

4.1 Publications in peer-reviewed or refereed journals

1. Strydom, P.E., de Bruyn, J.F., Naudé, R.T. & Casey, N.H., 1994. Growth response, sexual development, carcass and meat quality of zinc tannate treated bulls. *S. Afr. J. Anim. Sci.* 23, (5/6) 151.
2. Strydom, P.E., Naudé, R.T, Scholtz, M.M & Van Wyk, J.B., 2000. Characterisation of Indigenous Cattle Breeds in relation to Carcass Characteristics. *Anim. Prod.* 70, 241-252
3. Strydom, P.E., Naudé, R.T, Scholtz, M.M & Van Wyk, J.B., 2000. Characterisation of Indigenous Cattle Breeds in relation to Meat Quality Characteristics. *Meat Sci.* 55, 79-88
4. Strydom, P.E., 1995. The role of genotype and physiological type of an animal on an increased meat yield. *J. Zimbabwe Soc. Anim. Prod.* 7, 89.
5. Strydom, P.E. & Buys, E.M. 1995. A pilot study on the effects of spray-chilling on carcass mass loss and surface bacteriology. *Meat Sci.* 39, 265 - 276.
6. Strydom, P.E., Naudé, R.T, Scholtz, M.M & Van Wyk, J.B., 2000. Genetic distances and relationships in production and product traits between subpopulations of Bonsmara and Nguni cattle breeds. (accepted for publication, *South African Journal of Animal Science* 31, 181-194
7. Holloway, J.W., Warrington, B.G. & Strydom, P.E., 2000. Beef Quality of Bonsmara Cattle. *BOTTOM LINE – a bulletin of the Texas A&M Agricultural Research and Extension Centre, Uvalde.* <http://uvalde.tamu.edu/PDF/beefquality.pdf>
8. Tshabalala, P.A., Strydom, P.E., Webb, E.C. & De Kock, H.L., 2003. Meat quality of designated South African indigenous goat and sheep breeds. *Meat Science.* 65 (1) 563-570.
9. Strydom, P.E., Frylinck, L. & Smith, M.F., 2005. Should electrical stimulation be applied when cold shortening is not a risk? *Meat Science* 70 (4) 733-742.
10. Strydom, P.E. & Smith, M.F., 2005. Predicting yields of high priced trimmed cuts by means of carcass weight and visual assessments of fat cover and conformation. *South African Journal of Animal Science*, 35 (3), 195-205.
11. Corbet, N.J., Shepherd, R.K., Burrow, H.M., Van der Westhuizen, J., Strydom, P.E. & Bosman, D.J., 2006. Evaluation of Bonsmara and Belmont Red cattle breeds in South Africa. 1. Productive performance. *Australian Journal of Experimental Agriculture* 46, 199-212.
12. Muchenje, V., Dzama, K., Chimonyo, M., Raats, J.G. & Strydom, P.E., 2008. Meat quality of Nguni, Bonsmara and Aberdeen Angus steers raised on natural pasture in the Eastern Cape, South Africa. *Meat Science* 79, 20-28.
13. Muchenje V., Dzama K., Chimonyo M., Raats, J.G. & Strydom, P.E., 2008. Tick susceptibility and its effects on growth & and carcass characteristics of Nguni, Bonsmara and Angus steers raised on natural pasture. *Animal*, 2 (2), 298-304.
14. Strydom, P.E., Frylinck, L., Van der Westhuizen, J. & Burrow, H.M., 2008. Growth performance, feed efficiency and carcass and meat quality of tropically adapted breed types from different farming systems in South Africa. *Australian Journal of Experimental Agriculture.* 48, 599-607.
15. Strydom, P.E., 2008. Do indigenous Southern African cattle breeds have the right genetics for commercial production of quality meat? *Meat Science* 80, 86-93.
16. Muchenje, V., Dzama, K., Chimonyo, M., Strydom, P.E., Hugo, A. & Raats, J.G., 2008. Some biochemical aspects pertaining to beef eating quality and consumer health: A review. *Food Chemistry* 112, 279–289.
17. Esterhuizen, J., Groenewald, I., Hugo, A. & Strydom P.E., 2008. A comparison between feedlot, conventional veld feeding and organic veld feeding production systems. Animal performance, meat quality and financial implications. *South African Journal of Animal Science* 38, 303 - 314.
18. Jama, N., Muchenje, V., Chimonyo, M., Strydom, P.E., Dzama K., & Raats, J.G., 2008. Cooking loss components of beef from Nguni, Bonsmara and Angus steers. *African Journal of Agricultural Research* 3, 416 -420.

