

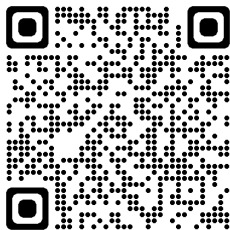
# Cobus M Visagie (PhD)

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**FABI**

## RESEARCH FOCUS

I am a new generation mycologist on the taxonomy of *Aspergillus*, *Penicillium*, *Talaromyces* and other moulds. My research focus includes their biodiversity, ecology, phylogenetics, nomenclature and identification with a particular interest in taxonomically robust ecological and biodiversity studies. My major contribution to the international mycological community has been the accepted species lists for *Aspergillus*, *Penicillium* and *Talaromyces* that was published in Samson et al (2014), Visagie et al (2014) and Yilmaz et al (2014). We updated and expanded these lists to *Eurotiales* in Houbraken et al. (2020). Before these papers, describing new species in these genera was very complicated because of unavailable reference data. These papers had a big international impact and have been cited a combined 1754 times (on 2021/11/21).

From my own perspective, the accepted species lists allowed me to easily describe the new species I came across. By the end of 2020, I had introduced 46 *Aspergillus*, 73 *Penicillium* & 20 *Talaromyces* species. Many of these were originally isolated from South Africa and there are many more local species waiting to be discovered, making local knowledge and diversity, internationally relevant and important.

My research has now shifted to exploit the strong and modern taxonomy we created in these genera. To do this, we have several grain-related projects that are focused on characterising fungal communities related to these important crops and developing methods to monitor communities more efficiently and rapidly detect species of interest. Most notably, I was recently awarded a prestigious FLAIR fellowship. This project will potentially change the way researchers approach Next Generation Sequencing (NGS) tools to study fungal communities at a species level, something not currently possible. The large gap between described and undescribed species must be narrowed and NGS methods have a crucial role to play to start narrowing this gap. However, these methods must be used with care and preferably with a strong taxonomic backbone. My vision is to use the modern taxonomy that we created for *Eurotiales* and create a model for how we can explore diversity in a responsible manner using modern tools.

Within the FLAIR project, we will also sequence the genomes of especially mycotoxigenic species that will lead to a better understanding of their mycotoxin producing capabilities. During our projects, we are expanding the already large culture collection housed at FABI to now include reference strains of grain associated fungi to be used for a variety of other research projects. One project is to explore fungi we isolate for the production of novel useful compounds. For this venture, we successfully applied for a Marie Curie grant (H2020-MSCA-RISE-2020) from the European Union in collaboration with 11 collaborators across the world.

I've thus dedicated my research on improving the taxonomy, nomenclature, phylogeny and identification of *Aspergillus*, *Penicillium* and *Talaromyces*, and making this associated data freely available. I was part of the team to open these genera to the world. It is now possible for essentially anybody who can sequence to make relatively accurate species identifications and, in many cases, describe new species.

## CAREER HIGHLIGHTS

- **Visagie CM**, Frisvad JC, Houbraeken J, Visagie A, Samson RA, Jacobs K. 2021. A re-evaluation of *Penicillium* section *Canescentia*, including the description of five new species. *Persoonia* 46:163–187. <https://doi.org/10.3767/persoonia.2021.46.06>
- **Visagie CM**, Houbraeken J. 2020. Updating the taxonomy of *Aspergillus* in South Africa. *Studies in Mycology* 95:253–292. <https://doi.org/10.1016/j.simyco.2020.02.003>
- Houbraeken J, Kocsube S, **Visagie CM**, Yilmaz N, Wang X-C, Meijer M, Kraak B, Hubka V, Samson RA, Frisvad JC. 2020. Classification of *Aspergillus*, *Penicillium*, *Talaromyces* and related genera (*Eurotiales*): an overview of families, genera, subgenera, sections, series and species. *Studies in Mycology* 95:5–169. <https://doi.org/10.1016/j.simyco.2020.05.002>
- **Visagie CM**, Houbraeken J, Frisvad JC, Hong SB, Klaassen CHW, Perrone G, Seifert KA, Varga J, Yaguchi T, Samson RA. 2014. Identification and nomenclature of the genus *Penicillium*. *Studies in Mycology* 78:343–371. <https://doi.org/10.1016/j.simyco.2014.09.001>
- Samson RA, **Visagie CM**, Houbraeken J, Hong SB, Hubka V, Klaassen CH, Perrone G, Seifert KA, Susca A, Tanney JB et al. 2014. Phylogeny, identification and nomenclature of the genus *Aspergillus*. *Studies in Mycology* 78:141–173. <https://doi.org/10.1016/j.simyco.2014.07.004>

## WORK EXPERIENCE

### Current Positions

- Associate Professor: FABI, University of Pretoria, South Africa 2019–current
- Extraordinary senior lecturer: Stellenbosch University, South Africa 2018–current

