

BYENG RYEL MIN:

Assi. Professor. Dept. of Agricultural and Environmental Sciences,
202 Morrison-Mayberry Hall, Tuskegee University, Tuskegee, AL 36088.
Tel: 334-727-8321. 334-524-7670 (cell). E-mail: minb@mytu.tuskegee.edu

Book Chapter :

1. Patra, A.K., **B.R. Min**, and J. Saxena. 2012. Dietary tannins on microbial ecology of the gastrointestinal tract in ruminants. In; Dietary Phytochemicals and Microbes. A.K. Patra (Ed.). Pages 237-262, Springer Sciences.

Publications with refereed journals:

1. **B.R. Min**, W. E. Pinchak, R.C. Anderson, and R. Puchala. 2016. Bloat mitigation potential of plant tannins and yucca extracts based on in vitro ruminal fermentation and methane gas production from wheat forage. International Journal of Research Studies in Agricultural Sciences (IJRSAS) Volume 2 (1). PP 1-13 ISSN 2454-6224 www.arcjournals.org ©ARC.
2. **Min, B.R.**, S. Solaiman, N. Gurung, and W. McElhenney. 2016. The effect of forage-based meat goat production systems on live performance, carcass traits and fatty acid composition of Kiko crossbred goats. Animal Nutrition, 1:1-11. Insight Medical Publishing Journal.
3. **Min, B.R.**, D. Perkins, C. Wright, A. Dawod, B. J. Min, T. H. Terrill, J.-S Eun, R.. Shang, S.Y. Yang, and N. Gurung. 2016. Effects of feeding two different tannin-containing diets on ruminal fermentation profiles and microbial population changes in meat goats. Agriculture, Food and Analytical Bacteriology, 5: 153-165.
4. **Min, B.R.**, S. Solaiman, E. Taha, and J. Lee. 2016. Effect of plant tannin-containing diet on fatty acid profile in meat goats. Journal of Animal Nutrition, 1: 1-7
5. **Min, B.R.**, K. Hernandez, W.E. Pinchak, R.C. Anderson, J.E. Miller, and E. Valencia. 2015. Effects of plant tannin extracts supplementation on animal performance and gastrointestinal parasites infestation in steers grazing winter wheat. Open J. Animal Science, 5: 343-350. <http://dx.doi.org/10.4236/ojas>.
6. **Min, B.R.**, and S. Solaiman. 2015. Prediction of feed intake and its relationship with chemical composition of diets in goats consuming concentrate, bahaigrass pasture and mimosa browse. Open J. of Animal Science. 5: 283-293. www.scirp.org/Journal/PaperDownload.aspx?paperID=57813.
7. Malinowski, D.P., W. E. Pinchak, **B. R. Min**, J. C. Rudd, and J. Baker. 2015. Phenolic compounds affect bloat potential of wheat forage. Crop, Forage & Turfgrass Management, pages 1- 8. DOI: 10.2134/cftm2015.0146.
8. **Min, B.R.**, S. Solaiman, T. Terrill, A. Ramsay, and I. Mueller-Harvey. 2015. The effects of tannins-containing ground pine bark diet upon nutrient digestion, nitrogen balance, and mineral retention in meat goats. J. Anim. Sci. and Biotechnol. 6:25 DOI: 10.1186/s40104-015-0020-5. URL: <http://www.jasbsci.com/content/6/1/25>
9. **Min, B.R.**, E.A. Wilson, S. Solaiman, and J. Miller. Effects of tannin-rich pine bark diet on experimentally infected with Haemonchus contortus in meat goats. Int. J. Vet. Health Sci. and Res. 3:49-57.
10. **Min, B.R.**, C. Wright, P. Ho, J. S. Eun, N. Gurung, and R. Shange. 2014. The effect of phytochemical tannins-containing diet on rumen fermentation characteristics and microbial

diversity dynamics in goats using 16S rDNA amplicon pyrosequencing. *Agric. Food Anal. Bacteriol.* 4:195-211.

