

Subject index

ONDERSTEPSOORT JOURNAL OF VETERINARY RESEARCH

Volume 62, Numbers 1–4, 1995

Acari: Ixodidae

- Attachment preferences of *Hyalomma truncatum* and *Hyalomma marginatum rufipes* ticks (Acari: Ixodidae) on two sheep breeds—L.J. FOURIE and D.J. KOK 211–213
- Rhipicephalus interventus* sp. nov. (Acari: Ixodidae), a new tick species closely related to *Rhipicephalus tricuspis* Dönitz, 1906 and *Rhipicephalus lunulatus* Neumann, 1907, from East and Central Africa—JANE B. WALKER, R.G. PEGRAM and J.E. KEIRANS 89–95

African elephant(s)

- Characterization of mucus glycoproteins in the intestinal mucosa of the African elephant (*Loxodonta africana*) following lectin histochemistry—H.L. COETZEE, S.H. KOTZÉ and N. LOURENS 187–192
- An outbreak of Encephalomyocarditis virus infection in free-ranging African elephants in the Kruger National Park—D.G. GROBLER, J.P. RAATH, L.E.O. BRAACK, D.F. KEET, G.H. GERDES, B.J.H. BARNARD, N.P.J. KRIEK, J. JARDINE and R. SWANEPOEL 97–108
- The scull and mandible of the African elephant (*Loxodonta africana*)—N.J. VAN DER MERWE, A.J. BEZUIDENHOUT and CHRISTINA D. SEEVERS 245–260

African horsesickness

- Epidemiology of African horsesickness: antibodies in free-living elephants (*Loxodonta africana*) and their response to experimental infection—B.J.H. BARNARD, R.G. BENGIS, D.F. KEET and E.H. DEKKER 271–275

African horsesickness virus

- Detection of bluetongue virus and African horsesickness virus in co-infected cell cultures with NS1 gene probes—E.H. VENTER, H. HUISMANS and A.A. VAN DIJK 217–222

Alcelaphine Herpesvirus-1

- Monitoring experimental Alcelaphine Herpesvirus-1 infection in cattle by nucleic-acid hybridization and PCR—ANITA L. MICHEL, GABRIELE S. BUCHHOLZ and J.J. VAN DER LUGT 109–115

Allerton Regional Veterinary Laboratory

- The prevalence of neosporosis in aborted bovine foetuses submitted to the Allerton Regional Veterinary Laboratory—J.E. JARDINE and R.D. LAST 207–209

***Alofia parva* n. sp.**

- Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles *Osteolaemus tetraspis* Cope, 1851 from the Congo, with a description of *Alofia parva* n. sp.—J. RILEY and F.W. HUCHZERMAYER 151–162

Animals

- Ectoparasites of animals and control methods—O.I.E. 69

Antibodies

- Epidemiology of African horsesickness: antibodies in free-living elephants (*Loxodonta africana*) and their response to experimental infection—B.J.H. BARNARD, R.G. BENGIS, D.F. KEET and E.H. DEKKER 271–275

- Serological prevalence of leptospiral antibodies in pigs in South Africa—A.D. POTTS, CHRISTINE LÖTTER and J.T.R. ROBINSON 281–284

