

## Papers published by VLA staff in 2004

### ANIMAL HEALTH AND WELFARE

Cartman ST; La Ragione RM 2004

Spore probiotics as animal feed supplements.

In: Ricca E (ed), Henriques AO (ed); Cutting SM (ed), *Bacterial spore formers: probiotica and emerging applications*, Horizon Bioscience, 155-161

Howe KS; Christiansen KH 2004

The state of animal health economics: a review.

*Proceedings Society for Veterinary Epidemiology and Preventive Medicine*, Martigny, Switzerland, 24-26 March 2004, 153-165.

Webster K 2004

Demystifying diagnostic testing: non-culture techniques for large animal infectious disease.

*In Practice* 26 (6) 325-330.

### ANTIMICROBIAL RESISTANCE

Bennett PM; Livesey CT; Nathwani D; Reeves DS; Saunders JR; Wise R 2004

An assessment of the risks associated with the use of antibiotic resistance genes in genetically modified plants: report of the Working Party of the British Society for Antimicrobial Chemotherapy.

*Journal of Antimicrobial Chemotherapy* 53 (3) 418-431.

Bennett PM; Livesey CT; Nathwani D; Reeves DS; Saunders JR; Wise R 2004

Comment on: An assessment of the risks associated with the use of antibiotic resistance genes in genetically modified plants: report of the Working Party of the British Society for Antimicrobial Chemotherapy – Reply.

*Journal of Antimicrobial Chemotherapy* 54 (5) 960-960

Snary EL; Kelly LA; Davison HC; Teale CJ; Wooldridge M 2004

Antimicrobial resistance: a microbial risk assessment perspective.

*Journal of Antimicrobial Chemotherapy* 53 (6) 906-917.

Teale CJ 2004

Antimicrobial resistance in porcine bacteria in England and Wales 1998-2002: an update.

*Pig Journal* (53) 39-58.

### BIOSECURITY

Wrathall AE; Simmons HA 2004

Biosecurity strategies for conservation of farm animal genetic resources.

In: Simm G, *Farm Animal Genetic Resources*, Nottingham University Press, Nottingham 2004, 243-261.

Wrathall AE; Simmons HA; Bowles DJ; Jones S 2004

Biosecurity strategies for conserving valuable livestock genetic resources.

*Reproduction, Fertility and Development* (16) 103-112.

## **BOVINE SPONGIFORM ENCEPHALOPATHY**

Arnold ME; Wilesmith JW 2004

Estimation of the age-dependent risk of infection to BSE of dairy cattle in Great Britain.  
*Preventive Veterinary Medicine* 66 (1-4) 35-47.

Cunningham AA; Kirkwood JK; Dawson M; Spencer YI; Green RB; Wells GAH 2004  
Distribution of bovine spongiform encephalopathy in greater kudu (*Tragelaphus strepsiceros*).

*Emerging Infectious Diseases* 10 (6) 1044-1049.

Kempster S; Collins ME; Aronow BJ; Simmons M; Green RB; Edington N 2004  
Clusterin shortens the incubation and alters the histopathology of bovine spongiform encephalopathy in mice.

*Neuroreport* 15 (11) 1735-1738

Koeijer A de; Heesterbeek H; Schreuder B; Oberthur R; Wilesmith J; Roermund H van; Jong M de 2004

Quantifying BSE control by calculating the basic reproduction ratio  $R_0$  for the infection among cattle.

*Journal of Mathematical Biology* 48 (1) 1-22

Konold T; Bone G; Ryder S; Hawkins SAC; Courtin F; Berthelin-Baker C 2004  
Clinical findings in 78 suspected cases of bovine spongiform encephalopathy in Great Britain.

*Veterinary Record* 155 (21) 659-666.

Martin TC; Moecks J; Belousov A; Cawthraw S; Dolenko B; Eiden M; Frese J von; Kohler W; Schmitt J; Somorjai R; Udelhoven T; Verzakov S; Petrich W 2004  
Classification of signatures of bovine spongiform encephalopathy in serum using infrared spectroscopy.

