

## **R.M. Sandeman - Research Publications**

### **Patents**

Reed, B.J. Sandeman, R.M. and Chandler, D.C. 1995 International Patent No. PCT/AU95/00347. "Biological Control of Insects". Priority Date June 1994.

Sandeman, R.M., Chandler, D.S., Duncan, A-M. and Hay, P.M. 2002 International Patent No. PCT/AU02/00389. "Insecticide and method for controlling insects". Priority Date March 2002.

### **Journal Issue Editor**

Sandeman, R.M., (1999) Editor Special Issue:1998 Annual Conference of the Australian Society for Parasitology 27th International Journal for Parasitology, 29(6):801-979.

### **Books Edited**

Sandeman, R.M., Arundel, J.H., and Scheurmann, E.A. (1991) "Immunological Control of Flystrike". Australian Wool Corporation, Melbourne.

### **Book Chapters**

Williams, J.F. and Sandeman, R.M. (1981) Antigens of Taenid cestodes. In, "Cysticercosis: Present state of knowledge and perspectives". Proceedings of an International Workshop, Mexico City, Mexico.

Sandeman, R.M. (1992) Biotechnology and the control of myiasis diseases. In "Animal parasite control utilising biotechnology" Ed. W.K. Yong, CRC Press, p275-301.

Sandeman, R.M. (1996) Immune responses to flies and mosquitoes. In "Immunology of Host-Ectoparasitic Arthropod Relationships" Ed. S.K. Wikel. CAB International.

Sandeman, R.M., Raadsma, H.W. and Bowles, V.M. (1996) Vaccination and host resistance in the control of *Lucilia cuprina*. In: "Comparative Aspects of Immune Responses to Myiasis" Ed R.W. Baron, Turkish Society for Parasitology.

### **Papers**

Howell, M.J., Sandeman, R.M. and Rajasekariah, G.R. (1977) In vivo and in vitro studies of the effects of immune rat serum on *Fasciola hepatica*. International Journal for Parasitology, 7(5):367-371.

Howell, M.J. and Sandeman, R.M. (1979) *Fasciola hepatica*: some properties of a precipitate which forms when metacercariae are cultured in immune rat serum. International Journal for Parasitology, 9(1):41-45.

Sandeman, R.M. and Howell, M.J. (1980) In vitro studies of the response of sheep to infection with *Fasciola hepatica*. Veterinary Parasitology 6:347-357.

Sandeman, R.M., Howell, M.J. and Campbell, N.J. (1980) An attempt to vaccinate sheep against *Fasciola hepatica* using a juvenile fluke antigen - sheep antibody complex. Research in Veterinary Science 29:255-259.

Sandeman, R.M. and Howell, M.J. (1981) The response of sheep to challenge infection with *Fasciola hepatica*. Research in Veterinary Science 30:294-297.

Sandeman, R.M. and Howell, M.J. (1981) Precipitating antibodies against excretory-secretory antigens of *Fasciola hepatica* in sheep serum. Veterinary Parasitology 9:35-46.

Sandeman, R.M. and Howell, M.J. (1982) Characterization of sheep antibodies involved in precipitate formation with surface antigens of *Fasciola hepatica* in vitro. *International Journal for Parasitology* 12:467-471.

Sandeman, R.M. and Carnegie P.R. (1983). Reaginic antibodies and the sheep immune response to *Lucilia cuprina*. In: "Sheep Blowfly and Flystrike in Sheep" Ed. Raadsma, H.W. Proceedings of the Second National Symposium, Sydney, December, 1983. Department of Agriculture, NSW.

Sandeman, R.M. and Carnegie, P.R. (1984) Allergic reactions and the sheep immune response to larvae of the blowfly *Lucilia cuprina*. *Sheep Breeding and Wool Technology*, 32:23-27.

Sandeman, R.M. and Williams, J.F. (1985) Lectin binding to cystic stages of *Taenia taeniaformis*. *Journal of Parasitology* 70:661-667.

Sandeman, R.M., Dowse, C.A. and Carnegie, P.R. (1985) Initial characterization of the sheep immune response to infections of *Lucilia cuprina*. *International Journal for Parasitology* 15(2):181-185.

Sandeman, R.M., Bowles, V.M., Stacey, I.N. and Carnegie, P.R. (1986) Acquired resistance in sheep to infection with larvae of the blowfly, *Lucilia cuprina*. *International Journal for Parasitology* 16(1):69-75.

Sandeman, R.M. (1986) Vaccination against cutaneous myiasis, In: *Molecular Vaccines against Parasites*, ed. G.F. Mitchell *Parasitology Today* 2(7):S11-S13.

