

Complete list of publications (in international peer-reviewed journals)

2020

Mishra B, Ploch S, Runge F, Schmuker A, Xia X, Gupta DK, Sharma R, Thines M (2020). The genome of *Microthlaspi erraticum* (Brassicaceae) provides insights into the adaptation to highly calcareous soils. **Frontiers in Plant Science** 11:943.

Wijayawardene N, et al., [(100+ co-authors), Thines M (last author)] (2020) Outline of Fungi and fungus-like taxa. **Mycosphere** 11:1060-1456

Thines M, Sharma R, Rodenburg SY, Gogleva A, Judelson HS, Xia X, et al. (2020) The Genome of *Peronospora belbahrii* reveals high heterozygosity, a low number of canonical effectors, and TC-rich promoters. **Molecular Plant-Microbe Interactions** MPMI-07-19-0211-R.

Loizides M, Alvarado P, Polemis E, Dimou DM, Zervakis GI, Thines M, et al. (2020) Multiple evolutionary origins of sequestrate species in the agaricoid genus *Chlorophyllum*. **Mycologia** 112(2):400-22.

Hoffmeister M, Maier W, Thines M, Becker Y (2020) Tracking host infection and reproduction of *Peronospora salviae-officinalis* using an improved method for confocal laser scanning microscopy. **Plant Pathology**. 2020.

Hoffmeister M, Gabriel D, Thines M, Maier W (2020) Epidemiology of sage downy mildew, *Peronospora salviae-officinalis*. **European Journal of Plant Pathology**. 156:1147-62.

Hoffmeister M, Ashrafi S, Thines M, Maier W (2020) Two new species of the *Peronospora belbahrii* species complex, *Pe. choii* sp. nov. and *Pe. salviae-pratensis* sp. nov., and a new host for *Pe. salviae-officinalis*. **Fungal Systematics and Evolution**, in press.

Buaya AT, Ploch S, Kraberg A, Thines M (2020) Phylogeny and cultivation of the holocarpic oomycete *Diatomophthora perforans* comb. nov., an endoparasitoid of marine diatoms. **Mycological Progress** 19:441-454.

Buaya A, Thines M (2020) *Bolbea parasitica* gen. et sp. nov., a cultivable holocarpic parasitoid of the early-diverging Saprolegniomycetes. **Fungal Systematics and Evolution**, in press.

2019

Wittwer C, Stoll S, Thines M, Nowak C (2019) eDNA-based crayfish plague detection as practical tool for biomonitoring and risk assessment of *A. astaci*-positive crayfish populations. **Biological Invasions** 21(4):1075-88.

Vallet M, Baumeister TU, Kaftan F, Grabe V, Buaya A, Thines M, et al. (2019) The oomycete *Lagenisma coscinodisci* hijacks host alkaloid synthesis during infection of a marine diatom. **Nature Communications**. 10(1):1-8.

Thines M, Denton GJ, Beal EJ, Kilty A, Denton JO, Shin H-D, et al. (2019) *Peronospora aquilegiicola* sp. nov., the downy mildew affecting columbines in the UK is an invasive species from East Asia. **European Journal of Plant Pathology**. 155(2):515-25.

Thines M (2019) Fixing loose ends in downy mildew research—the Peronosporaceae of Kazakhstan by Nina Ivanovia Gaponenko. **Schlechtendalia**. 36:133-9.

Thines M (2019) An evolutionary framework for host shifts—jumping ships for survival. **New Phytologist**. 224(2):605-617.

Tanaka S, Schweizer G, Rössel N, Fukada F, Thines M, Kahmann R (2019) Neofunctionalization of the secreted Tin2 effector in the fungal pathogen *Ustilago maydis*. **Nature Microbiology** 4(2):251-7.

Sharma R, Ökmen B, Doehlemann G, Thines M (2019) Saprotrophic yeasts formerly classified as *Pseudozyma* have retained a large effector arsenal, including functional Pep1 orthologs. **Mycological Progress** 18(5):763-8.

Kruse J, Thines M (2019) *Entyloma lagoeciae*: a new smut fungus occurring on the annual Apiaceae *Lagoecia cuminoides*. **Nova Hedwigia** 108(1-2):173-84.