*Analyst* 129 (10) 897-901.

Matthews D; Jeffrey M; Simmons MM; Stack M; Wells GAH; Wilesmith JW 2004  
Bovine spongiform encephalopathy.

In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 549-569.

Ocana MF; Neubert H; Przyborowska A; Parker R; Bramley P; Halket J; Patel R 2004  
BSE control: detection of gelatine-derived peptides in animal feed by mass spectrometry.

*Analyst* 129 (2) 111-115.

Stack MJ; Balachandran A; Chaplin M; Davis L; Czub S; Miller B 2004

The first Canadian indigenous case of bovine spongiform encephalopathy (BSE) has molecular characteristics for prion protein that are similar to those of BSE in the United Kingdom but differ from those of chronic wasting disease in captive elk and deer.

*Canadian Veterinary Journal* 45 (10) 825-830.

## **BRUCELLA**

Dawson CE; Perrett LL; Davison NJ; Quinney S; Simpson V 2004

*Brucella* species infection in marine mammals off the Cornish coast (letter).

*Veterinary Record* 155 (1) 32.

Dricot A; Rual JF; Lamesch P; Bertin N; Dupuy D; Hao T; Lambert C; Hallez R; Delroisse JM; Vandenhautte J; Lopez-Goni I; Moriyon I; Garcia-Lobo JM; Sangari FJ; MacMillan AP; Cutler SJ; Whatmore AM; Bozak S; Sequerra R; Doucette-Stamm L; Vidal M; Hill DE; Letesson JJ; De Bolle X 2004  
Generation of the *Brucella melitensis* ORFeome version 1.1.  
*Genome Research* 14 (10B) 2201-2206

England T; Kelly L; Jones RD; MacMillan A; Wooldridge M 2004  
A simulation model of brucellosis spread in British cattle under several testing regimes.  
*Preventive Veterinary Medicine* 63 (1-2) 63-73.

Jackson R; Pite L; Kennard R; Ward D; Stack J; Domi X; Rami A; Dedushaj I 2004  
Survey of the seroprevalence of brucellosis in ruminants in Kosovo.  
*Veterinary Record* 154 (24) 747-751.

Jones RD; Kelly L; England T; MacMillan A; Wooldridge M 2004  
A quantitative risk assessment for the importation of brucellosis-infected breeding cattle into Great Britain from selected European countries.  
*Preventive Veterinary Medicine* 63 (1-2) 51-61.

Perrett LL; Dawson CE; Davison N; Quinney S 2004  
Brucella infection of lungworms from a harbour porpoise (letter).  
*Veterinary Record* 154 (25) 800.

Perrett LL; Brew SD; Stack JA; MacMillan AP; Bashiruddin JB 2004  
Experimental assessment of the pathogenicity of brucella strains from marine mammals for pregnant sheep.  
*Small Ruminant Research* 51 (3) 221-228.

Smits HL; Cutler SJ 2004  
Contributions of biotechnology to the control and prevention of brucellosis in Africa.  
*African Journal of Biotechnology* 3 (12) 631-636.

Whatmore AM; Murphy TJ; Cutler SJ; MacMillan AP 2004  
An assessment of the potential of amplified-fragment length polymorphism (AFLP) for use in identification and typing of *Brucella* isolates.  
In: Elzer PH (ed), Metodiev KT (ed), *Risk infections and possibilities for biomedical terrorism*, IOS Press, 2004, 95-99.

### **CAMPYLOBACTER**

Delsol AA; Sunderland J; Woodward MJ; Pumbwe L; Piddock LJV; Roe JM 2004  
Emergence of fluoroquinolone resistance in the native *Campylobacter coli* population of pigs exposed to enrofloxacin.  
*Journal of Antimicrobial Chemotherapy* 53 (5) 872-874

Gaynor EC; Cawthraw S; Manning G; MacKichan JK; Falkow S; Newell DG 2004  
The genome-sequenced variant of *Campylobacter jejuni* NCTC 11168 and the original clonal clinical isolate differ markedly in colonization, gene expression, and virulence-associated phenotypes.  
*Journal of Bacteriology* 186 (2) 503-517.

