Dr. Samina Sarwar

Book Chapters Published

1. Muhammad Hanif, Zubaria Ashraf, Samar Bashir, Fatima Riaz, Rizwan Amanat, Nousheen Yousaf and **Samina Sarwar**. 2023. "Ectomycorrhizal Fungi as Biofertilizers in Forestry" in the book "Arbuscular Mycorrhizal Fungi in Agriculture - New Insights", chapter 10. DOI: 10.5772/intechopen.110090. Published by IntechOpen Publishers, Rijeka. Editor = Dr. Rodrigo De Sousa. url = https://doi.org/10.5772/intechopen.110090.
2. **Samina Sarwar**, Qudsia Firdous and Abdul Nasir Khalid. 2019. "Importance of Molecular and Phylogenetic Analyses for Identification of Basidiomycetes" in Book Recent Advances in Phylogenetics," ISBN 978-1-78985-890-7. Chapter 3, pp: 43-58. http://dx.doi.org/10.5772/intechopen.80671. Published by IntechOpen Publishers, Rijeka.

Research Publications

1. Ullah, Zia; Jabeen, Sana; Sarwar, Samina; Faisal, Muhammad; Khalid, Abdul. 2025. Hortiboletus swaticus sp. nov. (Boletaceae, Boletales) from Himalayan forests of Pakistan". Nordic Journal of Botany. 2025 (8): e04929. https://doi.org/10.1002/njb.04929.
2. Crous et al. (2025). *Fungal Planet description sheets: 1781–1866*. (Pakistani part, *Callistosporium khalidii* S. Haroon, Haqnawaz, H. Ali, S. Sarwar and Afshan, *sp. nov). Persoonia - Molecular Phylogeny and Evolution of Fungi, 54: 327–587. https://doi.org/10.3114/persoonia.2025.54.10*
3. Khalil, T., S. Sarwar*, S. Javad, A. Abid, M. Hanif, H. Khalil and A. Abrar. 2025. Green synthesis of silver nanoparticles using wild mushroom *Lepista sordida* and its antifungal activity. Pak. J. Bot., 57(3): DOI: http://dx.doi.org/10.30848/PJB2025-3(11).
4. Hyde KD et al. 2024 – The 2024 Outline of Fungi and fungus-like taxa. *Mycosphere* 15(1), 5146– 6239, Doi 10.5943/mycosphere/15/1/25.
5. Aleena Iqbal, Samina Sarwar*, Irmgard Krisai-Greilhuber, Talha Sajad, Muhammad Fiaz and Muhammad Hanif. 2024. Molecular phylogeny and phenology reveal a new fungistic record of *Pseudoomphalina khanspurensis* (Agaricales, Tricholomataceae) from Pakistan. *Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/Journal of Tianjin University Science and Technology*; 57(8): 131-140.
6. Farwa Batool and Samina Sarwar*. 2024. A COMPREHENSIVE ANALYSIS AND STATUS OF BOLETALES FROM PAKISTAN. *Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/Journal of Tianjin University Science and Technology*; 57: 05:2024.
7. Muhammad Hanif, Abdul Nasir Khalid, Samina Sarwar. 2024. First report of *Sparassis latifolia* (Basidiomycota) from Pakistan: evidence from morpho-anatomical and nrDNA data. *Pakistan Journal of Botany*, 56(4): DOI: http://dx.doi.org/10.30848/PJB2024-4(5)
8. Malka Saba, Abdul Nasir Khalid and Samina Sarwar. 2023. New species of *Mallocybe* (Agaricales, Inocybaceae) from Pakistan based on morphological and molecular evidence. *Mycokeys*, 99: 171–186. DOI: 10.3897/mycokeys.99.86844
9. Noor Fatima, Samina Sarwar*, Muhammad Shahbaz, Muhammad Hanif, Nousheen Yousaf, Amina Abrar. 2023. Characterization of mycoflora associated with the rhizosphere of rice crop

from selected sites in district Gujranwala, Punjab, Pakistan. *Plant Protection*, 07 (02): 245-254. DOI: 10.33804/pp.007.02.4716.