### Previous Positions

- Senior Researcher: Mycology, Plant Health and Protection, Agricultural Research Council South Africa 2017–2019
- Extraordinary lecturer: FABI, University of Pretoria, South Africa 2018–2019
- Post-Doctoral Fellow (with Prof Keith A Seifert): Agriculture and Agri-Food Canada & University of Ottawa, Canada 2014–2017
- Post-Doctoral Researcher (Prof. Dr. Dr. hc Rob A. Samson): Westerdijk Fungal Biodiversity Institute, the Netherlands 2012–2014

### Editorial positions

- Editorial board member for *Studies in Mycology* 2020–current
- Editorial board member for *Mycological Progress* 2020–current
- Associate editor for FUSE: Fungal Systematics and Evolution 2019–current

### Education

- Ph.D. (Microbiology), Stellenbosch University, South Africa, “Polyphasic taxonomy of *Penicillium* and *Talaromyces* spp. isolated from the diverse Fynbos biome” 2009–2012
- M.Sc. (Microbiology) (cum laude), Stellenbosch University, South Africa, “Biodiversity in the genus *Penicillium* from coastal Fynbos soil” 2007–2008
- B.Sc.Hons. (Microbiology), Stellenbosch University, South Africa 2006
- B.Sc. (Molecular and Cellular Biology), (majors: Microbiology, Biochemistry, Genetics) Stellenbosch University, South Africa 2003–2005

## SCHOLARSHIPS

- National Research Foundation (NRF) South African Biosystematics Initiative (SABI) scholarship 2009–2012
- Stellenbosch University Merit bursary 2003, 2007, 2009–2011
- Stellenbosch University Murray Bursary 2008
- NRF Free-standing Bursary 2007–2008
- The Ernst and Ethel Eriksen Trust study grant 2007–2008

## AWARDS

- **National Research Foundation Prestigious Award (P-rating)**, rating obtained in 2019.
- **Michele C. Heath award**, for best Post-Doctoral presentation, awarded at the 31st Great Lakes Mycology Meeting, held at the Queens University Biological Station, Chaffey's Lock, Canada. 2–3 May 2015.
- **John and Petakin Mildenhall Award**, awarded at the 47th congress of the South African Society of Plant Pathology, Kruger National Park, for a PhD student making considerable contributions to the field of Plant Pathology in South Africa, 23–26 January 2011.
- **IMC9: The Biology of Fungi Travel Award**, awarded by the British Mycological Society at the 9th International Mycological Congress, Edinburgh Scotland, 1–6 August 2010.
- **South African Biosystematics Initiative Student International Travel Award**, for attendance at the 9th International Mycological Congress, Edinburgh Scotland, from 1–6 August 2010, as well as research visits to CBS-KNAW, the Netherlands, and ECORC (AAFC), Canada.
- **Bio2Biz South Africa 2009 & South African Society for Microbiology 09 Travel Award**, awarded at the congress of the South African Society for Microbiology, Durban, South Africa. 20–23 September 2009.
- **Darwin Initiative Award for the Conservation of Biodiversity**, for best presentation on the conservation of fungi at the African Mycological Association session, 46th congress of the SASPP, Gordon's Bay, South Africa. 25–28 January 2009.
- **Young Plant Pathologist Award**, 46th congress of the SASPP, Gordon's Bay, South Africa. 25–28 January 2009.
- **Inqaba Biotech/CLC Bio Microbiology Poster Award**, 2nd prize awarded at the SASM BIO'08 Conference, Grahamstown, South Africa. 21–25 January 2008.

## MEDIA AWARDS

- International Institute for Species Exploration (IISE) - SUNY-ESF Top 10 new species 2014 (<http://www.esf.edu/top10/2014/>), *Penicillium vanoranjei* Visagie, Houbraken & Samson was chosen as one of the top 10 species described in 2013 by the International Institute for Species Exploration (IISE). The annual award is meant to increase public awareness of biodiversity in the world. These awards are covered in popular press.

## MEMBERSHIPS

- International Commission on the Taxonomy of Fungi 2022–present
- Mycological Society of America 2020–present
- South African Society for Systematic Biology 2017–present
- International Mycological Association 2010–present
- African Mycological Association (committee between 2009 and 2012) 2009–present
- South African Society of Plant Pathology 2008–2012, 2020–present
- South African Society for Microbiology 2008–2012

## SUPERVISION

### Supervision completed

- Mr Anthony Hobden, BSc Hons, The fungal diversity associated with South Africa cattle feed, University of Pretoria (supervisor) 2021
- Ms Marizanne Jones, BSc Hons, Fungal diversity and their antibacterial activity found in the soil of the Namib desert fairy circles, University of Pretoria, (co-supervisor) 2020
- Ms Shivan Bezuidenhout, BSc Hons, Fungi for Future: Citizen Science project, University of Pretoria, (supervisor) 2020
- Ms Jenna-Lee Price, BSc Hons, Diversity of mycotoxigenic fungi associated with sunflower and soybean seeds, University of Pretoria (co-supervisor) 2019
- Ms Andrea Fennell, BSc Hons, Investigation, identification and characterisation of *Penicillium* spp. isolated from blueberry-associated fynbos soil, Stellenbosch University (co-supervisor) 2019
- Ms Zoe Humphries, undergraduate research assistant, ORDC-AAFC 2016
- Ms Olga Koppel, undergraduate research assistant, ORDC-AAFC 2015

