

Curriculum Vitae

Name: Dr. Rajesh Kumar K.C., Scientist E
Address: National Fungal culture Collection of India (NFCCI),
Biodiversity and Palaeobiology (Fungi) Group,
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Academic/Career Excellence

Scientist E - National Fungal Culture Collection of India (NFCCI WDCM 932), Biodiversity (Fungi) Group, Agharkar Research Institute, Pune (October 2008- June 2013 as Sci B; January 2014 to 30th June 2018 as Sci C; 1st July 2019 to 30th June 2022 as Sci D).

*Also affiliated to Savitribai Phule Pune University as a recognised teacher (Professor equivalent with 08 PhD positions) in Botany and Microbiology department.

Post-Doctoral Fellow: Post Doc Fellow in CAB International (2008) in a project entitled “Studies on Natural Enemies of *Impatiens glandulifera* and *Hedychium* spp. in the Himalayas” Funded by CAB International, London, UK (under Dr. KV Sankaran, KFRI, Peechi - Indian Collaborator).

Doctor of Philosophy Degree: Doctoral thesis in Forestry (Mycology & Plant Pathology), topic entitled “Biodiversity of Plant Pathogenic Fungi in Natural Forests in the Kerala part of Western Ghats” from **Forest Research Institute University**, Dehradun, Uttarakhand, India (awarded 2008) (under the guidance of Dr. C. Mohanan, Scientist, KFRI, Peechi, Kerala, India).

Master’s Degree: in Life Sciences, Kuvempu University, Karnataka (1999-2001) First Rank/Gold Medal.

Bachelor’s Degree: in Botany, Kannur University, Kerala (1996-1999) First Class.

Projects handled as Scientist (PI and Co-PI) at Agharkar Research Institute, Pune:

1. Unravelling the symbiosis of algal and fungal partners in lichen family *Graphidaceae* and *Parmeliaceae* from the Western Ghats through polyphasic taxonomic approach and ecological studies (SERB (DST)- **Core Research Grant 2021-2023 as Principal investigator**)
2. Reappraisal of lichen family *Parmeliaceae* using morphology and molecular tools (DST-ARI Pune, May 2017 – 2020 as Co-PI)
3. Polyphasic taxonomy of genus *Aspergillus* and *Penicillium* from India (SERB (DST)- **Early Career Research Award - ECRA 2016 -2019 as PI**)
4. National Fungal Culture Collection – NFCCI- A DST National Facility (DST SERB/ARI, 2008– 2013 as Sci B; 2015 – 2022 as Co-PI)
5. Fungal Identification service (DST /ARI, 2015 March – 2022 as Co-PI)

6. Polyphasic taxonomy of *Mycosphaerellaceae*, *Nectriaceae* and *Trichocomaceae* (DST/ARI, March 2014 – 2016 March as PI)

Editor/Reviewer:

Senior Associate Editor – MycoAsia – Journal of Modern Mycology

Editor – Microbial Biosystems Journal, Egypt

Served as Reviewer- Mycological Progress Germany, Mycologia UK, Mycosphere, Phytotaxa NZ, MycoKeys, CREAM, Plant Disease, APS USA, Chiang Mai Journal of Science

Major Contributions to Science:

Published 06 new genera and about 30 new species and 04 new combinations to science

Other affiliations/recognition:

- Recognised teacher (Ph. D. Guide) in Botany and Microbiology Department, Savitribai Phule Pune University, Pune, Maharashtra, India.
- Represented India in WDCM-WFCC Meeting- Contributed to Global Catalogue of Microorganisms – Chinese Academy of Science, Beijing, China (Nov 2014).
- Member- Indian Chapter: *International Society for Fungal Conservation*, London, UK (Nov 2011 India-UK Scientists Meet).
- Life Member - Mycological Society of India.
- PhD Thesis Evaluator: Forest Research Institute (FRI), Dehradun; Adjudicator (PhD Evaluation) MG University Kottayam

Peer Reviewed Publications (International/National)/ Book Chapters/others:

