



# XIII CONGRESS OF THE WORLD VETERINARY POULTRY ASSOCIATION JULY 19-23, 2003 DENVER, COLORADO



### **SCIENTIFIC PROGAM**

	Sunday, July 20, 2003 – Morning Program			
	Session A – Ballroom 1	Session B – Ballroom 4	Session C - Room C201	
	Moderator: Karel Schat			
8:00 AM	Opening - AVMA, AAAP, WVPA			
8:40 AM		Keynote Speaker #1 - Dick Jones espiratory Diseases of Poultry (IBV, LT, P	neumo)	
9:20 AM		Keynote Speaker #2 - John Glisson Mycoplasmal and Bacterial Diseases of Poultry		
	Break	Break	Break	
	10:00 AM - 10:30AM	10:00 AM - 10:30AM	10:00 AM - 10:30AM	
	Moderator: Sara Steinlage	Moderator: Calvin Keeler	Moderator: Karel Schat	
	A New And Emerging Disease Of Chickens Caused By Pasteurella Haemolytica-Like Organisms: Disease And Control Strategy Gonzalez, Carlos, Maria Vazquez, Raul Campogarrido, Rodriguez Humberto and Vaithianathan Sivanandan	Trends In Live Avian Pneumovirus Vaccination In The UK Naylor, Clive, Dick Jones and Dave Cavanagh	Novel Characteristics Of Recent Isola Avian Reoviruses In The USA Hein, Ruud, Gwen Slacum, Phyllis Lyncl and Saskia Van de Zande	
	The Effects Of Differences In Virulence Of Different Serovars Of Haemophilus Paragallinarum On Vaccine Efficacy Bragg, Robert	Field Effects And Lesions Of Avian Pneumovirus By Itself And/Or In The Presence Of Other Disease (NDV, ORT, BA, HE) And Environmental (Air Quality, Temperature Variations, Ammonia, Dust, Relative Humidity) Factors In Turkeys In The Upper Midwest Of The USA Medina, Hugo	Central Nervous System Disorders Caused By A New Avian Reovirus Van de Zande, Saskia, Sander van Bommel, Eva Kuhn and Ruud Hein	
		Protection Of Chickens Against Infections Caused By Avian Pneumovirus Cook, Jane, Michael Huggins and Sarah Orbell	Development Of A Safe And Efficacio In Ovo Administered Antibody Compl Vaccine Against Avian Reoviruses Giambrone, Joseph and Zhuyan Guo	
11:15 AM	Chicken Embryo Lethality Assay For Determining The Pathogenicity Of Ornithobacterium Rhinotracheale Isolates Hafez, Hafez and Christina Popp	Immunization Of Turkeys With A DNA Vaccine Expressing Either The F Or N Gene Of Avian Metapneumovirus Kapczynski, Darrell and Holly Sellers	Improved Diagnostics For Poult Ente Miles, Andrea, H. John Barnes, Lorrie Brundige, James Guy, Nancy Reimers, David Rives and Jean-Pierre Vaillancou	
11:30 AM		Efforts To Eradicate Avian Pneumovirus Halvorson, David, Carl Heeder, Dale Lauer, Kakambi Nagaraja, Moses Njenga, Don Roepke, Ron Lippert and Brian McComb		
	Pasteurella Multocida Infection In Heterophil-Depleted Chickens And Turkeys Bojesen, Anders, Kamille Petersen, Ole Nielsen, Jens Christensen and Magne Bisgaard	Richard Rimler Award Identification and Sequence Analysis Of Avian Metapneumoviruses in Wild Birds Outside Of Endemic Areas Turpin, Elizabeth	Effects Of Poult Enteritis And Mortalit Syndrome On Commercial Turkey Performance Rives, David, Julian Brake, Andrea Miles John Barnes, S Schultz-Cherry, James of and Nancy Reimers	
	Lunch	Lunch	Lunch	
	12:00 noon – 1:15PM	12:00 noon – 1:15PM	12:00 noon – 1:15PM	

	Sunday, July 20, 2003 – Afternoon Program		
	Session A - Ballroom 1	Session B - Ballroom 4	Session C - Room C201
			Chicken Anaemia Virus: Subclinical Infection In Broilers Zanella, Antonio, Rafaella Ceruti, Luigi Gavazzi and Alberto Volorio
1:30 PM	Enterococcus Sp. Related Arthritis In Broilers Salem, Mariano, John Rosenberger, Sandra	Colibacillosis Inducing Ability Of Massachusetts Type IB Vaccine – And Field Virus In Commercial Broilers Matthijs, Mieke, Jo Van Eck, Wil Landman and Arjan Stegeman	Detection And Environmental Monitoring Of DNA Viruses Using The Feathers Of Commercial Chickens Davidson, Irit, M. Kedem, H. Borochovitz, R Borenshtain, Ester Hamzani and B. Smith
1:45 PM		Pathogenicity Of Intestinal Passaged Infectious Bronchitis Virus (IBV) Alvarado, Ivan, Pedro Villegas and Guillermo Zavala	Transcription Of Latent Chicken Infectious Anemia Virus In Chicken Embryos Schat, Karel, Karla Stucker, Myrna Miller and Priscilla O'Conell
2:00 PM	Study Of Safety And Efficacy Of Mycoplasma Gallisepticum TS-11 Vaccine Stipkovits László, Judit Bíró, János Povazsán, László Krösi, János Mészáros and Róbert Glávits	Generating Novel IBV Spike Glycoprotein Genes By A New Technique Termed RNA Shuffling Callison, Scott, Mark Jackwood and Deborah Hilt	
2:15 PM		Infectious Bronchitis Virus (IBV) Protein Functions Studied Using Recombinant IBV's Cavanagh, Dave, Rosa Casais, Brian Dove, Teri Hodgson, Sharon Evans and Paul Britton	Characterization And Comparison Of Chicken Anemia Virus (CAV) Types From Different Ages In Commercial Broilers Sommer, Franz, Carol Cardona and Bruce Charlton
	Break	Break	Break
	2:30 PM – 3:00PM  Moderator: Stanley Kleven	2:30 PM – 3:00PM  Moderator: John Mauer	2:30 PM – 3:00PM  Moderator: Tami Kelly
3:00 PM		Keynote Speaker #3 – John Smith cepts of Management and Disease Control	in Poultry
3:45 PM	Further Studies Of Mycoplasma Gallisepticum Isolate K5054 As A Vaccine In Poultry Ferguson, Naola, Victoria Leiting and Stanley Kleven	Factors Affecting Epidemiology Of Antibiotic-Resistant Campylobacter Jejuni And Campylobacter Coli Idris, Umelaalim, Jingrang Lu, Margie Lee, Susan Sanchez, Charles Hofacre and John Maurer	What Is Your Diagnosis For Hatch Loss? Stayer, Philip
4:00 PM	Aerosol-Induced Mycoplasma Synoviae Arthritis: The Synergistic Effect Of Infectious Bronchitis Virus Landman, Wil and Anneke Feberwee	Determination Of The Prevalence Of Campylobacter Spp. On Turkey And Broiler Production Farms In North Carolina  McCann, Regan, Jesse Grimes, Sophia Kathariou, Andrea Sinclair, Jean-Pierre Vaillancourt and Michael Wineland	Evaluating Chlorine Dioxide (CIO <sub>2</sub> ) As A Drinking Water Sanitizer In Young Commercial Turkeys Brundige, Lorrie, Andrea Miles, David Rives and H. John Barnes
4:15 PM	Effect Of Mycoplasma Synoviae Infection On Serologic Response To Newcastle La		Effect Of Treated Waste Water On
	Sota Vaccine Nascimento, Elmiro, Rita Silva, Marcela Platenik, Virginia Almeida, M. Lucia Barreto	Stern, Norman and Michael Robach	Performance And Health Status Of Broilers Hassanain, Mohey
	Sota Vaccine Nascimento, Elmiro, Rita Silva, Marcela Platenik, Virginia Almeida, M. Lucia Barreto and Antonio Correa The Use Of MGC2-PCR-RFLP For Rapid Differentiation Between Mycoplasma Gallisepticum Field And Vaccine Strains Levisohn, Sharon, Inna Lysnyansky, Stanley Kleven and Maricarmen Garcia	Stern, Norman and Michael Robach  Campylobacter Jejuni Prevalence In Commercial And Organic Poultry Operations Luangtongkum, Taradon, Teresa Morishita and Qijing Zhang	Broilers
	Sota Vaccine Nascimento, Elmiro, Rita Silva, Marcela Platenik, Virginia Almeida, M. Lucia Barreto and Antonio Correa The Use Of MGC2-PCR-RFLP For Rapid Differentiation Between Mycoplasma Gallisepticum Field And Vaccine Strains Levisohn, Sharon, Inna Lysnyansky, Stanley Kleven and Maricarmen Garcia In Vivo Characterization Of A Glycoprotein C Mutant Of Infectious Laryngotracheitis Virus	Stern, Norman and Michael Robach  Campylobacter Jejuni Prevalence In Commercial And Organic Poultry Operations Luangtongkum, Taradon, Teresa Morishita	Broilers Hassanain, Mohey A Novel Approach To Foot Dipping