Karlyshev AV; Everest P; Linton D; Cawthraw S; Newell DG; Wren BW 2004  
The *Campylobacter jejuni* general glycosylation system is important for attachment to human epithelial cells and in the colonization of chicks.  
*Microbiology* 150 (6) 1957-1964.

Leatherbarrow AJH; Hart CA; Kemp R; Williams NJ; Ridley A; Sharma M; Diggle PJ; Wright EJ; Sutherst J; French NP 2004  
Genotypic and antibiotic susceptibility characteristics of a *Campylobacter coli* population isolated from dairy farmland in the United Kingdom.  
*Applied and Environmental Microbiology* 70 (2) 822-830.

Newell D; Jacobs-Reitsma WF; Wagenaar JA 2004  
*Campylobacter jejuni* and *Campylobacter coli*.  
In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 1072-1081.

Pumbwe L; Randall LP; Woodward MJ; Piddock LJV 2004  
Expression of the efflux pump genes *cmeB*, *cmeF* and the porin gene *porA* in multiple-antibiotic-resistant *Campylobacter jejuni*.  
*Journal of Antimicrobial Chemotherapy* 54 (2) 341-347

#### **CATTLE DISEASES AND CONDITIONS**

Colloff AD; Scholes SFE 2004  
Idiopathic necrotising enteritis in a dairy calf (letter).  
*Veterinary Record* 155 (12) 374.

Cranwell MP 2004  
Bracken poisoning.  
*Cattle Practice* 12 (3) 205-207.

Harwood D 2004  
Alimentary tract perforation in cattle caused by tyre wire (letter).  
*Veterinary Record* 154 (18) 574-575.

Harwood DG; Watson EN 2004  
Clostridial infection in young cattle: an update.  
*Cattle Practice* 12 (3) 219-227.

Howard P 2004  
Investigation of calf health and welfare on dairy farms in south-west England.  
*Veterinary Record* 155 (9) 262-265.

Laven RA; Livesey CT; Offer NW; Fountain D 2004  
Apparent subclinical hepatopathy due to excess copper intake in lactating Holstein cattle.  
*Veterinary Record* 155 (4) 120-121.

Laven RA; Livesey CT 2004  
The diagnosis of copper related disease: do we have the necessary tools? Part 1: prevalence of disease and the diagnosis of copper toxicity.  
*Cattle Practice* 12 (4) 265-269.

Laven RA; Livesey CT; May SA 2004  
Relationship between acute phase proteins and hoof horn haemorrhages in postpartum first-lactation heifers.  
*Veterinary Record* 154 (13) 389-395

Laven RA; Livesey CT 2004  
The effect of housing and methionine intake on hoof horn hemorrhages in primiparous lactating holstein cows.  
*Journal of Dairy Science* 87 (4) 1015-1023.

Livesey CT; Sharpe RT; Hogg RA 2004  
Recent association of cattle botulism with poultry litter (letter).  
*Veterinary Record* 154 (23) 734.

Millar M; Scholes S; Morris M 2004  
Progressive ataxia of Charolais cattle (letter).  
*Veterinary Record* 154 (12) 379.

Monies B 2004  
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*Veterinary Record* 154 (23) 735.

Payne JH; Sharpe RT; Livesey CT 2004  
Recognising and investigating poisoning incidents in cattle.  
*Cattle Practice* 12 (3) 193-198.

Sharpe R; Livesey C 2004  
Discarded lead-acid batteries: a preventable cause of lead poisoning in cattle (letter).  
*Veterinary Record* 154 (16) 512.

Sharpe RT; Livesey CT 2004  
An overview of lead poisoning in cattle.  
*Cattle Practice* 12 (3) 199-203.

Van der Burgt GM; Livesey CT 2004  
Effect of trace element supplementation on the fertility of dairy herds (letter).  
*Veterinary Record* 155 (21) 683-684.