### Supervision ongoing

- Mr Nkosinathi Sthembiso Ndaba, PhD, Seed health of grey leaf spot diseased maize, University of Pretoria (co-supervisor) 2022–current
- Ms Carlynn Jacobs, PhD, The effect of abiotic factors on the production of mycotoxins in maize, University of Pretoria (supervisor) 2021–current

- Ms Alandie Nieuwoudt, PhD, Towards a better understanding of *Exserohilum turcicum*, University of Pretoria (supervisor) 2021–current
- Ms Samkelisiwe Thango, PhD, Precision diagnostics of maize foliar disease development by integration of genomic, phenotypic, and environmental data using machine learning analysis approaches, University of Pretoria (co-supervisor) 2021–current
- Ms Chanel Thomas, MSc, The taxonomy and population genetics of *Sclerotinia*, University of Pretoria (co-supervisor) 2022–current
- Ms Shivan Bezuidenhout, MSc, Fungal diversity associated with South African produced soybean, including mycotoxin screening, University of Pretoria (supervisor) 2021–current
- Ms Alice Mthembu, MSc, Identification of plant pathogenic fungi associated with Eastern Cape produced maize, University of Pretoria (supervisor) 2021–current
- Ms Claudette Dewing, PhD, A novel approach to discover fungal biodiversity (supervisor) 2020–current
- Ms Jenna-Lee Price, MSc, Diversity of mycotoxigenic fungi associated with maize in the Eastern Cape, University of Pretoria (supervisor) 2020–current
- Ms Nombulelo Qikani, MSc, Fungal and Oomycete diversity associated with soil from maize fields in South Africa, University of Pretoria (supervisor) 2020–current
- Ms Nicole van Vuuren, MSc, Fungal biodiversity in the Fairy circles from Namibian dessert, University of Pretoria (co-supervisor) 2020–current
- Dr Godfrey Kgatle, PostDoctoral researcher, Pleosporales diversity with a focus on *Alternaria* associated with grain in South Africa 2019–current
- Mr Aiden Visagie, MSc, Isolation and identification of *Penicillium* species with potential phosphate solubilization activity from agricultural environments, Stellenbosch University (supervisor) 2019–current
- Ms Thando Bhiya, MSc, Quantitative detection of fungal pathogens causing leaf blight of prominent vegetables in South Africa, UNISA (co-supervisor) 2018–current

## TEACHING EXPERIENCE

- Lecture and practical session for BSc Hons Microbiology MBY 755 ('Working with Fungi': University of Pretoria) 2020–current
- Lectures for Microbiology MBY 161 (University of Pretoria) 2019–current
- Instructor at the Introduction to Food-borne and Indoor Fungi course, University of Ottawa, Canada, and CBS-KNAW, Utrecht, the Netherlands 2013–2015
- Tutor lectures for B.Sc. Microbiology 2nd year students, Stellenbosch University, South Africa 2009–2011
- Lectures and practicals on the identification of fungi for B.Sc. Hons. students, Stellenbosch University, South Africa 2007–2011
- Demonstrator for B.Sc. Microbiology 2nd year student practicals, Stellenbosch University, South Africa 2007–2011
- Guest Lecture on the forms and shapes of fungi for jewellery design course in Visual Arts department, Stellenbosch University, South Africa 2007
- Guest Lecture on the diversity of *Aspergillus* and *Penicillium* to 3rd year Microbial Ecology students, Stellenbosch University, South Africa 2018

## REVIEWER

- Active reviewer of manuscripts for international journals such as the Canadian journal of Botany, Fungal Ecology, International Journal of Systematics and Evolutionary Microbiology, IMA Fungus, Medical Mycology, Mycologia, Mycology, Mycokeys, Mycological Progress, Mycological Research, Mycoscience, Nova Hedwigia, Persoonia, Plant Pathology, PLOS ONE, Studies in Mycology, Sydowia and Toxins.

## SUCCESSFUL GRANT APPLICATIONS

- European Commission – H2020-MSCA-RISE-2020 (grant nr 101008129), Joining forces to exploit the mycobiota of Asia, Africa and Europe for beneficial metabolites and potential biocontrol agents, using -OMICS techniques, 4 years (2021), ±R5 million over 4 years
- Maize Trust, Survey of fungal pathogens affecting maize production in the Eastern Cape, 3 years (2021), R1 180 210 over 3 years
- FLAIR collaboration grant: The Royal Society & the African Academy of Sciences funded by the Global Challenges Research Fund: The effect of interacting abiotic conditions on mycotoxin production by fungal communities, 2 years, ±R120 000.