10. Hira Bashir, Samina Sarwar*, Irmgard Krisai-Greilhuber, Ayesha Hanif and Abdul N. Khalid. 2023. A new fungistic record of *Boletus himalayensis* - a morphologically complex porcini mushroom from Pakistan. *Bangladesh Journal of Plant Taxonomy*, 30(1): 99-106 https://doi.org/10.3329/bjpt.v30i1.67048.
11. Muhammad ASIF, Qudsia FIRDOUS, Aiman IZHAR, Abdul Rehman NIAZI, Samina SARWAR, Abdul Nasir KHALID. 2023. Molecular and morphological studies reveal a new species of *Panaeolus* (Agaricales, Basidiomycota) from Punjab, Pakistan. *European Journal of Taxonomy*, 888: 77–96
12. Sarwar, S*., M. Saba, M. Hanif, A. Abrar, M. Ulfat and H. Khalil. 2023. Utilization of fruit peels to inhibit aflatoxins synthesis by *Aspergillus* species: a biotreatment of two pulses *Cicer arietinum* and *Vigna radiata* for safe long–term storage. *Pakistan Journal of Botany*, 55(2): DOI: http://dx.doi.org/10.30848/PJB2023-2(38)
13. Amina Abrar, Samina Sarwar, Moneeza Abbas, Nadia Ghani, Ammara Fatima, Zahra Asghar and Arifa Tahir. 2023. Identification of locally isolated entomopathogenic *Fusarium* species from the soil of Changa Manga Forest, Pakistan and evaluation of their larvicidal efficacy against *Aedes aegypt*. Brazilian Journal of Biology. 83, e246230 | https://doi.org/10.1590/1519-6984.246230.
14. Muhammad Hanif, Bushra Arshad, Samina Sarwar & Nousheen Yousaf. 2022. First report of the ectomycorrhizal status of *Clavariadelphus pakistanicus* Hanif & Khalid based on morphotyping and molecular evidence. Bangladesh Journal of Plant Taxonomy. 29(1): 129136.
15. Muhammad Hanif, Abdul Nasir Khalid, Samina Sarwar and Nousheen Yousaf. (2022). Ectomycorrhizal Status of *Pinus wallichiana* (Blue Pine) Growing in Himalayan Moist Temperate Forests of Pakistan. Pakistan Journal of Botany, 54(1): 275-283.
16. Samina Sarwar*, Arooj Naseer & Abdul N. Khalid. 2021. *Cyanoboletus macroporus* (Boletaceae), a new bolete species from Pakistani forests. *Karstenia*, 59(1–2): 78–87.
17. Samina Sarwar*, Zeb Siddique, Ayesha Bashir and Abdul Nasir Khalid. 2021. *Rubroboletus himalayensis* Sarwar & Khalid - a new mushroom from Pakistan. Bangladesh Journal of Plant Taxonomy, 28(1): 17–26.
18. Dima B., Brandrud T.E., Corriol G., Jansen G.M., Jordal J.B., Khalid A.N., Larsson E., Lorås J., Morozova O.V., Naseer A., Noordeloos M.E., Rossi W., Santamaria S., Sarwar S., Sesli E., Usman M., Afshan N.S., Ahmad I., Banerjee A., Banerjee K., Bendiksen E., Colombo D.R.S., De Kesel A., Dovana F., Ferisin G., Hussain S., Islam S., Jesus A.L., Kaygusuz O., Krisai-Greilhuber I., Mahammad S., Mishra D.K., Nath P.S., da Paixão S.C.O., Panja B., Papp V., Pires-Zottarelli C.L.A., Radnóti Á., Rana D., Saha R., Türkekul I˙. & Haelewaters D. (2021). Fungal Systematics and Evolution: FUSE 7. – Sydowia 73: 271–339.
19. Samina Sarwar*, Tanzeela Aziz, Muhammad Hanif, Sobia Ilyas, Malka Saba, Sana Khalid and Muhammad Fiaz. 2020. Plectological and molecular identification of wild economically important Russulales mushrooms from Pakistan and their antifungal potential against potentially food pathogenic fungus *Aspergillus niger*. Bangladesh Journal of Plant Taxonomy. 27(1): 67–77.
20. Amina Abrar, Tahira Aziz Mughal, Samina Sarwar, Muhammad Oneeb, Kausar Abdullah Malik, Samia Saif & Moneeza Abbas. 2020. *Aspergillus Pakistanicus*: A new

Entomopathogenic fungi isolated from soil of Changa Manga Forest, Pakistan based on Microscopy and Phylogenetic analysis. Applied Ecology and Environmental Research. 18(3):3795-3804. ISSN: 1589-1623.

