

# ADDRESS:

51 Canterbury Road, Farnborough, Hampshire, United Kingdom

# STATUS:

Married, 6 children

# CONTACT:

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## **QUALIFICATIONS:**

BSc (Hons)	Bachelor of Science with Honours: University of Westminster, London (1978-81)
MSc	Master of Science (with Distinction): Imperial College London (1990-91)
DIC	Diploma of Imperial College: Imperial College London (1990-91)
PhD	Doctor of Philosophy: Imperial College London (1993-95)

## **FELLOWSHIPS:**

Fellow of the American College of Nutrition

## AREAS OF EXPERTISE (in alphabetic order):

Environmental impact assessment Environmental toxicology Evolutionary biology Food technology **Risk analysis** Risk/benefit analysis Experimental design and research Food quality Keto-adaptation Non-chemical pest management Termite management Nutrient risk/benefit analysis Nutritional sciences Organic agriculture Sustainability (healthcare, agriculture, energy) Systems biology

## **ACHIEVEMENTS:**

Dr Robert Verkerk is an internationally acclaimed expert in health, agricultural and environmental sustainability. During the course of his work over the last 35 years, he has focused on a diverse array of issues ranging from environmental protection, to reducing synthetic chemical load among urban and rural communities, to assisting the development of natural and sustainable approaches to healthcare. In Europe, Dr Verkerk has made substantial contributions to the development of more appropriate legal and scientific frameworks for the regulation of natural products used in healthcare.

Following his first degree in ecology (University of Westminster, London), he spent some 10 years in the private sector in Australia working in the field of sustainable environmental management while simultaneously leading various environmental campaigns through his voluntary work at the Total Environment Centre, Sydney.

He returned to the UK in 1990 and completed a Masters degree at Imperial College London (with Distinction) and after a further period of a year in Australia (1992-3) he resumed his studies, being awarded a Doctorate in 1995 after just two years. Dr Verkerk remained at Imperial College for a further 7 years as a postdoctoral Research Fellow. His research focused particularly on biocompatible approaches to agriculture, biocontrol of insect pests and multitrophic interactions within agro-ecosystems. He ran projects in Eastern and southern Africa, Central and South East Asia, and has acted as an advisor to governments and development agencies. In 1998, Dr Verkerk was appointed scientific director of the UK government's termite eradication programme which has, using environmentally friendly methods, targeted an established subterranean termite infestation in Saunton, Devon. No termite activity has been detected since 2010.

In 2002, Dr Verkerk founded the Alliance for Natural Health International (ANH-Intl) (<u>www.anhinternational.org</u>), a pan-European and international, non-governmental organisation dedicated to promoting and protecting natural approaches to healthcare, as well as helping to shape the scientific and regulatory framework affecting such approaches.

Dr Verkerk is also scientific director of ANH Consultancy Ltd, a consultancy arm linked to ANH-Intl, that provides bespoke consultancy services to food, health and agricultural interests.

He has authored some 60 papers in scientific journals and conference proceedings, he contributes regularly to magazines and other popular media including writing a monthly column in *What Doctor's Don't Tell You* (<u>www.wddty.com</u>). He is an accomplished and inspirational speaker and communicator on a wide range of issues relating to sustainability.

#### **Peer-reviewed publications**

KORHAN P., VERKERK R. (2017) Scientific rationale for integrative and personalised strategies for pancreatic ductal adenocarcinoma management. *Integr Mol Med* **4**(5): 1-32.

VERKERK R.H. (2010) The paradox of overlapping micronutrient risks and benefits obligates risk/benefit analysis. *Toxicology* **278**(1): 27-38.

VERKERK R.H, HICKEY S. (2010) A critique of prevailing approaches to nutrient risk analysis pertaining to food supplements with specific reference to the European Union. Toxicology **278** (1): 17-26.

VERKERK R.H. Can the failing Western medical paradigm be shifted using the principle of sustainability? *Journal of the Australasian College of Nutritional and Environmental Medicine*. 2009; 28(3): 4-10.

HICKEY S., DOWNING D., VERKERK R.H.J., OSBOURNE A., NORIEGA L.A., HICKEY A. (2008) Nutrient risk assessment in a decision theoretic context. *Journal of Nutritional and Environmental Medicine* **17** (3): 184–194.

VERKERK R.H.J. (2003) The European Directives – How they impact innovation in nutritional medicine. *Journal of Nutritional and Environmental Medicine* **13**(2): 75-77.

VERKERK, R.H.J., BRAVERY, A.F. (2001) The UK termite eradication programme: Justification and implementation. *Sociobiology* **37** (2): 351-360.

JENKINS, T.M., DEAN, R., VERKERK, R.H.J., FORSCHLER, B.T. (2001) Phylogenetic analyses of two mitochondrial genes and a nuclear intron region illuminate European subterranean termite (Isoptera: Rhinotermitidae) taxonomy and gene flow. *Molecular Phylogenetics and Evolution* **20**: 286-293.