- Chainika Gupta, Romesh Kumar Salgotra, Ulrike Damm, **K. C. Rajeshkumar (2022)** Phylogeny and pathogenicity of *Colletotrichum lindemuthianum* causing anthracnose of Phaseolus vulgaris cv. Bhaderwah-Rajmash from northern Himalayas, India. 3 Biotech 12:169 <https://doi.org/10.1007/s13205-022-03216-0>
- Crous PW, M. Sandoval-Denis*, MM Costa ...**Rajeshkumar KC**...et al. (2022) Fusarium and allied fusarioid taxa (FUSA) 1. Fungal Systematic and Evolution 9: 161–200.
- Wijayawardene NN, Phillips AJL, Pereira DS, Dai DQ, Aptroot A, Monteiro JS, Druzhinina IS, Cai F, Fan X, Selbmann L, Coleine C, Castañeda-Ruiz RF, Kukwa M, Flakus A, Fiuza PO, Kirk PM, **Rajeshkumar KC**, et al. 2022. Forecasting the number of species of asexually reproducing fungi (Ascomycota and Basidiomycota). Fungal Diversity <https://doi.org/10.1007/s13225-022-00500-5>
- Wijayawardene NN1, Hyde KD, Dai DQ, Sánchez-García M, Goto BT, Saxena RK, Erdoğan M, Selçuk F, **Rajeshkumar KC**, Aptroot A. et. Al. 2022. Outline of Fungi and fungus-like taxa–2021. Mycosphere 13(1), 53–453, Doi 10.5943/mycosphere/13/1/2
- Lad S, **Rajeshkumar KC**, Sruthi OP, Ashtekar N, Ansil PA, Verma RK, Wijayawardene NN. 2022. Resolving the phylogenetic placement of Gangliostilbe in the family Xenosporidiales (Xenosporidiales). MycoAsia 2022/01 (ISSN: 2582-7278)
- Ashtekar N, **Rajeshkumar KC**, Yilmaz N, Visagie CM (2022) A new Penicillium section Citrina species and series from India. Mycological Progress. 21(4):1-3.

- Wijayawardene NN, Phillips AJL, Tibpromma S, Dai DQ, Selbmann L, Monteiro JS, Aptroot A, Flakus A, **Rajeshkumar KC**, Coleine C, Pereira DS, Fan X, Zhang L, Maharachchikumbura SSN, Souza MF, Kukwa M, Suwannarach N, Rodriguez-Flakus P, Ashtekar N, Dauner L, Tang LZ, Jin XC, Karunarathna SC **2021** – Looking for the undiscovered asexual taxa; case studies from lesser studied life modes and habitats. *Mycosphere* 12(1), 1186–1229, Doi 10.5943/mycosphere/12/1/17
- Verma Rajnish Kumar; Prasher, I.B.; Sushma; Gautam, Ajay Kumar; **Rajeshkumar, Kunhiraman C.**; Kumar, Ashish; Castañeda-Ruiz, Rafael F. **2021**. *Neosporidesmium himachalense* sp. nov. from India and *Neosporidesmina* gen. nov. to accommodate *N. micheliae*. *Mycotaxon* 136 (3): 587-595(9)
- Verma Rajnish Kumar, Prasher IB, Sushma, Gautam Ajay Kumar, **KC Rajeshkumar**, Rafael F. Castañeda-Ruiz. **2021**. *Kirschsteiniothelia shimlaensis* sp. nov. from Himachal Pradesh, India. *Mycotaxon* 136 (2): 401-407.
- Garima A, **Rajeshkumar KC**. (2021) Challenges and Threats Posed by Plant Pathogenic Fungi on Agricultural Productivity and Economy. In *Fungal diversity, Ecology and Control Management*" (Eds. Rajpal, Singh and Navi) Springer, Switzerland.
- **Rajeshkumar KC**, Verma RK, Boonmee S, Chandrasiri S, Hyde KD, Ashtekar N, Lad SS, Wijayawardene SS. (2021) *Paradictyocheirospora tectonae*, a novel genus in the family Dictyosporiaceae from India. *Phytotaxa* 509 (3): 259-271.
- Saranyaphat Boonmee, Huanraluek N...**Rajeshkumar KC**, Ashtekar N, Lad SS, Wijayawardene NN,..et al...Hyde KD. (2021) Fungal diversity notes 1387–1511: taxonomic and phylogenetic contributions on genera and species of fungal taxa (*Cylondrotorula indica* gen. sp. nov). *Fungal Diversity* 111: 1-335.
- Crous PW, L. Lombard*, M. Sandoval-Denis*, ...**Rajeshkumar KC**...et al. (2021) *Fusarium*: more than a node or a foot cell. *Studies in Mycology* 98: 100–116
- Crous PW, Cowan DA, Maggs-Kölling G, N. Yilmaz... **Rajeshkumar KC**, Garima A. et al. (2021) Fungal Planet description sheets: 1182–1283. *Persoonia* 46: 313–528.
- Rajnish K. Verma, Prasher IB, Sushma, **Rajeshkumar KC**, A. K. Gautam, R. F. Castañeda-Ruiz. (2021) *Brykendrickia catenata* gen. & sp. nov., from India. *Mycotaxon* 136: 131–140. <https://doi.org/10.5248/136.131>
- **Rajeshkumar KC**, Braun U, Groenewald JZ, Lad SS, Ashtekar N, Fatima S, Anand G. (2021) Phylogenetic placement and reassessment of *Asperisporium pongamiae* as *Pedrocrousiella pongamiae* gen. et comb. nov. (*Mycosphaerellaceae*). *Fungal Systematics and Evolution* 7: 165-176. doi.org/10.3114/fuse.2021.07.08
- Ashtekar N, Anand G, Thulasiram HV, **Rajeshkumar KC**. (2020) Genus *Penicillium*: Advances and Application in the Modern era. In *New and Future Developments in Microbial Biotechnology and Bioengineering-Recent advances in the application of fungi and fungal metabolites: Current aspects*. (Eds. Joginder Singh Panwar & Praveen Gehlot). Elsevier, Amsterdam, Netherlands.

