Nuttapon (Nat) Pombubpa

Contact

Ph.D. candidate in Plant Pathology
Microbiology and Plant Pathology Department
University of California Riverside
900 University Ave.
Riverside, CA 92521

Email: npomb001@ucr.edu
Website: natpombubpa.github.io
Google scholar: Nat Pombubpa
Researchgate: Nat Pombubpa
Phone: +1 612-802-7784

Education

University of California Riverside Sept. 2015 – Present
Ph.D. in Plant Pathology, Microbiology and Plant Pathology Department *Riverside, CA*

- **Advisor**: Dr. Jason E. Stajich
- **Coursework**: Intro to Plant pathology, Intro to Mycology, Advance Mycology, Bacterial and Viral diseases, Biological Soil Crusts of Joshua Tree National Park, Colloquium on The Principles of Plant Pathology, Community Ecology (Lichen Ecology), and Phytopathogens: Nematodes

University of Colorado Boulder Aug. 2011 – May 2015
Bachelor of Arts and Science (Summa cum laude) *Boulder, CO*

- **Double Majors** in Molecular, Cellular, and Developmental Biology (MCDB) and Ecology and Evolutionary Biology (EBIO)
- **Cumulative GPA** 3.802; Dean's List in Fall 2011, Spring 2012, 2013, and 2014
- **Coursework**: Intro to Cellular and Molecular Biology, Principles of Genetics, Molecular Cell Biology I, Molecular Cell Biology II, Evolutionary Biology, Microbial Diversity and Biosphere, Microbiology, General Chemistry 1, General Chemistry 2, Organic Chemistry 1, General Physics 1, General Physics 2, Statistic and Research Methods, Survey of Biochemistry, Math and Science Education

Honors and Awards

Royal Thai Government Scholarship	2010 – Present
Dissertation Research Grant	2020 – 2021
Dissertation Year Program Award	2020
Graduate Student Association Travel Award 2016, 2017, 2018, 2019 and 2020	2016 – 2020
Earle C. Anthony Graduate Student Travel Award	2019
L.J. Klotz Memorial Award 2016, 2017, 2018, and 2019	2016 – 2019
Translational Mycology Research Award, Mycological Society of America	2018
LTER graduate fellowship summer 2018, Jornada long-term ecological research	2018
UCR Grad Slam 2018: Honorable Mention award	2018
Robert Lee Graduate Student Research Grant	2015 – 2017
Undergraduate Research Opportunities Program Award, CU Boulder	2013
Search for Young Scientists: Special Award, Penang, Malaysia	2010

Publications

1. Collins, C.G., Spasojevic, M., Alados , C., Aronson, E., Benavides, J., Cannone, N., Caviezel, C., Grau, O., Guo, H., Kudo, G., Kuhn, N., Müllerová, J., Phillips, M., **Pombubpa , N.**, Reverchon , F., Shulman , H., Stajich, J.E., Stokes, A., Weber, S., Diez, J., 2020. Belowground impacts of alpine woody encroachment are determined by plant traits, local climate, and soil conditions. *Global Change Biology.*

2. **Pombubpa, N.**, Pietrasiak, N., De Ley, P. and Stajich, J.E., 2020. Insights into dryland biocrust microbiome: geography, soil depth and crust type affect biocrust microbial communities and networks in Mojave Desert, USA. *FEMS Microbiology Ecology*, 96(9), p.fiaa125.

3. **Pombubpa, N.**, Kurbessoian, T., La Doux, T., Stajich, J.E., Pietrasiak, N., 2020. Exploring the Microbial Diversity in Biological Soil Crusts at Joshua Tree National Park (U.S. National Park Service). National Parks Service, U.S. Department of the Interior, www.nps.gov/articles/exploring-the-microbial-diversity-in-biological-soil-crusts-at-joshua-tree-national-park.htm

4. Coleine, C., **Pombubpa, N.**, Zucconi, L., Onofri, S., Turchetti, B., Buzzini, P., Stajich, J.E. and Selbmann, L., 2020. Uncovered Microbial Diversity in Antarctic Cryptoendolithic Communities Sampling three Representative Locations of the Victoria Land. *Microorganisms*, 8(6), p.942.