19. Strydom, P.E., Frylinck, L., Montgomery, J.L. & Smith, M.F., 2009. The comparison of three β -agonists for growth performance, carcass characteristics and meat quality of feedlot cattle. *Meat Science* 81, 557-564.
20. Muchenje, V., Dzama, K., Chimonyo, M., Strydom, P.E., Hugo, A. & Raats, J.G., 2008. Sensory evaluation and its relationship to physical meat quality attributes of beef from Nguni and Bonsmara steers raised on natural pasture. *Animal* 2, 1700-1706.
21. Muchenje, V., Dzama, K., Chimonyo, M., Strydom, P.E., & Raats, J.G., 2009. Relationship between pre-slaughter stress responsiveness and beef quality in three cattle breeds. *Meat Science* 81, 653-657.
22. Muchenje, V., Hugo, A., Dzama, K., Chimonyo, M., Strydom, P.E., & Raats, J.G., 2009. Cholesterol levels and fatty acid profiles of beef from three cattle breeds raised on natural pasture, *Journal of Food Composition and Analysis* 22 (4): 354-358.
23. Strydom, P.E., van Heerden, S.M., Schönfeldt, H.C., Kruger, R. & Smith, M.F., 2009. The influence of fat score and fat trimming on primal cut composition of South African lamb. *South African Journal of Animal Science* 39, 233-242.
24. Mapiye, C.A., Chimonyo, M., Dzama, K., Strydom, P.E., Muchenje, V., & Marufu, M.C., 2009. Nutritional status, growth performance and carcass characteristics of Nguni steers supplemented with *Acacia karroo* leaf-meal. *Livestock Science* 126, 206-214.
25. Frylinck, L., van Wyk, G.L., Smith T.P.L., Strydom, P.E., van Marle-Köster, E., Webb, E.C., Koochmarai, M., & Smith, M.F., 2009. Evaluation of biochemical parameters and genetic markers for association with meat tenderness in South African feedlot cattle. *Meat Science* 83, 657-665.
26. Strydom, P.E. & Smith, M.F. 2010. Effects of duration of zilpaterol hydrochloride supplementation on growth performance, carcass traits and meat quality of grainfed cull cows. *Animal* 4, 653-660.
27. Mapiye, C.A., Chimonyo, M., Dzama, K., Muchenje, V., & Strydom, P.E., 2010. Meat quality of Nguni steers supplemented with *Acacia karroo* leaf-meal. *Meat Science* 84, 621-627.
28. Muchenje, V., Chimonyo, M., Dzama, K., Strydom, P.E., & Raats, J.G., 2010. Relationship between off-flavor descriptors and flavor scores in beef from cattle raised on natural pasture. *Journal of Muscle Foods* 21, 424-432.
29. Hope-Jones, M., Strydom, P.E., Frylinck, L., & Webb, E.C., 2010. The efficiency of electrical stimulation to counteract the negative effects of β -agonists on meat tenderness of feedlot cattle. *Meat Science*, 86, 699-705.
30. Strydom, P.E., Frylinck, L., & Smith, M.F., 2011. Variation in meat quality characteristics between Sanga (*Bos taurus africanus*) and Sanga-derived cattle breeds and between Sanga and Brahman (*Bos indicus*). *Animal* 5, 483-491.
31. Schönfeldt, H.C. & Strydom, P.E., 2011. Effect of age and cut on cooking loss, juiciness and flavour of South African beef. *Meat Science* 87, 180-190.
32. Schönfeldt, H.C. & Strydom, P.E., 2011. Effect of age and cut on tenderness of South African beef. *Meat Science* 87, 206-218.
33. Strydom, P.E., Hope-Jones, M., Frylinck, L., & Webb, E.C., 2011. The effects of a beta-agonist treatment, Vitamin D₃ supplementation and electrical stimulation on meat quality of feedlot steers. *Meat Science*, 89, 462-468.
34. Mapiye, C.A., Chimonyo, M., Dzama, K., Hugo, A., Strydom, P.E. & Muchenje, V., 2011. Fatty acid composition of beef from Nguni steers supplemented with *Acacia karroo* leaf-meal. *Journal of Food Composition and Analysis*, 24, 523-528.
35. Strydom, P.E., 2011. Quality related principles of the South African beef classification system in relation to grading and classification systems of the world. *South African Journal of Animal Science*, 41, 177-193.
36. Hope-Jones, M., Strydom, P.E., Frylinck, L. & Webb, E.C., 2012. Effect of dietary beta-agonist treatment, vitamin D₃ supplementation and electrical stimulation of carcasses on colour and drip loss of steaks from feedlot steers. *Meat Science*, 90, 607-612.