Watson PJ; Scholes SFE 2004  
Polioencephalomyelitis of unknown aetiology in a heifer (letter).  
*Veterinary Record* 154 (24) 766-767.

### **ESCHERICHIA COLI**

Aktan I; Sprigings KA; La Ragione RM; Faulkner LM; Paiba GA; Woodward MJ 2004  
Characterisation of attaching-effacing Escherichia coli isolated from animals at slaughter in England and Wales.  
*Veterinary Microbiology* 102 (1-2) 43-53.

Avery SM; Liebana E; Hutchison ML; Buncic S 2004  
Pulsed field gel electrophoresis of related Escherichia coli O157 isolates associated with beef cattle and comparison with unrelated isolates from animals, meats and humans.  
*International Journal of Food Microbiology* (2) 161-169

Barlow AM; Wales AD; Burch AA; La Ragione RM; Woodward MJ; Pearson GR 2004  
Attaching and effacing lesions in the intestines of an adult goat associated with natural  
infection with *Escherichia coli* O145.  
*Veterinary Record* 155 (25) 807-808.

Cassar CA; Ottaway M; Paiba GA; Futter R; Newbould S; Woodward MJ 2004  
Absence of enteroaggregative *Escherichia coli* in farmed animals in Great Britain.  
*Veterinary Record* 154 (8) 237-239.

Clifton-Hadley FA 2004  
Verocytotoxigenic *Escherichia coli*.  
In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and  
bees)*, 5th ed, OIE, 2004, 1127-1137.

Hoyle DV; Shaw DJ; Knight HI; Davison HC; Pearce MC; Low JC; Gunn GJ;  
Woolhouse MEJ 2004  
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*Applied and Environmental Microbiology* 70 (11) 6927-6930.

Kuhne SA; Hawes WS; La Ragione RM; Woodward MJ; Whitlam GC; Gough KC  
2004  
Isolation of recombinant antibodies against EspA and intimin of *Escherichia coli*  
O157:H7.  
*Journal of Clinical Microbiology* 42 (7) 2966-2976.

La Ragione RM; Cooley WA; Parmar DDG; Ainsworth HL 2004  
Attaching and effacing *Escherichia coli* O103:K+:H- in red-legged partridges.  
*Veterinary Record* 155 (13) 397-398.

La Ragione RM; Best A; Sprigings KA; Cooley WA; Jepson MA; Woodward MJ 2004  
Interaction between attaching and effacing *Escherichia coli* serotypes O157:H7 and  
O26:K60 in cell culture.  
*Veterinary Microbiology* 104 (1-2) 119-124.

Roe AJ; Naylor SW; Spears KJ; Yull HM; Dransfield TA; Oxford M; McKendrick IJ;  
Porter M; Woodward MJ; Smith DGE; Gally DL 2004  
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*Escherichia coli* O157:H7.  
*Molecular Microbiology* 54 (2) 337-352.

Stevens MP; Roe AJ; Vlisidou I; Diemen PM van; La Ragione RM; Best A;  
Woodward MJ; Gally DL; Wallis TS 2004  
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influences the expression and secretion of locus of enterocyte effacement-encoded  
proteins but not intestinal colonization in calves or sheep.  
*Infection and Immunity* 72 (9) 5402-5411.

#### **FOOD SAFETY (including residues and disease transmission)**

Byford MF; Sauer MJ 2004  
Application of oestrogen receptor ligand binding domain to the generic isolation of  
oestrogens by receptor affinity chromatography.  
*Chromatographia* 59 (Supp) S123-S130.

Darbre PD; Aljarrah A; Miller WR; Coldham NG; Sauer MJ; Pope GS 2004  
Concentrations of parabens in human breast tumours.  
*Journal of Applied Toxicology* 24 (1) 5-13.