Antigen

- The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS 227–233

The diagnosis of Wesselsbron disease in a new-born lamb by immunohistochemical staining of viral antigen—J.J. VAN DER LUGT, J.A.W. COETZER, M.M.E. SMIT and C. CILLIERS	143–146
Arthropod parasites	
Parasites of domestic and wild animals in South Africa. XXXIV. Arthropod parasites of nyals in north-eastern KwaZulu-Natal—I.G. HORAK, J. BOOMKER and J.R.B. FLAMAND	171–179
Babesia sp.	
<i>In vitro</i> cultivation of a <i>Babesia</i> sp. from cattle in South Africa—E. ZWEYGARTH, C. VAN NIEKERK, M.C. JUST and D.T. DE WAAL	139–142
Bacterial contamination	
A rapid method to determine bacterial contamination on hatching eggs. 2. Correlation of the optical-density measurements after incubation to bacterial counts on hatching eggs—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	25–33
A rapid method to determine bacterial contamination on hatching eggs. 3. Use of commercial DNA probe kits for detection of specific pathogens after six hours of incubation—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	35–40
Bacterial counts	
A rapid method to determine bacterial contamination on hatching eggs. 2. Correlation of the optical-density measurements after incubation to bacterial counts on hatching eggs—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	25–33
Bluetongue virus	
Detection of bluetongue virus and African horsesickness virus in co-infected cell cultures with NS1 gene probes—E.H. VENTER, H. HUISMANS and A.A. VAN DIJK	217–222
Boar	
Evaluation of some reproductive parameters in the indigenous boar of Zimbabwe—B.T. AKINGBEMI and M.O. MAKINDE ..	59–61
Bovine foetuses	
The prevalence of neosporosis in aborted bovine foetuses submitted to the Allerton Regional Veterinary Laboratory—J.E. JARDINE and R.D. LAST	207–209
Bovine-virus-diarrhoea-virus antibodies	
Detection of bovine-virus-diarrhoea-virus antibodies in cattle using an enzyme-linked immunosorbent assay—P. MUVAWA-RIRWA, D. MUDENGE, D. MOYO and S. JAVANGWE	241–244
Brucella abortus antigens	
Detection of <i>Brucella abortus</i> antigens by immunoperoxidase histochemical staining of lochia smears—J.N. ALBERTS and J.A. ERASMUS	147–150
Calcium antagonist	
<i>In vivo</i> effects of a novel calcium antagonist (R56865) against induced epoxyscillirosidin and tulip poisoning in sheep—G.E. SWAN, R. ANITRA SCHULTZ, T.S. KELLERMAN, MARIA S.G. MÜLDERS, B.P. MAARTENS and J.J. VAN DER WALT	163–166
Calf	
Causes of calf mortality in Kibete area of Kenya—C.M. MULEI, G.K. GITAU and P.G. MBUTHIA	181–185
The use of preserved colostrum for rearing replacement dairy calves: calf performance, economics and on-farm practicability in Kenya—D.I. KARIOKI, G.K. GITAU and S.J.M. MUNYUA	167–170
Canine ehrlichiosis	
Canine ehrlichiosis in Egypt: Sero-epidemiological survey—B.A.M. BOTROS, M.S. ELMOLLA, A.W. SALIB, C.A. CALAMAO, G.A. DASCH and R.R. ARTHUR	41–43
Carbaryl-treated seed	
The effect(s) of carbaryl-treated seed on body maintenance and survival of the multi-mammate mouse, <i>Mastomys natalensis</i> (sensu lato)—M.J. NELUVHALANI, S.M. FERREIRA and R.J. VAN AARDE	235–240
Cardiomyopathy	
Isolation of the toxin responsible for gousiekte, a plant-induced cardiomyopathy of ruminants in southern Africa—N. FOURIE, G.L. ERASMUS, R.A. SCHULTZ and L. PROZESKY	77–87
Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN	5–18
Cattle	
Detection of bovine-virus-diarrhoea-virus antibodies in cattle using an enzyme-linked immunosorbent assay—P. MUVAWA-RIRWA, D. MUDENGE, D. MOYO and S. JAVANGWE	241–244

Monitoring experimental Alcelaphine Herpesvirus-1 infection in cattle by nucleic-acid hybridization and PCR—ANITA L. MICHEL, GABRIELE S. BUCHHOLZ and J.J. VAN DER LUGT	109–115
<i>In vitro</i> cultivation of a <i>Babesia</i> sp. from cattle in South Africa—E. ZWEYGARTH, C. VAN NIEKERK, M.C. JUST and D.T. DE WAAL	139–142
Paired-ion extraction and high-performance liquid chromatographic determination of diminazene in cattle plasma: a modified method—B. GUMMOW, J.L. DU PREEZ and G.E. SWAN	1–4
The distribution of <i>Pasteurella haemolytica</i> serotypes among cattle, sheep and goats in South Africa and their association with disease—M.W. ODENDAAL and M.M. HENTON	223–226
Immunohistochemical identification of <i>Cowdria ruminantium</i> in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT	277–280
Cell culture(s)	
The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS	227–233
Detection of bluetongue virus and African horsesickness virus in co-infected cell cultures with NS1 gene probes—E.H. VENTER, H. HUISMANS and A.A. VAN DIJK	217–222
Chromatographic determination	
Paired-ion extraction and high-performance liquid chromatographic determination of diminazene in cattle plasma: a modified method—B. GUMMOW, J.L. DU PREEZ and G.E. SWAN	1–4
Colostrum	
The use of preserved colostrum for rearing replacement dairy calves: calf performance, economics and on-farm practicability in Kenya—D.I. KARIOKI, G.K. GITAU and S.J.M. MUNYUA	167–170
<i>Cowdria ruminantium</i>	
Immunohistochemical identification of <i>Cowdria ruminantium</i> in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT	277–280
Crocodiles	
Mycoplasma-associated polyarthritis in farmed crocodiles (<i>Crocodylus niloticus</i>) in Zimbabwe—K. MOHAN, C.M. FOGGIN, P. MUVAVARIRWA, J. HONYWILL and A. PAWANDIWA	45–49
<i>Crocodylus niloticus</i>	
Mycoplasma-associated polyarthritis in farmed crocodiles (<i>Crocodylus niloticus</i>) in Zimbabwe—K. MOHAN, C.M. FOGGIN, P. MUVAVARIRWA, J. HONYWILL and A. PAWANDIWA	45–49
Cryopreservation	
An improved technique for the cryopreservation of <i>Gaigeria pachyscelis</i> (Sandveld hookworm)—G.A.P. TITOY	215
Cryopreservation of sheathed third-stage larvae of <i>Gaigeria pachyscelis</i> (Sandveld hookworm)—G.A.P. TITOY and E.V. SCHWAN	63–64
<i>Culicoides</i>	
A survey of the <i>Culicoides</i> (Diptera: Ceratopogonidae) of the Umlalazi Nature Reserve in Zululand, South Africa, with notes on two species biting man—HILDA NEVILL and E.M. NEVILL	51–58
Dairy calves	
The use of preserved colostrum for rearing replacement dairy calves: calf performance, economics and on-farm practicability in Kenya—D.I. KARIOKI, G.K. GITAU and S.J.M. MUNYUA	167–170
Diminazene	
Paired-ion extraction and high-performance liquid chromatographic determination of diminazene in cattle plasma: a modified method—B. GUMMOW, J.L. DU PREEZ and G.E. SWAN	1–4
Diptera: Ceratopogonidae	
A survey of the <i>Culicoides</i> (Diptera: Ceratopogonidae) of the Umlalazi Nature Reserve in Zululand, South Africa, with notes on two species biting man—HILDA NEVILL and E.M. NEVILL	51–58
DNA probe kits	
A rapid method to determine bacterial contamination on hatching eggs. 3. Use of commercial DNA probe kits for detection of specific pathogens after six hours of incubation—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	35–40
Dwarf crocodiles	
Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles <i>Osteolaemus tetraspis</i> Cope, 1851 from the Congo, with a description of <i>Alofia parva</i> n. sp.—J. RILEY and F.W. HUCHZERMEYER	151–162
Ectoparasites	
Ectoparasites of animals and control methods—O. I.E.	69

