

South African Society for Animal Science

Congress 53

26 to 28 September 2022



Theme: Changing paradigms in livestock production – confronting a new reality

Programme: Monday 26 September

09:00	Registration Tea & Rusks
Session 1 – Chair:	
10:30	Welcome - President of SASAS
10:45	Welcome to KZN – Prof Albert Modi, Deputy Vice-Chancellor & Head of College of Agriculture, Engineering & Science - UKZN
11:00	Opening address - Prof Edward Nesamvuni - Hon President: SASAS
11:30	Early Farmers in KwaZulu-Natal: the archaeological evidence - Dr Gavin Whitelaw - KwaZulu-Natal Museum
12:30 Lunch	
Session 2:	
13:30	Sustainable, climate resilient livestock production systems for South African livestock? - Dr Jean Rust
14:15	Emerging & re-emerging disease challenges due to increased environmental temperatures – Dr S Mbizeni (UNISA)
15:00	Tea

Parallel Session 1			
	Physiology	Nutrition	Applied Animal Science
Venue:	Elephant room	Rhino room	Buffalo room
15:15	Ngcobo, Jabulani Nkululeko et al A comparative study on the reproductive performance of South African indigenous sheep breeds following oestrus synchronization	Mpanza TDE, et al Growth performance, methane emission, ruminal fermentation and microbial composition of the meat-master lambs fed barley sprout	Mogano RR, et al. Modelling environmental suitability and estimating effective population size of South African indigenous chickens: Implication for conservation
15:30	Lambrechts, H, et al. Assessment of the post-insulation viability and potential fertilizing ability of ejaculated spermatozoa using a sperm functional test	Mbukwane, Mbuso, et al. Apparent ileal nutrient digestibility of broilers fed maize-soy-based diets with elevated levels of sunflower meal supplemented with enzymes	Madilindim M.A et al. Genetic analysis of predicted gross feed efficiency in first-parity South African Holstein cows
15:45	Thabethe, Fortune et al (online) Response in growth performance of South African indigenous Windsnyer pigs to dietary inclusion of Amarula oil cake diets	Matshepo Hlohlongoane, et al Effect of game species on shelf life, volatiles compounds and fatty acid profiles of impala, springbok and mountain reedbuck	Sampson, Caitlin Leigh, et al. Preliminary results on the influence of feather harvesting practices on the welfare of ostriches
16:00	Mudau, Fhulufhelo, et al. (online) Application of convolution neural networks in the detection and quantification of tick burdens on cattle.	Bopape M.A., et al B-sitosterol as an alternative to oxytetracycline: effect on growth performance, feed intake and utilization efficiency, and meat quality of broiler chickens	Muvhali, Pfunzo, et al. Genetic and environmental parameters for behavioural responses towards humans in farmed ostriches
16:15	van Rensburg, Waldo, et al. (online) Manipulation of the rumen environment with the inclusion of canola oil to increase the rumen undegradable protein fraction of feedstuffs	Fushaia, F Effects on nutrient digestibility of 10% dietary inclusion of high-fibre Macadamia (<i>Integrifolia tetraphylla</i>) oil cake with supplementary exogenous enzymes	Kekana, Molatelo, et al Provision of different degrees of shade influences the physiology and thermoregulatory behaviour of ostrich chicks

17:00 - Evening: Meet & Greet

Finals of Plaas Media Animal Science Student Quiz

Programme: Tuesday 27 September

08:00	Registration/information tables open		
Session 3 – Chair:			
08:30	Challenges to livestock production - Dr John Roche : Chief science advisor – New Zealand Ministry of Primary Industries		
09:15	Revisiting the matching of livestock with their environment in an era of new challenges – Dr M D MacNeil : Deltag, USA		
10:00	Improving rural livestock – changing the mind set and market availability - Dr Florence Nherera-Chokuda: CEO NERPO		
10:30 Tea			
Session 4: Chair			
11:00	Meat Traceability – its impact on South African producers and international markets – Dewald Olivier SAFA		
11:30	Biosecurity measures – Prof Neil Duncan : Poultry Consultant and Veterinary Pathologist		
Parallel Session 2			
	Nutrition	Applied Animal Science	Physiology
Venue:	Elephant room	Rhino room	Buffalo room
12:00	Meeske, R., et al. (online) Supplementation of Aspergillus oryzae metabolites to Jersey cows grazing kikuyu/ryegrass pasture in spring	Augustyn, W., et al. Growth performance and carcass characteristics of early castrated, late castrated and intact South African Mutton Merino lambs	Lubisia, M.W., et al Plasma metabolic biomarkers of indigenous, exotic and crossbred growing pigs on roasted or sprouted cowpea-maize diets
12:15	Dreyer, O, et al. (online) The effect of extrusion of canola oilcake meal and sweet lupins on the production performance of Meatmaster lambs under feedlot conditions	O'Neill, HA, et al. Carcass composition of early castrated, late castrated and intact South African Mutton Merino lambs	Ngcobo, Jabulani, et al. Effects of dietary flaxseed oil and ascorbic acid on the reproductive performance of South African indigenous sheep
12:30	Theron, P, et al (online) A comparison of various growth models for the modelling of growth in pure- and crossbred lambs	Shingange Rimbilana, et al. The age at which a ram reaches puberty and the contribution of landrace sheep to sub-Saharan Africa's production systems	le Roux Sounes, et al. Semen analyses of Swakara sheep based at Karakul Research Station, Upington
12:45	Mdoda, Bayanda, et al (online) Effects of zingerone on growth performance, feed intake and utilisation efficiency, carcass yield and viscera macromorphometry of Cobb500 broiler chicken	Mulaudzi, M., et al. Effect of ecotype and season on the production and reproductive performance of Nguni cattle in Limpopo Province of South Africa	Lambrechts,H, et al Resilience of ram spermatozoa to heat stress, induced using scrotal insulation

