

Nam Q. Pham

Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria

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Phone: +27 (0)12 480 5816



Education:

- 2018–2024** Ph.D. (Plant Pathology) – University of Pretoria
Dissertation: “Discovery of the cause and relevance of a serious new *Eucalyptus* foliar disease in Indonesia”
- 2016–2018** M.Sc. (Plant Pathology) – University of Pretoria (*Cum laude*)
Dissertation: “New species of *Calonectria* and *Cylindrocladiella* from Vietnam, Indonesia and Malaysia”
- 2011–2015** B.Sc. (Botany/Mycology) – Vietnam National University - University of Science (*Distinction*)
Dissertation: “Peronosporaceae and Pythiaceae species associated with *Acacia* plantation soils in Vietnam”

Professional Experience:

- 2024–current** Postdoctoral Researcher, Department of Biochemistry, Genetics and Microbiology (BGM), Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria – with Prof. Brenda D. Wingfield and Prof. Michael J. Wingfield

Research Interests:

Forest pathology; mycology; fungal diversity; taxonomy, population biology, genetics, genomics of plant pathogenic fungi.

Honors and Awards:

- 2024–2025** Postdoctoral fellowship award – funded by DST-NRF SARCHI chair in Fungal Genomics
- 2021** FABian of the year (Awarded to best student of the year)
- 2021** FABI Best Creative Art Submission (Awarded to best art piece based on the theme *Biodiversity in Art*)
- 2019–2020** University of Pretoria Doctoral Bursary Award (Scholarship to support Ph.D. research)
- 2018** Academic Honorary Colours for Master of Science (Given for an M.Sc. of *cum laude*)
- 2016–2017** University of Pretoria Masters Bursary Award (Scholarship to support M.Sc. research)
- 2015** Sakura Science Exchange Programme (Host University: University of Kitakyushu, Japan)

Peer-Reviewed Publications:

