Publications - Markus Thamm

Journal Articles (peer reviewed)

1. Moris, V. C., Podsiadlowski, L., Martin, S., Oeyen, J. P., Donath, A., Petersen, M., … **Thamm**, **M.** et al. (2023). Intrasexual cuticular hydrocarbon dimorphism in a wasp sheds light on hydrocarbon biosynthesis genes in hymenoptera. *Communications Biology*, *6*(1), 147. doi:10.1038/s42003-022-04370-0

2. Reiß, F., Schuhmann, A., Sohl, L., **Thamm**, **M.**, Scheiner, R., & Noll, M. (2023). Fungicides and insecticides can alter the microbial community. *Frontiers in Microbiology*, *14*, 1271498. doi:10.3389/fmicb.2023.1271498

3. Rother, L., Müller, R., Kirschenmann, E., Foster, J. J., Kaya-Zeeb, S., **Thamm**, **M.**, & Pfeiffer, K. (2023). Walking bumblebees see faster. *Proceedings of the Royal Society B*, *290*(1999), 20230460. doi:10.1098/rspb.2023.0460

4. Kaya-Zeeb, S., Delac, S., Wolf, L., Marante, A. L., Scherf-Clavel, O., & **Thamm**, **M.** (2022). Robustness of the honeybee neuro-muscular octopaminergic system in the face of cold stress. *Frontiers in Physiology*, *13*. doi:10.3389/fphys.2022.1002740

5. Kaya-Zeeb, S., Engelmayer, L., Straßburger, M., Bayer, J., Bähre, H., Seifert, R., … **Thamm**, **M.** (2022). Octopamine drives honeybee thermogenesis. *eLife*, *11*, e74334. doi:10.7554/eLife.74334

6. Habenstein, J., **Thamm**, **M.**, & Rössler, W. (2021). Neuropeptides as potential modulators of behavioral transitions in the ant Cataglyphis nodus. *Journal of Comparative Neurology*, *529*(12), 3155–3170. doi:10.1002/cne.25166

7. Schilcher, F., **Thamm**, **M.**, Strube-Bloss, M., & Scheiner, R. (2021). Opposing actions of octopamine and tyramine on honeybee vision. *Biomolecules*, *11*(9), 1374. doi:10.3390/biom11091374

8. **Thamm**, **M.**, Wagler, K., Brockmann, A., & Scheiner, R. (2021). Tyramine 1 receptor distribution in the brain of corbiculate bees points to a conserved function. *Brain, Behavior and Evolution*, *96*(1), 13–25. doi:10.1159/000517014

9. George, E. A., Bröger, A.-K., **Thamm**, **M.**, Brockmann, A., & Scheiner, R. (2020). Inter-individual variation in honey bee dance intensity correlates with expression of the foraging gene. *Genes, Brain, and Behavior*, *19*, e12592. doi:10.1111/gbb.12592

10. Scheiner, R., Strauß, S., **Thamm**, **M.**, Farré-Armengol, G., & Junker, R. R. (2020). The bacterium pantoea ananatis modifies behavioral responses to sugar solutions in honeybees. *Insects*, *11*(10), 692. doi:10.3390/insects11100692

11. Thölken, C., **Thamm**, **M.**, Erbacher, C., & Lechner, M. (2019). Sequence and structural properties of circular RNAs in the brain of nurse and forager honeybees (Apis mellifera). *BMC Genomics*, *20*(1), 1–15. doi:10.1186/s12864-018-5402-6

12. Değirmenci, L., **Thamm**, **M.**, & Scheiner, R. (2018). Responses to sugar and sugar receptor gene expression in different social roles of the honeybee (apis mellifera). *Journal of Insect Physiology*, *106*, 65–70. doi:10.1016/j.jinsphys.2017.09.009

13. **Thamm**, **M.**, Sturm, K., Schlossmann, J., & Scheiner, R. (2018). Levels and activity of cyclic guanosine monophosphate-dependent protein kinase in nurse and forager honeybees. *Insect Molecular Biology*, *27*, 815–823. doi:10.1111/imb.12520

