Demetris Taliadoros

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Github: https://github.com/Jimi92

Nationality: Cypriot

Home Town: Aglantzia

Current residence: Plön, Germany

Research experience

Ph.D. research, Environmental Genomics Group, Max Planck Institute for Evolutionary Biology (2020-2023)

- Investigating the genetic basis of local adaptation and host specialization of plant pathogenic fungi
- Inferring demographic histories of different fungal plant pathogen populations using simulation-based (e.g., ABC) and Sequential Markov coalescence algorithms
- Identifying genomic regions evolving under strong directional selection through genomic scans for selective sweep signatures within and between populations
- Identifying genomic features relevant for local adaptation, located in selective sweep regions

Relevant skills

- Strong foundation in population genetics
- Proficient in next-generation sequence analysis
- Experienced in awk, R, and python

Teaching experience

2021-2022: Population Genomics (biol-244), Christian Albrechts University of Kiel, Kiel, Germany

Responsibilities:

- Guide students through practical exercises using state-of-art population genomic software and packages on the terminal and in R
- Lecture on genetic effects of population structure: A summary of concepts and tools.

2021-2023: Supervision of internships, BSc, and MSc projects

- Rune Sommerkamp (2022, Inter): Presence/absence variation as an indicator of the demographic history and selection in different plant pathogens
- Rebekah Jolicoeur (2021, Intern): Host-driven divergence of *Cercospora beticola* populations in the UK. The case of crop-specialized lineages

Education

2020-2023: (anticipated):	Ph.D. Evolutionary biology, Kiel University, Kiel, Germany
2016-2019:	M.Sc. Biology, Wageningen University, Netherlands • Specialization: Biodiversity and Evolution • Dissertation: Population genomics and local adaptation of barley net blotch agent, *Pyrenophora teres*
2016-2019:	M.Sc. Forest and Nature Conservation, Wageningen, Netherlands • Specialization: Ecology • Dissertation: Life history traits of *Nasonia vitripennis*: The interplay of larval competition, sex ratio, and emergence time
2012-2016:	B.Sc. Agricultural Sciences, Biotechnology, and Food Science Cyprus University of Technology • Specialization: Plant Science and Technology • Dissertation: Identification and control of nematodes in Cypriot banana plantations. Assessment of a novel nematicide

Referees

1. Prof. Dr. Eva Stukenbrock, Environmental Genomics Group, Max Planck Institute for Evolutionary Biology, Ploen and Christian Alrbechts University, Kiel, Germany, (Ph.D. advisor). email: stukenbrock@evolbio.mpg.de, Tel: +49 431 880 6368
2. Dr. Alice Feurtey, Laboratory of Evolutionary Genetics, Institute of Biology, University of Neuchâtel, CH-2000 Neuchâtel, and Plant Pathology, D-USYS, ETH Zurich, CH-8092 Zurich, Switzerland (M.Sc. daily supervisor). Email: alice.feurtey@usys.ethz.ch, Tel: +41 44 6323 871

Publications

1. **Taliadoros D**, Stukenbrock EH. The use of evolutionary analyses to predict functionally relevant traits in filamentous plant pathogens. Curr Opin Microbiol. 2023;73:102244.

2. Spanner R, **Taliadoros D**, Richards J, Rivera-Varas V, Neubauer J, Natwick M, et al. Genome-Wide Association and Selective Sweep Studies Reveal the Complex Genetic Architecture of DMI Fungicide Resistance in Cercospora beticola. Genome Biol Evol. 2021;13(9):1–17.

3. Ebert MK, Rangel LI, Spanner RE, **Taliadoros D**, Wang X, Friesen TL, et al. Identification and characterization of Cercospora beticola necrosis-inducing effector CbNip1. Vol. 22, Molecular Plant Pathology. 2021. p. 301–16.

4. Kanetis LI, **Taliadoros D**, Makris G, Christoforou M. A Novel Seimatosporium and Other Sporocadaceae Species Associated with Grapevine Trunk Diseases in Cyprus. Plants. 2022 Oct 1;11(20).

5. **Taliadoros D,** Feurtey A, Wyatt N, Gladieux P, Friesen T, Stukenbrock H. E. Emergence and spread of the barley net blotch pathogen coincided with crop domestication and cultivation history. Available from: https://doi.org/10.1101/2023.07.28.550921 (under peer-review)