Darbre PD; Pope GS; Aljarrah A; Miller WR; Coldham NG; Sauer MJ 2004  
Reply to Alan M. Jeffrey's and Gary M. Williams' letter commenting on Concentrations  
of parabens in human breast tumours by Darbre et al. (letter).  
*Journal of Applied Toxicology* 24 (4) 303-304.

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Reply to Robert Golden's and Jay Gandy's letter commenting on Concentrations of  
parabens in human breast tumours by Darbre et al. (letter).  
*Journal of Applied Toxicology* 24 (4) 299-301.

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Untitled - Reply to Christopher Flower.  
*Journal of Applied Toxicology* 24 (4) 305-306

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Animal growth promoters: to ban or not to ban? A risk assessment approach.  
*International Journal of Antimicrobial Agents* 24 (3) 205-212

La Ragione RM; Narbad A; Gasson MJ; Woodward MJ 2004  
In vivo characterization of *Lactobacillus johnsonii* FI9785 for use as a defined  
competitive exclusion agent against bacterial pathogens in poultry.  
*Letters in Applied Microbiology* 38 (3) 197-205.

Liebana E; Gibbs M; Clouting C; Barker L; Clifton-Hadley FA; Pleydell E;  
Abdalhamid B; Hanson ND; Martin L; Poppe C; Davies RH 2004  
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cephalosporins in *Escherichia coli* and *Salmonella enterica* strains from  
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*Microbial Drug Resistance* 10 (1) 1-9

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Characterization of pathogenic *Vibrio parahaemolyticus* isolates from clinical sources in  
Spain and comparison with Asian and North American pandemic isolates.  
*Journal of Clinical Microbiology* 42 (10) 4672-4678

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sheep at slaughter and from humans with yersiniosis in Great Britain during  
1999-2000.  
*Letters in Applied Microbiology* 39 (1) 103-108.

Murtazina NR; Eremin SA; Mozoleva OV; Everest SJ; Brown AJ; Jackman R 2004  
Fluorescent polarization immunoassay for sulphadiazine  
using a high specificity antibody.  
*International Journal of Food Science and Technology* 39 (8) 879-889.

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Functional integrity of precision-cut liver slices from deer and cattle.  
*Journal of Veterinary Pharmacology and Therapeutics* 27 (2) 79-84.

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Receptor based technology for screening and confirmatory analysis of androgenic agents in cattle.  
In: *Proceedings of EuroResidue V: conference on residues of veterinary drugs in food* held Noordwijkerhout, 10-12 May 2004, 946-951.

### **FOOT AND MOUTH DISEASE**

Jones R; Kelly L; French N; Livesey C; Wooldridge M 2004  
Quantitative estimates of the risk of new outbreaks of foot-and-mouth disease as a result of burning pyres.  
*Veterinary Record* 154 (6) 161-165.

Jones R; Kelly L; Wooldridge M; French N 2004  
Quantitative estimates of the risk of new outbreaks of foot-and-mouth disease as a result of burning pyres – Reply to letter from S Alexandersen S and AI Donaldson (letter).  
*Veterinary Record* 154 (9) 278

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Validation of a foot-and-mouth disease antibody screening solid-phase competition ELISA (SPCE).  
*Journal of Virological Methods* 115 (2) 145-158.

Watson P 2004  
Differential diagnosis of oral lesions and FMD in sheep.  
*In Practice* 26 (4) 182-186, 188-191.

### **INFLUENZA VIRUSES (including avian influenza)**

Alexander D; Capua I 2004  
Avian influenza.  
*State Veterinary Journal* 14 (1) 3-8.

Alexander DJ 2004  
Highly pathogenic avian influenza.  
In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 258-269.

Capua I; Alexander DJ 2004  
Avian influenza: recent developments.  
*Avian Pathology* 33 (4) 393-404.

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Human health implications of avian influenza viruses and paramyxoviruses.  
*European Journal of Clinical Microbiology and Infectious Diseases* 23 (1) 1-6.