	Monday, July 21, 2003 – Morning Program		
	Session A – Ballroom 1	Session B – Ballroom 4	Session C - Room C201
	Moderator: Chuck Hofacre	Moderator: Darko Mitevski	Moderator: Robert Bragg
8:00 AM	Keynote Speaker #4 – A. A. Sami Ahmed Emerging and Endemic Diseases in Developing Countries		
	Farm And Management Variables Linked To Fecal Shedding Of Campylobacter And Salmonella In Niche-Market Poultry Jeffrey, Joan, Brigid McCrea, Karen Tonooka and Edward Atwill		An Overview Of Ocular Diseases In Poultry Shivaprasad, H. L.
	Case Report: Investigation Of Salmonella Tolerance Failures At Two Broiler Processing Plants Cline, Joel, Susan Lockaby, Sara Rowe- Mortor, Robert Norton and Fred Hoerr		A Serological Survey Of Wild Helmeted Guineafowl (Numida meleagris) In KwaZulu-Natal Province, South Africa Horner, Roger, Margaret Parker and Charles Ratcliffe
	Detection Of Salmonella Enteritidis In The Environment Of Experimentally Infected Laying Hens By An Electrostatic Air Sampling Device Gast, Richard, Bailey Mitchell and Peter Holt	Sequence Analysis Of A Putative Virulence Region Of A Conjugative R Plasmid In An Avian Escherichia Johnson, Timothy, Shelley Horne, Catherine Gibbings, Jerod Skyberg and Lisa Nolan	Poultry Health In The Pacific Region With, Leslie
	Isolations Of Salmonella Enteritidis And Salmonella Typhimurium From Mice In Poultry Flocks Henzler, David and Jean Guard-Petter	Investigations On The Clonality of E. Coli Infections In Industrial Poultry Production Christensen, Jens, Mark Chadfield and Magne Bisgaard	Mortality In Minnesota Game Birds Associated With West Nile Virus Infection Ziegler, Andre and Huanguang Lu
	Salmonella Pullorum Isolation From A Georgia Backyard Poultry Operation Kelly, Donna, Louise Dufour-Zavala and W. Douglas Waltman	New Results On Vaccination Of Chickens Against Colibacillosis Of Chickens Cserep, Tibor	Pathology Of West Nile Virus Infection North American Owls (Family Strigidae Fitzgerald, Scott, Heather Simmons, Jon Patterson, Matti Kiupel, Sheila Grimes, Jeffrey Massey and Richard Fulton
	Break	Break	Break
	10:00 AM - 10:30AM	10:00 AM - 10:30AM	10:00 AM - 10:30AM
	Moderator: Lloyd Spencer		
10:30 AM	Houghton Lecture Marek's Disease Virus Research in the Post-Sequencing Era: New Tools for the Study of Gene Functions and Virus-Host Interactions Vladimir Zelnik		
	AAAP Awards Luncheon 11:30AM – 2:00PM	AAAP Awards Luncheon 11:30 AM – 2:00 PM	AAAP Awards Luncheon 11:30AM – 2:00PM

	Monday, July 21, 2003 – Afternoon Program		
	Session A – Ballroom 1	Session B – Ballroom 4	Session C - C201
	Moderator: Deoki Tripathy		
2:00 PM			
		Lasher History Lecture	
		Dr. Peter M. Biggs	
	Break	Break	Break
	2:45PM - 3:15PM	2:45PM - 3:15PM	2:45PM - 3:15PM
	Moderator: Spangler Klopp	Moderator: Andre Ziegler	Moderator: Teresa Morishita
3:15 PM		Keynote Speaker #5 – Mo Saif Enteric Diseases of Poultry (Viral)	
	Evaluation Of Twelve Stabilizers In A Developed Attenuated Salmonella Enteritidis Vaccine Barbour, Elie, Afif Abdelnour, Farris Jirjis, Obied Faroon and Mohammed Farran	Assessment Of The Efficacy of Fluoroquinolones And Other Antimicrobials Against Respiratory Colibacillosis And Septicemia In Chickens Under Standardized Challenge Conditions Froyman, Robrecht and Jane Cooper	Immunological Significance Of Plasma Cell, Russel Bodies And Secretory Products In The Harderian Gland Of White Leghorn Birds – A Histological And Ultrastructural Study Ramkrishna, Vishveswara and Ashok Pawar
	A Case Study Of Salmonella Vaccination In Broilers Kelly, Tami	Progeny Challenge Studies Assessing The Protection Afforded Against Inclusion Body Hepatitis Field Isolates By An Inactivated Avian Adenovirus Vaccine El-Attrache, John, Pedro Villegas, Gregorio Rosales and Eric Jensen	Stimulation Of The Innate Immune System Of Broiler Chicks With DNA Oligonucleotides Containing CpG Motifs (CpG DNA) Against A Lethal Challenge Of E. Coli Gomis, Susantha, Lorne Babiuk, Tannis Thrush, Edwin Waters, Rolf Hecker, Brenda Allan and Andrew Potter
	Serovar Enteritidis Phage Type 4 Strains Lopes, Vanessa, Binu Velayudhan, David Halvorson and Kakambi Nagaraja	Attenuation Of Virulent Fowl Adenovirus Serotype 4 Through Continuous Passage On QT-35 Cells Hess, Michael, Stefan Mantke, Christine Prusas and Hafez Hafez	Effects Of High Dietary Vitamin E Supplementation On The Immune System Of Young Turkey Poults Heffels-Redmann, Ursula, Thomas Redmann, Christian Menge, Ulrich Eskens, Silke Rautenschlein and Klaus Lange
4:45 PM	Molecular Epidemiology Of Salmonella On Poultry Farms In NE Georgia	Inclusion Body Hepatitis: Efficacy Of Adenovirus Vaccines To Induce Antibody Response In Chickens Villegas, Pedro, John El-Attrache, Gregorio Rosales and Eric Jensen	The Value Of Vitamin C Supplementation In Broilers Raised Under Heat Stress And/Or Coccidia Infection Alawy, Ahmed El-Bassiouny, Sayed Hegazy, Amira Iskander and Ghada E- Gobary
5:00 PM	Adjourn	Adjourn	Adjourn

	Tuesday, July 22, 2003 – Morning Program		
	Session A – Ballroom 1	Session B – Ballroom 4	Session C - Room C201
М	loderator: Trevor Bagust		
8:00 AM	Keynote Speaker #6 – Jagdev Sharma Immunity and Immunosuppressive Diseases of Poultry		
8:40 AM	Keynote Speaker #7 – Paul McMullin Food Safety and Other Contemporary Industry Concerns (Antibiotic Resistance, Animal Welfare)		
9:20 AM	Keynote Speaker #8 – John Maurer Food Safety and Other Contemporary Industry Concerns (Antibiotic Resistance)		
	Break	Break	Break
	10:00 AM - 10:30AM	10:00 AM - 10:30AM	10:00 AM - 10:30AM
10:30 AM	AAAP Business Meeting 10:30AM - 12:00Noon		
	Lunch	Lunch	Lunch
	12:00 Noon - 1:00 PM	12:00 Noon - 1:00 PM	12:00 Noon - 1:00 PM

	Session A – Ballroom 1	Session B – Ballroom 4	Session C - Room C201
	Moderator: Joe Giambrone	Moderator: Dan Karunakaran	Moderator: Fred Hoerr
1:00 PM			
1.00 PW		Keynote Speaker #9 – David Swayne espiratory Diseases of Poultry (Al and ND\	/ Focus)
1:45 PM	Molecular Epidemiology Of Infectious Bursal Disease Viruses: Use Of Real- Time RT/PCR To Detect New Variants Jackwood, Daral and Susan Sommer	The Rapid Detection Of Avian Influenza Virus By Dot-ELISA Lu, Huaguang	Comparative Virulence Of Fowlpox Isolates And Vaccine Strains Wang, Jianning, Joanne Meers, Peter Spradbrow and Wayne Robibson
2:00 PM	Induction Of Gut-Associated And Systemic Immunity Following Vaccination And Challenge With IBDV Rautenschlein, Silke and Christine Haase	Avian Influenza In California O'Connor, Robert	Emergence Vaccination Against For Poxvirus In Laying Flock Under Fie Condition Jodas, Silvia and Hafez Hafez
2:15 PM	A Comparison Of Infectious Bursal Disease Vaccine Viruses To A vvIBD Field Isolate Present In Brazil Using Bursal Image Processing Analysis And Other Techniques Bernardino, Alberto, Kalen Cookson, Ronan Leite and Roberto Naime	Low Pathogenic Avian Influenza Virus In Commercial Chicken Flocks In South Africa Horner, Roger, Marco Romito, Shahn Bisschop and Raina Maharaj	Antimicrobial Susceptibility Monitor For Poultry In Europe De Jong, Anno and Robrecht Froyma
	Break	Break	Break
	2:30 PM - 3:00PM	2:30 PM - 3:00PM	2:30 PM - 3:00PM
	Moderator: Mo Saif	Moderator: Pedro Villegas	Moderator: Steve Fitz-Coy
3:00 PM	Generation Of Chicken Single Chain Antibody Variable Fragments For Infectious Bursal Disease Virus Ignjatovic, Jagoda, Sandra Sapats, Hans Heine, Lee Trinidad and Gaylen Gould	A Description Of The Serologic Response To Avian Influenza Vaccine In Turkeys Pabilonia, Kristy, Brian Wooming, Christina Gerhard and Nancy Reimers	Consequences Of Growth Promote Removal And Increased Use Of Anticoccidial Vaccine – European Experience Mortimer, Iain and Keith Lawrence
3:15 PM	Pivotal Role Of Interferon Gamma In Infectious Bursal Disease van den Berg, Thierry, Bénédicte Lambrecht, Fabienne Rauw, Dolores Morales and Guy Meulemans	Avian Influenza H5N2 Outbreak In Commercial Poultry – 2002, Virginia, USA Karunakaran, Daniel	The Impact Of Growth-Promoting Antibiotics On Total Poultry Microk As Well As Enterococcus Population Present On Poultry Carcass Avellaneda, Gloria, Jinrang Lu, Tongr Margie Lee, Charles Hofacre and John Maurer
	Molecular Identification Of Very Virulent Infectious Bursal Disease Virus In Chickens From Jordan Al-Natour, Mohammad	A Novel Approach To The Control Of Avian Influenza Infections Caused By Viruses Of The H5 And H7 Subtypes Capua, llaria and Stefano Marangon	Isolation Of Bacterial Pathogens Fi Poultry Eggs In Grenada Kabuusu, Richard, Theresa McCann Ravindra Sharma
	Region Of Several Infectious Bursal Disease Virus Isolates From The United States And Abroad Cookson, Kalen, Daral Jackwood and Jeff Rodenberg	Field And Laboratory Investigations On The Low Pathogenicity H7N3 Avian Influenza Outbreaks Affecting Northern Italy In 2002 Cattoli, Giovanni, Calogero Terregino, Elena Bertoli Giovanni Ortali, Stefano Marangon and Ilaria Capua	Prevalence, Strains, And Antimicro Resistance Patterns Of Campyloba Identified On North Carolina Turkey Farms Carver. Donna, Sophia Kathariou and Shepherd
4:00 PM	Development Of New Infectious Bursal Disease Virus Vaccine Abbassi, Hayet, Alicia Copa and Jagdev Sharma	Factors Influencing Proposed Changes To The OIE Code Definition Of Highly Pathogenic Avian Influenza (HPAI) And Regulatory Implications Of The Change Senne, Dennis and Brundaban Panigrahy	A High-Throughput Molecular Meth Quantify Relatedness Of Human Ar Chicken Enterococus Faecium Isol Steegh, Anneke, T. S. Cummings, D. Sullivan, and S. C. Burgess
4:15 PM	Withdrawn	Recombination Leading To Increased Virulence In The Chile H7N3 Influenza Poultry Outbreak Suarez, David, Dennis Alexander, Jill Banks, Ian Browne, Chang-Won Lee, Dennis Senne and Erica Spackman	The Use of a Modified Electromagn Field (EMFM) in Addressing The W Concerns of Commercial Layers (C Keirs, Robert
4:30 PM	Adjourn	Adjourn	Adjourn
4:45 PM		I	1
		WVPA Business Meeting 4:45 PM – 6:00 PM	