11. **Min, B.R.**, S. Solaiman, R. Shange and J.-S. Eun. 2014. Gastrointestinal bacterial and methanogenic Archaea diversity dynamics associated with condensed tannins-containing pine bark diet in goats using 16S rDNA amplicon pyrosequencing. *International Journal of Microbiology*. Volume 2014, Article ID 141909, 11pages. <http://dx.doi.org/10.1155/2014/141909>.
12. **Pitta, D.W.**, **Pinchak, W.E.**, **Dowd, S.**, **Dorton, K.**, **Yoon, I.**, **Min, B.R.**, **Fulford, J.D.**, **Wickersham, T.A.**, and **Malinowski, D.P.** 2014. Longitudinal shifts in bacterial diversity and fermentation pattern in the rumen of steers grazing wheat pasture. *Anaerobe*, 30: 11-17.
13. Dawod, A. and B.R. Min. 2014. Effect of puerperal metritis on Holstein cows productive, reproductive and culling rate. *American Journal of Animal and Veterinary Sciences*. 9:162-169.
14. Noviandi, C. T., J.-S. Eun, M. D. Peel, B. L. Waldron, **B. R. Min**, D. R. ZoBell, and R. L. Miller. 2013. Effects of energy supplementation in pasture forages on in vitro ruminal fermentation characteristics in continuous cultures. *The Professional Animal Scientist*. 30:1-2
15. Noviandi, C. T., J.-S. Eun, M. D. Peel, B. L. Waldron, **B. R. Min**, D. R. ZoBell, and R. L. Miller. 2013. Comparison of alfalfa, birdsfoot trefoil, and cicer milkvetch in combination with 25, 50, or 75% tall fescue in a continuous culture system. *The Professional Animal Scientist*. 30(1):
16. **Min, B. R.**, Pinchak, W.E., C. Hernandez, and M. E. Hume. 2013. Grazing activity and ruminal bacterial population associated with frothy bloat in steers grazing winter wheat. *The Professional Animal Scientist*. 29: 179-187.
17. Anderson, R.C., M. Vodovnik, **B. R. Min**, W.E. Pinchak, N.A. Krueger, R.B. Harvey and D.J. Nisbet. 2012. Bactericidal effect of hydrolysable and condensed tannin extracts on *Campylobacter jejuni* in vitro. *Folia Microbiol.* 57:253–258.
18. **Min, B.R.**, W. E. Pinchak, K. Hernandez, C. Hernandez, M. E. Hume, E. Valencia, and J. D. Fulford. 2012. The effect of plant tannins supplementation on animal responses and in vivo ruminal bacterial populations associated with bloat in heifers grazing wheat forage. *The Professional Animal Scientist*. 28:464-472.
19. **Min, B.R.**, S. Solaiman, N. Gurung, J. Behrends, J.-S. Eun, E. Taha, and J. Rose. 2012. Effects of pine bark supplementation on performance, rumen fermentation, and carcass characteristics of Kiko crossbred male goats. *Journal of Animal Science*. 90: 3556-3567.
20. Solaiman, S., **B.R. Min**, N. Gurung, and J. Behrends. 2012. Effects of breed and stage of growth on feed intake, growth performance, and carcass traits of purebred Boer and Kiko goat kids. *Journal of Animal Science*. 90: 2092-2108.
21. Dschaak, C. M., C.M. Williams, M.S. Holt, J.-S. Eun, A.J. Young, and **B.R. Min**. 2011. Effects of supplementing condensed tannin extract on intake, digestion, ruminal fermentation, and milk production of lactating dairy cows. *J. Dairy Sci.*94:2508-2519.

