

LIST OF PUBLICATIONS

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as of October 10th, 2018, my articles have been cited 612 times with an h-index of 13 ([Google Scholar](#))

PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED JOURNALS

- (1) Grubbs KJ, Surup F, **Biedermann PHW**, McDonald B, Klassen J, Clardy J & Currie CR (*in rev.*) Cycloheximide producing *Streptomyces* associated with *Xyleborinus saxesenii* and *Xyleborus affinis* Ambrosia beetles. *mSphere*, *in revision*
- (2) Seibold S, Mueller J, Baldrian P, Cadotte MW, Stursova M, **Biedermann PHW**, Krah FS & Baessler C (*in rev.*) Fungi vectored by beetles dispersing from dead wood – Let’s take the beetle bus! *Fungal Ecology*, *in revision*
- (3) **Biedermann PHW** & Nuotcla JA (2018) Sociality in beetles. *Encyclopedia of Social Insects*, *in press*
- (4) Lehenberger M, **Biedermann PHW (shared last authorship)** & Benz JP (2018) Molecular identification and enzymatic profiling of *Trypodendron* ambrosia beetle-associated fungi of the genus *Phialophoropsis*. *Fungal Ecology*, *in press*
- (5) Lehenberger M, Benz PJ, Mueller J & **Biedermann PHW** (2018) Buchen- und Linierter Nutzholzborkenkäfer (*Trypodendron domesticum* und *T. lineatum*) als potentielle Vektoren von xylobionten Pilzen sowie Träger von Ambrosiapilzen. *Mitteilungen der Deutschen Gesellschaft für allgemeine und angewandte Entomologie*, *in press*
- (6) Ranger CM, **Biedermann PHW (shared first authorship)**, Phuntumart V, Beligala GU, Ghosh S, Palmquist DE, Mueller R, Barnett J, Schultz PB, Reding ME and Benz JP (2018): Symbiont selection via alcohol benefits fungus farming by ambrosia beetles. *Proceedings of the National Academy of Sciences* 115(17), 4447-4452. Links to newspaper articles about this work: [National Geographic](#), [Science](#), science.orf.at, [Die Zeit](#)
- (7) Van de Peppel LJJ, Aanen DK & **Biedermann PHW** (2018) Low intraspecific genetic diversity indicates asexuality and vertical transmission in the fungal cultivars of ambrosia beetles. *Fungal Ecology* 32: 57-64.
- (8) Birkmoe T, Sverdrup-Thygeson A, Jacobsen RM, **Biedermann PHW** (2018) Insect-fungus interactions in dead wood. In M Ulyshen (Ed.), *Saproxyllic Insects*. Heidelberg: Springer, pp. 377-427. (book chapter)
- (9) **Biedermann PHW** & Rohlfs M (2017) Evolutionary feedbacks between insect sociality and microbial management. *Current Opinion in Insect Science* 22: 92-100.
- (10) Vega FE, Simpkins A, Rodriguez-Soto MM, Infante F & **Biedermann PHW** (2016): Artificial diet sandwich reveals subsocial behaviour in the coffee berry borer *Hypothenemus hampei* (Coleoptera: Curculionidae: Scolytinae). *Journal of Applied Entomology* 141: 470-476.
- (11) Dohet L, Gregoire JC, Kaltenpoth M, Berasategui A & **Biedermann PHW** (2016): Bacterial and fungal symbionts of parasitic *Dendroctonus* bark beetles. *FEMS Microbiology Ecology* 92 (9).
- (12) Mayers CG, McNew DL, Harrington TC, Roeper RA, Fraedrich SW, **Biedermann PHW**, Castrillo LA, & Reed S (2015): Three lineages within the Ceratocystidaceae adapted to symbiosis with three ambrosia beetle tribes with large mycangia. *Fungal Biology* 119: 1075-92.
- (13) Flórez L, **Biedermann PHW (shared first authorship)**, Engl T & Kaltenpoth M (2015): Defensive symbioses of animals with prokaryotic and eukaryotic microorganisms. *Natural Product Reports* 32(7):904-36.
- (14) Kirkendall LR, **Biedermann PHW** & Jordal BH (2015): Evolution and Diversity of Bark and Ambrosia Beetles. In FE Vega, RW Hofstetter (Eds.), *Bark Beetles: Biology and Ecology of Native and Invasive Species*. San Diego: Academic Press, pp. 85-156. (book chapter)
- (15) Nuotcla JA, Taborsky M & **Biedermann PHW** (2014): The importance of blocking behaviour in the ambrosia beetle *Xyleborinus saxesenii* Ratzeburg (Coleoptera; Scolytinae). *Mitteilungen der Deutschen Gesellschaft für allgemeine und angewandte Entomologie* 19: 203-210.
- (16) **Biedermann PHW** (2014): Evolution of cooperation in ambrosia beetles. *Mitteilungen der Deutschen Gesellschaft für allgemeine und angewandte Entomologie* 19: 191-202.
link to article about this work [Max Planck Newsletter Puls/CE 22.6](#).

