

# CURRICULUM VITAE

Dr. Karin Staudacher

01.02.1981, Villach, Austria



## University

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1999–2005	Studies of Biology (Ecology, Limnology) at the University of Innsbruck.
Nov. 2005	Master's Degree of Natural Sciences at the Institute of Zoology and Limnology.
2007–2012	Doctoral Programme (Ecology) at the University of Innsbruck.
Jan. 2012	Doctoral's Degree of Natural Sciences at the Institute of Ecology. Title of the Doctoral thesis: 'Unravelling species identity and feeding ecology of soil insect pests via molecular diagnostics'.

## Work experience and Research positions

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2006–2009	Scientific collaborator, BBK-project (1448) 'New approaches to regulate wireworms, with a special emphasis on organic farming'.
2007–2008	PhD scholarship from the University of Innsbruck.
Since 2007	Co-supervision of several bachelor/master students (Applied & Trophic Ecology).
Since 2008	Teaching and co-teaching at the University of Innsbruck (Molecular Experiments for Secondary School), communication of research topics to a non-scientific public (Lange Nacht der Forschung, Junge Uni).
2008–2012	Scientific collaborator, Austrian Science Fund (FWF)-project (P20377) 'Exploitation of plant diversity by below-ground herbivores: tracking dietary choice in elaterid larvae using a molecular approach'.
2011	Member of the organizing committee for the 13 <sup>th</sup> European Meeting of the IOBC/WPRS Working Group 'Insect Pathogens and Insect Parasitic Nematodes', Innsbruck, Austria.
since Feb. 2012	Scientific collaborator, Biodiversa-project ,APPEAL: Assessment and valuation of Pest suppression potential through biological control in European Agricultural Landscapes' (FWF: I786 'Biological Pest suppression Potential in Europe').  Scientific collaborator, Swedish Research Council (Formas)-project 'The importance of natural enemy diversity and food-web structure for biological control at organic and conventional farms'.  Assistance (incl. fund raising) in several international collaborations of the Applied & Trophic Ecology group (France, Chile, Sweden).
May–July 2012	Research stay and organization/realization of field experiments in Lund, Sweden (in the course of APPEAL)
Oct.–Nov. 2015	Research stay and supervision of lab experiments at the University of Talca, Talca, Chile (in the course of APHIWEB: Structure, strength and invisibility of aphid food webs)

## Scientific publications

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- STAUDACHER K., JONSSON M. & TRAUGOTT M. (2015): Diagnostic PCR assays to unravel food web interactions in cereal crops with focus on biological control of aphids. *Journal of Pest Science*, DOI 10.1007/s10340-015-0685-8.
- ROUBINET E., STRAUB C.S., JONSSON T., STAUDACHER K., TRAUGOTT M., EKBOM B. & JONSSON M. (2015): Additive effects of predator diversity on pest control caused by few interactions among predator species. *Ecological Entomology* 40: 362–371.
- WALLINGER C., STAUDACHER K., SCHALLHART N., MITTERRUTZNER E., STEINER E.-M., JUEN A. & TRAUGOTT M. (2014): How generalist herbivores exploit belowground plant diversity in temperate grasslands. *Molecular Ecology* 23: 3826-3837.
- STAUDACHER K., SCHALLHART N., THALINGER B., WALLINGER C., JUEN A. & TRAUGOTT M. (2013): Plant diversity affects behavior of generalist root herbivores, reduces crop damage, and enhances crop yield. *Ecological Applications* 23(5): 1135-1145.
- STAUDACHER K., SCHALLHART N., PITTERL P., WALLINGER C., BRUNNER N., KROMP B., LANDL M., GLAUNINGER J. & TRAUGOTT M. (2013): Occurrence of *Agriotes* wireworms in Austrian agricultural land. *Journal of Pest Science* 86: 33-39.
- WALLINGER C., STAUDACHER K., SCHALLHART N., PETER E., DRESCH P., JUEN A. & TRAUGOTT M. (2013): The effect of plant identity and the level of plant decay on molecular gut content analysis in a herbivorous soil insect. *Molecular Ecology Resources* 13: 75-83.
- SCHALLHART N., TUSCH M.J., WALLINGER C., STAUDACHER K. & TRAUGOTT M. (2012): Effects of plant identity and diversity on the dietary choice of a soil-living insect herbivore. *Ecology*. 93: 2650-2657.
- WALLINGER C., JUEN A., STAUDACHER K., SCHALLHART N., MITTERRUTZNER E., STEINER E.-M., THALINGER B. & TRAUGOTT M. (2012): Rapid Plant Identification Using Species- and Group-Specific Primers Targeting Chloroplast DNA. *PlosOne*, 7(1): e29473. doi:10.1371/journal.pone.0029473.
- SCHALLHART N., TUSCH M. J., STAUDACHER K., WALLINGER C. & TRAUGOTT M. (2011): Stable isotope analysis reveals whether soil-living elaterid larvae move between agricultural crops. *SOIL Biology & Biochemistry* 43: 1612-1614.
- STAUDACHER K., WALLINGER C., SCHALLHART N. & TRAUGOTT M. (2011): Detecting ingested plant DNA in soil-living insect larvae. *Soil Biology & Biochemistry* 43: 346-350.
- STAUDACHER K., PITTERL P., FURLAN L., CATE P.C. & TRAUGOTT M. (2011): PCR-based species identification of *Agriotes* larvae. *Bulletin of Entomological Research* 101: 201-210.