Hassett BT, Thines M, Buaya A, Ploch S, Gradinger R (2019) A glimpse into the biogeography, seasonality, and ecological functions of arctic marine Oomycota **IMA Fungus** 1(1):6.

Buaya AT, Ploch S, Thines M (2019) Rediscovery and phylogenetic placement of *Olpidiopsis gillii* (de Wildeman) Friedmann, a holocarpic oomycete parasitoid of freshwater diatoms. **Mycoscience** 60(3):141-6.

Buaya A, Thines M (2019) Diatomophthoraceae—a new family of olpidiopsis-like diatom parasitoids largely unrelated to *Ectrogella*. **Fungal Systematics and Evolution**. 2019.

Buaya A, Thines M (2019) *Miracula moenusica*, a new member of the holocarpic parasitoid genus from the invasive freshwater diatom *Pleurosira laevis*. **Fungal Systematics and Evolution** 3(1):35-40.

Buaya A, Ploch S, Inaba S, Thines M (2019) Holocarpic oomycete parasitoids of red algae are not *Olpidiopsis*. **Fungal Systematics and Evolution** 4(1):21-31.

Buaya A, Kraberg A, Thines M (2019) Dual culture of the oomycete *Lagenisma coscinodisci* Drebes and *Coscinodiscus* diatoms as a model for plankton/parasite interactions. **Helgoland Marine Research** 73(1):2.

Bode E, Heinrich AK, Hirschmann M, Abebew D, Shi YN, Vo TD, et al. [incl. Thines M] (2019) Promoter activation in Δ hfq mutants as an efficient tool for specialized metabolite production enabling direct bioactivity testing **Angewandte Chemie**. 131(52):19133-9.

Bennett R, Thines M (2019) Revisiting Salisapiliaceae. **Fungal Systematics and Evolution**. 3(1):353-66.

Bandini D, Oertel B, Ploch S, Ali T, Vauras J, Schneider A, et al. [Thines M (senior author)] (2019) Revision of some central European species of *Inocybe* (Fr.: Fr.) Fr. subgenus *Inocybe*, with the description of five new species. **Mycological progress**. 18(1-2):247-94.

Bandini D, Oertel B, Moreau P-A, Thines M, Ploch S (2019) Three new hygrophilous species of *Inocybe*, subgenus *Inocybe*. **Mycological Progress** 18(9):1101-19.

Ali T, Muñoz-Fuentes V, Buch A-K, Çelik A, Dutbayev A, Gabrielyan I, et al. [Thines M (senior author)] (2019) Out of Transcaucasia: Origin of Western and Central Palearctic populations of *Microthlaspi perfoliatum*. **Flora** 253:127-41.

Zamora JC, Svensson M, Kirschner R, Olariaga I, Ryman S, Parra LA, et al. [incl. Thines M] (2019) Considerations and consequences of allowing DNA sequence data as types of fungal taxa. **IMA Fungus**. 9(1):167.

Wittwer C, Stoll S, Strand D, Vrålstad T, Nowak C, Thines M (2019) eDNA-based crayfish plague monitoring is superior to conventional trap-based assessments in year-round detection probability. **Hydrobiologia** 807(1):87-97.

Wittwer C, Nowak C, Strand DA, Vrålstad T, Thines M, Stoll S (2019) Comparison of two water sampling approaches for eDNA-based crayfish plague detection. **Limnologica** 70:1-9.

Thines M, Crous PW, Aime MC, Aoki T, Cai L, Hyde KD, et al. (2019) Ten reasons why a sequence-based nomenclature is not useful for fungi anytime soon. **IMA Fungus** 9(1):177-83.

Thines M (2019) Oomycetes. **Current Biology** 28(15):R812-R3.

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Sharma R, Oekmen B, Doehlemann G, Thines M (2019) *Pseudozyma* saprotrophic yeasts have retained a large effector arsenal, including functional Pep1 orthologs. **Mycological Progress** 18:763-768.