- FLAIR fellowship: The Royal Society & the African Academy of Sciences funded by the Global Challenges Research Fund, Ensuring human food and animal feed safety: Characterizing sources of mycotoxin contamination, 2 years (2020), £150000 (±R3 000 000) per year
- NRF-small FBIP (grant id 129117), Characterizing fungal diversity associated with maize produced in the Eastern Cape, 1 year (2020), R188 000
- UP-RDP grant, Novel ways to explore biodiversity, 1 year (2020), R50 000
- Maize Trust, Population genetics and physiological race diversity of *Exserohilum turcicum*, 2 years (2020), R150 000 per year
- NRF-Large FBIP (Collaborator), Defining functional microbiomes of major crops in South Africa for improved productivity, 3 years (2019), R5 962 273 over 3 years
- NRF incentive (grant nr 118924), NRF grant for 2019-2024: incentive funding for rated researchers (IPPR), 6 years (2019), R300 000
- NRF award (grant nr 120352), NRF special recognition awards (P rated researcher), 1 year (2019), R60 000
- NRF-small FBIP (grant id 115955), Discovering *Alternaria* Diversity in South Africa, 1 year (2018), R199 900
- NRF-small FBIP (grant id 110441), Updating the taxonomy of *Aspergillus* in South Africa, 1 year (2017), R200 000
- NRF-small FBIP (grant id 110442), Updating the taxonomy of *Penicillium* in South Africa, 1 year (2017), R199 300

## POPULAR ARTICLES, MEDIA AND BLOG POSTS

- Farmers Weekly – 13 November 2020: New technology to detect mycotoxins in animal feed
- Landbou Weekblad – 29 October 2020: Nuwe vennootskap gesluit om graanavorsing te versterk
- RSG monitor – 16 Sept 2020: Fungi in indoor environments
- Landbou Weekblad – 6 Augustus 2020: Nuwe swam na Cuddles genoem
- PretoriaFM “Ek wil weet” – 19 November 2019 <https://www.pretoriafm.co.za/ek-wil-weet-pienaar-en-die-wetenskaplikes-19-november-2019/>
- RSG Landbou – 27 April 2018 <http://www.rsg.co.za/Program-Potgooi/321/RSG-Landbou>
- MicrobeNET – September 2014: <http://microbe.net/2014/11/12/studies-in-mycology-78-species-diversity-in-aspergillus-penicillium-and-talaromyces/>

## BOOK OR BOOK CHAPTERS

- Studies in Mycology vol. 78: Species diversity in *Aspergillus*, *Penicillium* and *Talaromyces*. Samson RA, Visagie CM, Houbraken J (eds), Published by Elsevier 2014

## PUBLICATIONS AND PAPERS

### Peer-reviewed Papers:

1. Ashtekar N, Rajeshkumar KC, Yilmaz N, Visagie CM. 2022. A new *Penicillium* section *Citrina* species and series from India. *Mycological Progress* 21(4):42, <https://doi.org/10.1007/s11557-022-01802-3>.
2. Crous PW, Osieck ER, Jurjević Ž, Boers J, van Iperen AL, Starink-Willemse M, Dima B, Balashov S, Bulgakov TS, Johnston PR, et al. (2021). Fungal Planet description sheets: 1284–1382. *Persoonia* 47: 178–374, <https://doi.org/10.3767/persoonia.2021.47.06>.
3. Houbraken J, Visagie CM, Frisvad J (2021). Recommendations To Prevent Taxonomic Misidentification of Genome-Sequenced Fungal Strains. *Microbiology Resource Announcements* 10: e0107420. <https://doi.org/10.1128/MRA.01074-20>.
4. Yilmaz N, Sandoval-Denis M, Lombard L, Visagie CM, Wingfield BD, Crous PW (2021). Redefining species limits in the *Fusarium fujikuroi* species complex. *Persoonia* 46: 129–162, <https://doi.org/10.3767/persoonia.2021.46.05>
5. Visagie CM, Goodwell M, Nkwe DO (2021). *Aspergillus* diversity from the Gcwihaba Cave in Botswana and description of one new species. *Fungal Systematics and Evolution*, <https://doi.org/10.3114/fuse.2021.08.07>
6. Visagie CM, Frisvad JC, Houbraken J, Visagie A, Samson RA, Jacobs K (2021). A re-evaluation of *Penicillium* section *Canescentia*, including the description of five new species. *Persoonia* 46: 163–187, <https://doi.org/10.3767/persoonia.2021.46.06>
7. Sun B-D, Visagie CM, Chen AJ, Houbraken J (2021). A taxonomic review of *Penicillium* section *Charlesia*. *Mycological Progress* 20: 1383-1397, <https://doi.org/10.1007/s11557-021-01735-3>
8. Pyrrí I, Visagie CM, Soccio P, Houbraken J (2021). Re-Evaluation of the Taxonomy of *Talaromyces minioluteus*. *Journal of Fungi* 7: 993, <https://doi.org/10.3390/jof7110993>
9. Crous PW, Lombard L, Sandoval-Denis M, Seifert KA, Schroers HJ, Chaverri P, Gené J, Guarro J, Hirooka Y, Bensch K, et al. (2021). *Fusarium*: more than a node or a foot-shaped basal cell. *Studies in Mycology* 98, <https://doi.org/10.1016/j.simyco.2021.100116>

