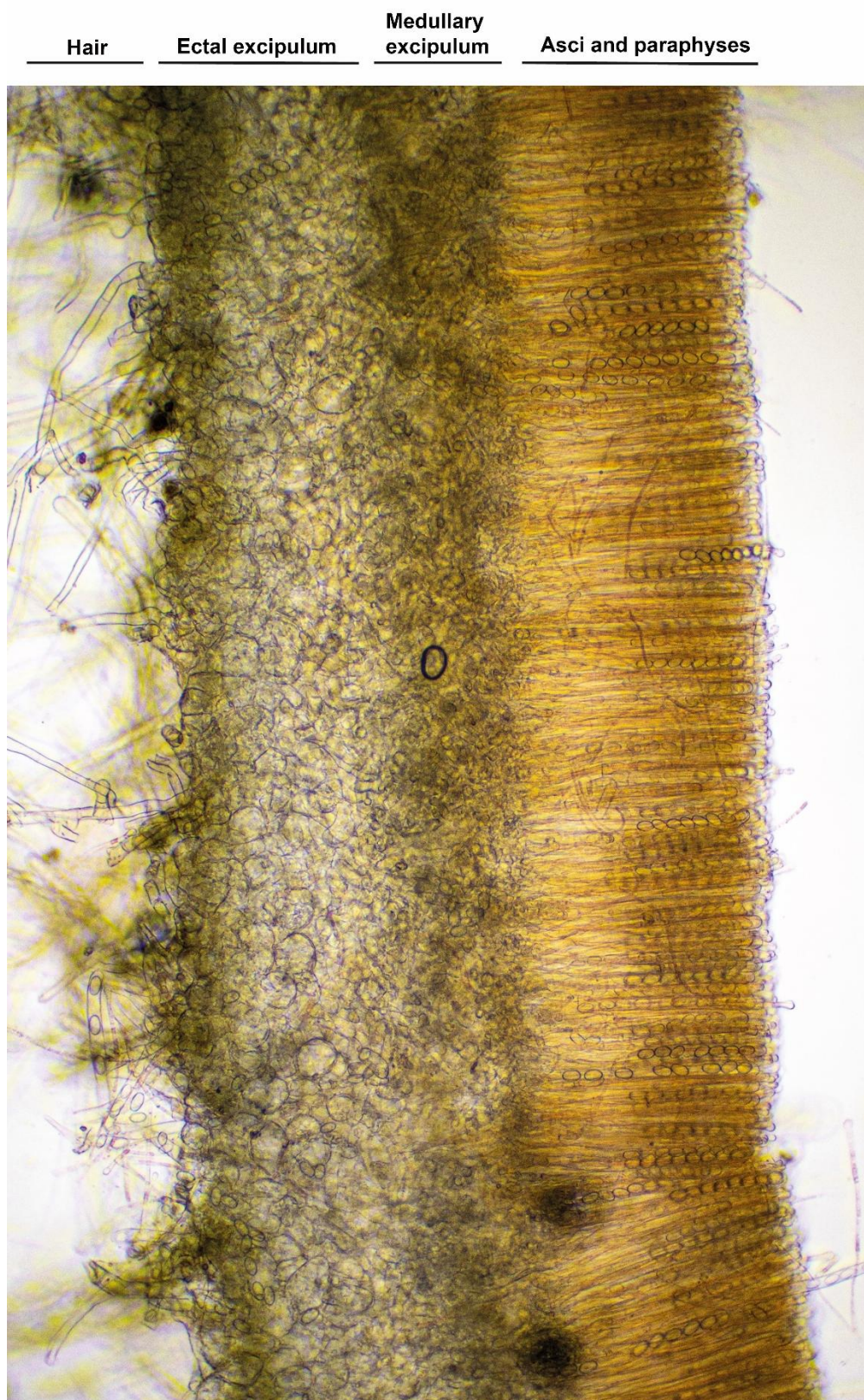
Supplementary Figure S1 - Maximum Likelihood phylogenetic tree based on LSU sequences (24 taxa). Bootstrap support values (%) are shown at the nodes. *Cheilymenia stercorea* was used as outgroup. Scale bar indicates substitutions per site.