14. Blenau, W., Daniel, S., Balfanz, S., **Thamm**, **M.**, & Baumann, A. (2017). Dm5-HT2B: Pharmacological characterization of the fifth serotonin receptor subtype of drosophila melanogaster. *Frontiers in Systems Neuroscience*, *11*, 28. doi:10.3389/fnsys.2017.00028

15 Reim, T., Balfanz, S., Baumann, A., Blenau, W., **Thamm**, **M.**, & Scheiner, R. (2017). AmTAR2: functional characterization of a honeybee tyramine receptor stimulating adenylyl cyclase activity. *Insect Biochemistry and Molecular Biology*, *80*, 91–100. doi:10.1016/j.ibmb.2016.12.004

16 Scheiner, R., Entler, B. V., Barron, A. B., Scholl, C., & **Thamm**, **M.** (2017). The effects of fat body tyramine level on gustatory responsiveness of honeybees (Apis mellifera) differ between behavioral castes. *Frontiers in Systems Neuroscience*, *11*, 55. doi:10.3389/fnsys.2017.00055

17 Scheiner, R., Reim, T., Søvik, E., Entler, B. V., Barron, A. B., & **Thamm**, **M.** (2017). Learning, gustatory responsiveness and tyramine differences across nurse and forager honeybees. *Journal of Experimental Biology*, *220*, 1443–1450. doi:10.1242/jeb.152496

18 **Thamm**, **M.**, Scholl, C., Reim, T., Grübel, K., Möller, K., Rössler, W., & Scheiner, R. (2017). Neuronal distribution of tyramine and the tyramine receptor AmTAR1 in the honeybee brain. *Journal of Comparative Neurology*, *525*(12), 2615–2631. doi:10.1002/cne.24228

19 Scheiner, R., Kulikovskaja, L., & **Thamm**, **M.** (2014). The honey bee tyramine receptor AmTYR1 and division of foraging labour. *Journal of Experimental Biology*, *217*(8), 1215–1217. doi:10.1242/jeb.098475

20 **Thamm**, **M.**, & Scheiner, R. (2014). PKG in honey bees: Spatial expression, Amfor gene expression, sucrose responsiveness, and division of labor. *Journal of Comparative Neurology*, *522*(8), 1786–1799. doi:10.1002/cne.23500

21 Reim, T., **Thamm**, **M.**, Rolke, D., Blenau, W., & Scheiner, R. (2013). Suitability of three common reference genes for quantitative real-time PCR in honey bees. *Apidologie*, *44*(3), 342–350. doi:10.1007/s13592-012-0184-3

22 **Thamm**, **M.**, Rolke, D., Jordan, N., Balfanz, S., Schiffer, C., Baumann, A., & Blenau, W. (2013). Function and distribution of 5-HT2 receptors in the honeybee (Apis mellifera). *PLOS One*, *8*(12), 1–12. doi:10.1371/journal.pone.0082407

23 Blenau, W., & **Thamm**, **M.** (2011). Distribution of serotonin (5-HT) and its receptors in the insect brain with focus on the mushroom bodies: Lessons from Drosophila melanogaster and Apis mellifera. *Arthropod Structure & Development*, *40*(5), 381–394. doi:10.1016/j.asd.2011.01.004

24 **Thamm**, **M.**, Balfanz, S., Scheiner, R., Baumann, A., & Blenau, W. (2010). Characterization of the 5-HT1A receptor of the honeybee (Apis mellifera) and involvement of serotonin in phototactic behavior. *Cellular and Molecular Life Sciences*, *67*(14), 2467–2479. doi:10.1007/s00018-010-0350-6

25 **Thamm**, **M.**, Schmidt, S. L., Bernhard, D. et al. (2010). Insights into the phylogeny of the genus stentor (heterotrichea, ciliophora) with special emphasis on the evolution of the macronucleus based on ssu rdna data. *Acta Protozoologica*, *2010*(3), 149–157.

Book Chapters

1 Blenau, W., **Thamm**, **M.**, & Baumann, A. (2013). Serotonin in insects: Distribution, biosynthesis, uptake, inactivation, receptors, functions, and implications for human health. In F. S. Hall (Ed.), *Serotonin: Biosynthesis, regulation and health implications.* (Chap. 1, pp. 1–26). NOVA Publishers, New York.