22. Leick, C.M., J.M. Behrends, S.G. Solaiman, P.R. Broadway, **B.R. Min**, and W.B. Mikel. 2012. Sensory properties and instrumental texture analysis of chevon patties from intact male Boer and Kiko goats harvested at four endpoints. *Meat Science* 91: 215-222.
23. Utierrez-Bañuelos, H., W.E. Pinchak, **B.R. Min**, G.E. Carstens; R.C. Anderson; L. O. Tedeschi, W. K. Krueger, N. A. Krueger, P.A. Lancaster, R. R. Gomez. 2011. Effects of feed-supplementation and hide-spray application of two sources of tannins on enteric and hide bacteria of feedlot cattle. *J. Environ. Sci. and Health, Part B: Pesticides, Food Contaminants, and Agricultural Wastes*. 46: 360-365.
24. Williams, C.M., J.-S. Eun, J.W. MacAdam, A.J. Young, V. Fellner, and **B.R. Min**. 2011. Effects of forage legumes containing condensed tannins on methane and ammonia production in continuous cultures of mixed ruminal microorganisms. *Animal Feed Science and Technology*. 166-167, 364-372.
25. McAdam, J.W., R.E. Ward, T.C. Grigs, **B.R. Min**, and G. E. Aiken. 2011. Case study: Average daily gain and blood fatty acid composition of cattle grazing the non-bloating legumes birdsfoot trefoil and cicer milkvetch in the mountain west. *The Professional Animal Scientist*. 27:574-583.
26. Malinowski, D.P., D.W. Pitta, W.E. Pinchak, **B.R. Min** and Y.Y. Emendack. 2011. Effect of nitrogen fertilisation on diurnal phenolic concentration and foam strength in forage of hard red wheat (*Triticum aestivum* L.) cv. Cutter. *Crop and Pasture Science* 62: 656-665.
27. Solaiman, S., C. Kerth, K. Willian, **B. R. Min**, C. Shoemaker, W. Jones, D. Bransby. 2011. Growth Performance, Carcass Characteristics and Meat Quality of Boer-Cross Wether and Buck Goats Grazing Marshall Ryegrass. *Asian-Aust. J. Anim. Sci.*, 24 351-357.
28. Malinowski, D.P., D.W. Pitta, W.E. Pinchak, **B.R. Min** and Y.Y. Emendack. 2011. Effect of nitrogen fertilisation on diurnal phenolic concentration and foam strength in forage of hard red wheat (*Triticum aestivum* L.) cv. Cutter. *Crop and Pasture Science* 62: 656-665.
29. Solaiman, S., C. **B. R. Min**, N. Gurung, J. Behrends, and E. Taha. 2011. Assessing feed intake, growth performance, organ growth, and carcass characteristics of purebred boer and kiko male kids fed high concentrate diet. *Small Ruminant Research* 98: 98-101.
30. Solaiman, S., Thomas, J., Dupre, Y., **Min, B.R.**, Gurung, N., Terril, T.H., and Haenlein, G.F.W. 2010. Effect of feeding sericea lespedeza (*Lespedeza cuneata*) on growth performance, blood metabolites, and carcass characteristics of Kiko crossbred male kids. *Small Ruminant Research*. 93:149-156.
31. Krueger, W.K., Gutierrez, H., Carstens, G.E., **Min, B.R.**, Pinchak, W.E., Gomez, R.R., Anderson, R.C., Krueger, N.A., and Forbes, T.D.A. 2010. Effects of dietary tannin source on performance, feed efficiency, ruminal fermentation, and carcass and non-carcass traits in steers fed high-grain diet. *Animal Feed Science and Technology*. 159:1-9.
32. Pitta, D.W., Pinchak W.E., Dowd, S.E., Osterstock, J., Gontcharova, V., Youn, E., Dorton, K., Yoon, I., **Min, B.R.**, Fulford, J.D., Wickersham, T.A., Malinowski, D.P. 2010. Rumen bacterial diversity dynamics associated with changing from bermudagrass hay to grazed winter wheat diets. *Microbial Ecology*. 59:511-522.