2018

Ploch S, Choi Y-J, Thines M (2018) The only known white blister rust on a basal angiosperm is a member of the genus *Albugo*. **Organisms Diversity & Evolution** 18(1):63-9.

Park JH, Thines M, Lee HB, Shin H-D, Choi Y-J (2018) *Bremia polycephala* and *Bremia sawadae* spp. nov.(Peronosporaceae; Oomycota), parasitic to Northeast Asian Asteraceae. **Nova Hedwigia** 107(3-4):303-14.

Mishra B, Gupta DK, Pfenninger M, Hickler T, Langer E, Nam B, et al. [Thines M (senior author)] (2018) A reference genome of the European beech (*Fagus sylvatica* L.). **GigaScience** 7(6):giy063.

Mishra B, Choi Y-J, Thines M (2018) Phylogenomics of *Bartheletia paradoxa* reveals its basal position in Agaricomycotina and that the early evolutionary history of basidiomycetes was rapid and probably not strictly bifurcating. **Mycological Progress** 17(3):333-41.

Kruse J, Piatek M Lutz M, Thines M (2018) Broad host range species in specialised pathogen groups should be treated with suspicion—a case study on *Entyloma* infecting *Ranunculus*. **Persoonia** 41:175.

Kruse J, Kummer V, Shivas RG, Thines M (2018) The first smut fungus, *Thecaphoraanthemidis* sp. nov.(Glomosporiaceae), described from *Anthemis* (Asteraceae). **MycoKeys** 2018(41):39.

Kruse J, Dietrich W, Zimmermann H, Klenke F, Richter U, Richter H, et al. [Thines M (senior author)] (2018) *Ustilago* species causing leaf-stripe smut revisited. **IMA Fungus** 9(1):49-73.

Gupta DK, Rühl M, Mishra B, Kleofas V, Hofrichter M, Herzog R, et al. [Thines M (senior author)] (2018) The genome sequence of the commercially cultivated mushroom *Agrocybe aegerita* reveals a conserved repertoire of fruiting-related genes and a versatile suite of biopolymer-degrading enzymes. **BMC Genomics**. 19(1):48.

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Choi Y-J, Kruse J, Thines M (2018) *Hyaloperonospora erucae* sp. nov. (Peronosporaceae; Oomycota), the downy mildew pathogen of arugula (*Eruca sativa*). **European Journal of Plant Pathology** 151(2):549-55.

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Bennett RM, Devanadera MK, Dedeles GR, Thines M (2018) A revision of *Salispina*, its placement in a new family, Salispinaceae (Rhipidiales), and description of a fourth species, *S. hoi* sp. nov. **IMA Fungus** 9:259-69.

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Ali T, Muñoz-Fuentes V, Buch A-K, Çelik A, Dutbayev A, Gabrielyan I, Glynou K, Khaliq I, Kitner M, Nigrelli L, Ploch S, Runge F, Schmuker A, Solovyeva I, Xia X, Vakhrusheva L, Maciá-Vicente JG, Nowak C, Thines M (2017) Genetic patterns reflecting Pleistocene range dynamics in the annual calcicole plant *Microthlaspi erraticum* across its Eurasian range. **Flora** 236-237:132-142.

Buaya AT, Ploch S, Hanic L, Nam B, Nigrelli L, Kraberg A, Thines M (2017) Phylogeny of *Miracula helgolandica* gen. et sp. nov. and *Olpidiopsis drebesii* sp. nov., two basal oomycete parasitoids of marine diatoms, with notes on the taxonomy of *Ectrogella*-like species. **Mycological Progress** 16:1041–1050.

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Kruse J, Choi Y-J, Thines M (2017) New smut-specific primers for the ITS barcoding of Ustilaginomycotina. **Mycological Progress** 16:213-221.

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Bennett RM, Dedeles GR, Thines M (2017) *Phytophthora elongata* (Peronosporaceae) is present as an estuarine species in Philippine mangroves. **Mycosphere** 8:959-67.

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Bálint M, Schmidt P-A, Sharma R, Thines M, Schmitt I (2014) An Illumina metabarcoding pipeline for fungi. **Ecology and Evolution** 4:2642-2653.

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