Egypt

- Canine erlichiosis in Egypt: Sero-epidemiological survey—B.A.M. BOTROS, M.S. ELMOLLA, A.W. SALIB, C.A. CALAMAOI, G.A. DASCH and R.R. ARTHUR 41–43

Elephants

- Epidemiology of African horsesickness: Antibodies in free-living elephants (*Loxodonta africana*) and their response to experimental infection—B.J.H. BARNARD, R.G. BENGIS, D.F. KEET and E.H. DEKKER 271–275

Encephalomyocarditis virus

- An outbreak of encephalomyocarditis-virus infection in free-ranging African elephants in the Kruger National Park—D.G. GROBLER, J.P. RAATH, L.E.O. BRAACK, D.F. KEET, G.H. GERDES, B.J.H. BARNARD, N.P.J. KRIEK, J. JARDINE and R. SWANEPOEL 97–108

Enzyme-linked immunosorbent assay

- Detection of bovine-virus-diarrhoea-virus antibodies in cattle using an enzyme-linked immunosorbent assay—P. MUVAVARIRWA, D. MUDENGE, D. MOYO and S. JAVANGWE 241–244

- The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS 227–233

Epidemiology

- Epidemiology of African horsesickness: Antibodies in free-living elephants (*Loxodonta africana*) and their response to experimental infection—B.J.H. BARNARD, R.G. BENGIS, D.F. KEET and E.H. DEKKER 271–275

Epoxyscillirosidin

- In vivo* effects of a novel calcium antagonist (R56865) against induced epoxyscillirosidin and tulip poisoning in sheep—G.E. SWAN, R. ANITRA SCHULTZ, T.S. KELLERMAN, MARIAS.G. MULDERS, B.P. MAARTENS and J.J. VAN DER WALT 163–166

Fleas

- Fleas, lice and mites on scrub hares (*Lepus saxatilis*) in Northern and Eastern Transvaal and in KwaZulu-Natal, South Africa—J.P. LOUW, I.G. HORAK, M. LOUISE HORAK and L.E.O. BRAACK 133–137

Foot infestations

- The role of *Hyalomma* ticks in foot infestations and temporary lameness of sheep in a semi-arid region of South Africa—D.J. KOK and L.J. FOURIE 201–206

Formalin-fixed tissue

- Immunohistochemical identification of *Cowdria ruminantium* in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT 277–280

Gaigeria pachyscelis

- Cryopreservation of sheathed third-stage larvae of *Gaigeria pachyscelis* (Sandveld hookworm)—G.A.P. TITOY and E.V. SCHWAN 63–64

- An improved technique for the cryopreservation of *Gaigeria pachyscelis* (Sandveld hookworm)—G.A.P. TITOY 215

Goats

- The distribution of *Pasteurella haemolytica* serotypes among cattle, sheep and goats in South Africa and their association with disease—M.W. ODENDAAL and M.M. HENTON 223–226

