

Publikationen Dr. Ulrich Hildebrandt

2016

- **Hildebrandt, U.:** Interaktionen von Pilzen und Bakterien mit pflanzlichen Oberflächen. Rundgespräche Forum Ökologie, Bd. 45 „Die Sprache der Moleküle – Chemische Kommunikation in der Natur“, S. 83-92. Verlag Dr. Friedrich Pfeil, München – ISSN 2366-2875 – ISBN 978-3-89937-214-4
- Horn, H., Keller, A., **Hildebrandt, U.**, Kämpfer, P., Riederer, M., Hentschel, U.: Draft genome of the *Arabidopsis thaliana* phyllosphere bacterium, *Williamsia* sp. ARP1. Standards in Genomic Sciences 11, 8.
- Forieri, I., **Hildebrandt, U.**, Rostás, M.: Salinity stress effects on direct and indirect defence metabolites in maize. Environmental and Experimental Botany 122, 68-77.

2014

- Weis, C., **Hildebrandt, U.**, Hoffmann, T., Hemetsberger, C., Pfeilmeier, S., König, C., Schwab, W., Eichmann, R., Hüchelhoven, R.: CYP83A1 is required for metabolic compatibility of Arabidopsis with the adapted powdery mildew fungus *Erysiphe cruciferarum*. New Phytologist 202, 1310–1319.

2013

- Reisberg, E.E., **Hildebrandt, U.**, Riederer, M., Hentschel, U.: Distinct phyllosphere bacterial communities on Arabidopsis wax mutant leaves. PLoS ONE. 8, e78613.

2012

- Reisberg, E.E., **Hildebrandt, U.**, Riederer, M., Hentschel, U.: Phyllosphere bacterial communities of trichome-bearing and trichomeless *Arabidopsis thaliana* leaves. Antonie van Leeuwenhoek. 101, 551-560.
- Leide, J., **Hildebrandt, U.**, Hartung, W., Riederer, M., Vogg, G.: Abscisic acid mediates the formation of a suberized stem scar tissue in tomato fruits. New Phytologist. 194, 402-415.
- Hansjakob, A., Riederer, M., **Hildebrandt, U.:** Appressorium morphogenesis and cell cycle progression are linked in the grass powdery mildew fungus *Blumeria graminis*. Fungal Biology. 116, 890-901.

2011

- Hansjakob, A., Riederer, M., **Hildebrandt, U.:** Wax matters: absence of very-long-chain aldehydes from the leaf cuticular wax of the *glossy11* mutant of maize compromises the prepenetration processes of *Blumeria graminis*. Plant Pathology. 60, 1151-1161 (2011).
- Leide, J., **Hildebrandt, U.**, Vogg, G., Riederer, M.: The positional sterile (ps) mutation affects cuticular transpiration and wax biosynthesis of tomato fruits. J. Plant Physiol. 168, 871-877.

2010

- Hansjakob, A., Riederer, M., **Hildebrandt, U.**: Very-long-chain aldehydes promote *in vitro* prepenetration processes of *Blumeria graminis* in a dose- and chain length-dependent manner. *New Phytologist*. 188, 1039-1054.

2009

- Wilde, P., Manal, A., Stodden, M., Sieverding, E., **Hildebrandt, U.**, Bothe, H.: Biodiversity of arbuscular mycorrhizal fungi in roots and soils of two salt marshes. *Environmental Microbiology*. 11, 1548-1561.
- Ringelmann, A., Riedel, M., Riederer, M., **Hildebrandt, U.**: Two sides of a leaf blade: *Blumeria graminis* needs chemical cues in cuticular waxes of *Lolium perenne* for germination and differentiation. *Planta*. 230, 95-105.

2008

- Rostás, M., Ruf, D., Zabka, V., **Hildebrandt, U.**: Plant surface wax affects parasitoid's response to host footprints. *Naturwissenschaften*. 95, 997-1002.
- Füzy, A., Biró, B., Tóth, T., **Hildebrandt, U.**, Bothe, H.: Drought, but not salinity determines the apparent effectiveness of halophytes colonized by arbuscular mycorrhizal fungi. *J. Plant Physiol*. 165, 1181-1192.
- Zabka, V., Stangl, M., Bringmann, G., Riederer, M., Vogg, G., **Hildebrandt, U.**: Host surface properties affect pre-penetration processes in the barley powdery mildew fungus. *New Phytologist*. 177, 251-263.
- Reimann, S., Hauschild, R., **Hildebrandt, U.**, Sikora, R.A.: Interrelationships between *Rhizobium etli* G12 and *Glomus intraradices* and multitrophic effects in the biological control of the root-knot nematode *Meloidogyne incognita* on tomato. *Journal of Plant Diseases and Plant Protection*. 115, 108-113.

2007

- Leide, J., **Hildebrandt, U.**, Reussing, K., Riederer, M., Vogg, G.: The developmental pattern of tomato fruit wax accumulation and its impact on cuticular transpiration barrier properties: effects of a deficiency in a β -ketoacyl-coenzyme A synthase (LeCER6). *Plant Physiology*. 144, 1667-1679.
- Küster, H., Becker, A., Firnhaber, C., Hohnjec, N., Manthey, K., Perlick, A.M., Bekel, T., Dondrup, M., Henckel, K., Goesmann, A., Meyer, F., Wipf, D., Requena, N., **Hildebrandt, U.**, Hampp, R., Nehls, U., Krajinski, F., Franken, P., Pühler, A.: EST-sequencing, in silico- and microarray based transcriptome profiling studies contribute to a molecular understanding of mycorrhizal symbioses. *Phytochemistry*. 68, 19-32.
- **Hildebrandt, U.**, Regvar, M., Bothe, H.: Arbuscular mycorrhiza and heavy metal tolerance. *Phytochemistry*. 68, 139-146.