	Wednesda	y, July 23, 2003 – Mornir	ng Program	
	Session A – Ballroom 1	Session B – Ballroom 4	Session C - Room C201	
	Moderator: Guillermo Zavalla	Moderator: David Suarez	Moderator: Greg Mathis	
8:00 AM		Keynote Speaker #10 – Kirk Klasing ental, Nutritional, and Metabolic Diseases	of Poultry	
	<b>Breeder Flocks In Australia</b> Bagust, Trevor, Simon Fenton and Maddula Reddy	CA 2002 And 1996-2000 Mexican	Gene Expression Profiling To Study Cytokine Production After Eimeria Infection Lillehoj, Hyun, Wongi Min, Hunter Bea Nadim Alkharouf and Benjamin Matthe	
	Meat-Type Chickens	Phylogenetic Relationship Among Pigeon Paramyxovirus Type-1 (PPMV-1) Isolates Barlic-Maganja, Darja, Uros Krapez, Ivan Toplak, Sara Mankoc, Joze Grom, and Olga Zorman-Rojs	Flock-Level Prevalence And Risk Fa Of Coccidiosis In Broiler Chicken Fa In Jordan Abo-Shehada, Mahmoud, Mohammad Natour and Rami Gharabat	
	Avian Reticuloendotheliosis Viruses Could Cause Severe Immunodepression	Experimental Susceptibility Of Pigeons, Doves And Japanese Quail To vvENC Strain Alba, Monica, Eliana Icochea, Pablo Reyna, Fabiola Caballero, Tatiana Quevedo, Alberto Vargas and Rosa Gonzalez		
9:30 AM	Response To White Leghorn Chickens Of Various B Haplotypes To Infection With Subgroup J Avian Leukosis Virus Mays, Jody, Larry Bacon, Arun Pandiri and Aly Fadly		The Impact Of Coccivac-B Antigenic Capabilities When Used Concurrent With Roxarsone Or Salinomycin Davis, Stephen, John Radu, Steve Fitz and Richard Phillips	
	Field Štrain Óf Subgroup J Avian Leukosis Virus Lupiani, Blanca, Arun Pandiri, Jody Mays,	Ecological, Antigenic, And Genetic Studies On Other-Than-NDV Avian Paramyxoviruses (APMV) Isolated In Israel Shihmanter, Esther, Yoram Weisman, A. Panshin, E. Lapin, I. Gissin and M. Lipkind	Vaccination Of Broilers With An Experimental Live Attenuated Coccidiosis Vaccine McDougald, Larry and Lorraine Fuller	
	10:00 AM – 10:30AM	10:00 AM – 10:30AM	Break 10:00 AM – 10:30AM	
	Moderator: Aly Fadly	Moderator: Patricia Wakenell	Moderator: Larry McDougald	
10:30 AM		Keynote Speaker #11 – David Chapman Enteric Diseases of Poultry (Protozoal)		
	Polymerase Chain Reactions For Detection Of Fowl Poxvirus (FPV) And Reticuloendotheliosis Virus (REV) In Field Samples As Well As Detection Of Integrated REV In FPV Genome Luschow, Dorte and Hafez Hafez	The Effect Of Mutations In Newcastle Disease Virus Strains LaSota And Beaudette C On Their Pathogenicity In Chickens King, Daniel, Nobuko Wakamatsu, Ben Peeters, Siba Samal, Corrie Brown and Bruce Seal	Examination Of The Restoration Of Sensitivity To Clinacox By Using Covac B Mathis, Greg and Charlie Broussard	
	The Incidence Of Tumors In Selected Genetic Strains Of Chickens Fabricant, Julius and Bruce Calnek	Expression Of The Hemagglutinin- Neuraminidase Gene Of NDV On A Fowl Adenovirus 9-Based Gene Expression Vector Nagy, Eva, Yanlong Pei and Davor Ojkic	The Effects Of Clinacox And Coban Upon The Performance Of Tom Turk And The Development Of Immunity Eimeria Species Chapman, HD, Phil Matsler, Jennifer McFarland and Mark Chapman	
	Marek's Disease in Turkeys and Japanese Quail in Southwest Scotland Thomas W. Pennycott	Immunohistochemical Detection Of Paramyxovirus In The Brains Of Broiler Breeder Chickens With Encephalitis Lockaby, Susan, Joel Cline and Frederic Hoerr	Evaluation Of A Natural Anticoccidia (Cocci-Guard) In Broilers Icochea, Eliana, Pablo Reyna, Monica Alberto Crespo and Alfredo Codemarin	
	Lunch	Lunch	Lunch	

	Wednesday, July 23, 2003 – Afternoon Program		
	Session A – Ballroom 1	Session B – Ballroom 4	Session C – Room C201
	Moderator: Richard Witter	Moderator: Peter Woolcock	Moderator: Mariano Salem
1:00 PM		Keynote Speaker #12 – Richard Witter Neoplasatic Diseases of Poultry	
	Characterization Of The Marek's Disease Virus LORF-10 Gene Silva, Robert, Blanca Lupiani and Sanjay Reddy	An outbreak of Exotic Newcastle Disease in Chickens in Southern California Kinde, Hailu, J. Odani, F. Uzal, J. Moore, B. Daft, D. Read, B. Barr, P.Blanchard, B. Charlton, A. Ardans, H. Shivasprasad, R. Chin, M. Rezvani, M. McFarland, S. Hietala, F. Sommers, D. Zellner, R. Moeller, M. Anderson, L. Woods, P. Pesavanto, and P. Woolcock	The Effect Of Dietary Lysine Deficiency On The Immune Function Of Chickens Sander, Jean, Chieh-Fu Chen, I-Hsin Cheng and Nicholas Dale
	Role Of The Gene PP38 In The Pathogenesis Of Marek's Disease Virus Gimeno, Isabel, Richard Witter, Robert Silva and Sanjay Reddy	Marker Newcastle Disease Virus (NDV) Vaccines: Single Combined Immunization With A Marker NDV And A Recombinant HVT Expressing The NDV F Protein Provides Early And Long Lasting Immunity Kross-Landsman, Imke, Mark Koolen, Paul Sondermeijer and Teshome Mebatsion	Reproductive Potential In Female And Male Domestic Fowl Exposed To Lead Acetate Eltohamy, Magnda
	The Role Of Glycoprotein C In Marek's Disease Virus Lytic Replication Osterrieder, Nikolaus, Karsten Tischer and Vladimir Zelnik	Safety And Efficacy Of Turkey Herpesvirus Vectored Newcastle Disease Vaccine Jirjis, Faris, Paul Sondermeijer and Imke Kross-Landsman	Proteomics: Investigating The Molecular Basis Of Normal And Pathological Avian Physiology Burgess, Shane
	Break	Break	Break
	2:30 PM – 3:00PM	2:30 PM – 3:00PM	2:30 PM – 3:00PM
	Moderator: Richard Witter	Moderator: Peter Woolcock	Moderator: Mariano Salem
	Increased Nitric Oxide Levels In Chickens With Neurological Syndromes Associated With Very Virulent Plus Marek's Disease Virus Jarosinski, Keith, Brad Njaa, Priscilla O'Connell and Karel Schat	Compatability Of A Novel Newcastle Disease Vaccine With Marek's Vaccines When Co-Administered In Ovo Haddad, Eid, Craig Whitfill, Alan Avakian, Don Grosse, Michael Martin, Donald Link and Patricia Wakenell	Clostridial Enteritis In Mature Broiler Breeders Van Sambeek, Francene, Fred Hoerr and Susan Lockaby
3:15 PM	Retro- and Prospective Analysis Of Marek's Disease Outbreaks: Titration Of Marek's Disease Cell-Associated	Reed Rumsey Award Development Of A Novel DNA Vaccine Against Newcastle Disease Virus Moura, Lenita and Vikram Vakharia	Chondrocyte Maturation In Thiram- Induced Tibial Dyschondroplasia In Poultry Rath, Narayan, Janice Balog, William Huff and Geraldine Huff
		Serum Chemistry Changes In Response To Challenge With NDV, IBDV Or MDV In Commercial Broilers Wakenell, Patricia and Craig Blackmore	Avulsion Of The Tibial Crest A Cause Of Lameness And Leg Hemorrhage In Turkey Breeder Candidates Hoerr , Frederic, Charles Corsiglia and G. Yan Ghazikhanian
	Marek's Disease: Where Do We Stand? Reddy, Sanjay and Blanca Lupiani	Protective Immunity To Newcastle Disease In Broilers Vaccinated In Ovo With An Infectious Bursal Disease- Antibody Complex Vaccine And Against Newcastle Disease Post-Hatch Martin, Michael, Alan Avakian, Patricia Wakenell, Craig Blackmore and Craig Whitfill	Multiblending Formulation "Siformu-Opt" For Maximum Profit Using Energy, Protein, Digestable Methionine And Lysine In Broilers Ortega, Jose, Ariel Ortiz, Ernesto Avila and Mariano Gonzalez
4:00 PM		Closing - AVMA, AAAP, WVPA	
4:45 PM		ADJOURN	