- Immunohistochemical identification of *Cowdria ruminantium* in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT 277–280

Gousiekte

- Isolation of the toxin responsible for gousiekte, a plant-induced cardiomyopathy of ruminants in southern Africa—N. FOURIE, G.L. ERASMUS, R.A. SCHULTZ and L. PROZESKY 77–87

Haemagglutination-inhibition test

- The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS 227–233

Haemonchus contortus

- Microclimatic effect on vertical migration of *Haemonchus contortus* and *Haemonchus placei* third-stage larvae on irrigated kikuyu pasture—R.C. KRECEK, R. HARTMAN, H.T. GROENEVELD and A. THORNE 117–122

Haemonchus placei

- Microclimatic effect on vertical migration of *Haemonchus contortus* and *Haemonchus placei* third-stage larvae on irrigated kikuyu pasture—R.C. KRECEK, R. HARTMAN, H.T. GROENEVELD and A. THORNE 117–122

Haemophilus paragallinarum

- Effects of transformation on the hemagglutinins of *Haemophilus paragallinarum*—R.R. BRAGG, G. PURDAN, L. COETZEE and J.A. VERSCHOOR 261–270

Hatching eggs	
A rapid method to determine bacterial contamination on hatching eggs. 2. Correlation of the optical-density measurements after incubation to bacterial counts on hatching eggs—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	25–33
A rapid method to determine bacterial contamination on hatching eggs. 3. Use of commercial DNA probe kits for detection of specific pathogens after six hours of incubation—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	35–40
Heartwater	
Reactions to heartwater vaccination in crossbred Zebu cattle—J.A. LAWRENCE, J. MALIKA , A.P. WHITELAND and P.T. KAFUWA	19–23
Hemagglutinins	
Effects of transformation on the hemagglutinins of <i>Haemophilus paragallinarum</i> —R.R. BRAGG, G. PURDAN, L. COETZEE and J.A. VERSCHOOR	261–270
Herpesvirus	
Monitoring experimental Alcelaphine Herpesvirus-1 infection in cattle by nucleic-acid hybridization and PCR—ANITA L. MICHEL, GABRIELE S. BUCHHOLZ and J.J. VAN DER LUGT	109–115
Histochemistry	
Characterization of mucus glycoproteins in the intestinal mucosa of the African elephant (<i>Loxodonta africana</i>) following lectin histochemistry—H.L. COETZEE, S.H. KOTZÉ and N. LOURENS	187–192
Histopathology	
Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN	5–18
Horses	
The prevalence of intestinal <i>Salmonella</i> infection in horses submitted for necropsy—I.B.J. VAN RENSBURG, J.E. JARDINE, J.H. CARSTENS and M.L. VAN DER WALT	65–67
Hyalomma	
The role of <i>Hyalomma</i> ticks in foot infestations and temporary lameness of sheep in a semi-arid region of South Africa—D.J. KOK and L.J. FOURIE	201–206
<i>Hyalomma marginatum rufipes</i>	
Attachment preferences of <i>Hyalomma truncatum</i> and <i>Hyalomma marginatum rufipes</i> ticks (Acari: Ixodidae) on two sheep breeds—L.J. FOURIE and D.J. KOK	211–213
<i>Hyalomma truncatum</i>	
Attachment preferences of <i>Hyalomma truncatum</i> and <i>Hyalomma marginatum rufipes</i> ticks (Acari: Ixodidae) on two sheep breeds—L.J. FOURIE and D.J. KOK	211–213
Immunohistochemical identification	
Immunohistochemical identification of <i>Cowdria ruminantium</i> in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT	277–280
Immunohistochemical staining	
The diagnosis of Wesselsbron disease in a new-born lamb by immunohistochemical staining of viral antigen—J.J. VAN DER LUGT, J.A.W. COETZER, M.M.E. SMIT and C. CILLIERS	143–146
Immunoperoxidase histochemical staining	
Detection of <i>Brucella abortus</i> antigens by immunoperoxidase histochemical staining of lochia smears—J.N. ALBERTS and J.A. ERASMUS	147–150
Intestinal mucosa	
Characterization of mucus glycoproteins in the intestinal mucosa of the African elephant (<i>Loxodonta africana</i>) following lectin histochemistry—H.L. COETZEE, S.H. KOTZÉ and N. LOURENS	187–192
In vitro cultivation	
<i>In vitro</i> cultivation of a <i>Babesia</i> sp. from cattle in South Africa—E. ZWEYGARTH, C. VAN NIEKERK, M.C. JUST and D.T. DE WAAL	139–142
Ionophore antibiotic	
Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN	5–18
Ixodid ticks	
Parasites of domestic and wild animals in South Africa. XXXIII. Ixodid ticks on scrub hares in the north-eastern regions of Northern and Eastern Transvaal and of KwaZulu-Natal—I.G. HORAK, A.M. SPICKETT, L.E.O. BRAACK, B.L. PENZHORN, R.J. BAGNALL and A.C. UYS	123–131