- Ashtekar N, Anand G, Prakash PY, **Rajeshkumar KC**. (2020) *Aspergillus terreus*: Taxonomy, Biology and Bioactive Secondary Metabolites with Potential Applications. In New and Future Developments in Microbial Biotechnology and Bioengineering-Recent advances in the application of fungi and fungal metabolites: Current aspects. (Eds. Joginder Singh Panwar & Praveen Gehlot). Elsevier, Amsterdam, Netherlands.
- Hyde KD, Dong Y, Phookamsak R. et al., **Rajeshkumar KC**, Haelewaters D, Mortimer PE, Zhao Q, Lumyong S, Xu J, Sheng J. (2020) Fungal diversity notes 1151–1276: taxonomic and phylogenetic contributions on genera and species of fungal taxa. *Fungal Diversity*. <https://doi.org/10.1007/s13225-020-00439-5>
- **Rajeshkumar KC**, Hyde KD, Wijayawardene NN, Madrid H, Lad SS, Boonmee S, Fatima S. (2019). *Tubeufia sahyadriensis* (Tubeufiaceae), a new dictyosporous anamorph from the Western Ghats, India. **Phytotaxa** 423 (3): 171–181 (IF 1. 18)
- **Rajeshkumar KC**, Yilmaz N, Marathe SD, Seifert KA. (2019). Morphology and multigene phylogeny of *Talaromyces amyrossmaniae*, a new synnematosus species belonging to the section *Trachyspermi* from India. **MycoKeys**. 45: 41–56. (IF 3.2)
- Wijayawardene NN, Pawłowska J, Letcher PM, Kirk PM, Humber RA, Schüßler A, Wrzosek M, Muszewska A... **Rajeshkumar KC** et al. (2018). Notes for genera: basal clades of Fungi (including *Aphelidiomycota*, *Basidiobolomycota*, *Blastocladiomycota*, *Calcarisporiellomycota*, *Caulochytriomycota*, *Chytridiomycota*, *Entomophthoromycota*, *Glomeromycota*, *Kickxellomycota*, *Monoblepharomycota*, *Mortierellomycota*, *Mucoromycota*, *Neocallimastigomycota*, *Olpidiomycota*, *Rozellomycota* and *Zoopagomycota*). **Fungal diversity**. 92(1): 43-129. (IF 14. 1)
- **Rajeshkumar KC**, Bhat DJ, Lad SS, Wijayawardene NN, Singh SK, Pandkar MR, Maurya DK, Ashtekar ND, Hyde KD. (2018). Morphology and phylogeny of *Tamhinispora srinivasanii* sp. nov. (Tubeufiaceae) from northern Western Ghats, India. **Phytotaxa** 346(1): 113–120 (IF 1. 18)
- Wijayawardene NN, Hyde KD, Divakar PK, **Rajeshkumar KC**, Weerahewa D, Delgado G, Wang Y, Fu L. (2018). Notes for genera update – Ascomycota: 6616-6821. **Mycosphere** 9(1): 115–140 (IF 2.0)
- Wijayawardene NN, Hyde KD, **Rajeshkumar KC**, Hawksworth DL, Madrid H, Kirk PM et al. (2017). Notes for genera: *Ascomycota*. **Fungal Diversity** 86 (1): 1–594. (IF 14. 1)
- Tibpromma S, Hyde KD, Jeewon R, Maharachchikumbura SSN, Liu JK, **Rajeshkumar KC** ... et al. (2017). Fungal diversity notes 491–602: taxonomic and phylogenetic contributions to fungal taxa. **Fungal Diversity** 83 (1): 1–261. (IF 14.1)