Sandeman, R.M., Collins B and Carnegie, P.R. (1987) A scanning electron microscope study of *Lucilia cuprina* larvae and the development of blowfly strike on sheep. *International Journal for Parasitology* 17(3):753-758.

Bowles, V.M., Carnegie, P.R. and Sandeman, R.M. (1987) Immunisation of sheep against infection with larvae of the blowfly *Lucilia cuprina*. *International Journal for Parasitology* 17(3):759-765.

Allen, J.R. and Sandeman, R.M. (1987). Immunological control of livestock parasites. *International Journal for Parasitology* 17:1033-1034.

Bowles, V.M., Carnegie, P.R. and Sandeman, R.M. (1988). Characterization of proteolytic and collagenolytic enzymes from the larvae of *Lucilia cuprina*, the sheep blowfly. *Australian Journal of Biological Research* 41:269-278.

Sandeman, R.M. (1989). Sheep blowfly - new approaches to a continuing problem. Proceedings of the Second International Congress for Sheep Veterinarians, 12-16 February. Palmerston North, New Zealand.

Bowles, V.M., Feehan, J.P., and Sandeman, R.M. (1990). Sheep plasma protease inhibitors influence protease activity and growth of *L. cuprina* larvae in vitro. *International Journal for Parasitology* 20: 169-174

Sandeman, R.M. (1990). Prospects for the control of sheep blowfly strike by vaccination. *International Journal for Parasitology* 20: 537-541.

Sandeman, R.M., Feehan, J.P., Chandler, R.A. and Bowles, V.M. (1990) Tryptic and chymotryptic proteases released by larvae of the blowfly, *Lucilia cuprina*. *International Journal for Parasitology* 20: 1019-1024.

Fry, K.L., Farrell, J.M. and Sandeman, R.M. (1991) Characterization of potential vaccine antigens in blowfly larvae using monoclonal antibodies. In "Strategies for the immunological control of sheep blowfly strike". In "Immunological Control of Blowfly Strike" Eds R.M. Sandeman, J.H. Arundel & E.A. Scheurmann, Australian Wool Corporation, p 82-89.

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O'Meara, T., Nesa, M., Saville, D. and Sandeman, R.M. (1991) Inflammatory differences in sheep bred for resistance and susceptibility to fleece rot and body strike. In "Strategies for the immunological control of sheep blowfly strike". In "Immunological Control of Blowfly Strike" Eds R.M. Sandeman, J.H. Arundel & E.A. Scheurmann, Australian Wool Corporation, p 82-89.

Sandeman, R.A. and Sandeman, R.M. (1991) Cloning serine protease genes from *Lucilia cuprina*. In "Strategies for the immunological control of sheep blowfly strike". In "Immunological Control of Blowfly Strike" Eds R.M. Sandeman, J.H. Arundel & E.A. Scheurmann, Australian Wool Corporation, p 82-89.

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Seaton, D.S., Holt, H., Farrell, J.M. and Sandeman, R.M. (1991) Vaccination with *Lucilia cuprina* excretory-secretory antigens. In "Strategies for the immunological control of sheep blowfly strike". In "Immunological Control of Blowfly Strike" Eds R.M. Sandeman, J.H. Arundel & E.A. Scheurmann, Australian Wool Corporation, p 82-89.

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Sandeman, R.M., Chandler, R.A., Turner, N. & Seaton, D.S. (1995). Antibody degradation in wound exudates from blowfly strikes on sheep. *International Journal for Parasitology*, 25: 621-628.

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Engwerda, C.R., Dale, C.J. and Sandeman, R.M. (1996) IgE, TNF- $\alpha$ , IL-1 $\beta$  IL-4 and IFN $\gamma$  gene polymorphisms in sheep and resistance to fleece rot and flystrike. *International Journal for Parasitology*, 26: 787-791.

Sandeman, R.M., Raadsma, H.W. and Bowles, V.M. (1996) Vaccination and host resistance in the control of *Lucilia cuprina*. In: *Proceedings of the Eighth International Congress of Parasitology*, Ed M Ali Ozcel, ICOPA VIII. *Acta Parasitologica Turcica*, 20(Supplement1):581-596.

Vogiagis, D., Fry, R.C., Sandeman, R.M. and Salamonsen, L.A. (1997) Leukaemia inhibitory factor in endometrium during the oestrous cycle, early pregnancy and in ovariectomized steroid-treated ewes. *Journal of Reproduction and Fertility*, 109:279-288.