## Conference abstracts (\*talks)

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- \*STAUDACHER K. (2015): Unravelling species identity and trophic interactions in arable systems via molecular diagnostics. Seminar series, Agrocampus-Ouest, Rennes, France (April) and University of Talca, Talca, Chile (October).
- STAUDACHER K., SINT D., MALSHER G., JONSSON M. & TRAUGOTT M. (2014): The effect of weeds on cereal aphid-predator food web interactions. X<sup>th</sup> European Congress of Entomology, York, UK (poster).
- \*STAUDACHER K., SINT D., MALSHER G., JONSSON M. & TRAUGOTT M. (2013): How weeds affect aphid-predator food web interaction in cereal fields. 1<sup>st</sup> International symposium on Ecological Networks: Delving into the architecture of biodiversity, Coimbra, Portugal.
- JONSSON M., ROUBINET E., STAUDACHER K., MALSHER G., STRAUB C., EKBOM B. & TRAUGOTT M. (2013): Food-web interactions and aphid biological control in organic and conventional barley

fields. 1<sup>st</sup> International symposium on Ecological Networks: Delving into the architecture of biodiversity, Coimbra, Portugal.

\*STAUDACHER K., SCHALLHART N., THALINGER B., WALLINGER C., TUSCH M., JUEN A. & TRAUOGOTT M. (2013): Combining forces: molecular gut content and stable isotope analysis reveal the feeding behavior of generalist root herbivores and deliver new control tactics for subterranean pests. 2<sup>nd</sup> International Symposium on the Molecular Detection of Trophic Interactions, Lexington (KY), USA.

JONSSON M., ROUBINET E., STAUDACHER K., MALSHER G., STRAUB C., EKBOM B. & TRAUOGOTT M. (2013): Food-web interactions and aphid biological control in organic and conventional barley fields. 2<sup>nd</sup> International Symposium on the Molecular Detection of Trophic Interactions, Lexington (KY), USA.

SCHALLHART N., STAUDACHER K., WALLINGER C. & TRAUOGOTT M. (2013): Does food DNA detection frequency correlate with actual consumption? A case study using a soil insect herbivore-crop system. 2<sup>nd</sup> International Symposium on the Molecular Detection of Trophic Interactions, Lexington (KY), USA (poster).

\*STAUDACHER K., SCHALLHART N., PITTEHL P., WALLINGER C., BRUNNER N., LANDL M., KROMP B., GLAUNINGER J., TRAUOGOTT M. (2011): Occurrence of *Agriotes* wireworms in Austrian agricultural land. 13<sup>th</sup> European Meeting of the IOBC/WPRS Working Group 'Insect Pathogens and Insect Parasitic Nematodes': Biological control in IPM systems, Innsbruck, Austria.

\*STAUDACHER K., THALINGER B., SCHALLHART N., WALLINGER C., JUEN A. & TRAUOGOTT M. (2011): Looking behind the scenes: the mechanisms of trap-cropping soil insect pests. Entomologentagung DGaE, Berlin, Germany.

\*STAUDACHER K., THALINGER B., SCHALLHART N., WALLINGER C. & TRAUOGOTT M. (2010): Molecular gut content and stable isotope analyses reveal the dietary choice of soil-living insect herbivores. 58<sup>th</sup> Annual Meeting of the Entomological Society of America, San Diego (CA), USA.

STAUDACHER K., PITTEHL P., SCHALLHART N., WALLINGER C. & TRAUOGOTT M. (2010): Molecular identification of *Agriotes* larvae allows examining species-specific traits. 58<sup>th</sup> Annual Meeting of the Entomological Society of America, San Diego, USA (poster).

STAUDACHER K., FURLAN L. & TRAUOGOTT M. (2009): Identifying *Agriotes* larvae using a DNA-based approach. 23<sup>rd</sup> IWCO Conference & 2<sup>nd</sup> International Conference of *Diabrotica* Genetics, Munich, Germany (poster).

STAUDACHER K., FURLAN L. & TRAUOGOTT M. (2008): DNA-based identification of *Agriotes* wireworms. NOBIS Austria 2 - Biologische Systematik: Generation Next, Innsbruck, Austria (poster).

STAUDACHER K., WALLINGER C., SCHALLHART N., & TRAUOGOTT M. (2008): Detecting plant-DNA within the gut content of herbivorous soil insects. EURECO – GFOE Conference, Leipzig, Germany (poster).

STAUDACHER K., FURLAN L. & TRAUOGOTT M. (2008): DNA-based identification of *Agriotes* wireworms. XXIII International Congress of Entomology, Durban, South Africa (poster).