VERKERK, R.H.J., WILSON, H.B., WRIGHT, D.J. (1999) Why modeling techniques may be a useful accompaniment to conventional data analysis in studies of applied tritrophic systems. *Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit, Gent* **64** (3A).

VERKERK, R.H.J., LEATHER, S.R. & WRIGHT, D.J. (1998) Review: the potential for manipulating crop pest-natural enemy interactions for improved insect pest management. *Bulletin of Entomological Research*, **88**: 493-501.

VERKERK, R.H.J. (1998) Pest management in tropical organic farming: a cry for on-farm research. *Ecology & Farming*, **19**: 26-27.

VERKERK, R.H.J, NEUGEBAUER, K.R., ELLIS, P.R. & WRIGHT, D.J. (1998) Aphids on cabbage: tritrophic and selective insecticide interactions. *Bulletin of Entomological Research*, **88**: 343-349.

VERKERK, R.H.J., LEATHER, S.R. & WRIGHT D.J. (1997) Manipulating tritrophic interactions as a tool in Integrated Pest Management. *Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit, Gent*, **62**: 633-638.

VERKERK, R.H.J. & WRIGHT D.J. (1997) Field-based studies on diamondback moth tritrophic system in Cameron Highlands, Malaysia. *International Journal of Pest Management*, **43**: 27-33.

VERKERK, R.H.J. & WRIGHT, D.J. (1997) Common cabbage resistance mechanisms against the diamondback moth: still an open book? *Annals of Applied Biology*, **128**: 571-577.

VERKERK, R.H.J. & WRIGHT D.J. (1996) Review - Multitrophic interactions and management of the diamondback moth. *Bulletin of Entomological Research*, **86**: 205-216.

VERKERK, R.H.J. & WRIGHT D.J. (1996) Effects of host plant-selective insecticide interactions on larvae of *Plutella xylostella* (Lepidoptera: Yponomeutidae) in the laboratory. *Pesticide Science*, **44**: 171-181.

IQBAL, M., VERKERK, R.H.J., FURLONG, M.J., ONG, P.C., SYED, A.R. & WRIGHT, D.J. (1996) Evidence for resistance to *Bacillus thuringiensis* subsp. *kurstaki* HD-1 and subsp. *aizawai*, and abamectin in field populations of diamondback moth from Malaysia. *Pesticide Science*, **48**; 89-97.

WRIGHT, D.J. & VERKERK, R.H.J. (1995) Review - Integration of chemical and biological control systems for arthropods: evaluation in a multitrophic context. *Pesticide Science*, **44**: 207-218.

WRIGHT, D.J., IQBAL, M. & VERKERK, R.H.J. (1995) Resistance to *Bacillus thuringiensis* and abamectin in the diamondback moth, *Plutella xylostella*: a major problem for integrated pest management? *Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit, Gent*, **60/3b**: 927-933.

VERKERK, R.H.J. & WRIGHT D.J. (1994) Interactions between the diamondback moth, *Plutella xylostella* L. and glasshouse and outdoor-grown cabbage cultivars. *Annals of Applied Biology*, **125**: 477-488.

FURLONG, M.J., VERKERK, R. H. J. & WRIGHT, D. J. (1994) Differential effects of the acylurea insect growth regulator teflubenzuron on the adults of two endolarval parasitoids of *Plutella xylostella*, *Cotesia plutellae* and *Diadegma semiclausum*. *Pesticide Science*, **41**: 359-36

VERKERK, R.H.J. & WRIGHT D.J. (1993) Biological activity of neem seed kernel extracts and pure azadirachtin against larvae of *Plutella xylostella* L., *Pesticide Science*, **37**: 83-91.

#### Published proceedings of conferences and symposia

VERKERK, R.H.J. & WRIGHT, D.J. (2000) *Case Studies: Tritrophic Aspects of Integrated Pest Management of Crucifer Pests in the Field* (Invited paper). 21<sup>st</sup> International Congress of Entomology, 20-26 August 2000, Iguassu Falls, Brazil. Empraba Soja, Londrina, Brazil.

VERKERK, R.H.J. & LAINE, L.V. (2000) *Termites in Europe: Perspectives of Research and Management from the Last Century* (Invited paper). 21<sup>st</sup> International Congress of Entomology, 20-26 August 2000, Iguassu Falls, Brazil. Empraba Soja, Londrina, Brazil.

VERKERK, R.H.J. & BRAVERY, A.F. (2000) The UK Termite Eradication Programme: Justification and Implementation. Paper reference IRG/WP 00 - 10373. 31st Annual Meeting of the International Research Group on Timber Preservation, 14-19 May 2000, Kona, Hawaii. IRG Secretariat, Stockholm, Sweden. 10 pp.

VERKERK, R.H.J. & WRIGHT D.J. (1998) Multitrophic interactions and the diamondback moth: implications for pest management. *Proceedings of the Third International Workshop on Diamondback Moth and Other Crucifer Pests, 29 October - 1 November 1996, Kuala Lumpur,* Malaysian Plant Protection Society/Malaysian Agricultural Research and Development Institute.

