



D'Estrees ENTOMOLOGY

Science Services

Dr Richard Glatz

Professional Biography

Dr Glatz has a strong background in Molecular Biology, Entomology & Ecology. He has worked with industry and government performing scientific research and project management.

In 1992, he completed a Bachelor of Applied Science (Computer Studies) at University of South Australia. In 1996 he began an honours Degree in Agricultural Science at The University of Adelaide. He completed it in 1999 having achieved a range of awards including a University Medal and Best Student in all degrees in Faculty of Agriculture and Natural Resources.

In 2004, he completed a PhD at The University of Adelaide. That study involved characterisation of molecules employed by wasps to parasitise pest insects by suppressing their immunity. He then undertook a post-doc at CSIRO Molecular and Health Technologies developing drug-screening assays for compounds modulating the effect of G-protein-coupled Receptors.

From 2006-2013, Dr Glatz was a Senior Research Scientist at SARDI Entomology. During this time he led a series of projects primarily in biosecurity and sustainability of production systems. Some key achievements during this time were:

- major role in development of CRC Plant Biosecurity project to develop a biosensor of stored grain pests (winner of CRC Committee awards for Innovation and Science Impact)
- Project Leader for national *Pine Aphid Biocontrol Project*
- Project Leader for *Revegetation at a Property Scale Project* investigating use of native vegetation in horticultural systems
- Project Leader on work that validated the first known marker of prior irradiation in insects
- Project Leader on Horticulture Australia Ltd project to characterize wasp venom for insect immune disrupting compounds
- Project Leader for GRDC Innovation project to develop aptamer detectors of fungal spores
- Published a high-impact invited review on olfaction in *Progress in Neurobiology*

Since 1998, Dr Glatz has been studying ecology of semi-arid/temperate systems, particularly mallee ecosystems. He has a close association with Kangaroo Island (KI) and has now produced the only insect collection specific to the island; it currently has over 30,000 specimens, with about 15,000 databased.

In 2009, Dr Glatz discovered a family of primitive moth from the island that is new to science. This has resulted in an international study which has refined our knowledge of lepidopteran evolution. Additionally, he discovered a new Genus of braconid wasp that parasitizes the moth. He recently led a survey to determine the distribution of the Green carpenter bee on the island and continues to provide advice to State departments DEWNR and PIRSA regarding invertebrates and particularly on matters affecting KI. Dr Glatz has been a member of the KI Biosecurity Advisory Committee to the island's NRM Board for 5 years.

In late 2013, Dr Glatz founded D'Estrees Entomology and Science Services.

He holds affiliate/honourary positions with University of Adelaide, School of Agriculture, Food and Wine (where he supervises a range of students) and the South Australian Museum, Terrestrial Invertebrates.

He is also an Associate Editor in Entomology for the journal *Scientia Agricola*.

As of June 2014, Dr Glatz has published approx. 25 articles in peer-reviewed journals and a range of technical reports. He is currently editing a book for Elsevier, *The Molecular Basis of Olfaction*.