Programme: Tuesday 27 September - continued

Session 5: Chair

13:30	Fundamental aspects of successful livestock production on veld: Challenging conventional wisdom - Johann Zietsmann : Zimbabwe
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14:10	Practical application of BLUP/EBV's in grazing livestock systems – Prof Norman Maiwashe, ARC
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14:50 Tea

15:10 SASAS AGM

16:30 Online Live student debate - finals - Coordinator: Dr Fabian Fon

19:00 Congress Dinner / Awards Ceremony

Programme: Wednesday 28 September

08:00 Registration/information tables open			
Session 6 – Chair:			
08:30	The 21 st Century Animal Scientist: skills and mindset for the future – Jackie Tucker: Keystone Collection		
09:00	Poster sessions		
	Breeding & Physiology	Applied Animal Science & Meat Science	Nutrition
Venue	Elephant room	Rhino room	Buffalo room
10:00 Tea			
Parallel Session 3 :			
	Breeding	Nutrition	Applied Animal Science
Venue	Elephant room	Rhino room	Buffalo room
10:30	King et al. (online) Morphological and genetic characterisation of three Mozambican indigenous Cattle breeds.	Nkabinde, S.S.M., et al. Determination of the AMEN of maize using in-Vitro vs. in-Vivo methods and determination of the effect of maize quality on efficacy of a xylanase, amylase, and protease enzyme combination	Fon, Fabian Nde, et al. The role of effective microorganisms on broilers' performance, litter odour emission and other gases
10:45	Mafolo, Kgaogelo et al. Multi-breed genomic predictions in South African Holstein and Jersey dairy cattle	Ratsaka M Moses, et al. Effect of different dietary protein allowances on performance and nitrogen metabolism of Nguni and Hereford heifers	Ramukhithi, T.F., et al Characterization of small-scale broiler production in rural areas of Limpopo Province, South Africa
11:00	Nene, Mxolisi Emmanuel et al. Profiling the diversity of the village chicken faecal microbiota using 16S rRNA and shotgun sequencing data	Kolobe, Sekobane Daniel, et al. Effect of <i>Acacia karroo</i> leaf meal inclusion levels on performance and gut morphology of broiler chickens	Diudla, SP, et al. Effects of Bioresource groups on scavenging indigenous chicken production systems, population demographics, reproduction characteristics and challenges in KwaZulu-Natal
11:15	Olivier, WJ et al. The effect of incomplete reproduction data on the prediction of Genomic Estimated Breeding Values	Egbu, CF, et al Effect of <i>Moringa oleifera</i> seed extract on growth performance and haematological parameters in Cobb 500 broiler chickens	Mashamaite, Puleng, et al Mating strategies, incidence of stillbirth and other factors affecting sow productivity traits among Landrace and Large White crosses

Programme: Wednesday 28 September - continued

11:30	Scholtz, M M et al. The development of a biological index for cow-calf efficiency for beef cattle	Kekana, T.W., et al. Pre-weaning antioxidant capacity, immunity and growth of calves fed milk from <i>Moringa oleifera</i> supplemented cows	Nyangiwe, N, et al. An update on the ecological distribution of free-living ticks infesting cattle in the Eastern Cape Province
11:45	Visser, C., et al. Population structure and genetic diversity within and amongst three South African dairy cattle breeds	Jordaan, Leanne, et al. Effect of inclusion of specific encapsulated fatty acids in sow's diets on the quality of IgG and weaned piglet performance	Demont, Kaylee, et al. Effects of BCS, parity, and postpartum period on conception rates and days to conception of Bonsmara cows in TAI programs
12:00	Nel, CL, et al. The benefit of marker data in the prediction of production traits in South African Merinos: ssGBLUP vs A-BLUP	Mararenia, M, et al. Effect of different inclusion levels of dietary green seaweed (<i>Ulva</i> spp.) on live performance, blood parameters, visceral organs, and carcass and meat quality traits in Jumbo quail	Sihlangu, Ephodia, et al. Assessment of biochemical methane potential from various agricultural substrates
12:15	Nemutandani, K.R.et al. Estimation of breed effects and non-additive genetic variation for ostrich slaughter and skin traits	Grahame, M.M, et al. The effect of different Se sources on egg quality and Se level in eggs	Ntsiapane, Alina, et al. Assessing the efficiency of smallholder wool farmers in the changing paradigms in South Africa
12:30	Nkgapele, K.P. et al. Effective population size, inbreeding coefficient and risk status classification of Kalahari Red goats from 1977 to 2018 in stud flocks of South Africa	Modisaojang-Mojanaga, M.M.C, et al Impact of Heartwater (<i>Ehrlichia ruminantium</i>) Vaccination on Mineral Homeostasis as reflected in Bone, Faecal and Blood Phosphorus, Calcium and Magnesium in Friesian calves reared in South Africa	Reinecke, Riana, et al. Determination of the economic and environmental impact of diary production in South Africa: A system dynamics approach
12:45	Steyn, S, Cloete#, S.W.P. et al. Genetic and environmental parameters for birth weight and behaviour of neonatal merino lambs in relation to cold stress	Soko, Thabisa, et al. Effect of dietary calcium and phosphorus specifications and limestone solubility on performance, bone mineralization and cost of broiler production	Nwafor lfeoma, et al. Ovicidal and larvicidal activity of indigenous medicinal plant extracts on sheep's <i>Haemonchus contortus</i>
13:00 Lunch			
14:00 Closure			

10:30 – 13:00 SASAS Educational Forum meeting – Convenor - Helet Lampbrechts