Phipps LP; Essen SC; Brown IH 2004  
Genetic subtyping of influenza A viruses using RT-PCR with a single set of primers based on conserved sequences within the HA2 coding region.  
*Journal of Virological Methods* 122 (1) 119-122

Suarez DL; Senne DA; Banks J; Brown IH; Essen SC; Lee CW; Manvell RJ; Mathieu-Benson C; Moreno V; Pedersen JC; Panigrahy B; Rojas H; Spackman E; Alexander DJ 2004  
Recombination resulting in virulence shift in avian influenza outbreak, Chile.  
*Emerging Infectious Diseases* 10 (4) 693-699.

Van Reeth K; Brown I; Essen S; Pensaert M 2004  
Genetic relationships, serological cross-reaction and cross-protection between H1N2 and other influenza A virus subtypes endemic in European pigs.  
*Virus Research* 103 (1-2) 115-124.

### **MYCOPLASMA**

Ayling RD; Bashiruddin SE; Nicholas RAJ 2004  
Mycoplasma species and related organisms isolated from ruminants in Britain between 1990 and 2000.  
*Veterinary Record* 155 (14) 413-416.

Hubschle O; Godinho K; Rowan T; Nicholas R 2004  
Danofloxacin treatment of cattle affected by CBPP (letter).  
*Veterinary Record* 155 (13) 403.

Mbulu RS; Tjipura-Zaire G; Lelli R; Frey J; Pilo P; Vilei EM; Mettler F; Nicholas RAJ; Huebschle OJB 2004  
Contagious bovine pleuropneumonia (CBPP) caused by vaccine strain T1/44 of *Mycoplasma mycoides* subsp. *mycoides* SC.  
*Veterinary Microbiology* 98 (3-4) 229-234.

McAuliffe L; Kokotovic B; Ayling RD; Nicholas RAJ 2004  
Molecular epidemiological analysis of *Mycoplasma bovis* isolates from the United Kingdom shows two genetically distinct clusters.  
*Journal of Clinical Microbiology* 42 (10) 4556-4565.

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Rapid detection of *Mycoplasma dispar* and *M. bovirhinis* using allele specific polymerase chain reaction protocols.  
*FEMS Microbiology Letters* 241 (1) 103-107.

Nicholas R 2004  
Contagious agalactia.  
In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 607-614.

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Recent developments in the diagnosis and control of *Mycoplasma* spp. infections in cattle.  
*Medecin Veterinaire du Quebec* 34 (1-2) 21-23

### **NEWCASTLE DISEASE**

Alexander DJ; Manvell RJ 2004  
Heat inactivation of Newcastle disease virus (strain Herts 33/56) in artificially infected chicken meat homogenate.  
*Avian Pathology* 33 (2) 222-225.

Alexander DJ 2004

Newcastle disease.

In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 270-282.

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Manvell R; White PS; Richmond K; Jackson P; Hugh-Jones M 2004

Retrospective characterization of Newcastle disease virus Antrim '73 in relation to other epidemics, past and present.

*Epidemiology and Infection* 132 (2) 357-368.

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Antigenic and genotypical characterization of Newcastle disease viruses isolated in Taiwan between 1969 and 1996.

*Veterinary Microbiology* 104 (1-2) 19-30.

## **PARASITOLOGY AND PARASITIC DISEASES**

Bates P 2004

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In: *Manual of diagnostic tests and vaccines for terrestrial animals (mammals, birds and bees)*, 5th ed, OIE, 2004, 1033-1040.

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Therapies for ectoparasiticism in sheep.

*In Practice* 26 (10) 538-547.

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Early innate and longer-term adaptive cutaneous immunoinflammatory responses during primary infestation with the sheep scab mite, *Psoroptes ovis*.

*Journal of Comparative Pathology* 131 (4) 318-329.

Daniel R 2004

Control of bovine fasciolosis.

*Cattle Practice* 12 (3) 161-165.

Dijk J van 2004

The epidemiology and control of dictyocaulosis in cattle.

*Cattle Practice* 12 (2) 133-145.

Gaudie CM; Done SH; Evans RJ 2004

Coccidiosis associated with eimeria species in gilts (letter).