Kenya

Causes of calf mortality in Kibete area of Kenya—C.M. MULEI, G.K. GITAU and P.G. MBUTHIA 181–185

Kikuyu pastureMicroclimatic effect on vertical migration of *Haemonchus contortus* and *Haemonchus placei* third-stage larvae on irrigated kikuyu pasture—R.C. KRECEK, R. HARTMAN, H.T. GROENEVELD and A. THORNE 117–122**Kruger National Park**

An outbreak of encephalomyocarditis-virus infection in free-ranging African elephants in the Kruger National Park—D.G. GROBLER, J.P. RAATH, L.E.O. BRAACK, D.F. KEET, G.H. GERDES, B.J.H. BARNARD, N.P.J. KRIEK, J. JARDINE and R. SWANEPOEL 97–108

Lamb

The diagnosis of Wesselsbron disease in a new-born lamb by immunohistochemical staining of viral antigen—J.J. VAN DER LUGT, J.A.W. COETZER, M.M.E. SMIT and C. CILLIERS 143–146

LamenessThe role of *Hyalomma* ticks in foot infestations and temporary lameness of sheep in a semi-arid region of South Africa—D.J. KOK and L.J. FOURIE 201–206***Lepus saxatilis***Fleas, lice and mites on scrub hares (*Lepus saxatilis*) in Northern and Eastern Transvaal and in KwaZulu-Natal, South Africa—J.P. LOUW, I.G. HORAK, M. LOUISE HORAK and L.E.O. BRAACK 133–137**Lice**Fleas, lice and mites on scrub hares (*Lepus saxatilis*) in Northern and Eastern Transvaal and in KwaZulu-Natal, South Africa—J.P. LOUW, I.G. HORAK, M. LOUISE HORAK and L.E.O. BRAACK 133–137***Lochia smears***Detection of *Brucella abortus* antigens by immunoperoxidase histochemical staining of lochia smears—J.N. ALBERTS and J.A. ERASMUS 147–150***Loxodonta africana***Characterization of mucus glycoproteins in the intestinal mucosa of the African elephant (*Loxodonta africana*) following lectin histochemistry—H.L. COETZEE, S.H. KOTZÉ and N. LOURENS 187–192The scull and mandible of the African elephant (*Loxodonta africana*)—N.J. VAN DER MERWE, A.J. BEZUIDENHOUT and CHRISTINA D. SEEVERS 245–260Epidemiology of African horsesickness: Antibodies in free-living elephants (*Loxodonta africana*) and their response to experimental infection—B.J.H. BARNARD, R.G. BENGIS, D.F. KEET and E.H. DEKKER 271–275**Macropathology**

Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN 5–18

Maduramicin

Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN 5–18

MandibleThe scull and mandible of the African elephant (*Loxodonta africana*)—N.J. VAN DER MERWE, A.J. BEZUIDENHOUT and CHRISTINA D. SEEVERS 245–260***Mastomys natalensis* (sensu lato)**The effect(s) of carbaryl-treated seed on body maintenance and survival of the multi-mammate mouse, *Mastomys natalensis* (sensu lato)—M.J. NELUVHALANI, S.M. FERREIRA and R.J. VAN AARDE 235–240**Mice**Immunohistochemical identification of *Cowdria ruminantium* in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT 277–280**Microclimatic effect**Microclimatic effect on vertical migration of *Haemonchus contortus* and *Haemonchus placei* third-stage larvae on irrigated kikuyu pasture—R.C. KRECEK, R. HARTMAN, H.T. GROENEVELD and A. THORNE 117–122**Mites**Fleas, lice and mites on scrub hares (*Lepus saxatilis*) in Northern and Eastern Transvaal and in KwaZulu-Natal, South Africa—J.P. LOUW, I.G. HORAK, M. LOUISE HORAK and L.E.O. BRAACK 133–137