#### Poster Session I Sunday, July 20 – Monday, July 21, 2003 Ballroom 2&3

#### Adeno

1. Sequence Analysis And Viral Rescue From An Infectious Clone Of The Avian Adeno Associated Virus Estevez, Carlos and Pedro Villegas

2. Diagnosis Of Avian Adenovirus Type 2 Using PCR

Lavazza, Antonio, Diane Persia, Ana Moreno Martin, Maria Lodovica Pacciarini, Monica Cerioli, Paolo Cordioli and Paola Massi

- 3. Not Confirmed
- 4. Not Confirmed
- 5. Not Confirmed

#### Bacteria, Miscellaneous

6. Ornithobacterium Rhinotracheale In Israel – Review

Bock, Rachel

7. Detection Of Gallibacterium Spp. In Chickens By Fluorescent 16s rRNA In Situ Hybridization

Bojesen, Anders, Henrik Christensen, Ole Nielsen and John Olsen

8. Universal PCR For Detection Of Haemophilus Paragallinarum, Ornithobacterium Rhinotracheale And Pasteurella Multocida In Chickens

Hung, Armando and Giuliana Medrano

9. Quantification Of Enterococcus Faecalis-Induced Bacteraemia In Brown Layer Pullets

Landman, Wil, Kees Veldman, Dik Mevius and Jo Van Eck

10. Reimerella Anatipestier-Like Organism Causing Meningitis In Turkeys

Lublin, Avishai, Sara Mechani, Samuel Perl and Hanoch Yuval

11. Molecular Characterization Of Plasmids With Antimicrobial Resistant Genes In Avian Isolates of Pasteurella Multocida

Shieh, Happy, Poa-Chun Chang, Jin-Ru Wu, Jui-Hung, Shieh and Shuen-Rong Gong

12. Cross-Protection Studies Among Nine Serovars Of Haemophilus Paragallinarum In The Blackall Scheme Soriano, Edgardo, Manuel Longinos, Pomposo Fernandez, Guillermo Tellez, Francisco Suarez and Patrick Blackall

13. Proposal Of The Blackall Scheme For Hemagglutinin Serotyping Of Haemophilus Paragallinarum Soriano, Edgardo, Guillermo Tellez and Pomposo Fernandez

14. A New And Emerging Disease Of Chickens Caused By Pasteurella Haemolytica-Like Organisms: Prevalence, Isolation and Characterization

Vazquez, Maria Elena, Raul Campogarrido, Humberto Rodriguez, Vaithianathan Sivanandan and Carlos Gonzalez

15. Molecular Epidemiology Of Two Fowl Cholera Outbreaks On A Free-Range Chicken Farm

Zhang, Peijun, Narelle Fegan, Paul Duffy and Pat Blackall

181.Investigation On The Clonality Of Streptococcus Gallinaceous Isolated From An Outbreak Of Septicaemia Associated With A High Prevalence Of Endocarditis In A Flock Of Broiler Parents

Chadfield, Mark, Jens Christensen, Henrik Christensen and Magne Bisgaard

#### **Chick Anemia Virus**

16. Detection Of Chicken Anemia Virus In The Gonads And Vertical Transmission To The Progeny Of Broiler Breeder Hens With High Neutralizing Antibody Titers

Brentano, Liana, Simaia Lazzarin, Simone Bassi, Tania Klein and Karel Schat

17. Co-infection And Interaction Of Avian Infectious Anemia Virus And Reticuloendotheliosis Virus In Chicken Flocks Cui, Zhizhong, Shuhong Sun and Yan Du

18. Serological Evidence Of Chicken Infectious Anemia In Nigerian Indigenous Chickens

Emikpe, Benjamin, Oluwayelu Oladimeji, Oladele Omolade, Ohore Godspower and Oladokun Tinuke

19. Immunopathological Changes And PCR Tracing Of CAV Live Attenuated Vaccine In One Day Old Chicks Hussein, H.A., M. M. Youssef, E. A. El-Ibiary, A. Atman and M. A. Shalaby

#### 20. Characterization Of Chicken Infectious Anemia Outbreaks In Slovenia

Krapez, Uros, Darja Barlic-Maganja, Sara Mankoc and Olga Zorman-Rojs

21. Antibody Detection Of Chicken Infectious Anemia Virus By A Competitive Commercial ELISA In Vaccinated Broiler Breeder And Their Progeny

Quezada, Benjamin, Eliana Icochea, Monica Alba and Rosa Gonzalez

#### 22. Detection of Chicken Infectious Anaemia Virus With Polymerase Chain Reaction

Tosi, Giovanni, Francesca Paganelli, Laura Fiorentini, Paola Massi and Antonio Lavazza

### 23. Generation Of Chicken Anemia Virus (CAV) Infectious For Chickens From Infectious Clone Generated Directly From Clinical Specimen By PCR

Van Santen, Vicky, Haroldo Toro and Frederic Hoerr

#### **Education, General Disease and Small Flock**

24. Poultry Veterinarians: Postgraduate Education To Meet Professional Needs In The 21st Century Bagust, Trevor

### 25. Breaking International Barriers In The Poultry Industry: The UNAM's Unique Academic Training For Poultry Medicine Specialists

Barger, Katherine, Jean Pierre Vaillancourt, Jose Quintana, Magdalena Escorcia, Carlos Coello and Marco Juarez

### 26. Isolation Of Infectious Larygotracheitis Virus (ILTV) From Peafowls And Chickens With A History of Respiratory Diseases

Bautista, Daniel, Nathaniel Tablante, Robert Robison and Fidelis Hegngi

#### The Use Of A Continual Disinfection Program For The Control Of Infectious Diseases In Layers and Broilers Bragg, Robert

### 28. Genetic Variation In Psitacine Beak And Feather Disease Virus From Different Psittacine Birds Bragg, Robert, Kulsum Tajbhai and Jacobus Albertyn

### 29. Production Of Chicken Proventricular Organ Culture For Use In Infectious Disease Studies Brown, Thomas, Mary Pantin-Jackwood and Pedro Villegas

### 30. Composting Chicken Litter With Or Without Carcasses For Control Of Poultry Diseases In Argentina Buscaglia, Celina and Elena del Barrio

## 31. Establishment Of A Testing Method To Detect Virocidal Activity Of Commercial Disinfectants Cheng, I-Hsin and Jean Sander

## 32. Mortality In Organic Free-Range Chickens and Molecular Characterization Of The Involved Pathogens Eigaard, Nicoline, Permin Anders, Jens Christensen and Magne Bisgaard

#### 33. Erysipelas In Layers – A Growing Problem In Aviary And Organic Housing Systems

Eriksson, Helena, Desiree Jansson, Oddvar Fossum, Jan Chirico and Anders Gunnarsson

#### 34. Retrospective Study Of Diseases In Michigan Gamebirds

Fulton, Richard and Dwight Schwartz

#### 35. Cloacal Prolapse In Ostrich Chicks With Histomonosis

Georgiades, Georgios, Prodromos Iordanidis, Margarita Papazahariadou, Nikolaos Papaioannou and Stavros Frydas

#### 36. Compilation Of Hatchery Microbiological Evaluations

Hubbard, Sue and Reagan Sadler

#### 37. Evaluation Of Safety And Effectiveness Of Chlorine Dioxide As A Hatchery Disinfectant

Mitevski, Darko and Jean Sander

#### 38. Reproduction Of Proventriculitis In Commercial And SPF Broiler Chickens

Pantin-Jackwood, Mary and Thomas Brown

#### Immunology, Immunity and Vaccines

39. Effects Of Recombinant IL-6 On The Functional Activities Of Day-Old Chicken Heterophils

Ferro, Pamela, Christine Swaggerty, Virginia Lowry, Pete Kaiser, Lisa Rothwel and Michael Kogut

40. Differences In Lymphocyte Distribution Between Broilers Divergently Selected for High Or Low Early Antibody Reponse To Escherichia Coli Vaccine

Heller, Dan, Yotva Lavi, Avigdor Cahaner, Gabi Leitner and Irit Davidson

41. Immunohistopathological Investigation In Broilers Given Difference Levels Of Neem Oil (A. indica) In Feed Joshi, Madan, Ulhas Deore, Sudhakar Mehasare and Vinayak Pathak

42. Regulated Bacterial Lysis For DNA Vaccine Vector Delivery

Kong, Wei, Soo-Young Wanda and Roy Curtiss III

43. Molecular Cloning And Characterization Of A New Proinflammataory Chicken Cytokine Which Induces IL-6 Production

Min. Wongi and Hvun Lillehoi

- 44. Sequence And Functional Properties Of A New Proinflammatory Chicken Cytokine Homologous To Mammalian IL-16 Min, Wongi and Hyun Lillehoj
- 45. **Use Of Echinace Angustifolia As Natural Immunostimulant In The Poultry Industry** Ortiz, Ariel, Juan Carlos Del Rio, Yasmin Luis, Carlos Avila, Celso Lopez, and Ana Hernandez
- 46. Effects Of cGnRH-I Pulse Frequencies In Laying Hen Lactotrope And Somatotrope Populations In Vitro Plano, Carlos, Maria Sonez, Ana Di Matteo, Gustavo Delhon and Irene Von Lawzewitsch
- 47. Not Confirmed
- 48. Bromodialone Induced Down Regulation Of Humoral Immunity In Chicken