*Veterinary Record* 155 (20) 647.

Phipps LP; Otter A 2004

Transplacental transmission of *Theileria equi* in two foals born and reared in the United Kingdom.

*Veterinary Record* 154 (13) 406-408.

Taylor MA; Catchpole J; Marshall RN; Marshall J; Hoeben D 2004

Histopathological observations on the activity of diclazuril (Vecoxan) against the endogenous stages of *Eimeria crandallis* in sheep.

*Proceedings of the Sheep Veterinary Society* (26) 117-118.

Wessels J; Wessels ME; Thompson L 2004  
Histophilus somni myocarditis in cattle in the UK (letter).  
*Veterinary Record* 154 (19) 608.

### **PIG DISEASES AND CONDITIONS**

Barlow AM 2004  
Reproductive failure in sows associated with *Leptospira mozdok* from a wildlife source.  
*Pig Journal* (54) 123-131.

Done SH 2004  
Urolithiasis in pig units - a gritty problem.  
*Veterinary Journal* 168 (3) 209-210.

Pearson R; Done SH 2004  
Porcine lordosis and kyphosis (a third variant of 'humpy-back') associated with increased muscle masses and subsequent disc protrusion.  
*Pig Journal* (53) 207-220.

Steenmetz C; Sharp M; Irvine R; Done SH 2004  
Rupture of the aorta in two pigs (suspected copper deficiency).  
*Pig Journal* (53) 200-206.

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Production responses of weaned pigs after chronic exposure to airborne dust and ammonia.  
*Animal Science* 78 (1) 87-97.

Williamson S; Gaudie C; Murray K; Dalley C; Woodward M 2004  
Investigation of leptospira serovars in pigs in England and Wales: definition and detection of infecting agents.  
*Pig Journal* (54) 132-138.

### **POSTWEANING MULTISYSTEMIC WASTING SYNDROME**

Drew TW; Grierson SS; King DP; Hicks D; Done S; Nesor JA; Evans DPB; Grimbeek P; Banks M 2004  
Genetic similarity between porcine circovirus type 2 isolated from the first reported case of PMWS in South Africa and North American isolates.  
*Veterinary Record* 155 (5) 149-151

Grierson SS; King DP; Sandvik T; Hicks D; Spencer Y; Drew TW; Banks M 2004  
Detection and genetic typing of type 2 porcine circoviruses in archived pig tissues from the UK.  
*Archives of Virology* 149 (6) 1171-1183.

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Genome sequence analysis of 10 Dutch porcine circovirus type 2 (PCV-2) isolates from a PMWS case-control study.  
*Research in Veterinary Science* 77 (3) 265-268.

Rawdon T; Lawton D; Johnstone A; Stone M; Spencer Y; Johnson L 2004  
Investigation of post-weaning multisystemic wasting syndrome.  
*Surveillance* 31 (1) 11-15.

## **RABIES**

Brookes SM; McElhinney LM; Johnson N; Badrane H; Tordo N; Fooks AR 2004  
Rabies virus variants and molecular epidemiology in Europe.  
In: King AA (ed), Fooks AR (ed), Aubert M (ed), Wandeler AL (ed), *Historical perspective of rabies in Europe and the Mediterranean basin*, OIE, Paris, 2004, 243-258.

Cliquet F; McElhinney LM; Servat A; Boucher JM; Lowings JP; Goddard T; Mansfield KL; Fooks AR 2004  
Development of a qualitative indirect ELISA for the measurement of rabies virus-specific antibodies from vaccinated dogs and cats.  
*Journal of Virological Methods* 117 (1) 1-8.

Crowcroft N; Fooks A 2004  
Bat infected with a rabies virus (EBLV-2) identified in southern England.  
*Eurosurveillance Weekly* 8 (40) 5-6.

Finnegan CJ; Brookes SM; Johnson L; Fooks AR 2004  
Detection and strain differentiation of European bat lyssaviruses using in situ hybridisation.  
*Journal of Virological Methods* 121 (2) 223-229.

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