Mucus glycoproteins		
Characterization of mucus glycoproteins in the intestinal mucosa of the African elephant (<i>Loxodonta africana</i>) following lectin histochemistry—H.L. COETZEE, S.H. KOTZÉ and N. LOURENS	187–192	
Multi-mammate mouse		
The effect(s) of carbaryl-treated seed on body maintenance and survival of the multi-mammate mouse, <i>Mastomys natalensis</i> (sensu lato)—M.J. NELUVHALANI, S.M. FERREIRA and R.J. VAN AARDE	235–240	
Mycoplasma-associated polyarthritis		
Mycoplasma-associated polyarthritis in farmed crocodiles (<i>Crocodylus niloticus</i>) in Zimbabwe—K. MOHAN, C.M. FOGGIN, P. MUVAVARIRWA, J. HONYWILL and A. PAWANDIWA	45–49	
Necropsy		
The prevalence of intestinal <i>Salmonella</i> infection in horses submitted for necropsy—I.B.J. VAN RENSBURG, J.E. JARDINE, J.H. CARSTENS and M.L. VAN DER WALT	65–67	
Neosporosis		
The prevalence of neosporosis in aborted bovine foetuses submitted to the Allerton Regional Veterinary Laboratory—J.E. JARDINE and R.D. LAST	207–209	
NS1 gene probes		
Detection of bluetongue virus and African horsesickness virus in co-infected cell cultures with NS1 gene probes—E.H. VENTER, H. HUISMANS and A.A. VAN DIJK	217–222	
Nucleic-acid hybridization		
Monitoring experimental Alcelaphine Herpesvirus-1 infection in cattle by nucleic-acid hybridization and PCR—ANITA L. MICHEL, GABRIELE S. BUCHHOLZ and J.J. VAN DER LUGT	109–115	
Nyalas		
Parasites of domestic and wild animals in South Africa. XXXIV. Arthropod parasites of nyals in north-eastern KwaZulu-Natal—I.G. HORAK, J. BOOMKER and J.R.B. FLAMAND	171–179	
Optical-density measurements		
A rapid method to determine bacterial contamination on hatching eggs. 2. Correlation of the optical-density measurements after incubation to bacterial counts on hatching eggs—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	25–33	
Osteolaemus tetraspis		
Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles <i>Osteolaemus tetraspis</i> Cope, 1851 from the Congo, with a description of <i>Alofia parva</i> n. sp—J. RILEY and F.W. HUCHZERMAYER	151–162	
Ostrich		
Sperm-storage tubules in the vagina of the ostrich (<i>Struthio camelus</i>)—A.J. BEZUIDENHOUT, J.T. SOLEY, H.B. GROENEWALD and W.P. BURGER	193–199	
Paired-ion extraction		
Paired-ion extraction and high-performance liquid chromatographic determination of diminazene in cattle plasma: a modified method—B. GUMMOW, J.L. DU PREEZ and G.E. SWAN	1–4	
Parasites		
Parasites of domestic and wild animals in South Africa. XXXIII. Ixodid ticks on scrub hares in the north-eastern regions of Northern and Eastern Transvaal and of KwaZulu-Natal—I.G. HORAK, A.M. SPICKETT, L.E.O. BRAACK, B.L. PENZHORN, R.J. BAGNALL and A.C. UYS	123–131	
Parasites of domestic and wild animals in South Africa. XXXIV. Arthropod parasites of nyals in north-eastern KwaZulu-Natal—I.G. HORAK, J. BOOMKER and J.R.B. FLAMAND	171–179	
Pasteurella haemolytica		
The distribution of <i>Pasteurella haemolytica</i> serotypes among cattle, sheep and goats in South Africa and their association with disease—M.W. ODENDAAL and M.M. HENTON	223–226	
Pathogens		
A rapid method to determine bacterial contamination on hatching eggs. 3. Use of commercial DNA probe kits for detection of specific pathogens after six hours of incubation—A.C.E. PIENAAR, L. COETZEE and R.R. BRAGG	35–40	
PCR		
Monitoring experimental Alcelaphine Herpesvirus-1 infection in cattle by nucleic-acid hybridization and PCR—ANITA L. MICHEL, GABRIELE S. BUCHHOLZ and J.J. VAN DER LUGT	109–115	
Pentastomid parasites		
Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles <i>Osteolaemus tetraspis</i> Cope, 1851 from the Congo, with a description of <i>Alofia parva</i> n. sp—J. RILEY and F.W. HUCHZERMAYER	151–162	

Pigs

Serological prevalence of leptospiral antibodies in pigs in South Africa—A.D. POTTS, CHRISTINE LÖTTER and J.T.R. ROBINSON

281–284

Plasma

Paired-ion extraction and high-performance liquid chromatographic determination of diminazene in cattle plasma: a modified method—B. GUMMOW, J.L. DU PREEZ and G.E. SWAN

1–4

Poultry

Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN

5–18

***Rhipicephalus interventus* sp. nov.**

Rhipicephalus interventus sp. nov. (Acaris: Ixodidae), a new tick species closely related to *Rhipicephalus tricuspis* Dönitz, 1906 and *Rhipicephalus lunulatus* Neumann, 1907, from East and Central Africa—JANE B. WALKER, R.G. PEGRAM and J.E. KEIRANS