33. Williams, C.M., J.S. Eun, C.M. Dschaak, J.W. MacAdam, **B.R. Min**, and A.J. Young. 2010. In vitro ruminal fermentation characteristics of birdsfoot trefoil (*Lotus corniculatus* L.) hay in continuous cultures. The Professional Animal Scientist 26: 570-576.
34. Williams, C.M., J.S. Eun, C.M. Dschaak, J.W. MacAdam, **B.R. Min**, and A.J. Young. 2010. In vitro ruminal fermentation characteristics of birdsfoot trefoil (*Lotus corniculatus* L.) hay in continuous cultures. The Professional Animal Scientist 26: 570-576.
35. **Min, B.R.**, Pinchak, W.E, Anderson, R.A. and Hume, M.E. 2008. *In vitro* bacterial growth and *in vivo* rumen microbiota populations associated with potential bloat dynamics in steers grazing winter wheat. Journal of Animal Science 84: 2873-2882.
36. **Min, B.R.** W.E. Pinchak, R. Merkel, S. Walker, G. Tomita, and R.C. Anderson. 2008. Comparative antimicrobial activity of tannin extracts from perennial plants on mastitis pathogens. Scientific Research and Essay 3:66-73.
37. **Min, B.R.**, W.E. Pinchak, R. C. Anderson, and T.R. Callaway. 2007. Effect of tannins on the *in-vitro* growth of *Escherichia coli* O157:H7 and *in vivo* growth of generic *Escherichia coli* excreted from steers. Journal of Food Protection 70:543-550.
38. **Min, B.R.**, Pinchak, W.E., and Fulford, J.D. 2007. *In vitro* and *in vivo* rumen fermentation and gas production: influence of corn and mineral oils and their bloat potential. Animal Feed Science and Technology 133:192-205.
39. **Min, B.R.**, Tomita, G. and Hart, S.P. 2007. Effect of subclinical intramammary infection on somatic cell counts and chemical composition of goat's milk. Journal of Dairy Research 74:1-7.
40. **Min, B.R.**, W. E. Pinchak, R. C. Anderson, J. D. Fulford and R. Puchala. 2006. Effect of condensed tannins supplementation level on weight gain and *in vitro* and *in vivo* bloat precursors in steers grazing winter wheat. Journal of Animal Science 84: 2546-2554.
41. **Min, B. R.**, W.E. Pinchak, R. C. Anderson, and M. E. Hume. 2006. In vitro bacterial growth and in vivo ruminal microbiota populations associated with bloat in steers grazing wheat forage. J. Anim. Sci. 84: 2873-2882.
42. Sij, J., Pinchak, W. Ott, J. **Min, B.R.**, Malinowski, and D. Robinson. 2006. Returns mixed on wheat pasture response to N and maintenance P in wheat/stocker systems. Fluid Journal 14 (3): 8-10.
43. **Min, B.R.**, Pinchak, W.E., Fulford, J.D., and Puchala, R. 2005. Wheat pasture bloat dynamics, in vitro ruminal gas production and potential bloat mitigation with condensed tannins. Journal of Animal Science 83:1322-1331.
44. **Min, B.R.**, Hart, S.P., Sahlu, T. and Satter, L.D. 2005. The effect of diets on milk production, composition, and on lactation curves in pastured dairy goats. Journal of Dairy Science 88:2604-2615.
45. Puchala, R., **Min, B.R.**, Goetsch, A.L., and Sahlu, T. 2005. The effect of a condensed tannin-containing forage on methane emission by goats. Journal of Animal Science 83:182-186.