* corresponding/senior author

20. **Pham NQ***, Suzuki H, Duong TA, Wingfield BD, Barnes I, Durán A, Wingfield MJ. (2024) **Cryptic sexual reproduction in an emerging *Eucalyptus* shoot and foliar pathogen.** *Plant Pathology* (in press)
19. Tarigan M, Wingfield MJ, Jami F, Marpaung YMAN, Durán A, **Pham NQ***. (2024) **Pathogenicity of *Chrysosporthe deuterocubensis* on *Eucalyptus* in Indonesia.** *Southern Forest: A Journal of Forest Science*. [10.2989/20702620.2023.2279054](https://doi.org/10.2989/20702620.2023.2279054)
18. Wingfield MJ, Marincowitz S, Barnes I, Tarigan M, Solís M, Durán A, **Pham NQ***. (2023) **First report of phyllode rust on *Acacia crassicaarpa* outside its native range.** *Forest Pathology* **53**: e12839. [10.1111/efp.12839](https://doi.org/10.1111/efp.12839)
17. **Pham NQ***, Duong TA, Wingfield BD, Barnes I, Durán A, Wingfield MJ. (2023) **Characterisation of the mating-type loci in species of *Elsinoe* causing scab diseases.** *Fungal Biology* **127**:1484–1490. [10.1016/j.funbio.2023.11.003](https://doi.org/10.1016/j.funbio.2023.11.003)
16. Wingfield MJ, **Pham NQ**, Marincowitz S, Duong TA, Wingfield BD, Wilson AM (2023) **Blast from the past: A study of decades-old fungal cultures resolves a long-standing tree disease mystery.** *Journal of Plant Pathology*. [10.1007/s42161-023-01502-1](https://doi.org/10.1007/s42161-023-01502-1)
15. Tarigan M, Wingfield MJ, Marpaung YMAN, Durán A, **Pham NQ***. (2023) ***Quambalaria eucalypti* found on *Eucalyptus* in Indonesia.** *Forest Pathology* **53**: e12829. [10.1111/efp.12829](https://doi.org/10.1111/efp.12829)
14. **Pham NQ***, Wingfield MJ, Marincowitz S, Tanga AA, Tili KR, Weldesenbet BK, Hurley BP, Germishuizen I, Lawson SA, Healey MA, Wondafrash M (2023) **First report of the wattle rust pathogen, *Uromykladium acaciae* (Pileolariaceae, Pucciniales) in Ethiopia.** *Forestry: An International Journal of Forest Research*. [10.1093/forestry/cpad040](https://doi.org/10.1093/forestry/cpad040)
13. Paap T, Marincowitz S, **Pham NQ**, Roets F, Basson RJ, Wingfield BD, Oberlander K, Wingfield MJ. (2023) **A novel species of *Microsphaeropsis* causing cankers on *Rafnia amplexicaulis* in South Africa.** *Fungal Systematics and Evolution* **12**:73–80. [10.3114/fuse.2023.12.05](https://doi.org/10.3114/fuse.2023.12.05)
12. Marincowitz S, **Pham NQ**, Wingfield BD, Roets F, Wingfield MJ. (2023) **Microfungi associated with dying *Euphorbia mauritanica* in South Africa and their relative pathogenicity.** *Fungal Systematics and Evolution* **12**:59–71. [10.3114/fuse.2023.12.04](https://doi.org/10.3114/fuse.2023.12.04)
11. Roux J, Wingfield MJ, Marincowitz S, Solís M, Phungula S, **Pham NQ***. (2023) ***Eucalyptus* scab and shoot malformation: A new disease in South Africa caused by a novel species, *Elsinoe masingae*.** *Forestry: An International Journal of Forest Research*. [10.1093/forestry/cpad031](https://doi.org/10.1093/forestry/cpad031)
10. Tarigan M, **Pham NQ***, Jami F, Oliveira LSS, Saha MA, Durán A, Wingfield MJ. (2023) ***Calonectria* species diversity on eucalypts in Indonesia.** *Southern Forests: A Journal of Forest Science* **85**: 56–64. [10.2989/20702620.2023.2179441](https://doi.org/10.2989/20702620.2023.2179441)
9. **Pham NQ***, Marincowitz S, Chen SF, Rodas CA, Wingfield MJ. (2022) **Soil-borne *Calonectria* (Hypocreales, Nectriaceae) associated with *Eucalyptus* plantations in Colombia.** *MycoKeys* **94**:17–35. [10.3897/mycokeys.94.96301](https://doi.org/10.3897/mycokeys.94.96301)
8. Wingfield BD, Berger DK, Coetzee MPA, Duong TA, Martin A, **Pham NQ**, Van den Berg N, Wilken PM, Arun-Chinnappa KS, Barnes I, Buthelezi S, Dahanayaka BA, Durán A, Engelbrecht J, Feurtey A, Fourie A, Fourie G, Hartley J, Kabwe ENK, Maphosa M, Narh Mensah DL, Nsibo DL, Potgieter L, Poudel B, Stukenbrock EH, Thomas C, Vaghefi N, Welgemoed T, Wingfield MJ. (2022) **IMA genome-F17.** *IMA Fungus* **13**:19. [10.1186/s43008-022-00104-3](https://doi.org/10.1186/s43008-022-00104-3)
7. Wingfield MJ, Marincowitz S, **Pham NQ**, Roets F, Paap T, Wingfield BD, Aylward J. (2022) **Cypress Canker: An important disease discovered for the first time on a native South African tree.** *Plant Pathology* **71**: 1735–1742. [10.1111/ppa.13614](https://doi.org/10.1111/ppa.13614)

6. Solís M, Wingfield MJ, Greyling I, **Pham NQ***. (2022) **A serious shoot and leaf disease caused by *Colletotrichum theobromicola* discovered on eucalypts in South Africa.** *Southern Forests: A Journal of Forest Science* **84**:8–20. [10.2989/20702620.2021.2005454](https://doi.org/10.2989/20702620.2021.2005454)
5. **Pham NQ***, Marincowitz S, Chen SF, Yaparudin J, Wingfield MJ. (2022) ***Calonectria* species, including four novel taxa, associated with *Eucalyptus* in Malaysia.** *Mycological Progress* **21**:181–197. [10.1007/s11557-021-01768-8](https://doi.org/10.1007/s11557-021-01768-8)
4. **Pham NQ**, Marincowitz S, Solís M, Duong TA, Wingfield BD, Barnes I, Slippers B, Muro Abad JI, Durán A, Wingfield MJ. (2021) ***Eucalyptus* scab and shoot malformation: A new and serious foliar disease of *Eucalyptus* caused by *Elsinoe necatrix* sp. nov.** *Plant Pathology* **70**:1230–1242. [10.1111/ppa.13348](https://doi.org/10.1111/ppa.13348)
3. Burgess TI, Dang QN, Le BV, **Pham NQ**, White D, Pham TQ. (2020) ***Phytophthora acaciivora* sp. nov. associated with dying *Acacia mangium* in Vietnam.** *Fungal Systematics and Evolution* **6**:243–252. [10.3114/fuse.2020.06.11](https://doi.org/10.3114/fuse.2020.06.11)
2. **Pham NQ**, Barnes I, Chen SF, Liu FF, Dang NQ, Pham TQ, Lombard L, Crous PW, Wingfield MJ. (2019) **Ten new species of *Calonectria* from Indonesia and Vietnam.** *Mycologia* **111**:78–102. [10.1080/00275514.2018.1522179](https://doi.org/10.1080/00275514.2018.1522179)
1. **Pham NQ**, Barnes I, Chen SF, Pham TQ, Lombard L, Crous PW, Wingfield MJ. (2018) **New species of *Cylindrocladiella* from plantation soils in South-East Asia.** *MycKeys* **32**:1–24. [10.3897/mycokeys.32.23754](https://doi.org/10.3897/mycokeys.32.23754)