10. Visagie CM, Yilmaz N, Vanderwolf K, Renaud JB, Sumarah MW, Houbraken J, Assebgui R, Seifert KA, Malloch D (2020). *Penicillium* diversity in Canadian bat caves, including a new species, *P. speluncae*. *Fungal Systematics and Evolution* 5: 1–15, <https://doi.org/10.3114/fuse.2020.05.01>
11. Visagie CM, Houbraken J (2020). Updating the taxonomy of *Aspergillus* in South Africa. *Studies in Mycology* 95: 253–292, <https://doi.org/10.1016/j.simyco.2020.02.003>
12. Houbraken J, Kocsube S, Visagie CM, Yilmaz N, Wang X-C, Meijer M, Kraak B, Hubka V, Samson RA, Frisvad JC (2020). Classification of *Aspergillus*, *Penicillium*, *Talaromyces* and related genera (*Eurotiales*): an overview of families, genera, subgenera, sections, series and species. *Studies in Mycology* 95: 5–169, <https://doi.org/10.1016/j.simyco.2020.05.002>
13. Crous PW, Wingfield MJ, Schumacher RK, Akulov A, Bulgakov TS, Carnegie AJ, Jurjevic Z, Decock C, Denman S, Lombard L, et al. (2020). New and Interesting Fungi. 3. *Fungal Systematics and Evolution* 6: 157–231, <https://doi.org/10.3114/fuse.2020.06.09>
14. Crous PW, Cowan DA, Maggs-Kölling G, Yilmaz N, Larsson E, Angelini C, Brandrud TE, Dearnaley JDW, Dima B, Dovana F, et al. (2020). Fungal Planet description sheets: 1112–1181. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 45: 251–409, <https://doi.org/10.3767/persoonia.2020.45.10>
15. Walsh JP, Renaud JB, Hoogstra S, McMullin DR, Ibrahim A, Visagie CM, Tanney JB, Yeung KK, Sumarah MW (2019). Diagnostic fragmentation filtering for the discovery of new chaetoglobosins and cytochalasins. *Rapid Commun Mass Spectrom* 33: 133–139, <https://doi.org/10.1002/rcm.8306>
16. Crous PW, Wingfield MJ, Lombard L, Roets F, Swart WJ, Alvarado P, Carnegie AJ, Moreno G, Luangsa-ard J, Thangavel R, et al. (2019). Fungal Planet description sheets: 951–1041. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 43: 223–425, <https://doi.org/10.3767/persoonia.2019.43.06>
17. Crous PW, Carnegie AJ, Wingfield MJ, Sharma R, Mughini G, Noordeloos ME, Santini A, Shouche YS, Bezerra JDP, Dima B, et al. (2019). Fungal Planet description sheets: 868–950. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 42: 291–473, <https://doi.org/10.3767/persoonia.2019.42.11>
18. Zahariev M, Chen W, Visagie CM, Lévesque CA (2018). Cluster oligonucleotide signatures for rapid identification by sequencing. *BMC Bioinformatics* 19: 395, <https://doi.org/10.1186/s12859-018-2363-3>
19. Nilsson RH, Taylor AFS, Adams RI, Baschien C, Bengtsson-Palme J, Cangren P, Coleine C, Daniel H-M, Glassman SI, Hirooka Y, et al. (2018). Taxonomic annotation of public fungal ITS sequences from the built environment - a report from an April 10–11, 2017 workshop (Aberdeen, UK). *MycKeys* 28: 65–82, <https://doi.org/10.3897/mycokeys.28.20887>
20. Crous PW, Luangsa-ard JJ, Wingfield MJ, Carnegie AJ, Hernández-Restrepo M, Lombard L, Roux J, Barreto RW, Baseia IG, Cano-Lira JF, et al. (2018). Fungal Planet description sheets: 785–867. *Persoonia - Molecular Phylogeny and Evolution of Fungi* 41: 238–417, <https://doi.org/10.3767/persoonia.2018.41.12>
21. Botha CJ, Visagie CM, Sulyok M (2018). Putative neuromycotoxicoses in an adult male following ingestion of moldy walnuts. *Mycotoxin Research* 35: 9–16, <https://doi.org/10.1007/s12550-018-0326-1>
22. Visagie CM, Yilmaz N, Renaud JB, Sumarah MW, Hubka V, Frisvad JC, Chen AJ, Meijer M, Seifert KA (2017). A survey of xerophilic *Aspergillus* from indoor environment, including descriptions of two new section *Aspergillus* species producing eurotium-like sexual states. *MycKeys* 19: 1–30, <https://doi.org/10.3897/mycokeys.19.11161>
23. Tanney JB, Visagie CM, Yilmaz N, Seifert KA (2017). *Aspergillus* subgenus *Polypaecilum* from the built environment. *Studies in Mycology* 88: 237–267, <https://doi.org/10.1016/j.simyco.2017.11.001>
24. Sklenář F, Jurjević Ž, Zalar P, Frisvad JC, Visagie CM, Kolařík M, Houbraken J, Chen AJ, Yilmaz N, Seifert KA, et al. (2017). Phylogeny of xerophilic aspergilli (subgenus *Aspergillus*) and taxonomic revision of section *Restricti*. *Studies in Mycology* 88: 161–236, <https://doi.org/10.1016/j.simyco.2017.09.002>
25. Samson RA, Hubka V, Varga J, Houbraken J, Hong S-b, Klaassen CHW, Perrone G, Seifert KA, Magistà D, Visagie CM, et al. (2017). Response to Pitt & Taylor 2016: Conservation of *Aspergillus* with *A. niger* as the conserved type is unnecessary and potentially disruptive. *Taxon* 66: 1439–1446, <https://doi.org/10.12705/666.10>
26. Humphries Z, Seifert KA, Hirooka Y, Visagie CM (2017). A new family and genus in *Dothideales* for *Aureobasidium*-like species isolated from house dust. *IMA Fungus* 8: 299–315, <https://doi.org/10.5598/imafungus.2017.08.02.05>
27. Chen AJ, Hubka V, Frisvad JC, Visagie CM, Houbraken J, Meijer M, Varga J, Demirel R, Jurjević Ž, Kubátová A, et al. (2017). Polyphasic taxonomy of *Aspergillus* section *Aspergillus* (formerly *Eurotium*), and its occurrence in indoor environments and food. *Studies in Mycology* 88: 37–135, <https://doi.org/10.1016/j.simyco.2017.07.001>
28. Yilmaz N, Visagie CM, Frisvad JC, Houbraken J, Jacobs K, Samson RA (2016). Taxonomic re-evaluation of species in *Talaromyces* section *Islandici*, using a polyphasic approach. *Persoonia* 36: 37–56, <https://doi.org/10.3767/003158516X688270>
29. Wingfield BD, Ambler JM, Coetzee MPA, de Beer ZW, Duong TA, Joubert F, Hammerbacher A, McTaggart AR, Naidoo K, Nguyen HDT, et al. (2016). Draft genome sequences of *Armillaria fuscipes*, *Ceratocystiopsis minuta*, *Ceratocystis adiposa*, *Endoconidiophora laricicola*, *E. polonica* and *Penicillium freii* DAOMC 242723. *IMA Fungus* 7: 217–227, <https://doi.org/10.5598/imafungus.2016.07.01.11>
30. Visagie CM, Seifert KA, Houbraken J, Samson RA, Jacobs K (2016). A phylogenetic revision of *Penicillium* sect. *Exilicaulis*, including nine new species from fynbos in South Africa. *IMA Fungus* 7: 75–117, <https://doi.org/10.5598/imafungus.2016.07.01.06>