46. **Min, B.R.**, Attwood, G.T., McNabb, W.C., Molan, A.L., and Barry, T.N. 2005. The effect of condensed tannins from *Lotus corniculatus* on the proteolytic activities and growth of rumen bacteria. Animal Feed Science and Technology 121:45-58.
47. **Min, B.R.**, Hart, S.P., Tomita, G., Loetz, E. and Sahlu, T. 2005. The effect of condensed tannins on gastrointestinal parasite control in Angora Does. Veterinary Parasitology 130:105-113.
48. **Min, B.R.**, Pinchak, W.E., Fulford, J.D., and Puchala, R. 2005. Effect of feed additives on *in vitro* and *in vivo* rumen characteristics and frothy bloat dynamics in steers grazing wheat pasture. Animal feed Science and Technology 122-123:615- 625.
49. Soryal, K.A., Zeng, S.S., **Min, B.R.**, and Hart, S.P. 2004. Effect of feeding treatments and lactation stages on composition and organoleptic quality of goat milk Domiati cheese. Small Ruminant Research 52:109-116.
50. **Min, B.R.**, Pomroy, W., Hart, S.P. and Sahlu, T. 2004. The effect of short-term consumption of a forage containing condensed tannins on gastro-intestinal nematode parasite control in grazing wether goats. Small Ruminant Research 51:279-283.
51. **Min, B.R.** 2004. The effect of plant tannins on the nutrition and health of livestock and humans (Invited Paper). Proc. of the 2nd Annual Medical and Aromatic Plants Symposium. USDA/ARS/MSU, Beckly, WV.
52. Joemat, R., Goetsch, A.L., Horn, G.W., Sahlu, T., Puchala, R., **Min, B.R.**, Luo, J. and Smuts, M. 2004. Growth of yearling meat goat doelings with changing plane of nutrition. Small Ruminant Research 52:127-135.
53. **Min, B.R.**, Barry, T.N., Attwood, G.T. and McNabb, W.C. 2003. The effect of condensed tannins on the nutrition and health of ruminants fed fresh temperate forages: a review. Animal Feed Science and Technology 106: 3-19.
54. Soryal, K.A., Zeng, S.S. **Min, B.R.**, Hart, S.P. and Tesfai.K. 2003. Fatty acid profiles of goat milk and domiati cheese as affected by pasture feeding and stage of lactation. Journal of Food Lipids 10 (3): 219-236.
55. **Min, B.R.** and Hart, S.P. 2003. Tannins for suppression of internal parasites (Invited Paper). Journal of Animal Science 81 (E. Suppl. 2): E102-E109.
56. **Min, B.R.**, Attwood, G.T., Reilly, K., Sun, W., Peters, J.S., Barry, T.N., and McNabb, W.C. 2002. *Lotus corniculatus* condensed tannins decrease *in vivo* populations of proteolytic bacteria and affect nitrogen metabolism in the rumen of sheep. Canadian Journal of Microbiology 48:911-921.
57. Molan, A.L., Attwood, G.T., **Min, B.R.** and McNabb, W.C. 2001. The effect of condensed tannins from *Lotus pedunculatus* and *Lotus corniculatus* on the growth of proteolytic rumen bacteria *in vitro* and their possible mode of action. Canadian Journal of Microbiology 47:626-633.