Publications in Review:

* corresponding/senior author

1. van Heerden A, **Pham NQ**, Wingfield BD, Wingfield MJ, Muro Abad JI, Durán A, Wilken PM. (2024) **LAMP assay to detect *Elsinoe necatrix*; an important *Eucalyptus* shoot and leaf pathogen.** *Plant Disease* (submitted)

Scientific Conferences:

28. Wingfield MJ, Suzuki H, Marincowitz S, **Pham NQ**, Roux J, Wingfield BD (2024) **Emerging new diseases in the Cryphonectriaceae: hidden pathogens and unexpected host jumps.** IUFRO 26th World Conference, Stockholm, Sweden.
27. Aylward J, Coelho MA, David-Palma M, Averette AF, Basson RJ, Marincowitz S, **Pham NQ**, Roets F, Sun S, Heitman J, Wingfield BD, Wingfield MJ (2024) **Exploring the *Cryptococcus wingfieldii* complex: From African scolytine beetles to novel species discovery.** Fungal Genetics Conference 2024, Pacific Grove, CA, USA.
26. **Pham NQ**, Duong TA, Suzuki H, Wingfield BD, Barnes I, Durán A, Wingfield MJ (2024) **The emerging *Eucalyptus* scab and shoot malformation epidemic in North Sumatra defined by panmictic populations of *Elsinoe necatrix*.** Fungal Genetics Conference 2024, Pacific Grove, CA, USA.
25. **Pham NQ**, Duong TA, Suzuki H, Wingfield BD, Marincowitz S, Solís M, Barnes I, Muro Abad JI, Durán A, Wingfield MJ (2024) **Lessons learnt from the *Eucalyptus* scab and shoot malformation epidemic in Indonesia.** 53rd Congress of the Southern African Society for Plant Pathology (SASPP), Golden Gate National Park, Clarens, South Africa.
24. **Pham NQ**, Wingfield MJ, Duong TA, Chen SF, Liu FF (2024) **Population genetic analysis of *Calonectria reteaudii* from infected *Eucalyptus* leaves and associated soils suggests a phyllosphere and not a soil-borne origin.** 53rd Congress of the Southern African Society for Plant Pathology (SASPP), Golden Gate National Park, Clarens, South Africa.
23. **Pham NQ**, Marincowitz S, Rodas CA, Wingfield MJ (2024) **Identification of *Cylindrocladiella* species from Colombia soils reveals unexpectedly high diversity and highlights knowledge gaps.** 53rd Congress of the Southern African Society for Plant Pathology (SASPP), Golden Gate National Park, Clarens, South Africa.

