Acknowledgements

A PhD thesis is both an excruciating and enjoyable experience. Here I would like to express my sincere gratitude and appreciation to all people who supported me energetically not only during the exciting and productive but also the demanding and frustrating phases of this project. Without their kind help I could not have finished my dissertation successfully.

First of all, I thank my supervisor PD Dr. Joachim Ruther for his expert guidance and mentorship, his patience, encouragement and continuous support at all levels of my thesis. He has reminded me to stop running and to think first (I do my very best, however, it is not easy to lay off a bad habit). His enthusiasm and everlasting curiosity for the subject are probably the most valuable lessons I have learnt from this PhD.

I would also like to thank Prof. Dr. Monika Hilker, who kindly agreed to compose the second expertise on my thesis, for giving me the opportunity to work in her research group, for providing excellent working facilities and for inspiring and helpful discussions during our seminars.

Furthermore, I am grateful to Prof. Dr. Johannes Steidle from the University of Hohenheim for introducing me into the fascinating world of *L. distinguendus* and for the close collaboration during the PhD period.

Many other people have contributed to this thesis with fruitful discussions, comments and support along the way. Special thanks go to Torsten Meiners who patiently endured my numerous questions no matter how stupid they were. Without your assistance and many good advices, it would have been much more difficult!

Then I wish to thank Roland Schröder, Barbara Randlkofer and Florian Pankewitz, who had to cope with many of the same problems like me, for the numerous discussions about our work but also the life itself, for their continuous support, their admirable calmness even in stressful phases and, most important, for their entertainment and often curious humour that helped me to overcome every difficulty

I encountered during this project. Furthermore, I would like to thank Florian, who has become a good friend, for the countless hours that we spent together in nature willing to take the wildlife photo of the year (unfortunately, we never got it!).

I had the pleasure to supervise and work with several students, namely Nina Henrich, Nadin Hermann, Daniel Erdmann and Lina Stahl, who finished their diploma thesis in this project and contributed considerably to the realisation of this PhD. You were great!

I would also like to thank Maya Ulbricht, my dear helper, for taking care of my parasitoid and host cultures, for her assistance with experiments and for cleaning thousand and more Petri dishes (I feel sorry!).

Special thanks go to our technical assistants Ute Braun and Renate Jonas, the good spirits of our institute, for their skilful help whenever it was necessary. Frank Müller introduced me not only into the secrects of GC-MS analysis but also into the beautiful countryside around Berlin and Brandenburg. Furthermore, I am deeply grateful to our secretary Urte Kohlhoff who helped me a lot in administrative issues.

For the pleasant atmosphere I would like to thank all current and former members of the Department of Applied Zoology and Animal Ecology. I always enjoyed the company of my colleagues Roland Mumm, Andreas Reinecke, Ivo Beyaert, Martin Lehmann, Sven Kleier, Beatrice Blenn, Amina Gharbi and many more persons not only because of scientific exchange. Thanks a lot for the great evenings we had in our institute watching stupid movies (unfortunately, we have never watched "Dumb and dumber") or football matches during the world championship 2006.

Special thanks go to my dear friend Peter von der Ohe, whom I have known for more than ten years now, for endless telephone calls about life, the universe and everything and for the relaxing weekends in Berlin and Leipzig.

I feel incredibly grateful to my parents Dieter and Ingrid Steiner and my brother Lars for their faith and lovely support in all matters of life. And I am thankful that you never raised an eyebrow when I claimed that my thesis would be finished in the 'next two months' for nearly a year.

Last but always first, a huge hug and kiss belong to my girl-friend for her love, encouragement and endless patience during the PhD period. Katrin, you are the driving force in my life!

However, the acknowledgements would be definitely incomplete, if I left out our dogs, Boyes and Stella, who have always shown me the way out to the sunlight.

This work was financially supported by the Deutsche Forschungsgesellschaft (DFG RU 717/5-1).

Sven Steiner November 2006