31. Visagie CM, Renaud JB, Burgess KM, Malloch DW, Clark D, Ketch L, Urb M, Louis-Seize G, Assabgui R, Sumarah MW, et al. (2016). Fifteen new species of *Penicillium*. *Persoonia* 36: 247–280, <https://doi.org/10.3767/003158516X691627>
32. Visagie CM, Houbraken J, Dijksterhuis J, Seifert KA, Jacobs K, Samson RA (2016). A taxonomic review of *Penicillium* species producing conidiophores with solitary phialides, classified in section *Torulomyces*. *Persoonia* 36: 134–155, <https://doi.org/10.3767/003158516X690952>
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## CONFERENCE CONTRIBUTIONS

### Keynote presentations:

1. Visagie CM, Yilmaz N. Exploring fungal diversity in South Africa, a biodiversity hotspot. DGfM 100th anniversary meeting, Blaubeuren, Germany, 4–7 October 2021.

### Invited seminar presentations:

2. Visagie CM, Yilmaz N. Exploring the diversity of mycotoxigenic fungi in South Africa. British Mycological Society 125th Anniversary Conference on Fungi and the Environment. Cranfield University, Cranfield, UK. 4–6 April 2022.
3. Yilmaz N, Visagie CM. Facial Eczema caused by sprodemin producing strains of *Pseudopithomyces chartarum*: An important yet poorly understood disease of dairy cattle in South Africa. The World Mycotoxin Forum 13th conference. Parma, Italy. 16–18 May 2022.
4. Visagie CM, Hirooka Y. Taxonomic annotation of public fungal reference sequences. Mycological Society of Japan International symposium on UNITE. 28 August 2021.
5. Visagie CM. Exploring *Penicillium* species diversity from a biodiversity hotspot. 16th International Union of Microbiological Societies Congresses, Daejeon, South Korea (and virtual meeting), 12–16 October 2020.
6. Visagie CM. Exploring fungal diversity in important crops of South Africa. Keynote lecture for the SAGL Annual General Meeting, 20 November 2019.
7. Visagie CM, Seifert KA. Bridging the gap between cultured and uncultured fungi in the built environment. Symposium: Built Environments I – Fungi & Fungal Products in the Built Environment: Investigating our Indoor Companions. Mycological Society of America Annual Meeting, Berkeley, CA, August 2016.