22. Barnes I, Aylward J, Solís M, **Pham NQ**, Wingfield MJ (2023) **Important *Eucalyptus* diseases on forest plantations in South Africa**. IUFRO WP 7.02.13 and 7.02.03 meeting, Campo Grande, Mato Grosso do Sul, Brazil.
21. Wingfield MJ, **Pham NQ**, Marincowitz S, Duong TA, Wingfield BD, Wilson A (2023) **Blast from the past: A study of decades-old fungal cultures resolves a long-standing tree disease mystery**. 12th International Congress of Plant Pathology (ICPP), Lyon, France.
20. **Pham NQ**, Suzuki H, Duong TA, Barnes I, Wingfield BD, Duran A, Wingfield MJ (2023) **Genetic diversity of the emerging *Eucalyptus* pathogen *Elsinoë necatrix***. 12th International Congress of Plant Pathology (ICPP), Lyon, France.
19. **Pham NQ** (2023) ***Eucalyptus* scab in Indonesia - lessons learnt**. 34th Annual meeting of the Tree Protection Co-operative Programme (TCP) and the DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB), University of Pretoria, Pretoria, South Africa.
18. **Pham NQ**, Barnes I, Muro Abad JI, Durán A, Wingfield MJ (2022) ***Eucalyptus* scab and shoot malformation: An unexpected new threat to plantation forestry globally**. IUFRO Conference Division 7 – Forest Health Pathology and Entomology, Lisbon, Portugal.
17. van Heerden A, **Pham NQ**, Wingfield BD, Wingfield MJ, Duong TA, Wilken PM (2022) **A LAMP assay for in-field detection of *Elsinoë necatrix*, the causal agent of *Eucalyptus* scab and shoot malformation**. IUFRO Conference Division 7 – Forest Health Pathology and Entomology, Lisbon, Portugal.
16. **Pham NQ**, Marincowitz S, Chen SF, Rodas CA, Wingfield MJ (2022) **Soil-borne *Calonectria* species associated with commercial *Eucalyptus* plantation in Colombia**. IUFRO Conference Division 7 – Forest Health Pathology and Entomology, Lisbon, Portugal.
15. Ramírez N, Wingfield MJ, **Pham NQ**, Loitey JM, Pérez M, Pérez CA (2022) **Novel *Calonectria* species associated with a serious leaf disease on native *Ilex paraguariensis* in Uruguay**. IUFRO Conference Division 7 – Forest Health Pathology and Entomology, Lisbon, Portugal.
14. Roux J, **Pham NQ**, Phungula S, Wingfield MJ (2022) **First report of *Elsinoë* scab and shoot malformation disease on *Eucalyptus* in South Africa**. IUFRO Conference Division 7 – Forest Health Pathology and Entomology, Lisbon, Portugal.
13. **Pham NQ**, Barnes I, Muro Abad JI, Durán A, Wingfield MJ (2022) ***Eucalyptus* scab and shoot malformation: A threat to commercial forestry**. 52nd Congress of the Southern African Society for Plant Pathology (SASPP), Future Africa, University of Pretoria, Pretoria, South Africa.
12. **Pham NQ**, Marincowitz S, Chen SF, Rodas CA, Wingfield MJ (2022) ***Calonectria* species associated with *Eucalyptus* plantation soils in Colombia**. 52nd Congress of the Southern African Society for Plant Pathology (SASPP), Future Africa, University of Pretoria, Pretoria, South Africa.
11. Fell S, Paap T, Carstensen GD, **Pham NQ**, Hurley BP, Wingfield MJ (2022) **Previously unknown gall symptoms associated with *Uromycladium acaciae* infection on *Acacia mearnsii***. 52nd Congress of the Southern African Society for Plant Pathology (SASPP), Future Africa, University of Pretoria, Pretoria, South Africa.
10. Solís M, Wingfield MJ, Greyling I, **Pham NQ** (2022) ***Colletotrichum theobromicola* causes a shoot and leaf disease on *Eucalyptus* in South Africa**. 52nd Congress of the Southern African Society for Plant Pathology (SASPP), Future Africa, University of Pretoria, Pretoria, South Africa.
9. van Heerden A, **Pham NQ**, Wingfield BD, Wingfield MJ, Duong TA, Wilken PM (2022) **Development of a LAMP assay for in-field diagnosis of the novel *Eucalyptus* pathogen, *Elsinoë necatrix* using the elsinochrome toxin cluster as a marker**. 52nd Congress of the Southern African Society for Plant Pathology (SASPP), Future Africa, University of Pretoria, Pretoria, South Africa.