VERKERK, R.H.J. & WRIGHT D.J. (1998) Aphids on crucifers: multitrophic and selective insecticide interactions for enhanced control. *Proceedings of the Third International Workshop on Diamondback Moth and Other Crucifer Pests, 29 October - 1 November 1996, Kuala Lumpur*, Malaysian Plant Protection Society/Malaysian Agricultural Research and Development Institute.

VERKERK, R.H.J., SYED, A.R. & WRIGHT D.J. (1996) The development of an Insecticide Resistance Management programme for the diamondback moth in Malaysia. *International Pesticides Conference, April 23 - 25 1996, Kuala Lumpur (Abstracts),* Malaysian Agricultural Chemicals Association, Kuala Lumpur, pp. 114-17.

VERKERK, R.H.J. & WRIGHT D.J. (1994) The potential for induced extrinsic host plant resistance in IRM strategies targeting the diamondback moth, *Brighton Crop Protection Conference: Pests and Diseases 1994*, British Crop Protection Council, Farnham, UK, pp. 457-462.

VERKERK, R.H.J. & WRIGHT D.J. (1994) Tritrophic interactions between host plant resistance, the diamondback moth, *Plutella xylostella* L. and the hymenopteran parasitoid, *Cotesia plutellae* Kurdj., *Proceedings of the Fourth International Plant Protection in the Tropics Conference, Kuala Lumpur, 28-31 March 1994*, Malaysian Plant Protection Society , Kuala Lumpur, pp.123-126.

FURLONG, M.J., VERKERK, R.H.J. & WRIGHT, D.J. (1994) Differential effects of the insect growth regulator teflubenzuron on adult stages of two endolarval parasitoids of the diamondback moth., *Proceedings of the Fourth International Plant Protection in the Tropics Conference, Kuala Lumpur, 28-31 March 1994*, Malaysian Plant Protection Society, Kuala Lumpur, pp. 173-175.

#### **Published reports**

VERKERK, R.H.J. (2006) The pivotal role for natural products in countering an avian influenza pandemic. Alliance for Natural Health International, Dorking, UK. 63 pp.

SYSTEMS PEST MANAGEMENT PTY LTD <sup>1</sup>(1993) Low hazard and non-chemical methods of cockroach treatment in urban pest management. Funded by a grant from the NSW Environment Trust, Systems Pest Management Pty Ltd, Sydney, 40pp.

<sup>&</sup>lt;sup>1</sup>Research coordinator.

VERKERK, R.H.J. (1989) Three papers published as part-proceedings to symposium "Time for Change: Towards a Sustainable Pest Control Industry", Householders for Safe Pesticide Use, Perth, Australia.

VERKERK, R.H.J. (1987) A multidisciplinary analysis of pesticide-related problems in New South Wales. Myer Foundation & Sidney Myer Fund /Total Environment Centre, Sydney, 46pp.

POLLAK, J. K, SHORT, K. & VERKERK, R.H.J. (1985) A critical analysis of five organochlorine pesticides and implications of their use. Total Environment Centre, Sydney, 84pp.

#### **Selected Other Publications**

VERKERK, R.H. Exogenous Toxin Sources (Xenobiotics) In: Drisko J (Ed). *Integrative Medical Nutrition Therapy: Principles and Practices*. Springer [In Press].

VERKERK, R.H. Environmental Toxins. In: Peat, P. (Ed.) *The Cancer Revolution: Integrative Medicine - the Future of Medicine*. Win-Win Health Intelligence Limited, 2016: London.

VERKERK, R.H.J. (2004) Manipulation of tritrophic interactions for IPM. In: Koul, O. and Dhaliwal, G.S. (Eds.) *Integrated Pest Management: Potential, Constraints and Challenges*. CAB International, Wallingford. pp. 55-71.

VERKERK, R.H.J. (2002) Refugia for pests and natural enemies. In: Pimentel, D. (Ed.) *Encyclopedia of Pest Management*. Marcel Dekker, New York.

VERKERK, R.H.J. (2001) *Farmers' Friends: Recognition and Conservation of Natural Enemies of Vegetable pests*, Department of Biology, Imperial College, London, pp. 112 (ISBN 0-9540132-1-4).

VERKERK, R.H.J. (1995) Studies on Interactions between Diamondback Moth, Host Plants, Endolarval Parasitoids and Selective Toxicants, PhD Thesis, University of London, 244pp.

VERKERK, R.H.J. (1990) Building Out Termites: An Australian Manual for Environmentally Responsible Control, Pluto Press, Leichhardt, Sydney, 211pp.

TOXIC & HAZARDOUS CHEMICALS COMMITTEE<sup>2</sup> (1986) *The A-Z of Chemicals in the Home*, Total Environment Centre, Sydney, 119pp.

<sup>&</sup>lt;sup>2</sup>One of a panel of 12 authors and editors.