- **Rajeshkumar KC** and Prakash PY. (2017). Taxonomic Updates with Key Focus on Medically Important Aspergilli. In *Molecular Markers in Mycology*, 251-255., Springer International Publishing, Switzerland.
- **Rajeshkumar KC**, Crous PW, Groenewald JZ, Seifert KA. (2016). Resolving the phylogenetic placement of *Porobeltraniella* and allied genera in the *Beltraniaceae*. *Mycological Progress*. 15 (10-11): 1119-1136. (IF 1.9)
- M Hernández-Restrepo, Schumacher RK., Wingfield MJ., Ahmad I, Cai L, Duong TA, Edwards J, Gené J, Groenewald JZ, Jabeen S, Khalid AN, Lombard L, Madrid H, Marin-Felix Y, Marincowitz S, Miller AN, **Rajeshkumar KC**, Rashid A, Sarwar S, Stchigel AM, Taylor PWJ, Zhou N, Crous PW (2016) *Fungal Systematics and Evolution: FUSE 2. Sydowia* 68: 193–230. (IF 0.8)
- **Rajeshkumar KC**, Marathe SD, Madhusudhanan K, Castaneda-Ruiz RF (2016) Taxonomic re-evaluation and phylogenetic position of *Hemibeltrania cinnamomi* within Xylariales. *Mycotaxon* 131 (1):87–94. doi:10.5248/131.87
- **Rajeshkumar KC**, Marathe SD, Sneha S. Lad, Deepak K. Maurya, Sanjay K. Singh, Santosh V Swami (2016) Rediscovery of *Penicillium paradoxum* (Ascomycete, Aspergillaceae) from Maharashtra, India. *Journal of Threatened taxa* 8(6): 8919-8922.
- **Rajeshkumar KC** (2014) A reappraisal of the fungus genus *Phalangispora* with the rediscovery of *P.bharathensis* on leaf litter of *Mangifera indica* from the northern Western Ghats, India. *Journal of Threatened taxa* 6(9): 6278-6281.
- **Rajeshkumar KC** and Amy Y. Rossman. (2013). *Taiwanascus samuelsii* sp. nov., an addition to *Niessliaceae* from the Western Ghats, Kerala, India. *IMA Fungus* 4 (1), 1–4. doi:10.5598/imafungus.2013.04.01.01
- **Rajeshkumar KC** and Sharma R. (2013). *Tamhinispora* a new genus belongs to family *Tubeufiaceae* from the Western Ghats, India based on morphology and phylogenetic analysis. *Mycosphere* 4(2), 1–10, Doi 10.5943/mycosphere/4/2/2
- **Rajeshkumar KC**, Kajale S, Sutar SA and Singh SK. (2012). *Ellisembia karadkensis* sp. nov. from the Western Ghats, India. *Mycotaxon* 121:181-186.
- **Rajeshkumar KC** and Singh SK. (2012). *Manoharachariella indica* sp. nov. from the Western Ghats, India. *Mycotaxon* 120: 43-48.
- **Rajeshkumar KC**, Rahul P. Hapat, Swami SV, Singh PN & Singh SK. (2011). Morphology and molecular studies on *Pseudocercospora kamalii* sp. nov. a foliar pathogen on *Terminalia* from India. *Mycotaxon* 117: 227–237.
- **Rajeshkumar KC**, Rahul P. Hapat, Subhash B. Gaikwad & Sanjay K. Singh (2011). *Pilidiella crousii* sp. nov. from the northern Western Ghats, India. *Mycotaxon* 115: 155-162.