Singh, Desh Deepak, Rajesh Baggha, Lokesh Singhal and Ramswaroop Chauhan

49. Generation And Evaluation Of Recombinant Vaccines For Protection Against Fowlpox And Reticuloendotheliosis In Chickens

Singh, Pratik and Deoki Tripathy

50. Activity Of Uncitolina EA5 And Macandina On The Immune System Of Chicken Broilers

Valdiva, Ricardo, Eliana Icochea, Ximena Rossello and Sebastian De la Piedra

51. Bioengineering Arabidopsis To Express VP2 Gene Of IBDV And S1 Gene of Reovirus As An Edible Vaccine Wu, Hongzhaun, Narenda Singh, Robert Locy, Karyn Gunn and Joseph Giambrone

#### **Infectious Bronchitis Virus**

- 52. Turkey Coronavirus Spike Glycoprotein Gene Sequence Of Evolutionary Relationships To Other Coronaviruses Jackwood, Mark, Deborah Hilt and Scott Callison
- 53. RT-PCR And RFLP Characterization Of IBV Strains Isolated From Diseased Poultry In Costa Rica Jimenez, Carlos, Rocio Cortes, Marcia Ramirez, Jorge Prendas, Ennie Arrieta and Carlos Zuniga
- 54. Deleniation Of IBV-Recombinant Plasmid DNA In Embryonating And In Hatched Chicks Khan, Mazhar and Jaroslaw Fabis
- 55. **Detection And Genetic Characterization Of Avian Infectious Virus In Chile** Lopez, Juan, Robin McFarlane and Jorge Ulloa
- Construction Of A Full-Length cDNA Library For Cal-99 Infectious Bronchitis Virus Mondal, Shankar and Carol Cardona
- 57. S1 Glycoprotein Gene Analysis Of Recent Infectious Bronchitis Viruses Isolated In Korea Pak, Son II, Haan Woo Sung and Hyuk Moo Kwon
- 58. Efficacy Study With 3 Attenuated Infectious Bronchitis Vaccine Strains Of The Massachusetts Type In SPF Chickens Picault, Jean-Paul, Josiane Lamande, Chantal Allee, Yannick Morin and Sylvain Comte
- Some Experimental Results Concerning Comparative Pathogenicity Of Infectious Bronchitis Serotypes CR88 And Massachusetts In Chickens And Their Prophylaxy

Picault, Jean-Paul, Josiane Lamande, Chantal Allee, Yannick Morin and Sylvain Comte

60. Glycohistochemistry In Broilers Respiratory Tract Vaccinated Against Infectious Bronchitis (IB) And Newcastle Disease (NC)

Plano, Carlos, Ana Di Matteo, Maria Sonez and Irene von Lawzewitsch

61. Not Confirmed

62. Comparison Of Different Tissues For IBV Detection By RT-PCR

Toro, Haroldo, Frederic Hoerr and Lanqing Li

63. Nested-PCR For Serotype Identification Of Infectious Bronchitis Virus

Tosi, Giovanni, Francesca Paganelli, Laura Fiorentini, Paola Massi and Antonio Lavazza

#### Leukosis

64. Expression Of Mutant Tumor Suppressor Gene P53 In Avian Leukosis Subgroup J In Egg-Type Chicken Xu, Binrui, Weixing Dong, Zhaoqing He, Chunming Yu, Li Zhang, Xiaoyu Feng and Ning Li

65. Diagnosis Of Avian Leukosis Virus Subgroup J In Commercial Egg-Type Chickens In China

Xu, Binrui, Weixing Dong, Zhaoqing He, Yanli Lv, Chunming Yu, Lucy Lee and Maoxiang Li

#### Marek's Disease Virus

- 66. Routine Monitoring Of Marek's Disease Viraemias And Detection Of Wild Type Infection Using Molecular Methods Burgess, Graham and Ramon Layton
- 67. Pathogenesis And Mutagenesis Studies On Marek's Disease Viruses Encoded Interlekin-8 Gene (vIL8) Cui, Xiaoping, Lucy Lee, Willie Reed and Sanjay Reddy
- 68. Reticuloendotheliosis Viruses And Marek's Disease Viruses Were Often Isolated Simultaneously From Chicken Flocks Vaccinated With CVI/988 Rispens And Having Late Marek's Disease Tumor Outbreaks Cui, Zhizhong, Zhi Zhang, Shijin Jiang and Jiao Zhou
- 69. Molecular Interaction Between Marek's Disease And Retroviruses in Dually-Infected Chickens Davidson, Irit and Rinat Borenshtain
- 70. Strain Differentiation of Serotype 1 Marek's Disease Virus In Australian Poultry Using Conventional And Real Time PCR

Layton, Ramon and Graham Burgess

- 71. **Identification And Characterization Of LORF11 Unique To Three Serotypes Of Marek's Disease Virus** Lee, Lucy, Sanjay Reddy and Robert Silva
- 72. Expression Of Marek's Disease Virus PP38 In The Tet-on Inducible QT35 Cell Line, The DF-1 Cell Line And Primary CEF

Li, Xinhui and Karel Schat

- 73. Evaluation Of Efficacy Of In-Ovo Vaccination Against Marek's Disease In Broilers Marketed At Early Age In Korea Mo, In-Pil, Wong-woo Lee, Do-Wook Go, Myung-Soo Hwang and Seol-Ryung Jeong
- 74. The Description Of Chickens Immune Organs, Cellular Composition, Infected By Pathogenic And Vaccine Strains Fc-126 And VI-988 Viruses Of The Marek's Disease

Sadovnikov, Nikolay and L. I. Malakhyeva

75. Evaluation Of An Enzyme Linked Immunosorbent Assay For Monitoring Antibody To Marek's Disease In Vaccinated Commercial Leghorn Chickens

Spencer, Lloyd and Maria Chan

- 76. Not Confirmed
- 77. Natural Killer Cell-Mediated Immune Response To Marek's Disease Virus-Encoded Glycoproteins Zhu, Min and Karel Schat

#### **Paramyxovirus**

78. Not Confirmed

- Immunogenicity And Safety Of A New Viscerotropic ND-Vaccine Adene, Daniel, Omolade Oladele, Stephen Akpavie and Tunde Lawal
- 80. Withdrawn
- 81. Efficacy Comparison Of Genotype VII, IX And II Vaccine Of Newcastle Disease Cao, Dianjun, Lihui Yan, Peixin Liu, Jianhong Sun, Lujiang Qu, Hongmei Li and Haiyan Wang
- 82. The Status Of Newcastle Disease In Free-Ranging Chickens In South Africa And It's Possible Control By Means Of A Commercial Thermostable

Horner, Roger, Margaret Parker, Raina Maharaj, Leonard Mogoje, Oriel Thekisoe, Celia Abolnik and Shahn Bisschop

- 83. Cevamune Tablets: Protection And Safety Toward Vaccine Viruses Kelemen, Maria, Erzsebet Saghy, Sylvain Comte and Laurent Mogenet
- 84. Testing Safety And Efficacy Of Live Combined ND-IB Viral Vaccine On Day-Old SPF And Broiler Chicks Kelemen, Maria, Balazs Toth and Erzsebet Saghy
- 85. Study On Biological Property Of PPMV-JS And Sequencing-Homology Analysis Of Partial Fusion Protein Li, Gang, Zhenxiang Lu, Zhongqing Wu, Wie Sun, Jingping Zhou, Deming Zhang and Puyan Chen
- 86. Field Vaccination Trials With Malaysian Thermostable Newcastle Disease Vaccine (NDV4) In Village Chickens In Kaduna State, Nigeria

Nwanta, John, Umoh Jalath, Abdu Audu and Ajogi I.

87. Pathogenesis Of Various Strains Of Newcastle Disease Virus In Embryos, Using In Situ Hybridization And Immunohistochemistry

Oldoni, Ivomar, Corrie Brown, Daniel King and Bruce Seal

88. Virulence Markers Of Pigeon Paramyxovirus Type 1 (PPMV-1)

Panigrahy, Brundaban, Dennis Senne and Janice Pedersen

89. Changes In CD4+ And CD8+ T-Cell Subpopulations In Chicken Vaccinated With LaSota Or V4 Strains Of Newcastle Disease Virus

Sun, Jianhong, Dianjun Cao, Peixin Liu, Lihui Yan, Jie Chen, Xiangang Kong and Baoquan Liu

90. The Role Of Newcastle Disease Virus Fusion, Phosphoprotein, And Hemagglutinin-Neuraminidase Genes In Causation Of Disease

Wakamatsu, Nobuko, Daniel King, Ben Peeters, Siba Samal, Corrie Brown and Bruce Seal

91. Rapid Detection Of Newcastle Disease Virus Using A Real-Time Reverse Transcriptase PCR Assay For Viral Nucleic Acid

Wise, Mark, Erica Spackman, Daniel King, David Suarez and Bruce Seal

#### **Pneumovirus**

- 92. Avian Pneumovirus Infection In Turkey and Broiler Farms In Italy: A Virological And Serological Field Survey Catelli, Elena, Mattia Cecchinato, Mauro Delogu, Maria Alessandra De Marco, Giovanni Ortali, Carlo Franciosi and Clive Naylor
- 93. Protection Of Recombinant N Protein Of Avian Pneumovirus Against Respiratory Challenge In Turkeys Chary, Parag, Moses Njenga, Kakambi Nagaraja and Jagdev Sharma
- 94. Failure To Detect Molecular And Serological Evidence Of Avian Pneumovirus Infection In Wild Aquatic Birds In Italy Delogu, Mauro, Maria De Marco, Elena Catelli, Mattia Cecchinato, Luigi Ruffoni, Patrizia Pesente and Carlo Franciosi
- 95. **Avian Pneumovirus (APV) And Its Persistence In Poultry**Nagaraja, Kakambi, Binu Velayudhan, Vanessa Lopes and David Halvorson
- 96. Assessment Of RT-PCR And IIF To Detect Avian Pneumovirus (A, B and C) In Experimentally Infected Chickens Pages-Mante, Albert, Narcis Saubi, Alberto Moreno and Enric Espuna
- 97. Withdrawn
- 98. Fusion Gene Mutants Of Avian Pneumovirus (APV) And Their Cytopathic Effects In Vero Cells Velayudhan, Binu Vanessa Lopes, David Halvorson and Kakambi Nagaraja