58. **Min, B. R.**, McNabb, W.C., Peters, J. S. and Barry, T. N. 2000. Solubilization and degradation of ribulose-1,5-bisphosphate carboxylase (Rubisco) protein from white clover (*Trifolium repens*) and *Lotus corniculatus* by rumen micro-organisms and the effect of condensed tannins on these process. Journal of Agricultural Science, Cambridge 134:305-317.
59. Molan, A.L., Waghorn, G.C., **Min, B.R.** and McNabb, W.C. 2000. The effect of condensed tannins from the seven herbage on *Trichostrongylus colubriformis* larval migration in vitro. Folia Parasitologica 47:39-44.
60. **Min, B.R.**, Fernandez, J.M., McNabb, W.C., Kemp, P.D., McDoland, M.F. and Barry, T.N. 2001. The effect of condensed tannins in *Lotus corniculatus* upon reproductive efficiency and wool production in ewes during autumn. Animal Feed Science and Technology 92:185-202.
61. **Min, B.R.**, McNabb, W.C., Barry, T.N., Kemp, P.D., Waghorn, G.C. and McDonald, M.F. 1999. The effect of condensed tannins on reproductive efficiency and wool production in sheep grazing *Lotus corniculatus*. Journal of Agricultural Science, Cambridge 132:323-334.
62. Barry, T.N., McNabb, W.C., Kemp, P.D., Waghorn, G.C. **Min, B.R.** & Luque, A. 1999. The effect of condensed tannins in *Lotus corniculatus* upon reproductive efficiency and wool production in sheep during late summer and autumn. Proc. of New Zealand Grassland Association 61:51-55.
63. **Min, B.R.**, Barry, T.N., McNabb, W.C. and Kemp, P.D. 1998. The effect of condensed tannins on the production of wool and on its processing characteristics in sheep grazing *Lotus corniculatus*. Australian Journal of Agricultural Research 49: 597-605.
64. **Min, B.R.**, Barry, T.N., Wilson, P. & Kemp, P.D. 1997. The effect of grazing chicory (*Cichorium intybus*) and birdsfoot trefoil (*Lotus corniculatus*) on venison and velvet production by young red and hydride deer. New Zealand Journal of Agricultural Research 40:335-347.
65. Chang, M.B., Lee, S.S. and **Min, B.R.** 1994. Studies on the cellulolytic enzymes in the rumen of Korean native goats for the improvement of roughage usage. Korean Journal of Animal Nutrition and Feed 18 (4):297-307.

Web Publication

1. **Timely topic: June 2014**
Min, B.R. 2014. Pine bark and other natural dewormers for small ruminants. American Consortium for Gastrointestinal Parasites Control. <http://www.wormx.info/index.html>
2. **Impact Statement**
Min, R.R. 2014. Sustainable methods for managing internal parasites in small ruminants: natural dewormers. Academic Affairs/Agriculture and Natural Sciences/ ARD Impact Statement.

CONFERENCE AND FIELD DAY PAPERS;