8. **Pham NQ** (2022) *Elsinoe necatrix*: An unexpected new threat to *Eucalyptus* around the world. 33rd Annual meeting of the Tree Protection Co-operative Programme (TPCP) and the DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB), University of Pretoria, Pretoria, South Africa.
7. **Pham NQ**, Duong TA, Wingfield MJ, Barnes I, Durán A, Wingfield BD (2022) **Characterisation of the mating type loci in *Elsinoe* including the *Eucalyptus* pathogen *Elsinoe necatrix***. Fungal Genetics Conference 2022, Pacific Grove, CA, USA.
6. **Pham NQ**, Barnes I, Muro Abad JI, Durán A, Wingfield MJ (2021) ***Eucalyptus* Scab and Shoot Malformation: An emerging threat to plantation forestry in Southeast Asia**. 3rd IUFRO Acacia 2021 Webinar.
5. **Pham NQ**, Barnes I, Slippers B, Durán A, Wingfield MJ (2020) **Yeast communities associated with a *Eucalyptus* leaf and shoot disease of unknown aetiology in North Sumatra**. MSA 2020: Mycology from the Cloud.
4. **Pham NQ**, Marincowitz S, Barnes I, Wingfield MJ (2019) **Novel soil-borne *Calonectria* species from *Eucalyptus* plantations in Sabah, Malaysia**. 51st Congress of the Southern African Society for Plant Pathology (SASPP), Langebaan, South Africa.
3. Fourie G, Mufamadi ZC, Smith A, Sonnekus B, **Pham NQ**, Willis-Boyum A, van den Berg N (2019) **Characterisation of the causal agents of *Macadamia* husk rot in South Africa**. 51st Congress of the Southern African Society for Plant Pathology (SASPP), Langebaan, South Africa.
2. **Pham NQ**, Barnes I, Chen SF, Roux J, Pham TQ, Wingfield MJ (2017) **Novel *Calonectria* species from plantation and nursery soils in South-East Asia**. IUFRO 125th Anniversary Congress, Freiburg, Germany.
1. Dang QN, **Pham NQ**, Nguyen HM, Pham TQ (2017) **First report of *Phytophthora cinnamomi* on *Cinnamomum cassia* in Vietnam**. 8th Meeting IUFRO Working Party 7.02.09 - *Phytophthora* in Forests and Natural Ecosystems, Sapa, Vietnam.

Advising and Mentoring:

**Undergraduate Students*

- 2023** Kapsosideris N (DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHP) Mentorship Programme)
- 2020** Mokhara B (CPHB Mentorship Programme)
- 2018** van den Berg M (CPHB Mentorship Programme)

**Master Students*

- 2022–current** Selebi A (Co-advisor; with Prof. BD Wingfield)
- 2021–2023** van Heerden A (Co-advisor; with Dr. PM Wilken, Prof. MJ Wingfield, Prof. BD Wingfield)

Teaching Experience:

- 2023** GTK705 - Genome Analysis (University of Pretoria) – Teaching Assistant
- 2023** Introductory Microsatellite Workshop – IMW2023 (University of Pretoria) – Facilitator
- 2022** Introductory Microsatellite Workshop – IMW2022 (University of Pretoria) – Facilitator

International Research Visits and Professional Training:

**Research Visit*

- 2024** *Research visit:* UF/IFAS School of Forest, Fisheries & Geomatics Sciences, University of Florida – hosted by Prof. Jiri Hulcr
- 2018–2023** *Research visit:* Asia Pacific Resources International Holdings (APRIL) and Toba Pulp Lestari (TPL), Royal Golden Eagle (RGE), Indonesia
- 2015** *Study exchange:* University of Kitakyushu, Japan – hosted by Prof. Hidenari Yasui and Prof. Takanori Kihara
- 2013–2015** *Internship:* Forest Protection Research Center - Vietnamese Academy of Forest Sciences, Vietnam

**Professional Training*

- 2022** Advanced Study Institute on Invasions and Evolution – funded by National Science Foundation (NSF), USA
- 2016–2023** Phylogenetics workshop, Introductory Microsatellite workshop, Mycology workshop, Metagenomics workshop, STEM Applications Training on qPCR workshop - hosted at University of Pretoria
- 2015** *Phytophthora* workshop, Forest Protection Research Center – with Prof. Treena Burgess and Prof. Giles Hardy, Murdoch University

Service, Peer-review, Professional Affiliations, and Additional Skills:

**Service:*

- 2023** Art committee for Forestry and Agricultural Biotechnology Institute (FABI) 2021/2023 biannual report
- 2017–current** Audio-Visual Operator - Annual meeting of the Tree Protection Co-operative Programme (TPCP) and the DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB), University of Pretoria, South Africa
- 2016–current** Assistant – CMW Culture Collection, Forestry and Agricultural Biotechnology Institute (FABI)
- 2016, 2018** Member – Social Club, Forestry and Agricultural Biotechnology Institute (FABI)

**Professional Societies:*

- Southern African Society for Plant Pathology (SASPP), Mycological Society of America (MSA), Genetics Society of America (GSA)

**Peer-review for Scientific Journals:*

- Scientific Reports, Journal of Plant Pathology, Plant Disease, Fungal Biology

**Additional Languages:*

- English, Spanish, Vietnamese, Linux

References:

- Prof. Michael J. Wingfield
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- *Prof. Brenda D. Wingfield*

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- *Prof. Irene Barnes*

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- *Prof. Bernard Slippers*

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