#### **Processing**

99. Reducing DOA's At Processing Plants

Gustin, Scott and Charles Hofacre

100. Transport Mortality, Condemnation Rate And Pathological Findings In Broilers In Two Swiss Processing Plants Hoop, Richard

101. Investigation Of Liver Hepathopathy In Broiler Chickens Associated With Preharvest Feed Withdrawal Trampel, Darrell, Dong Ahn and Jerry Sell

#### Salmonella

102. The Effect Of Ascorbic Acid On Egg Contamination, Fecal Shedding, And Heterophil Bacterial Killing During Salmonella Enteritidis

Andreasen, Claire, Dagmar Frank and Joann Kinyon

103. Isolation And Characterization Of Salmonella Enterica From Layer Farms In Macedonia

Bauerfeind, Rolf, Risto Prodanov, Stefanie Barth, Wolfgang Rabsch and Darko Mitevski

104. Field Assessment Of A Salmonella Subtype Enteritidis Specific PCR Method Vs. Traditional Culture Method Charlton, Bruce, Cathryn Bauer, Sally Channing-Santiago, Haily Kinde and Richard Walker

105. Genetic And Phenotypic Characterization Of Salmonella Arizonae Isolated From Turkeys

Crespo, Rocio, Joan Jeffrey, H. L. Shivaprasad, Richard Chin and Gabriel Senties-Cue

106. Prolonged Bacteremia, Modified Genital Tract Infection And Reduction Of Egg Contamination By A Type 1 Fimbriae Mutant of Salmonella Enteritidis

De Buck, Jeroen, Filip Van Immerseel, Freddy Haesebrouck and Richard Ducatelle

107. Protection Of Laying Hens Against Salmonella Enteritidis By Feed Supplementation With Tea Extracts, Guar Bean Fibers And Iodination Of The Drinking Water

De Buck, Jeroen, Filip Van Immerseel, Freddy Haesebrouck and Richard Ducatelle

108. Salmonella Control In The Netherlands

de Vries, Tjep

109. "In Vivo" Properties Of Lytic Bacteriophages Isolates In Salmonella Enteritidis Infected And Uninfected SPF Chickens Fiorentin, Laurimar, Nilson Vieira and Waldomiro Barioni, Jr.

110. Effect Of Ochratoxin A and S. Gallinarum Infection On Pathological Changes In Broiler Chicks

Gupta, Sanjeev, Naresh Jindal, Raj Khokhar, Rajesh Asrani, David Ledoux and George Rottinghaus

111. Growth Response And Biochemical Alterations In Broiler Chicks Fed Ochratoxin A And Inoculated With Salmonella Gallinaru

Gupta, Sanjeev, Naresh Jindal, Raj Khokhar, S. Gupta, David Ledoux and George Rottinghaus

112. Effects Of Co-Infection with Salmonella Typhimurium And S. Enteritidis On Course Of S. Enteritidis Infection During Induced Molt

Holt, Peter and Richard Gast

113. Antigen-Specific Lymphocyte Proliferation, Interleukin-6 (IL-6) And IL-2 Production In Chickens Immunized With Outer Membrane Protein Of Salmonella Enteritidis

Lillehoj, Hyun, Masashi Okamura, Richard Raybourne, Uma Babu and Robert Heckert

114. The Effect Of A Novel Salmonella Subunit Vaccine On Intestinal Salmonella Shedding In Breeder Turkeys Lippert, Ron and James Sandstrom

115. Application Of Multiplex And RFLP PCR Towards The Rapid Identification Of Salmonella Scrotypes Isolated From Poultry And The Poultry Environment

Liu, Tongrui, Yang Hong, Christine Lobsinger, Charles Hofacre and John Maurer

116. Beta-Glucan Supplemented Feed Decreases Salmonella Enteritidis Organ Invasion In Immature Chicks

Lowry, Virginia, Pamela Ferro, Christinia Swaggerty, Arun Bahl and Michael Kogut

117. Some Epidemiological Findings On Fowl Typhoid In Broiler Chicks In Parts Of Haryana, India Mahajan, Nand, Naresh Jindal, Suresh Kumar and Raj Khokhar

118. The Recovery Of Salmonella Species From Wild Birds In Great Britain Between 1995 and 2002

Pennycott, Thomas, Alastair Park and Henry Mather

- 119. Response To A Combined Salmonella Enteritidis And Ascaridia Galli Infection In Two Different Chicken Breeds Permin, Anders, Nicoline Eigaard, Helle Juul-Madsen, Mark Chadfield, Jens Christensen, Torben Schou and Francesca Ambrosini
- 120. Differences In Susceptibility To Infections With Salmonella Enteritidis And Pasteurella Multocida Between Indigenous And Commercial Chicken Breeds

Schou, Torben, Anders Permin and Jens Christensen

121. Poultry Farm Prevalence Of Salmonella In North Carolina

Sinclair, Andrea, Jean-Pierre Vaillancourt, Michael Wineland, Jesse Grimes, Sophia Kathariou, Elliot Ryser and Regan McCann

- 122. The Effect Of A Novel Salmonella Subunit Vaccine in Chickens Challenged With Salmonella Enteritidis Straub, Darren and Daryll Emery
- 123. Butyric Acid Impregnated In Microbeads, As A Feed Additive, Protects Chickens Against Salmonella Enteritidis Colonization

Van Immerseel, Filip, Veerle Fievez, Frank Pasmans, Jeroen De Buck, Freddy Haesebrouck and Richard Ducatelle

124. Behavior Of The Dextro-Rotatory Tartrate Positive Variant Of Salmonella ParatyphiB, A New Emerging Pathogen In Western Europe, In In Vitro And In Vivo Models

Van Immerseel, Filip, Lieve Meulemans, Jeroen De Buck, Frank Pasmans, Freddy Haesebrouck and Richard Ducatelle

125. Early Protection Against Salmonella Enteritidis After Vaccination With A Live Strain Is Abolished By Depletion Of The Heterophilic Granlocytes

Van Immerseel, Filip, Lieve Meulemans, Jeroen De Buck, Frank Pasmans, Freddy Haesebrouck and Richard Ducatelle

126. Comparison Of 4 Plating Media For The Isolation Of Salmonella From Poultry Clinical And Environmental Samples Waltman, Doug

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### **Antibiotic Use/Resistance/Sensitivity**

127. Construction Of Expression-Vector With Non-Antibiotic Selection Marker And Expression Of SO7 Gene Of E. Tenella In Intergrowth Lactobacillus Acidophilus

Chun-feng, Wang, Sun Zhe, Qin Ze-rong and Liu Shang-gao

128. Inhibition Of R-Plasmid Transfer By Ionophore And Chlortetracycline In Gram Negative Bacteria

Clark, Steven, Jeremy Mathers, Paul Tillman, Dennis Hausmann, Valerie Benning and Shelly Gordon

 $129. \ Growth\ And\ Immunity\ Parameters\ Of\ Broilers\ On\ AGP\ And\ Bio-Mos\ Shuttle\ Program$ 

Cotter, Paul, Michael Sims and Ted Sefton

- 130. Antibiotic Sensitivity Screening Of Campylobacter May Be Affected By Primary Isolation Media Selective Pressure Idris, Umelaalim, Margie Le and Randy Singer
- 131. Performance Of Broilers Grown With Growth Promotant Antibiotics Compared With Feeding Programs Containing Bio-Mos in Various Phases of Growout

McElroy, Audery and Ted Sefton

- 132. Not Confirmed
- 133. Efficiency Test And Application On Poultry And Livestock's Additive BFA

Zuyi, Ren, Xinhao Lu, Hong Liu, Mengdai Zhu and Guodong Wu

#### **Avian Encephalomyelitis**

- 134 Withdrawn
- 135. Withdrawn

#### Avian Influenza

136. Utilization Of A Quantitative Risk Assessment Framework To Estimate The Spread And Impact Of An Outbreak Of Highly Pathogenic Avian Influenza In Georgia

Cole, Dana, Lee Myers, David Suarez, Charles Hofacre, Corrie Brown and Jeff Mahany

137. Sequence Analysis Of Low Pathogenic And Highly Pathogenic H7N1 Avian Influenza Viruses Isolated In Italy In 1999-2000

Di Trani, Livia, Maria Tollis, Barbara Bedini, Paolo Cordioli, Anna Moreno, Isabella Donatelli and Laura Campitelli

- 138. Not Confirmed
- 139. Generation Of Marker Vaccine For Avian Influenza Using Reverse Genetics

Lee, Chang-Won and David Suarez

140. Surveillance For Avian Influenza In Poland

Minta, Zenon, Grzegorz Tomczyk, Krzysztof Smietanka and Barbara Bartnicka

141. A LPAI Virus (H9N2) With HPAI Virus Behavior In Broiler And Breeder Flocks Due To The Co-Infection With Other Respiratory Virus

Mirsalimi, Seyed

142. Detection Of Avian Influenza Virus In Oil Emulsion Vaccines By Real-Time RT-PCR

Spackman, Erica and David Suarez

143. The Susceptibility Of The Chickens To Avian Influenza Viruses Isolated From Ducks And Ostrich

Wang, Chuanqing, Xia Gong, Hongying Liu, Junxing Yang, Heping Huangpu, Jun Luo and Hongtao Chang

144. Evaluation Of Commercial Immunoassay Kits For The Detection Of Influenza Virus Type A In Poultry

Woolcock, Peter and Carol Cardona

#### Campylobacter

145. Characterization Of Two Variants Of Campylobacter Jejuni NCTC11168

Allan, Brenda, Christine Szymanski, Ed Taboada, Kingsley Amoako, Susantha Gomis, Rachel Verhulp and Monica Lu

