

## Obituary

### In memoriam – Volker Witte (1969 - 2015)

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The unexpected passing of Dr. Volker Witte, a passionate ant researcher, on the 14<sup>th</sup> of July 2015 in Munich, Germany, left us with a deep sense of loss.

Volker studied biology in Frankfurt, Germany. Ever since his diploma project, he was dedicated to the study of pheromone communication in ants. Already then he began working with *Leptogenys* army ants at the Ulu Gombak Field Station of the University of Malaya, Kuala Lumpur (Malaysia). He returned to this rainforest site with pleasure over the years as assistant professor. After finishing his PhD with Ulrich Maschwitz (University of Frankfurt, Germany) on the coordination of raiding and emigration behavior of *Leptogenys* in 2001, he received a prestigious Alexander von Humboldt fellowship to join the lab of Athula Attygalle (Cornell University, USA) for two years to work on chemical communication in the invasive ant *Paratrechina longicornis*. He conducted field work for this project at the Biosphere in Arizona and could show that these ants have a very sophisticated communication system, which might very well be one of the causes for their ecological success. Upon his return to Germany as an assistant professor in the group of Susanne Foitzik (LMU Munich, Germany), he broadened his scientific scope and studied diverse aspects of ant biology resulting in more than 40 articles in scientific journals. He resumed his work with *Leptogenys* focusing on the behavioral and chemical integration mechanisms and fitness consequences of numerous *Leptogenys* myrmecophiles. While studying these fascinating ant guests, he discovered many new species, among them such remarkable creatures as the first myrmecophilous snail and a parasitic staphylinid beetle of an entirely new genus, which was named *Witteia* in his honor. He also found the first ant species specialized on harvesting wild-growing mushrooms, *Euprenolepis procera* and *E. wittei*. Next to his remarkable discoveries in the tropics, his work on the communication of invasive ants, in general, revealed the importance of communication for the ecological dominance of these pest species. Recently, he became more interested in potential applications of his understanding of the fundamental mechanisms of ant communication for companies and human interactions.



Volker Witte handling a non-venomous sunbeam snake at the Ulu Gombak Field Station of the University of Malaya, Kuala Lumpur, in 2008 (© Christoph von Beeren).

Volker was also a dedicated teacher at the LMU Munich over many years, who shared his enthusiasm for the behavior and interactions of living organisms with his students. He was well known for his patience and cooperativeness and provided guidance to many bachelor and master students as well as to five PhD students. Volker habilitated in 2010 and then held an associate professorship for Behavioral Ecology at the LMU Munich from 2010 to 2012. After two more years as an assistant professor, he left academia with a heavy heart. The German Academic system offers only few permanent positions, and Volker had reached the limit for fixed-term contracts.

Volker loved being outdoors and doing field-work. He was a dedicated naturalist and explorer with endless patience and insatiable curiosity for observing ants and their interspecific interactions. While searching for ants at night, Volker always kept looking for other nocturnal animals, especially snakes. He often brought these animals back to the field station to show them to his colleagues or students. For many of us it was the first time that we handled or touched wild snakes. Hence, many of us keep lasting memories of these "wild experiences" with Volker. Once he called me in the middle of the night (HF) to the forest to take a look at a large python, which he grabbed to find out how strong it was – it was very strong indeed as he was nearly pulled off his feet when it escaped straight towards me. During my (CvB) first walk in the tropical rainfor-

ests at Ulu Gombak, Volker took me to a nest of one of the largest ant species on earth, *Camponotus gigas*, and apparently enjoyed my joyfulness when seeing these massive ants for the first time. I (SF) remember my arrival at the field station after more than 24 hours of travels in the dead of the night, only to be led by Volker to a *Leptogenys* nest migration, where by flashlight we could observe a single file of ants moving through the rainforest. When the migration came to an end, I wanted to turn in, only to be held off by Volker to wait for some myrmecophiles, staphylinid beetles, which followed the ants with some distance. Volker later found out that these beetles prey on ant brood and are therefore attacked by the ants, so that they have to follow the chemical ant trails to the next nesting site.

Volker had a very generous personality, and we are fortunate to have counted him among our colleagues and friends. We will deeply miss him. Volker leaves behind his wife and three young daughters.

### Publications by Volker Witte

#### Journal articles:

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