- (17) **Biedermann PHW & Kaltenpoth M** (2014): New synthesis: The chemistry of partner choice in insect-microbe mutualisms. *Journal of Chemical Ecology* 40: 99.
- (18) Aylward FO, Suen G, **Biedermann PHW**, Adams AS, Scott JJ, Malfatti SA, del Rio TG, Tringe SG, Poulsen M, Raffa KF, Klepzig KD & Currie CR (2014): Convergent bacterial Microbiotas in the fungal agricultural systems of insects. *mBio* 5(6): e02077-14.
- (19) **Biedermann PHW**, Klepzig KD, Taborsky M & Six DL (2013): Abundance and dynamics of filamentous fungi in the complex ambrosia gardens of the primitively eusocial beetle *Xyleborinus saxesenii* Ratzeburg (Coleoptera: Curculionidae, Scolytinae). *FEMS Microbiology Ecology* 83(3): 711-723.
- (20) **Biedermann PHW**, Peer K & Taborsky M (2012): Female dispersal and reproduction in the ambrosia beetle *Xyleborinus saxesenii* Ratzeburg (Coleoptera; Scolytinae). *Mitteilungen der Deutschen Gesellschaft für allgemeine und angewandte Entomologie* 18: 231-235.
- (21) De Fine Licht HH & **Biedermann PHW** (2012): Patterns of functional enzyme activity in *Xyleborinus saxesenii* fungus-growing ambrosia beetles. *Frontiers in Zoology* 9:13.
- (22) Grubbs K.J., **Biedermann PHW**, Suen G., Adams S.M., Moeller J.A., Klassen J.L., Goodwin L.A., Woyke T., Munk A.C., Bruce D., Detter C., Tapia R., Han C.S. & Currie C.R. (2011): Complete genome sequence of *Streptomyces* cf. *griseus* (XyelibKG-1 1), an ambrosia beetle-associated actinomycete. *Journal of Bacteriology* 193(11): 2890–2891.
- (23) **Biedermann PHW & Taborsky M** (2011): Larval helpers and age polyethism in ambrosia beetles. *Proceedings of the National Academy of Science USA* 108(41): 17064-17069. links to newspaper articles about this work: [Zeit-Online](#), [Bild der Wissenschaften](#), [The New York Times](#), [science.orf.at](#), [Uniaktuell](#), [Tagesanzeiger](#); Radio interviews: [Deutschlandfunk](#) (7/12/11), [WDR](#) (15/5/12)
- (24) **Biedermann PHW**, Klepzig KD & Taborsky M (2011): Costs of delayed dispersal and alloparental care in the fungus-cultivating ambrosia beetle *Xyleborus affinis* Eichhoff (Scolytinae: Curculionidae). *Behavioral Ecology & Sociobiology* 65:1753–1761.
- (25) **Biedermann PHW** (2010) Observations on sex ratio and behavior of males in *Xyleborinus saxesenii* Ratzeburg (Scolytinae, Coleoptera). In: Cognato AI, Knížek M (Eds) Sixty years of discovering scolytine and platypodine diversity: A tribute to Stephen L. Wood. *Zookeys* 56: 253-267.
- (26) **Biedermann PHW**, Klepzig KR & Taborsky M (2009) Fungus cultivation by ambrosia beetles: Behavior and laboratory breeding success in three Xyleborine species. *Environmental Entomology* 38(4): 1096-1105.
- (27) Delhey K, Peters A, **Biedermann PHW & Kempnaers B** (2008) Optical properties of the uropygial gland secretion: no evidence for UV cosmetics in birds. *Naturwissenschaften* 95(10): 939-946.
- (28) Kärcher MH, **Biedermann PHW**, Hrasnigg N & Crailsheim K (2008) Predator-prey interaction between drones *A. m. carnica* and swallows *Hirundo rustica* or *Delichon urbica*. *Apidology* 39(3): 302-309.
- (29) **Biedermann PHW** (2006) Hidden leks in the Yellow-browed Warbler (*Phylloscopus inornatus*)? - Investigations from the Khan Khentey Reserve (Mongolia). *Acrocephalus* 27: 233-247.

POPULAR SCIENCE ARTICLES

- (1) **Biedermann PHW** (2018) Warum diese Käfer Alkohol lieben – und was wir von ihnen lernen können. *Focus Online* [Link \(11.4.2018\)](#)
- (2) Van de Peppel L, Wisselink M, Aanen DK & **Biedermann PHW** (2017) Genetic diversity in fungal symbionts of ambrosia beetles in Europe. *DGaaE Nachrichten*
- (3) Uhe C & **Biedermann PHW** (2016) Heimische Ambrosiakäfer: Sozialverhalten und Funktion im Ökosystem Wald. *Artenschutzreport* 35: 67-68. Jena, Germany.
- (4) **Biedermann PHW** (2016) Verborgen unter Blattwerk. Buchrezension zu „Bäume und ihre Bewohner“. *Spektrum der Wissenschaften* 9/2016, 86.
- (5) **Biedermann PHW** (2014) Käfer als Pilzzüchter – Biologie und Beobachtungsanleitung von Ambrosiakäfern. *Artenschutzreport* 33: 43-45. Jena, Germany.
- (6) **Biedermann PHW** (2013) Käfer als fleißige Gärtner. *ÖAW Young Science* 30/5/2013, ORF Vienna. [science.orf.at](#)
- (7) **Biedermann PHW** (2013) Kinderarbeit bei Gottes Käfern. *Bild der Wissenschaften*, Sonderbeilage.
- (8) **Biedermann PHW & Kärcher MH** (2008) Weather-dependent activity and flying height of Barn Swallows (*Hirundo rustica*) and House Martins (*Delichon urbica*) in southwestern Styria. *Egretta* 50: 76-81. links to newspaper articles about this work: [Neue Züricher Zeitung](#), [Uniaktuell](#), [derStandard](#)

- (9) **Biedermann PHW** (2003) Die Kraniche der Welt. *Zool. Newsletter* 2; Landesmuseum Joanneum Graz.

THESES

- **Biedermann PHW** (2012): Evolution of Cooperation in Ambrosia beetles. Ph.D. thesis, Univ. of Bern
- **Biedermann PHW** (2007): Evolution of Social Behaviour in Ambrosia beetles. MSc thesis, Univ. of Bern
- **Biedermann PHW** (2005): Breeding Ecology of the Yellow-browed Warbler. BSc thesis, Univ. of Graz