### Seminar presentations:

8. Visagie C, Yilmaz N (2022). Exploring the diversity of mycotoxigenic fungi in South Africa. 125<sup>th</sup> British Mycological Society conference, Cranfield University, England, 4–7 April 2022.
9. Visagie C, Yilmaz N (2021) Reference collections, next generation taxonomy & digital data management tools. 32nd Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and the DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB), Virtual Conference hosted by FABI, South Africa, 4–6 May 2021.
10. Visagie C. (2022) Unlocking the potential of a global culture collection for local and regional plant health: HexagonBio and CMW-IA. 33rd Annual Meeting of the Tree Protection Co-operative Programme (TPCP) and the DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB), Hybrid Conference hosted by FABI, South Africa, 10–11 May 2022.
11. Visagie CM, Yilmaz N. Updating the taxonomy of the genera *Aspergillus*, *Penicillium* and *Talaromyces* in South Africa. Asian Mycology Congress 2019. Mie, Japan, 1–4 October 2019.
12. Visagie CM, Yilmaz N. Updating the taxonomy of *Aspergillus*, *Penicillium* and *Talaromyces* in South Africa. Joint Biodiversity Information Management & Foundational Biodiversity Information Programme Forum 2019. Pretoria, South Africa, 20–22 August 2019.
13. Visagie A, Jacobs K, Visagie CM. Isolation and identification of *Penicillium* species with potential phosphate solubilization activity from agricultural environments. Joint Biodiversity Information Management & Foundational Biodiversity Information Programme Forum 2019. Pretoria, South Africa, 20–22 August 2019.
14. Visagie CM. Exploring species diversity in *Aspergillus* & *Penicillium*. 11th International Mycological Congress, San Juan, Puerto Rico, July 2018.
15. Visagie CM. Exploring species diversity in *Aspergillus* & *Penicillium*. South African Society of Microbiology conference, Krugersdorp, January 2018.
16. Visagie CM, Seifert KA. The importance of incorporating xerophilic fungi in surveys of indoor environments. 32nd Great Lakes Mycology Meeting, Queens University Biological Station, Chaffey's Lock, Canada, May 2016.
17. Visagie CM, Hirooka Y, Tanney JB, Koppel O, Nguyen H, Houbraken J, Meijer M, Yilmaz N, Chen W, Lowe C, Samson RA, Seifert KA. The importance of incorporating xerophily for biological modelling and observations. 4th International Conference on the Microbiology of the Built Environment, Boulder, USA, July 2015.
18. Visagie CM, Samson RA, Seifert KA. The Sloan project: Bridging the gap between culture-dependent and – independent detection techniques in *Aspergillus*, *Penicillium* and *Talaromyces*. 31st Great Lakes Mycology Meeting, Queens University Biological Station, Chaffey's Lock, Canada, May 2015.
19. Hirooka Y, Tanney JB, Bilkhu S, Zhang N, Nguyen H, Amend A, Visagie CM, Meijer M, Samson RA, Seifert KA. Presentation. A comparison of dilution-to-extinction culturing and pyrosequencing extends our view of the fungal biodiversity of house dust. 10th International Mycological Congress, Bangkok, Thailand, August 2014.
20. Houbraken J, Frisvad JC, Visagie CM, Samson RA. New taxonomies of Aspergilli producing aflatoxins and ochratoxins. 10th International Mycological Congress, Bangkok, Thailand, August 2014.
21. Samson RA, Visagie CM, Seifert KA. Biodiversity of common food and airborne Fungi. 14th International Union of Microbiological Societies Congresses, Montréal, Canada, July to August 2014.
22. Seifert KA, Mwange K, Whitfield E, Visagie CM, Samson RA, Meijer Amend AS, Bruns TD. IM-BOL The Indoor Mycota Barcode of Life. 4th International Barcode of Life Conference, Adelaide, Australia, November to December 2011.



23. Visagie CM, Roets F, Seifert KA, Jacobs K. Working towards DNA barcoding for South African species of the genus *Penicillium*. South African Society of Microbiology conference, Cape Town, South Africa, November 2011.
24. Visagie CM, Roets F, Seifert KA, Jacobs K. The ecology of *Penicillium* spp. in the Cape Floristic Region. 47th Congress of the South African Society for Plant Pathology, Kruger National Park, South Africa, January 2011.
25. Visagie CM, Jacobs K. Biodiversity in the genus *Penicillium* from coastal fynbos soil. 46th Congress of the South African Society for Plant Pathology, Gordon's Bay, South Africa, January 2009.