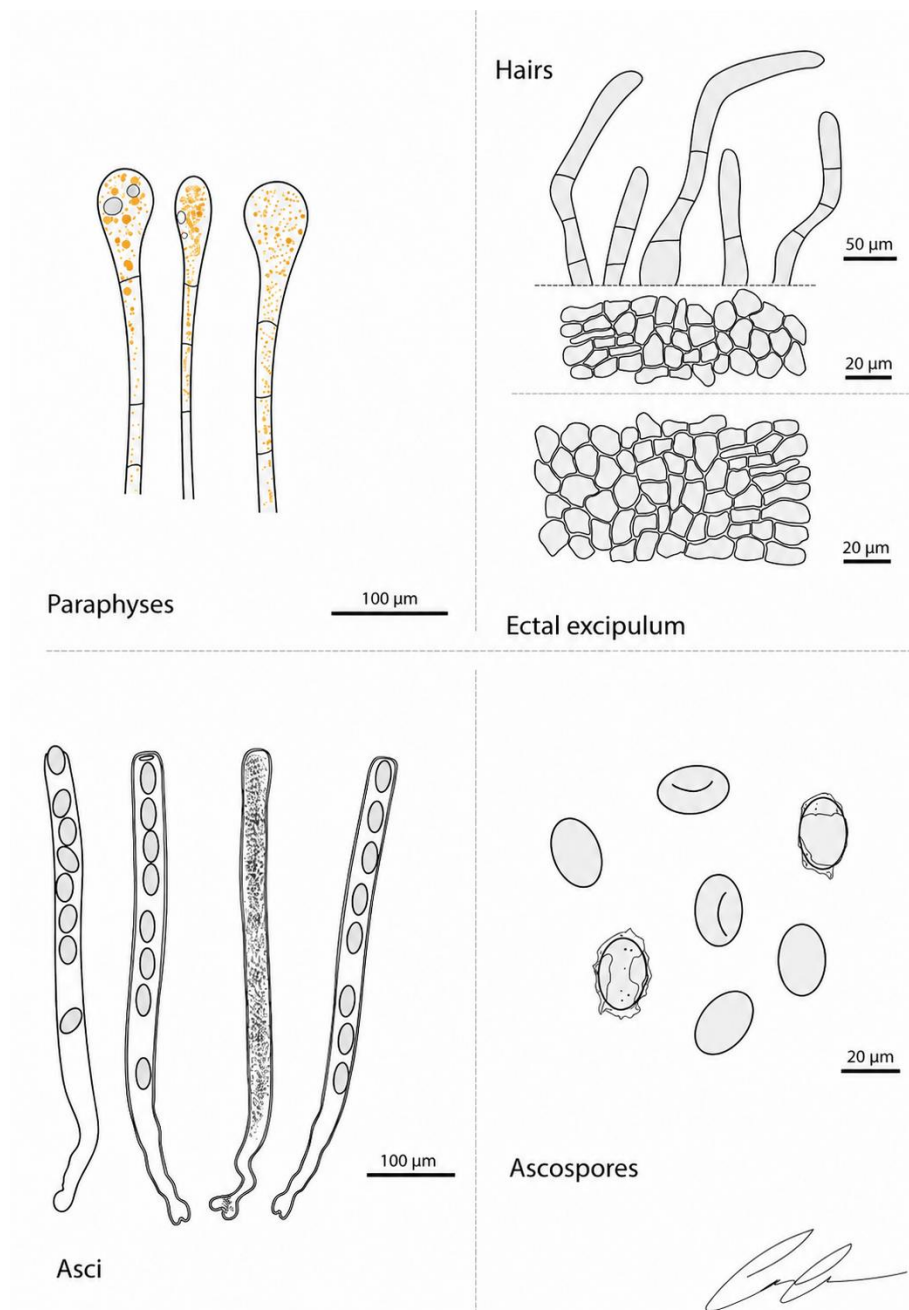
Supplementary Figure S2 - *Peziza fibrillosa*. Illustration by Sara Bartemucci



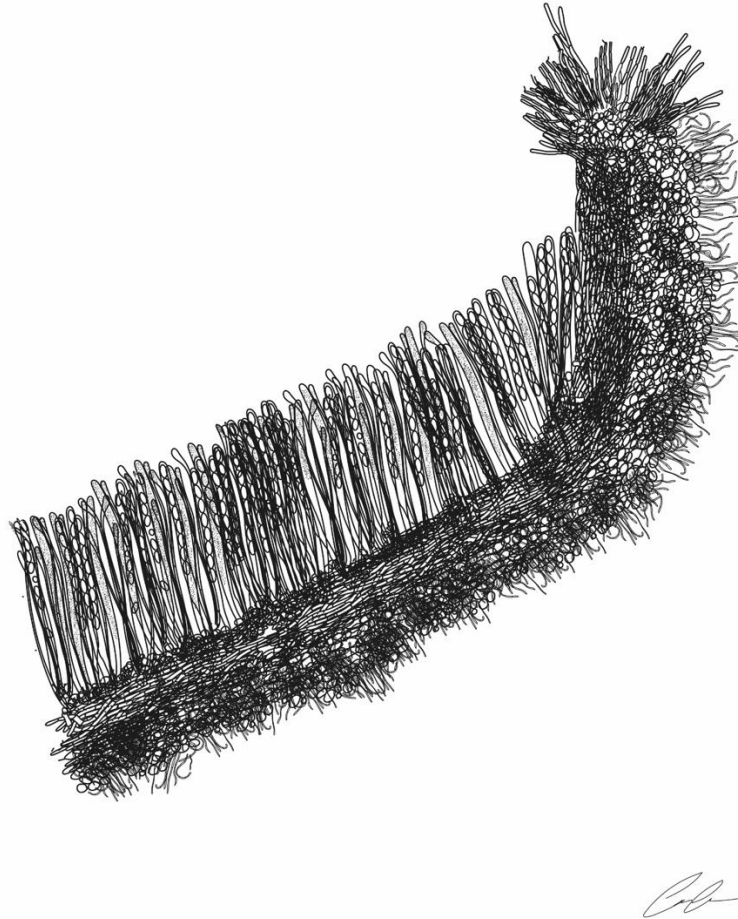
Supplementary Figure S3 - *Pseudaleuria fibrillosa*. Photographs of fresh specimens photographed in the laboratory. AGMT 15291 (G. Guidi).