89–95

***Rhipicephalus lunulatus* Neumann**

Rhipicephalus interventus sp. nov. (Acaris: Ixodidae), a new tick species closely related to *Rhipicephalus tricuspis* Dönitz, 1906 and *Rhipicephalus lunulatus* Neumann, 1907, from East and Central Africa—JANE B. WALKER, R.G. PEGRAM and J.E. KEIRANS

89–95

***Rhipicephalus tricuspis* Dönitz**

Rhipicephalus interventus sp. nov. (Acaris: Ixodidae), a new tick species closely related to *Rhipicephalus tricuspis* Dönitz, 1906 and *Rhipicephalus lunulatus* Neumann, 1907, from East and Central Africa—JANE B. WALKER, R.G. PEGRAM and J.E. KEIRANS

89–95

Rift Valley fever virus

The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS

227–233

Ruminants

Cardiomyopathy of ruminants induced by the litter of poultry fed on rations containing the ionophore antibiotic, maduramicin. II. Macropathology and histopathology—STELLA S. BASTIANELLO, N. FOURIE, L. PROZESKY, P.W. NEL and T.S. KELLERMAN

5–18

Isolation of the toxin responsible for gousiekte, a plant-induced cardiomyopathy of ruminants in southern Africa—N. FOURIE, G.L. ERASMUS, R.A. SCHULTZ and L. PROZESKY

77–87

Salmonella

The prevalence of intestinal *Salmonella* infection in horses submitted for necropsy—I.B.J. VAN RENSBURG, J.E. JARDINE, J.H. CARSTENS and M.L. VAN DER WALT

65–67

Sandveld hookworm

Cryopreservation of sheathed third-stage larvae of *Gaigeria pachyscelis* (Sandveld hookworm)—G.A.P. TITOY and E.V. SCHWAN

63–64

An improved technique for the cryopreservation of *Gaigeria pachyscelis* (Sandveld hookworm)—G.A.P. TITOY

215

Scrub hares

Parasites of domestic and wild animals in South Africa. XXXIII. Ixodid ticks on scrub hares in the north-eastern regions of Northern and Eastern Transvaal and of KwaZulu-Natal—I.G. HORAK, A.M. SPICKETT, L.E.O. BRAACK, B.L. PENZHORN, R.J. BAGNALL and A.C. UYS

123–131

Fleas, lice and mites on scrub hares (*Lepus saxatilis*) in Northern and Eastern Transvaal and in KwaZulu-Natal, South Africa—J.P. LOUW, I.G. HORAK, M. LOUISE HORAK and L.E.O. BRAACK

133–137

Scull

The scull and mandible of the African elephant (*Loxodonta africana*)—N.J. VAN DER MERWE, A.J. BEZUIDENHOUT and CHRISTINA D. SEEGERS

245–260

Sebekidae Fain, 1961

Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles *Osteolaemus tetraspis* Cope, 1851 from the Congo, with a description of *Alofia parva* n. sp.—J. RILEY and F.W. HUCHZERMAYER

151–162

Sero-epidemiological survey

Canine ehrlichiosis in Egypt: Sero-epidemiological survey—B.A.M. BOTROS, M.S. ELMOLLA, A.W. SALIB, C.A. CALAMAO, G.A. DASCH and R.R. ARTHUR

41–43

Serological prevalence

Serological prevalence of leptospiral antibodies in pigs in South Africa—A.D. POTTS, CHRISTINE LÖTTER and J.T.R. ROBINSON