- 146. Co-Infection Of Multiple Campylobacter Strains In Turkeys And Their Effects On Meaningful Sample Collection Carver, Donna, Sophia Kathariou and Lee Shepherd
- 147. Experimental Campylobacter Jejuni Infection In Young Broiler Chicken

Dhillon, A. Singh, Lloyd Lauerman and H. L. Shivaprasad

- 148. Phenotypical And Genotypical Campylobacter Jejuni Prevalence In Poultry Breedings Of Southern Italy
  Di Modugno, Girolama, Antonio Camarda, Antonio Parisi, Donatella Di Modugno, Donato Pennelli and Cosimo Montagna
- 149. Efficacy Of Antibioics In Semen Diluents On Wildtype Campylobacters Or C. Jejuni In Turkey Semen Donoghue, Dan, Pam Blore, Naida Loskutoff and Ann Donoghue
- 150. Multiplex Polymerase Chain Reaction To Detect And Differentiate Campylobacter, Arcobacter And Helicobacter Neubauer, Claudia and Michael Hess

#### **Ducks And Geese**

151. New Gosling Viral Enteritis First Observed In China

Chun, Cheng, Wang Ming Shu, Zhou Yi, Chen Xiao Yue, Guo Yu Fei, Fang Pen Fang, and Liu Zhao Yu

152. Morphogenesis Of Gosling New Type Viral Enteritis Virus (NGEV) And Ultrastructural Changes Of Gosling Be Infected Artificially

Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng

153. Pathological Studies On Experimental New Gosling Viral Enteritis

Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng

- 154. Studies And Application On The High Immuned Serum Against Gosling New Type Viral Enteritis Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng
- 155. Studies On The Growth Of Attenuated Vaccine Strain Of Gosling New Type Viral Enteritis And Characteristic Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng
- 156. Studies On The Method Of Virus Be Purified And Nucleic Acid Strandedness And Structural Proteins Of Gosling New Type Viral Enteritis Virus

Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng

- 157. Studies On The Rule Of The Rise And Fall Of Antibodies Against Gosling New Type Viral Enteritis And Relationship Of Antibody Titers With Goslings Be Protected From Parents Be Vaccinated Viral Enteritis Virus Chun, Cheng, Wang Ming Shu, Chen Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng
- 158. Study On A Dot Immunogold Staining (IGS) For Detection Of The Gosling New Type Viral Enteritis (NGVE) Antibody Chun, Cheng, Wang Ming Shu, Chwn Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng
- 159. Study On The Agar Gel Precipitin Test To Detect Antigen and Antibody Of The Gosling New Type Viral Enteritis Chun, Cheng, Wang Ming Shu, Chwn Xiao Yue, Zhou Yi, Guo Yu Fei, Zhu de Kang and Huang Cheng
- 160. Goose Hemorrhagic Polyomavirus, Associated To Hemorrhagic Nephritis Enteritis Of Geese (HNEG): From The Identification Of The Virus To The Vaccine

Guerin, Jean-Luc, Jacqueline Gelfi, Carine Claverys and Michael Pappalardo

- 161. A Field Survey Of Chlamydophila Psittaci Infections In French Ducks Guerin, Jean-Luc, Benoit Sraka and Olivier Costedoat
- 162. Withdrawn
- 163. Not Confirmed
- 164. A New Kind Of Virus Disease Of Muscovy Duck - "Flower Liver" Disease Li, Liu Hui, Zhou Zhong Qing and Li Zhen
- 165. Cross-Protection Study In Muscovy Ducks Using Goose And Duck Parvovirus Antigens Palya, Vilmos, Anna Zolnai, Timea Tatar-Kis, Tibor Horvath and Janos Benyeda

#### 166. Sequencing And Phylogenetic Analysis Of A Muscovy Duck Parvovirus Isolated In Pennsylvania

Poonia, Bhawna, Keith Jarosinski and Karel Schat

#### 167. Genetic Analysis Of A Non-Serotype 1 Duck Hepatitis Virus

Tsai, Hsiang-Jung and C. H. Tseng

#### **Education, General Disease and Small Flock**

#### 168. Diseases And Lesions Of The Urinary System

Julian, Richard

#### 169. An Evaluation Of In-House Composting Of Catastrophic Poultry Mortalities

Tablante, Nathaniel, Lewis E. Carr and George Malone

#### 170. Effect Of Removal Of Third And Splenic Lobes Of Pancreas In Broilers

Mehasare, Sudhakar, Vinayak Pathak and Madan Joshi

#### 171. Poultry Health Management School: Continuing Education For The Avian Health Professional

Morishita, Teresa, Meredith Davis, Robert Porter, Jr., Richard Fulton, Todd Applegate and Ralph Stonerock

#### 172. The Evaluation Of Biosecurity Of Large Scale Composting

Reynolds, Don, Sevinc Akinc and Thomas Glanville

#### 173. Organochlorine Pesticide Residues In Indian Chicken And Eggs

Sharma, Jagdish and Rabinder Aulakh

#### 174. Turkey Disease Trends In California, 1989-2001

Shivaprasad, H.L., Rocio Crespo, Richard Chin, Peter Woolcock, Bruce Charlton, George Cooper and Arthur Bickford

#### 175. Dysplastic and Neoplastic Lesions Of The Thyroid Gland In Puerto Rican Parrots (Amazona Vittata)

Stedman, Nancy and Charlotte Quist

#### 176. A Survey On The Location And Health Status Of Backyard Poultry Flocks On The Delmarva Peninsula

Tablante, Nathaniel, Daniel Bautista, Michelle Colby, Maung Myint, Daniela Gera, Yvette Johnson and Fidelis Hegngi

#### 177. Acute-Phase Serum Amyloid – A Production By Chicken Synovial Fibroblasts

Upragarin, Narin, Wil Landman, Alphonsus Van Asten, Mathilda Toussaint, Anne Marie Van Ederen and Erik Gruys

#### 178. A Multimedia Biosecurity Training Program

Vaillancourt, Jean-Pierre, Mike Stringham, Gene Lambert and Charles Beard

# 179. Virucidal Activity Of Three Commercial Available Disinfectants And Formic Acid As Candidate For A Reference Disinfectant At 20 And 10 °C Using Bovine Enterovirus Type 1 (ECBO Virus), Mammalian Orthoreovirus Type 1 And Bovine Adenovirus Type 1

Yilmaz, Ayhan and Erhard Kaleta

#### 180. Broiler Breeder Health Report In Georgia

Zavala, Guillermo

#### Escherichia Coli

181. Moved to Bacterial, Misc.

### 182. Evaluation Of Avian Escherichia Coli Isolates For Intracellcular Macrophage Survival In Vitro and The Yersinia High-Pathogenicity Island (HPI)

Gibbs, Penelope, Jacob Ihle, Shana Peterman and Richard Wooley

#### 183. The Quantitative Expression Of ISS Transcripts

Horne, Shelley, Catherine Giddings and Lisa Nolan

#### 184. Identification And Characterization Of A Novel Fimbrial Operon In Avian Pathogenic Escherichia Coli

Lymberopoulos, Maria and Charles Dozois

#### 185. Plasmid-Associated Traits Of Avian Escherichia Coli

Nolan, Lisa, Catherin Giddings, Curt Doetkott, Jerod Skyberg, Timothy Johnson, Jodi Powell and Rebekka Oliver

#### 186. Identification Of A Novel Siderophore-Independent IronTransporter In Avian Pathogenic Escherichia Coli

Sabri, Mourad, Maria Lymberopoulos and Charles Dozois

187. Evaluation of Tiamulin And Chlortetracycline In Feed In The Control Of CRD In Broilers

Valks, Martin, Diao Youxiang, Danny Yu and David Burch

188. Tiamutin And Consumix Plus In Comparison With Other Antimicrobials For The Control Of CRD And E. coli Infections In Broiler Breeders

Valks, Martin, Diao Youxiang, Qin Yishun, Danny Yu and David Burch

189. Colibacillosis In Caged Layer Flocks In Belgium: Clinical, Necropsy And Bacterial Findings

Vandekerchove, Dominique, Peter De Herdt, Hans Laevens, Monita Vereecken, Marc Verlinden, Ria Wyffels and Frank Pasmans

190. Comparison of Three Adult Challenge Models for Avian Colibacillosis and the Embryo Lethality Assay

Wooley, Richard and Penelope Gibbs

#### **Infectious Bursal Disease**

191. Not Confirmed

192. Withdrawn

193. Molecular Characterization Of Field Strains Of Infectious Bursal Disease Virus In The United States And Some Latin American Countries

Banda, Alejandro, Pedro Villegas and John El-Attrache

194. Infectious Bursal Disease Virus Variant Strains – Preliminary Survey Results In Canada

Cereno, Teresa

195. The Comparison Of IP And AC-ELISA Tests Used For Detection Of IBDV Antigens

Domanska, Katarzyna, Barbara Bartnicka, Krzysztof Smietanka and Zenon Minta

196. Preliminary Characterization Of Polish IBDV Strains By Using RT-PCR Combined with REA

Domanska, Katarzyna, Krzysztof Smietanka and Zenon Minta

197. Characterization And Sequence Comparison Of Infectious Bursal Disease Virus Quasispecies

Jackwood, Daral and Susan Sommer

198. Effect Of Infectious Bursal Disease On Campylobacter Shedding In Chickens

Jackwood, Daral, Qijing Zhang and Y.M. Saif

199. Epidemiological Studies On Infectious Bursal Disease In Broiler Chicks In Haryana, India

Jindal, Naresh, Nand Mahajan, Suresh Kumar and Raj Khokhar

200. Withdrawn

201. Detection And Identification Of IBDV Strains In The Bursa Of Fabricius Of Experimentally Infected SPF Chickens

Kabell, Susanne, Mette Kusk, Poul Jorgensen and Kurt Handberg

202. Immunosuppressive And Pathological Properties Of Infectious Bursal Disease Vaccine 'Intermediate Plus Strain' In

**Broiler Chickens** 

Khurana, Sanjay, Narender Mahajan and Kanhya Ahuja

203. Amino Acid Specific Typing Of Infectious Bursal Disease Virus

Kusk, Mette, Susanne Kabell, Poul Jorgensen and Kurt Handberg

204. Protection Of Chickens Against Infectious Bursal Disease Virus By DNA Vaccines

Kwon, Hyuk Moo, Soo Young Kim, Haan Woo Sung, Son-Il Pak and Jeong Hee Hahn

205. What Happens To IBD Vaccine When Given In Ovo In The Face Of Maternal Antibodies?

McCarty, John, Tom Brown and Joe Giambrone

206. Characterization Of Infectious Bursal Disease Virus Strains By Partial Sequence Analysis Of Both Genome Segments

Mankoc, Sara, Uros Krapez, Olga Zorman-Rojs, Ivan Toplak, Joze Grom and Darja Barlic-Maganja