- **Rajeshkumar KC**, PN Singh, LS Yadav, Santosh Swami, SK Singh (2010). *Chaetospermum setosum* sp. nov. from the Western Ghats, India. *Mycotaxon* 113: 397-404.
- Mohanan C, **Rajeshkumar KC**, Yesodharan K (2010) *Coniella* causing foliage diseases in forest species in Kerala, India. *Indian journal of Forestry*, 33 (3): 355-360.
- Mohanan C, Ratheesh N, **Rajeshkumar KC** (2010). Teak (*Tectona grandis* L.f.) root trainer nurseries: Diseases and their management. *Indian journal of Forestry*, 33 (4): 519-523.
- SK Singh, LS Yadav, PN Singh, R Sharma & **Rajeshkumar KC** (2010). A new record of *Gliocephalotrichum* (Hypocreales) from India. *Mycotaxon* 114: 163-169.
- SK Singh, LS Yadav, PN Singh, G Senthilarasu, R Sharma, **Rajeshkumar KC** (2010). Exploration, Biosystematics and Ex-situ Conservation of Indigenous Fungi in NFCCI (WDCM-932) with special reference to *Gliocephalotrichum* (Hypocreales). In: *International Conference on Culture Collection (ICCC 12)*, 26th September- 1st October, 2010 at Florianopolis, Brazil.
- **Rajeshkumar KC**, LS Yadav, PN Singh, SK Singh (2009). Diversity of microfungi in Deccan Plateau of the Western Ghats, India, 36th Annual Meeting of Mycological Society of India, Goa University, Panaji, Goa 29-30 October 2009.
- Mohanan C, **Rajeshkumar KC** (2008). *Ganoderma* root and butt rot of *Acacia mangium* plantations in Kerala, India, *Indian Journal of Forestry*. Vol. 31 (3): 375-378.
- **Rajeshkumar KC**, 2008. *Biodiversity of plant pathogenic fungi in natural forests in the Kerala part of the Western Ghats, India*. Ph. D Thesis, Forest Research Institute University, Dehra Dun, India. 201p
- Mohanan C, N. Ratheesh, Nair LP, **Rajeshkumar KC** (2005). Disease Problems in Root Trainer Forest Nurseries in Kerala state and their Management. In: Lilja, J.R. Sutherland, M. Poteri and C. Mohanan (eds.) *Proceedings of the 5th meeting of IUFRO Working Papers of the Finnish Forest Research Institute*, Finnish Forest Research Institute, Finland. 7-12 pp

Workshops/Symposium organized at Agharkar Research Institute, Pune

- 1st Workshop on Taxonomy, *Ex-situ* conservation and Bioprospecting of Fungi (25th May-8th June 2012)
- 2nd Workshop on Taxonomy, *Ex-situ* conservation and Bioprospecting of Fungi (26th November -10th December 2012)
- 3rd Workshop on Isolation, Characterization and Conservation of Endophytes and potential applications in Agriculture and allied disciplines (19th-25th February 2015)

- 4th Workshop & 1st Certificate course on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (1st-30th June 2016)
- 2nd Certificate Course on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (21st-30th November 2016)
- 5th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (22nd- 31st May 2017)
- 6th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (21st-30th November 2017)
- 7th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (21st -28th May 2018)
- International symposium on fungal biology: advances, applications and conservation and 45th Annual Meeting of Mycological Society of India (MSI MEET 2018) (19th – 21st November) and post symposium workshop (22nd to 24th November 2018).
- 9th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (May 2019)
- 10th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi (20th November – 2nd Dec 2019)
- 11th Workshop on Taxonomy, Bio-diversity and *Ex-situ* conservation and applications of Fungi for ICFRE Scientists (March 2022)

Field of Interests:

- Fungal Taxonomy, Phylogeny, Ecology and Biodiversity, Plant Diseases and Quarantine.
- Fungal Biotechnology and Bio-prospecting, Lichen taxonomy and illustration.
- Scientific documentation, Teaching and illustration.

(Rajesh Kumar K.C.)