5. Coleine, C., Stajich, J.E., **Pombubpa, N.**, Zucconi, L., Onofri, S. and Selbmann, L., 2020. Sampling strategies to assess microbial diversity of Antarctic cryptoendolithic communities. *Polar Biology*, 43(3), pp.225-235.

6. Coleine, C., **Pombubpa, N.**, Zucconi, L., Onofri, S., Stajich, J.E. and Selbmann, L., 2020. Endolithic fungal species markers for harshest conditions in the McMurdo Dry valleys, Antarctica. *Life*, 10(2), p.13.

7. Collins, C.G., Spasojevic, S. J., **Pombubpa, N.** and Diez, J.M., 2020. Beyond Enemy Release: Multiple microbial mechanisms influence plant-soil feedbacks and range expansion. *In review*

8. Coleine, C., Stajich, J.E., **Pombubpa, N.**, Zucconi, L., Onofri, S., Canini, F. and Selbmann, L., 2019. Altitude and fungal diversity influence the structure of Antarctic cryptoendolithic Bacteria communities. *Environmental Microbiology Reports*, 11(5), pp.718-726.

9. Warren, S.D., Clair, L.L.S., Stark, L.R., Lewis, L.A., **Pombubpa, N.**, Kurbessoian, T., Stajich, J.E. and Aanderud, Z.T., 2019. Reproduction and dispersal of biological soil crust organisms. *Frontiers In Ecology Evolution* 7: 344., 7, p.344.

10. Coleine, C., Stajich, J.E., Zucconi, L., Onofri, S., **Pombubpa, N.**, Egidi, E., Franks, A., Buzzini, P. and Selbmann, L., 2018. Antarctic cryptoendolithic fungal communities are highly adapted and dominated by Lecanoromycetes and Dothideomycetes. *Frontiers in microbiology*, 9, p.1392.

11. Coleine, C., Zucconi, L., Onofri, S., **Pombubpa, N.**, Stajich, J.E. and Selbmann, L., 2018. Sun exposure shapes functional grouping of fungi in cryptoendolithic Antarctic communities. *Life*, 8(2), p.19.

12. Collins, C.G., Stajich, J.E., Weber, S.E., **Pombubpa, N.** and Diez, J.M., 2018. Shrub range expansion alters diversity and distribution of soil fungal communities across an alpine elevation gradient. *Molecular ecology*, 27(10), pp.2461-2476.

13. Abarenkov, K., Adams, RI., Irinyi, L., Agan, A., Ambrosio, E., Antonelli, A., Bahram, M., Bengtsson-Palme, J., Bok, G., Cangren, P., Coimbra, V., Coleine, C., Gustafsson, C., He J., Hofmann, T., Kristiansson, E., Larsson, E., Larsson, T., Liu, Y., Martinsson, S., Meyer, W., Panova, M., **Pombubpa, N.**, Ritter, C., Ryberg, M., Svantesson, S., Scharn, R., Svensson, O., Töpel, M., Unterseher, M., Visagie, C., Wurzbacher, C., Taylor, AFS., Kõljalg, U., Schriml, L., Nilsson, RH. 2016. Annotating public fungal ITS sequences from the built environment according to the MIxS-Built Environment standard–a report from a May 23-24, 2016 workshop (Gothenburg, Sweden). *MycoKeys*, 16, p.1-15.