207. Antigenic And Genetic Characterization Of IBDV Strains Isolated In North Italy During The Period 1996-2002

Moreno Martin, Ana, Giovanni Tosi, Gaelle Rivallan, Nicolas Enterradossi, Antonio Lavazza, Raffaella Ceruti and Luigi Gavazzi

208. Molecular Characterization Of Colombian Infectious Bursal Disease Virus Determined By Reverse Transcription-Nested Polymerase Chain Reaction/Restriction Fragment Length Polymorphism (RT-Nested-PCR/RFLP)

### 209. A Sequential Haematological Study Of Experimental Infectious Bursal Disease Virus Infection In Chicken, Turkey and Duck

Oladele, Omolade, Daniel Adene and Adeyinka Aiyedun

### 210. Serologic Evidence Of Infectious Bursal Disease Virus Infection In Adult Nigerian Indigenous Ducks

Oluwayelu, Oladimeji, Emkpe Benjamin, Fagbohun Olusegun and Ohore Godspower

#### 211. Control Of Infectious Bursal Disease In Broilers By Early (In Ovo And Day-Old) Vaccination

Palya, Vilmos, Katalin Forgach, Tibor Suveges, Maria Kelemen, Janos Meszaros and Janos Benyeda

### 212. Study on Acute Phase Proteins and Lysozyme During Infection With Different Pathotypes of IBDV

Smietanka, Krzysztof, Beata Mazur-Gonkowska, Zenon Minta and Andrzej Koncicki

#### 213. Determining Optimum Gumboro Disease Vaccination Time By Chick Weight Rather Than By Age

Venne, Daniel, Amer Silim and Sylvain Gingras

#### 214. Molecular Characterization Of VP2 Of vvIBDV Isolated From Immunized Chickens From Henan, China

Wang, Chuanqing, Hongying Liu, Hongxing Qiao, Mingfu Niu, Hongtao Chang, Junxing Yang and Heping Huangpu

#### 215. Very Virulent IBDV: Experimental Studies In Vaccinated And Unvaccinated Chickens

Zuanaze, Marcelo, Hugo Scanavini, Nair Ito, Claudio Miyaji, Sandra Okabayashi, Eduardo Lima and Antonio Correia

#### Laryngotracheitis

#### 216. Re-emergence Of Infectious Laryngotracheitis In Poland

Smietanka, Krzysztof, Zenon Minta, Grzegorz Tomczyk and Wojciech Kozaczynski

#### Mycoplasma

#### 217. Mycoplasma Synoviae Infections In Layers

Bradbury, Janet, Jennifer Hagan and Kenton Morgan

#### 218. DNA Sequence Analysis For Typing Mycoplasma Synoviae Strains In Poultry

Hong, Yang, Victoria Leiting, Maricarmen Garcia, Stanley Kleven and Dusan Bencina

#### 219. Onset Of Immunity With The Mycoplasma Synoviae Vaccine MS-H (Vaxsafe MS, Bioproperties Australia)

Jones, Jillian, Amir Noormohammadi and Kevin Whithear

#### 220. Aerosolization Of Mycoplasma Synoviae Compared To M. Gallisepticum And Enterococcus Faecalis

Landman, Wil, Anneke Feberwee and Jo van Eck

### 221. Mycoplasma Gallisepticum Control Programs In The Netherlands And The Use Of A Novel Geographic Information

System

Landman, Wil and Anneke Feberwee

### 222. Mycoplasma Gallisepticum Outbreaks In North Carolina, 1999-2001: Lessons Learned From The Tail End Of The Epidemic Curve

Ley, David, Algis Martinez and Jean-Pierre Vaillancourt

#### 223. Detection And Identification Of Pathogenic Avian Mycoplasmas In Spanish Commercial Poultry Flocks

Maldonado, Jaime, Albert Pages and Carlos Artigas

#### 224. PCR Detection Of Mycoplasma Stored And Transported On FTA Gene Guard Filter Paper

Moscoso, Hugo, Stephan Thayer, Charles Hofacre and Stanley Kleven

#### 225. Withdrawn

#### 226. Comparison Of Vaccines And Other Mycoplasma Gallisepticum Strains On Seroconversion Of SPF Chickens

Nascimento, Elmiro, Patricia Polo, Virginia Pereira, Rita Silva, Marcela Platenik, M.Graca Nascimento and Marcelo Zuanaze

#### 227. Studies On The M. Synoviae Vaccine MS-H In Turkeys

Noormohammadi, Amir, Nathan Jeffery, Antonio Belfiore and Kevin Whithear

#### 228. Comparison Of The Efficacy Of Vaxsafe MG TS-11 And 6/85 Vaccines

Noormohammadi, Amir, Greg Underwood and Kevin Whithear

#### 229. Evaluation Of The Non-Temperature-Sensitive Field Clonal Isolates Of The Mycoplasma Synoviae Vaccine Strain MS-

Noormohammadi, Amir, Jillian Jones, Karl Harrigan and Kevin Whithear

#### 230. Studies On Infertility Of Goose Eggs Associated With Mycoplasma Infection

Stipkovits, Laszlo, Zoltan Bitay, Anna Simon, Judit Biro and Aniko Beregszaszi

## 231. Application Of Method "Polymerase Chain Reaction" For Diagnosis Of Mycoplasma Gallisepticum And Mycoplasma Synoviae

Tosi, Giovanni, Francesca Paganelli, Laura Fioentini, Paola Massi and Antonio Lavazza

### 232. Comparison Of A Tiamulin Medication Program With TS-11 Mycoplasma Vaccine On The Control Of M. Gallisepticum In Broiler Breeders

Valks, Martin, Nisit Chansong and David Burch

#### Nutrition

### 233. Effect Of Dietary Energy And Protein Levels In Broilers And Its Relation To Environmental Temperature Alawy, Ahmed, S. M. Hegazy, Fatma Kamel and Nehad Badrawy

#### 234. Utilization Of Black Jowar Spent Grains In Broiler Rations As A Protein Source

Chopde, Shital, Pravin Sarde and Ravinra Dhore

- 235. Not Confirmed
- 236. Not Confirmed

#### **Parasitic Diseases**

- 237. The Nutritional Effects Of Cochlosoma Anatis Infection In Turkeys And Evaluation Of Control Measures
  Bermudez, Alex and Yvette Broomhead
- 238. Pathological And Chromatographical Analysis Of Intoxication With Sodium Salinomycin In Chicken Breeders Bianu, Elisabeta, Daniela Nica and Elie Barbour

#### 239. In Vivo Effects Of CpG-ODN On Eimeria Acervulina-Infected SC and TK Chickens

Dalloul, Rami, Hyun Lillehoj and Robert Heckert

#### 240. Pathogenic Plasmodium Juxtanucleare Isolate Of Japan

Isobe, Takashi, Faridah Mashor, Kenji Tsukamoto, Harue Kasuga and Naotoshi Tsujil

#### 241. Case Report: Efficacy Of Piperzine For The Treatment Of Roundworms In Broiler Chickens

Magee, Danny and Sue Hubbard

### 242. Examination Of Reasons For Field Problems With Eimeria Maxima: Part 2: Acervulina Versus E. Maxima Mathis, Greg

### 243. An Enzyme-Linked Immunosorbent Assay (ELISA) Using The Recombinant Merozoite Protein As Antigen For Detection Of Antibodies

Tajima, Osamu, Hiroshi Onaga and Toshihiro Nakamura

- 244. Not Confirmed
- 245. Role Of Experimentally Infected Chickens In Transmission Of Isospora Canis Infection

Zayed, Ahmed and Mohammed Abdel-Aziz Kotkat

246. Not Confirmed

#### **Poult Enteritis Mortality Syndrome**

#### 247. Intestinal Cytology Of Young Turkeys With Poultry Enteritis Complex

Barnes, H. John

#### 248. Turkey Coronavirus Potentiates Enteropathogenic Escherichia Coli Colonization And Pathogenicity In Young Turkeys

Guy, James, H. John Barnes, Lynda Smith, David Ley, Jean-Pierre Vaillancourt and Somsak Pakpinyo

#### Pox

249. Not Confirmed

#### Reo

#### 250. Phylogenetic Analysis Of Avian Reovirus Field Isolates

Sellers, Holly, Lorena Pereira and Darrell Kapczynski

**Toxins** 251. Not Confirmed

#### 252. A Case Of Acute Copper Intoxication In Poultry

Nica, Daniela and Elisabeta Bianu

- 253. Withdrawn
- 254. Not Confirmed

### <u>West Nile Virus</u> 255. A Survey of West Nile Virus in Avian Species By Reverse Transcription-Nested Polymerase Chain Reaction in Alabama **During 2001-2002**

Li, Lanqing, Michael Luther, Frederic Hoerr, Robin Yancey and Ashley Lovell

#### 256. Case Study - West Nile Virus In Lorikeets

Luna, Lynne