Supplementary Figure S4 - *Pseudaleuria fibrillosa*. Microscopy. Radial section of the ascoma. AGMT 15291 (G. Guidi).



Supplementary Figure S5 - *Pseudaleuria fibrillosa*. Microscopic Character Drawing. AGMT 15291 (G. Guidi)



Supplementary Figure S6 - *Pseudaleuria fibrillosa*. Radial section drawing of the ascoma (G. Guidi).

References

- Angelini P, Bistocchi G, Arcangeli A, Venanzoni R, Rubini A (2023) Molecular phylogenetic assessment of the genus *Scutellinia* (Pezizales: Pyronemataceae). *Plant Biosystems* 157(1):188–198. <https://doi.org/10.1080/11263504.2022.2098869>
- Hansen K, LoBuglio KF, Pfister DH (2005) Evolutionary relationships of the cup-fungus genus *Peziza* and Pezizaceae inferred from multiple nuclear genes: RPB2, β -tubulin, and LSU rDNA. *Molecular Phylogenetics and Evolution* 36(1):1–23. <https://doi.org/10.1016/j.ympev.2005.03.010>
- Hansen K, Perry BA, Dranginis AW, Pfister DH (2013) A phylogeny of the highly diverse cup-fungus family Pyronemataceae (Pezizomycetes, Ascomycota) clarifies relationships and evolution of selected life history traits. *Molecular Phylogenetics and Evolution* 67(2):311–335. <https://doi.org/10.1016/j.ympev.2013.01.014>
- Hansen K, Pfister DH (2006) Systematics of the Pezizomycetes—the operculate discomycetes. *Mycologia* 98(6):1029–1040. <https://doi.org/10.1080/15572536.2006.11832631>
- Mehmood T, Verma K, Sharma YP (2024) Morpho-molecular characterization reveals some interesting macrofungi from the cold arid region of Kargil, India. *Indian Phytopathology* 77(1):237–249. <https://doi.org/10.1007/s42360-024-00710-8>

- Olariaga I, Ballester L, Fernandes U, López-Amiano JI, Magaña V, Martínez-Gil R, Pancorbo F, Parra LA, Pérez Daniels P, Pérez del Amo C, Rodríguez Andrade E, Rodríguez Arribas C, Sánchez Dueñas G, Terés J, Torres D, Traba JM (2020) II Encuentro de la Sociedad Ibérica de Micología (Cerler, 26–30 de septiembre de 2018): hallazgo de 103 especies nuevas para Aragón, 15 para la Península Ibérica y 11 especies nuevas para la ciencia. *Fungi Iberici* 1:7–80.
- Perry BA, Hansen K, Pfister DH (2007) A phylogenetic overview of the family Pyronemataceae (Ascomycota, Pezizales). *Mycological Research* 111(5):549–571. <https://doi.org/10.1016/j.mycres.2007.03.014>
- Perry BA, Pfister DH (2008) *Chaetothiersia vernalis*: A new genus and species of Pyronemataceae (Ascomycota, Pezizales) from California. *Fungal Diversity* 28:65–72.
- Saitta S (2019) *Pseudaleuria fibrillosa* (Pezizales), una especie poco comune rinvenuta per la prima volta in Sicilia. *Ascomycete.org* 11(4):135–140. <https://doi.org/10.25664/ART-0266>
- Van Vooren N, Lindemann U, Healy R (2017) Emendation of the genus *Tricharina* (Pezizales) based on phylogenetic, morphological and ecological data. *Ascomycete.org* 9(4):101–123. <https://doi.org/10.25664/art-0204>
- Zeng M, Gentekaki E, Zeng XY, Hyde KD, Zhao Q, Tian Q (2022) Evolutionary relationships and allied species of Pyronemataceae, with segregation of the novel family Pyropyxidaceae. *Mycosphere* 13(Special Issue 1):207–280. <https://doi.org/10.5943/mycosphere/si/1f/7>