Experience

Graduate Student Researcher at Professor Jason E. Stajich Laboratory — 2015 – Present
Microbiology and Plant Pathology Department, University of California Riverside

Honor Thesis Project at Professor Steven K. Schmidt Laboratory — 2014 – 2015
Department of Ecology and Evolutionary Biology, University of Colorado Boulder

Research Assistant at Professor Linda Kinkel Laboratory — 2014
Plant Pathology Department, University of Minnesota Twin Cities

Research Assistant at Professor Diana Nemergut Laboratory — 2013 – 2014
The Institute of Arctic and Alpine Research, University of Colorado Boulder

High School Senior Science Project at Professor Pahol Kosiyachinda Laboratory — 2009 – 2010
Department of Biology, Mahidol University, Thailand

Invited Seminars and Conference Presentation

2020 ASA-CSSA-SSSA International Annual Meeting (Virtual)	2020
Department of Microbiology, Mahidol University (Bangkok, Thailand)	2020
The Fourth International Workshop on Biological Soil Crusts (Queensland, Australia)	2019
Mycological Society of America 2019 (Minneapolis, MN)	2019
Zygolife Genomic Workshop 2019 (Riverside, CA)	2019
New Mexico State University (Las Cruces, NM)	2018
The 11th International Mycological Congress (San Juan, PR)	2018
Jornada LTER Desert Ecology Short-Course and Seminar (Las Cruces, NM)	2018
Mycological Society of America 2017 (Athens, GA)	2017
The Third International Workshop on Biological Soil Crusts (Moab, UT)	2016
Mycological Society of America 2016 (Berkeley, CA)	2016
Sloan Microbiology of the Built Environment Data Analysis (San Diego, CA)	2016

Teaching Experience

Teaching Assistant for Microbiology Laboratory (MCBL/BIOL 121L) in Spring 2020	2020
Teaching Assistant for Microbial evolution (MCBL 127) in Winter 2020	2020
Lecture and Laboratory instructor, "Fungi in Biocrust", at Biological Soil Crusts of Joshua Tree National Park Fall 2019 Workshop (Joshua Tree National Park, CA)	2019
Workshop instructor, "Microbiome Data Processing (using AMPtk)", Zygolife Genomic Workshop 2019 at University of California Riverside (Riverside, CA)	2019
Teaching Assistant for Microbiology Laboratory (MCBL/BIOL 121L) in Winter 2019	2019
Workshop instructor, "Microbial Community Analysis (MiSeq Next Generation Sequencing data) using High-Performance Computing Cluster", at New Mexico State University (Las Cruces, NM)	2018
Workshop instructor, "Introduction to Unix: command-line interface", at New Mexico State University (Las Cruces, NM)	2018
Lecture and Laboratory instructor, "Fungi in Biocrust", at Biological Soil Crusts of Joshua Tree National Park Spring 2018 Workshop (Joshua Tree National Park, CA)	2018
Guest instructor, "Biocrust at Granite Mountain, CA", at Study USA class of the University of Mississippi (Granite Mountain, CA)	2018
Teaching Assistant for Microbiology Laboratory (MCBL/BIOL 121L) in Winter 2018	2018
Teaching Assistant for Microbiology Laboratory (MCBL/BIOL 121L) in Winter 2017	2017
Learning Assistant for Intro to Molecular and Cellular Biology in Fall 2013	2013

Extracurricular Activity

Thailand Educational Funding Network (TEF-Net) co-founder and www.tef-net.com webmaster	2017 – Present
Genomics Building Emergency Staff (BES)	2016 – Present
Plant Pathology Graduate Student Association, University of California Riverside	2015 – Present
Mycological Society of America Diversity & Inclusion student representative	2018
Vice President of Plant Pathology Graduate Student Association	2016 – 2017
Plant Pathology Graduate Student Association Outreach Committee	2016 – 2017
Thai Student Association, University of Colorado Boulder	2011 – 2015
President of Thai Student Association at University of Colorado Boulder	2013 – 2014
Vice President of Thai Student Association at University of Colorado Boulder	2011 – 2013

Last Update: November 20, 2020