21. Malka Saba, Junaid Khan, Samina Sarwar, Hassan Sher, Abdul Nasir Khalid. 2020. *Gymnopus barbipes* and *G. dysodes*, new records for Pakistan. Mycotaxon. 135: 203–212.
22. Amina Abrar, Zarafshan Ali, Tahira Aziz Mughal, Kausar Malik, Samina Sarwar, Muhammad Oneeb, Moneeza Abbas, Husnain Qamar and Rida Nasir. 2019. Effects of entomopathogenic *Aspergillus flavus* on tomato plant (*Solanum lycopersicum*) endophytic activity under agro-climatic condition of Lahore, Punjab-Pakistan. *Pure and Applied Biology*, 9 (1), 517-527.
23. Farwa Batool, Samina Sarwar*, Khajista Jabeen, Tooba Shafiq & Abdul Nasir Khalid. 2019. Assessment of Antifungal Activity of Some Boletes Mushrooms Found in Himalayan Range of Pakistan Against Some Fungi. Journal of Pure and Applied Biology. 8(4): 2257-2261.
24. Samina Sarwar*, Tanzeela Aziz, Muhammad Hanif, Sobia Ilyas and Shabnum Shaheen. 2019. *Russula swatica*: a new species of *Russula* based on molecular, LM and SEM analyses from swat valley of Khyber Pakhtunkhwa Province of Pakistan. Microscopy Research and Technique, 82(10):1700–1705.
25. Sarwar S*, Javed M and Nisar N. 2019. Biodegradation Capability of Native Fungi Present in the Effluent of a Local Pharmaceutical Industry near Lahore, Pakistan. Open Access Journal of Mycology & Mycological Sciences, 2(1): 1-7.
26. AROOJ Naseer, SAMINA Sarwar*, ABDUL NASIR Khalid, ROSANNE Healy & MATTHEW E. Smith. 2019. *Hortiboletus kohistanensis*: a new species from temperate and subalpine oak forests of Pakistan. Phytotaxa. 388 (3): 239–246.
27. Iqra Saeed, S. Shaheen, K. Hussain, M.A.Khan, M. Jaffer, T. Mehmood, S. Khalid, S. Sarwar, A. Tahir, F. Khan. 2018. Assessment of mold and yeast in some bakery products of Lahore, Pakistan based on LM and SEM. Microscopy Research and Technique, 82(2): 85-91.
28. Samina Sarwar*, Sana Jabeen, Ishtiaq Ahmed, Bryn M. Dentinger & Abdul Nasir Khalid (2018). *Boletus himalayensis* (Basidiomycota; Boletales), a new porcini species from Pakistan. Turkish Journal of Botany. 42: 790-800.
29. S. Sarwar*, M. Saba, A.N. Khalid and B.M. Dentinger. (2018). *Suillus himalayensis* (Boletales; Basidiomycota; fungi) and first report of its ectomycorrhizae with *pinus wallichiana* from coniferous forests of Pakistan. The Journal of Animal and Plant Sciences, 28(2): 576-584.
30. Samina S, Tahreem M, Shabnum S, Farah K, Qudsia F, Muhammad H 2017 – Micromycete diversity associated with the rhizospheres of plants from different polluted soils of Lahore, Pakistan. Current Research in Environmental & Applied Mycology 7(3), 193–202.
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32. Samina Sarwar*, Sana Jabeen, Abdul Nasir Khalid and Bryn Masson Dentinger (2016). Molecular and phylogenetic analysis of fleshy pored mushrooms*: Neoboletus luridiformis* and *Hortiboletus rubellus* from western Himalayan range of Pakistan. *Pakistan Journal of Botany*, 48(5): 2077-2083.

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35. S. Sarwar*, A. N. Khalid & A. R. Niazi. (2014). *Tylopilus*: a new species and a new record from Pakistan. *Mycotaxon*. 128: 1-10.
36. S. Sarwar*, A. N. Khalid. (2014). *Boletus pakistanicus* sp. nov. from coniferous forests of Pakistan based on molecular characterization. *International Journal of Agriculture & Biology* 16(3): 663–667.
37. S. Sarwar*, A.N. Khalid. (2014). Diversity and phylogeny of *Suillus* (*Suillaceae, Boletales*) from coniferous forests of Pakistan (Asia). *International Journal of Agriculture & Biology*, 16 (3): 489–497.
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