### Poster presentations:

1. Van Vuuren N, Visagie CM, Wingfield MJ, Cowan D, Yilmaz N. Diversity of fungi associated with *Stipagrostis* in the Namib desert "fairy circles". Mycological Society of America Annual Meeting, 'Mycology from the Cloud' virtual meeting, 22 July 2020.
2. Price J-L, Visagie CM, Yilmaz N. Fungal diversity associated with sunflower and soybean seeds in South Africa. Mycological Society of America Annual Meeting, 'Mycology from the Cloud' virtual meeting, 22 July 2020.
3. Visagie CM, Houbraken J, Yilmaz N. *Penicillium* and *Talaromyces* from a biodiversity hotspot. Mycological Society of America Annual Meeting, 'Mycology from the Cloud' virtual meeting, 22 July 2020.
4. Buthelezi ZM, Visagie CM, Jacobs K. *Cladosporium* species in the natural habitat: a source of contamination for indoor environments. Joint Biodiversity Information Management & Foundational Biodiversity Information Programme Forum 2019. Pretoria, South Africa, 20–22 August 2019.
5. Ndaba NS, Visagie CM, Jacobs K. *Trichoderma* as a functional fungal group in the rhizosphere of maize and wheat under conventional and conservation agricultural practices. Joint Biodiversity Information Management & Foundational Biodiversity Information Programme Forum 2019. Pretoria, South Africa, 20–22 August 2019.
6. Swart A, Shokoohi E, Visagie CM, Marais M. Specimens of an entomophilic species of the genus *Cruznema* found in a potato rotation trial site in the Free State Province, South Africa. Potatoes SA Research Symposium 2019, Bela Bela, 23–25 July 2019.
7. Visagie CM, Yilmaz N. Updating the taxonomy of the genera *Aspergillus* and *Penicillium* in South Africa. 11th International Mycological Congress, San Juan, Puerto Rico, July 2018.
8. Visagie CM, Seifert KA. New xerophilic fungi from the indoor environment. 5th International Conference on the Microbiology of the Built Environment, Boulder, USA, June 2016.
9. Visagie CM, Houbraken J, Jacobs K, Seifert KA, Samson RA. New insights into *Penicillium* diversity. 14th International Union of Microbiological Societies Congresses, Montréal, Canada, July to August 2014.
10. Wyatt TT, van Leeuwen MR, Gerwig GJ, Golovina EA, Hoekstra FA, Kuenstner EJ, Palumbo EA, Snyder NL, Visagie CM, Dijksterhuis J, Verkennis A, Kamerling JP, Wöstern HAB. Novel trehalose-based oligosaccharides from extreme stress-tolerant ascospores of *Neosartorya fischeri* (*Aspergillus fischeri*). 14th International Union of Microbiological Societies Congresses, Montréal, Canada, July to August 2014.
11. Meijer M, Visagie CM, Oliviera BR, Samson RA. DNA barcoding the mycobiota in indoor environments - International collaboration. One Fungus = Which Name symposium, Amsterdam, the Netherlands, April 2012.
12. Visagie CM, Roets F, Seifert KA, Samson RA, Jacobs K. The diverse nature of *Penicillium* and *Talaromyces* from the fynbos biome in South Africa. One Fungus = Which Name symposium, Amsterdam, the Netherlands, April 2012.
13. Du Plessis IL, Visagie CM, Slabbert E, Jacobs K. Distributions patterns of species in the genus *Penicillium*. South African Society of Microbiology conference, Cape Town, South Africa, November 2011.
14. Du Plessis IL, Visagie CM, Jacobs K. *Penicillium* spp. in Madagascan soils. 47th Congress of the South African Society for Plant Pathology, Kruger National Park, South Africa, January 2011.
15. Borchardt J, Visagie CM, Jacobs K. Seasonal levels of airborne fungi present in indoor environments in Stellenbosch, South Africa. 9th International Mycological Congress, Edinburgh Scotland, August 2010.
16. Visagie CM, Roets F, Jacobs K. The ecology of *Penicillium* spp. associated with *Protea repens* in the Cape Floristic Region. 9th International Mycological Congress, Edinburgh Scotland, August 2010.
17. Jacobs K, Caleb OJ, Slabbert E, Titus PH, Visagie CM. Fungal diversity in South African soils: An untapped source for bioprospecting. South African Society of Microbiology conference, Durban, South Africa, September 2009.
18. Visagie CM, Roets F, Jacobs K. Biodiversity potential of the genus *Penicillium* in the Cape Floristic Region. South African Society of Microbiology conference, Durban, South Africa, September 2009.
19. Ralikhwatha TD, Visagie CM, Jacobs K. Taxonomy and molecular phylogeny of *Penicillium* spp. from Madagascar soils. 46th Congress of the South African Society for Plant Pathology, Gordon's Bay, South Africa, January 2009.
20. Visagie CM, Jacobs K. Dichotomous and Synoptic key to *Penicillium* spp. isolated from coastal fynbos soil. 46th Congress of the South African Society for Plant Pathology, Gordon's Bay, South Africa, January 2009.
21. Visagie CM, Jacobs K. Biodiversity in the genus *Penicillium* from sandveld Fynbos soil. SASM Bio-08 conference, Grahamstown, South Africa, January 2008.
22. Slabbert E, Visagie CM, Jacobs K. Automated ribosomal intergenic spacer analysis (ARISA) as a screening tool for bioprospecting. SASM Bio-08 conference, Grahamstown, South Africa, January 2008.

### REFERENCES

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