2006

- **Hildebrandt, U.**, Ouziad, F., Marner, F.J., Bothe, H.: The bacterium *Paenibacillus validus* stimulates growth of the arbuscular mycorrhizal fungus *Glomus intraradices* up to the formation of fertile spores. *FEMS Microbiol. Letters*. 254, 258-267.
- **Hildebrandt, U.**, Hoef-Emden, K., Backhausen, S., Bothe, H., Bozek, M., Siuta, A., Kuta, E.: The rare, endemic zinc violets of Central Europe originate from *Viola lutea* Huds. *Plant Systematics and Evolution*. 257, 205-222.
- Ouziad, F., Wilde, P., Schmelzer, E., **Hildebrandt, U.**, Bothe, H.: Analysis of expression of aquaporins and Na⁺/H⁺ transporters in tomato colonized by arbuscular mycorrhizal fungi and affected by salt stress. *Environmental and Experimental Botany*. 57, 177-186.

2005

- Beckers, G., Strösser, J., **Hildebrandt, U.**, Kalinowski, J., Farwick, M., Krämer, R., Burkovski, A.: Regulation of AmtR-controlled gene expression in *Corynebacterium glutamicum*: mechanism and characterization of the AmtR regulon. *Mol. Microbiol.* 58, 580-595.
- Ouziad, F., **Hildebrandt, U.**, Schmelzer, E., Bothe, H.: Differential gene expressions in arbuscular mycorrhizal colonized tomato grown under heavy metal stress. *J. Plant Physiol.* 162, 634-649.

2004

- Scheloske, S., Maetz, M., Schneider, T., **Hildebrandt, U.**, Bothe, H., Povh, B.: Element distribution in mycorrhizal and non-mycorrhizal roots of the halophyte *Aster tripolium* determined by proton induced X-ray emission (PIXE). *Protoplasma*. 223, 183-189.

2003

- Regvar, M., Vogel, K., Irgel, N., Wraber, T., **Hildebrandt, U.**, Wilde, P., Bothe, H.: Colonisation of pennycresses (*Thlaspi* sp.) of the Brassicaceae by arbuscular mycorrhizal fungi. *J. Plant Physiol.* 160, 615-626.
- Bothe, H., **Hildebrandt, U.**: Fungi and plants become partners under stress. *German Research* 25, 20-22.
- Bothe, H., **Hildebrandt, U.**: Im Stress werden Pilze und Pflanzen Partner. *DFG-Forschung* 28(2), 18-20

2002

- Landwehr, M., **Hildebrandt, U.**, Nawrath, K., Tóth, T., Biró, B., Bothe, H.: The arbuscular mycorrhizal fungus *Glomus geosporum* in European saline, sodic and gypsum soils. *Mycorrhiza*. 12, 199-211.
- **Hildebrandt, U.**, Janetta, K., Bothe, H.: Towards growth of arbuscular mycorrhizal fungi independently of a host plant. *Appl. Environ. Microbiol.* 68, 1919-1924.
- **Hildebrandt, U.**, Schmelzer, E., Bothe, H.: Expression of nitrate transporter genes in tomato colonized by an arbuscular mycorrhizal fungus. *Physiologia Plantarum*. 114, 125-136.

2001

- Bothe, H., **Hildebrandt, U.**, Ouziad, F., Landwehr, M., Nawrath, K.: The colonization of plants from Central European heavy metal soils and salt marshes by arbuscular mycorrhizal fungi. *Minerva Biotech.* 13, 65 - 67.
- **Hildebrandt, U.**, Janetta, K., Ouziad, F., Renne, B., Nawrath, K., Bothe, H.: Arbuscular mycorrhizal colonization of halophytes in Central European salt marshes. *Mycorrhiza.* 10, 175-183.
- Schröder, S., **Hildebrandt, U.**, Bothe, H., Niehaus, K.: Suppression of an elicitor-induced oxidative burst reaction in *Nicotiana tabacum* and *Medicago sativa* cell cultures by corticrocin but not by mycorradicin. *Mycorrhiza.* 11, 101-106.

1999

- Kaldorf, M., Kuhn, A.J., Schröder, W.H., **Hildebrandt, U.**, Bothe, H.: Selective element deposits in maize colonized by a heavy metal tolerance conferring arbuscular mycorrhizal fungus. *J. Plant Physiol.* 154, 709-717.
- **Hildebrandt, U.**, Kaldorf, M., Bothe, H.: The zinc violet and its colonization by arbuscular mycorrhizal fungi. *J. Plant. Physiol.* 154, 709-717.

1998

- Schreiner, T., **Hildebrandt, U.**, Bothe, H., Marner, F.J.: Chemical and biological characterization of corticrocin, a yellow pigment formed by the ectomycorrhizal fungus *Piloderma croceum*. *Z. Naturforsch.* 53c, 4-8 (1998).