281–284

Sheep	
Immunohistochemical identification of <i>Cowdria ruminantium</i> in formalin-fixed tissue sections from mice, sheep, cattle and goats—J.E. JARDINE, S.W. VOGEL, M. VAN KLEEF and J.J. VAN DER LUGT	277–280
The distribution of <i>Pasteurella haemolytica</i> serotypes among cattle, sheep and goats in South Africa and their association with disease—M.W. ODENDAAL and M.M. HENTON	223–226
The role of <i>Hyalomma</i> ticks in foot infestations and temporary lameness of sheep in a semi-arid region of South Africa—D.J. KOK and L.J. FOURIE	201–206
<i>In vivo</i> effects of a novel calcium antagonist (R56865) against induced epoxyscillirosidin and tulip poisoning in sheep—G.E. SWAN, R. ANITRA SCHULTZ, T.S. KELLERMAN, MARIA S.G. MÜLDERS, B.P. MAARTENS and J.J. VAN DER WALT	163–166
Sperm-storage tubules	
Sperm-storage tubules in the vagina of the ostrich (<i>Struthio camelus</i>)—A.J. BEZUIDENHOUT, J.T. SOLEY, H.B. GROENEWALD and W.P. BURGER	193–199
Struthio camelus	
Sperm-storage tubules in the vagina of the ostrich (<i>Struthio camelus</i>)—A.J. BEZUIDENHOUT, J.T. SOLEY, H.B. GROENEWALD and W.P. BURGER	193–199
Sucrose-acetone-extracted	
The use of sucrose-acetone-extracted Rift Valley fever virus antigen derived from cell culture in an indirect enzyme-linked immunosorbent assay and haemagglutination-inhibition test—J.T. PAWESKA, B.J.H. BARNARD and R. WILLIAMS	227–233
Third-stage larvae	
Microclimatic effect on vertical migration of <i>Haemonchus contortus</i> and <i>Haemonchus placei</i> third-stage larvae on irrigated kikuyu pasture—R.C. KRECEK, R. HARTMAN, H.T. GROENEVELD and A. THORNE	117–122
Cryopreservation of sheathed third-stage larvae of <i>Gaigeria pachyscelis</i> (Sandveld hookworm)—G.A.P. TITOY and E.V. SCHWAN	63–64
Tick species	
<i>Rhipicephalus interventus</i> sp. nov. (Acari: Ixodidae), a new tick species closely related to <i>Rhipicephalus tricuspid</i> Dönitz, 1906 and <i>Rhipicephalus lunulatus</i> Neumann, 1907, from East and Central Africa—JANE B. WALKER, R.G. PEGRAM and J.E. KEIRANS	89–95
Ticks	
The role of <i>Hyalomma</i> ticks in foot infestations and temporary lameness of sheep in a semi-arid region of South Africa—D.J. KOK and L.J. FOURIE	201–206
Attachment preferences of <i>Hyalomma truncatum</i> and <i>Hyalomma marginatum rufipes</i> ticks (Acari: Ixodidae) on two sheep breeds—L.J. FOURIE and D.J. KOK	211–213
Toxin	
Isolation of the toxin responsible for gousiekte, a plant-induced cardiomyopathy of ruminants in southern Africa—N. FOURIE, G.L. ERASMUS, R.A. SCHULTZ and L. PROZESKY	77–87
Tulip poisoning	
<i>In vivo</i> effects of a novel calcium antagonist (R56865) against induced epoxyscillirosidin and tulip poisoning in sheep—G.E. SWAN, R. ANITRA SCHULTZ, T.S. KELLERMAN, MARIA S.G. MÜLDERS, B.P. MAARTENS and J.J. VAN DER WALT	163–166
Umlalazi Nature Reserve	
A survey of the <i>Culicoides</i> (Diptera: Ceratopogonidae) of the Umlalazi Nature Reserve in Zululand, South Africa, with notes on two species biting man—HILDA NEVILL and E.M. NEVILL	51–58
Vaccination	
Reactions to heartwater vaccination in crossbred Zebu cattle—J.A. LAWRENCE, J. MALIKA, A.P. WHITELAND and P.T. KAFUWA	19–23
Viral antigen	
The diagnosis of Wesselsbron disease in a new-born lamb by immunohistochemical staining of viral antigen—J.J. VAN DER LUGT, J.A.W. COETZER, M.M.E. SMIT and C. CILLIERS	143–146
Virus antibodies	
Detection of bovine-virus-diarrhoea-virus antibodies in cattle with an enzyme-linked immunosorbent assay—P. MUVAVA-RIRWA, D. MUDENGE, D. MOYO and S. JAVANGWE	241–244
Wesselsbron disease	
The diagnosis of Wesselsbron disease in a new-born lamb by immunohistochemical staining of viral antigen—J.J. VAN DER LUGT, J.A.W. COETZER, M.M.E. SMIT and C. CILLIERS	143–146

Subject index

West African dwarf crocodiles

- Pentastomid parasites of the family Sebekidae Fain, 1961 in West African dwarf crocodiles *Osteolaemus tetraspis* Cope, 1851 from the Congo, with a description of *Alofia parva* n. sp.—J. RILEY and F.W. HUCHZERMEYER 151–162

Wild animals

- Parasites of domestic and wild animals in South Africa. XXXIII. Ixodid ticks on scrub hares in the north-eastern regions of Northern and Eastern Transvaal and of KwaZulu-Natal—I.G. HORAK, A.M. SPICKETT, L.E.O. BRAACK, B.L. PENZ-HORN, R.J. BAGNALL and A.C. UYS 123–131

- Parasites of domestic and wild animals in South Africa. XXXIV. Arthropod parasites of nyals in north-eastern KwaZulu-Natal—I.G. HORAK, J. BOOMKER and J.R.B. FLAMAND 171–179

Zebu cattle

- Reactions to heartwater vaccination in crossbred Zebu cattle—J.A. LAWRENCE, J. MALIKA, A.P. WHITELAND and P.T. KAFUWA 19–23

Zimbabwe

- Evaluation of some reproductive parameters in the indigenous boar of Zimbabwe—B.T. AKINGBEMI and M.O. MAKINDE 59–61