37. Hansen, S., Strydom, P.E. & Frylinck, L., 2012. Supplementation of vitamin D₃ to improve texture and oxidative stability of beef loins from steers treated with zilpaterol hydrochloride. *Meat Science* 90, 145-151.
38. O'Neill, H.A., Webb, E.C., Frylinck, L. & Strydom, P. 2012. Urinary catecholamine concentrations in three beef breeds at slaughter. *South African Journal of Animal Science* 42, 545-549.
39. Frylinck, L., Strydom, P.E. & Webb, E.C., 2013. Effect of South African beef production systems on post-mortem muscle energy status and meat quality. *Meat Science* 93, 827–837.
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41. Strydom, P.E. & Hope-Jones, M. 2014. Evaluation of three vacuum packaging methods for retail beef loin cuts. *Meat Science* 98, 689–694
42. Strydom, P.E. & Rosenvold, K. 2014. Muscle metabolism in sheep and cattle in relation to high rigor temperature – overview and perspective. *Animal Production Science* 54, 510-518.
43. Strydom, P.E., Frylinck, L., van Heerden, S.M., Hope-Jones, M., Hugo, A., Webb, E.C., Moholisa, E., Liebenberg, B.E. & Sehoole, O.C. 2015. Sources of variation in quality of South African beef: Case studies in relation to the red meat classification system. *South African Journal of Animal Science* 45, 289-301.
44. Modika, K.Y., Frylinck, L., Moloto, K.W. & Strydom P.E., Heinze, P.H. & Webb, E.C. 2015. Visual evaluation of beef tenderness by using surface structural observations and its relationship to meat colour. *South African Journal of Animal Science* 45, 255-262.
45. Moloto, K.W., Frylinck, L., Strydom P.E. & Koorsen, G. 2015. Proteomics approach as a new way to predict tenderness as compared to the classical South African Beef Carcass Classification System. *South African Journal of Animal Science* 45, 249-254.
46. Frylinck, L., O'Neil, A., Du Toit, E., Strydom, P.E. & Webb, E.C. 2015. The beef tenderness model. *South African Journal of Animal Science* 45, 234-248.
47. Sekali, M., Marume, U., Mlambo, V. & Strydom, P.E. 2016. Growth performance, hematology, and meat quality characteristics of Mutton Merino lambs fed canola-based diets. *Tropical Animal Health and Production* 48 (6) 1115-1121.
48. Strydom, P.E. 2016. Performance-enhancing technologies of beef production. *Animal Frontiers* 6, 22-30.
49. Marandure T, Mapiye C, Makombe G, Nengovhela B; Strydom P; Muchenje V & Dzama K, 2016. Determinants and opportunities for commercial marketing of beef raised on communally owned natural pastures in South Africa; *African Journal of Range & Forage Science*, 33:3, 199-206.
50. Marandure T, Mapiye C, Makombe G, Nengovhela B; Strydom P; Muchenje V & Dzama K, 2016. Beef Traders' and consumers' perceptions on the development of a natural pasture-fed beef brand by smallholder cattle producers in South Africa, *African Journal of Range & Forage Science*, 33:3, p 207-214.
51. Moloto, K.W., Frylinck, L., Pitse, T. Strydom, P.E. & Koorsen, G. 2016. Protein separation by two different first dimension isoelectric point ranges in two-dimensional electrophoresis gels from Nguni breed *m. longissimus lumborum* using different staining methods. *Clinical Proteomics & Bioinformatics*, 1 (2), 28-31.
52. Strydom, P.E. Lühla, J., Kahla, C & Hoffman, L.C. 2016. Comparison of shear force tenderness, drip and cooking loss, and ultimate muscle pH of the loin muscle among grass-fed steers of four major beef crosses slaughtered in Namibia. *South African Journal of Animal Science* 2016, 46 (4) 348-359.
53. Moholisa, E. Hugo, A., Strydom, P.E. & van Heerden, S.M. 2016. The effects of animal age, feeding regime and a dietary beta-agonist on tenderness of three beef muscles. *Journal of the Science of Food and Agriculture*

4.2 Books and/or chapters in books

1. Strydom, PE. 2004. Ethnic Meat Products: Africa. In: Werner K Jensen, Carrick Devine, Michael Dikeman (eds.) Encyclopedia of Meat Sciences, Elsevier Academic Press, San Diego, USA, pp 440–441.
2. Strydom, PE & Zondagh, B. 2014. Biltong: A Major South African Ethnic Meat Product. In: Carrick Devine & Michael Dikeman (eds.) Encyclopedia of Meat Sciences 2e, Vol. 1, Elsevier Academic Press, San Diego, USA, pp 515-517.
3. Strydom, P.E., Jaworska, D. & Kołożyn-Krajewska, D. 2015. Meat Quality of Slaughter Animals In: Meat Quality: Genetic and Environmental Factors (eds. Wiesław Przybylski & David Hopkins, CRC Press, Taylor and Francis, London pp. 31-80.
4. Strydom, P.E., Frylinck, F. & Hope-Jones, M. 2016. The carcass and meat quality of the Afrikaner. In: M.M. Scholtz, F.W.C. Naser & L. Tissier (eds.), The Afrikaner breed of cattle: South Africa's heritage for food security. ARC, Pretoria, pp. 55-59.
5. Strydom, PE. 2017. The effects of carcass chilling and electrical stimulation on visual beef quality and palatability. In: Ensuring safety and quality in the production of beef. Michael Dikeman (ed.) Burleigh Dodds Science Publishing Limited – to be published in April 2017.
6. Bonny, S., Polkinghorne, R. Strydom, P.E. Matthews, K., Loópez-Campos, O., Nishimura, T., Scollan, N., Pethick, D. & Hocquette, J-F. 2017. Quality assurance schemes in major beef producing countries. In: New aspects of meat quality – from genes to ethics. Peter Purslow (ed.) Elsevier Academic Press, San Diego, USA, to be published in March 2017