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Cook, G.M. and Sandeman, R.M. (1998) Isolation and enumeration of aerobic mesophilic *Bacillus* spp. in milk by heating in the presence of ethanol. *Australian Journal of Dairy Technology* 53:156-162

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Rajic, A., Kweifio-Okai, G., Macrides, T., Sandeman, R.M., Chandler, D.S. & Polya, G.M. (2000) Inhibition of serine proteases by anti-inflammatory triterpenoids. *Planta Medica*. 66: 206-210.

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Emmerling, M. Chandler, D. and Sandeman, R.M. (2001) Molecular cloning of cDNAs encoding aminopeptidases from the midgut of *Helicoverpa punctigera*, the Australian native budworm. *Insect Biochemistry and Molecular Biology*. 31:899-907.

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Rajic, A. Akihisa, T. Ukiya, M. Yasukawa, K. Sandeman, R.M. Chandler, D.S. and Polya, G.M. (2001) Inhibition of trypsin and chymotrypsin by anti-inflammatory triterpenoids from *Compositae* flowers. *Planta Medica* 67:599-604.

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Zalunardo M., Cargill C. and Sandeman RM. (2006) Identification of auto-antigens in skin scrapings from scabies infected pigs. *International Journal for Parasitology* 36:1133-1141.

Duncan A-M., Ren H., Bound F., Tully J., Chandler D.S. and Sandeman R.M. 2006 Assessment of novel inhibitors of *Helicoverpa* aminopeptidases as anti-insect agents. *Pest Management Science* 62, 1098-1108.

Richards K., Cotton S. and Sandeman RM. In Press. The use of detector dogs in the diagnosis of nematode infections in sheep faeces. *Journal of Veterinary Behavior*.

## **Conference Presentations**

I and my students have presented papers at most annual conference of the Australian Society of Parasitology since 1977. We also regularly present papers at the World Association for the Advancement of Veterinary Parasitology Congresses, and at the International Congresses of Parasitology. We have presented at the American Society for Parasitology on a number of occasions, at the International Veterinary Immunology Symposium, at the Second International Congress for Sheep Veterinarians and at several Lorne Protein Conferences. We have had single appearances at a range of other events including the Australian Veterinary Congress, Australian Entomology Society and the Australian Society for Medical Research

### **Conference presentations since 2001**

FLICS Fly and Lice IPM Control Strategies, 27th June 2001 Launceston, Novel protease inhibitors for control of sheep blowfly and other insects. RM Sandeman

Annual Scientific Meeting of the Australian Society for Parasitology, 9-13 July 2001 Cairns, Ectoparasites, proteases and parasitism RM Sandeman

American Society of Swine Veterinarians conference in Kansas City, Kansas city Missouri March 2002, Analysis of mange positive and negative pigs by a defined antigen ELISA. Mark Sandeman, Michael Zalunardo Jozef Vercruysse and Colin Cargill.

10th International Congress of Parasitology, 4-9 August 2002 Vancouver Canada, Novel protease inhibitors for the control of sheep blowfly Mark Sandeman, Anne-Maree Duncan and David Chandler

19th Conference of the World Association for the Advancement of Veterinary Parasitology, 10-14 August 2003 New Orleans USA, Vaccination against myiasis flies – where to next? V.M. Bowles and R.M. Sandeman

Annual Scientific Meeting of the Australian Society for Parasitology, 26-30 Sept 2004, Development of a diagnostic test for mange in pigs Peyman Mehrpouian Mark Sandeman

20th Conference of the World Association for the Advancement of Veterinary Parasitology, 30 Sept - 4 Oct 2005 Christchurch NZ, SELDI-TOF analysis of stage specific proteins released by sheep blowfly larvae. M. Sandeman, J. Burgess, N. Clairoux, P. Mehrpouian & T. Spithill

20st Conference of the World Association for the Advancement of Veterinary Parasitology, 30 Sept - 4 Oct 2005 Christchurch NZ, A pour-on formulation of Spinosad inhibits *Lucilia cuprina* myiasis in sheep. RM Sandeman, KC Hackett, AG Knowles & LB Lowe.

ASP & ARC/NHMRC Research Network for Parasitology Annual Conference, 2-5 July 2006, A parasite survey of Singapore Zoological Gardens and Night Safari. A Ash, H. Schwarz & RM Sandeman

ASP & ARC/NHMRC Research Network for Parasitology Annual Conference, 2-5 July 2006, Smelling parasites: using odour to diagnose *Teladorsagia circumcincta* infection in sheep. J Burgess and RM Sandeman.

11th International Congress of Parasitological Associations (ICOPA), 6 -11 August 2006, Odour detection of gastrointestinal nematodes. J Burgess & RM Sandeman

11th International Congress of Parasitological Associations (ICOPA), 6 -11 August 2006, Parasites and Singapore Zoo. A Ash, H. Schwarz & RM Sandeman