1. Condensed tannins-induced gene expression in meat goats: A pilot study. 2016. B.R. Min, C. Wright, D. Perkins, M. Mienaltowski, A. Dawod, T. Terrill, and N. Gurung. *J. Anim. Sci.* (Suppl. 2). SRP 12692.
2. Sustainable Livestock Production through Year-Round Forage Production and Grazing Management. 2016. Karki, U., S. Bambo, N. Gurung, L. Karki, B. R. Min, E. Jolley, A. Kumi, A. Elliott, and J. Moore. Southern Sustainable Agricultural Worker Group conference, Kentucky.
3. Composition and Quality Assessment of the Woodland Browse Species and Goats' Performance Study under Woodland. 2016. R. Khatri, U. Karki, Y. Karki, N. Gurung, B. Min. *Journal of Animal Science* (E. Supl. 2).
4. Effects of mixing two different tannin-containing diets to evaluate rumen fermentation and microbial population changes in goats. 2015. D. Perkins, B.R. Min, C. Wright, N. Gurung, T. Terrill, J.S. Eun, W.H. McElhenney, R. Shange, and Y. Uyeno. 2015. *J. Animal Science*, (E-suppl. 1): 88: W479.
5. Effects of feeding varying levels of deoiled distillers grains with soluble on dry matter intake, rumen fermentation, blood chemistry profile, growth, feed efficiency, and carcass quality of meat goats. 2015. J.G. Scott, N. Gurung, B.R. Min, E.G. Rhoden, and W.H. McElhenney. *J. Animal Science*, (E-suppl. 1): 88: 180.
6. Fatty acids composition of different fat depots from meat goats supplemented with tannin-rich pine bark. B.B. Lemma, J.H. Lee, B. R. Min, G. Kannan, and B. Kouakou. 2015. *J. Animal Science*, (E-suppl. 1): 88: M455.
7. Influence of dietary condensed tannins from pine bark and/or sericea lespedeza on chemical composition and quality of goats meat. 2015. T. Witherspoon, J.H. Lee. B.B. Lemma, B.R. Min, G. Kanna, and B. Kouakou. 2015. *J. Animal Science*, (E-suppl. 1): 88: M456.
8. Fatty acids composition of different fat depots from meat goats supplemented with either tannin-rich pine bark and sericea lespedeza alone or in combination. 2015. C.R. Alfred, J.H. Lee, T. Witherspoon, B.B. Lemma, B.R. Min, G. Kannan, and B. Kouakou. 2015. *J. Animal Science*, (E-suppl. 1): 88: M457.
9. In vitro ruminal metabolism of a lactation dairy diet supplemented with virgin coconut oil and pine bark extract in continuous cultures. 2015. S. Y. Yang, R. W. S. Ningrat, K. Neal, B. R. Min, and J.-S. Eun. *J. Animal Science*, (E-suppl. 1): 88: T384.
10. Quality parameters of goat meat as influenced by dietary condensed tannins from pine bark. 2015. J.O. Jones, H.H. Lee, B.R. Min, G. Kannan, and B. Kouakou. 2015. *J. Animal Science*, (E-suppl. 1): 88: W489.
11. Selected browse species: Initial growth performance. R. khatri, U. Karki, J. Byrd, A. Kumi, L. Karki, and B.R. Min. 72nd Professional Agricultural Conference, Tuskegee University, Tuskegee, AL.
12. The effects of combining condensed tannin-rich diets from sericea lespedeza pellets and pine bark powder on experimentally infected goats with drug-resistant *Haemonchus contortus*, body weight gain, and carcass quality in meat goats. 2015. C. Wright, B. R. Min, T. H. Terrill, D. Perkins, T. Vines, W. H. McElhenney, N. K. Gurung, D. S. Kommuru, and S. Howell. *Journal of Animal Science* (E. Supl. 2). 109
13. Assessment of the effect of plant tannins on rumen fermentation and gut microbial diversity in goats using 16S rDNA amplicon pyrosequencing. 2014. Min, B.R., C. Wright, P. Ho, J. S. Eun, N. Gurung, and R. Shang. 2014. *Journal of Animal Science*, (E. Suppl.1): 1860 W319.
14. Fatty acid profile and oxidative stability of carcass fat from meat goats fed grass-legume forage diets. 2014. Min, B.R., *Journal of Animal Science* (E. Supl. 1) 1106:W093.

15. Assessment of in vitro fermentation characteristics of lactation dairy diets consisting of orchardgrass or birdsfoot trefoil pasture forages with different supplements using continuous culture. Christensen, R. G., A. J. Young, J.S. Eun, J.W. MacAdam, and B.R. Min. *Journal of Animal Science*, (E. Suppl.1): 1105, W092.
16. Sustainable Year-Round Forage System for Goat Production in Southern USA. 2014. B.R. Min, S. Solaiman, N. Gurung, W. McElhenny. *J. Animal Science*. 105. E-suppl.2.
17. Inhibitory effects of mint oils alone or combining with tannin extract against foodborne pathogens. 2014. B. J. Min, B. R. Min, and J. H. Lee. *J. Anim. Sci.* 91: (E-Suppl. 1), TH223.
18. The Effects of a Tannin-rich Pine Bark Pellet Diet on Parasitic Nematodes Infections and Carcass Characteristics of Grazing Meat Goats. 2014. Reynolds, D., B.R. Min, O. Bolden-Tiller, N. Gurung, W. McElhenny, E. Rhoden, J. E. Miller, J.H. Lee, and J. K. Shin. *J. Animal Science*. 33. E-Suppl. 2.
19. On-Farm Evaluation of Alternative Parasite Prevention and Control Approaches in Meat Goats. 2013. **B. R. Min**, A. Elliott, and N. Gurung. National Goat Conference. Greensboro, NC.
20. Gastrointestinal bacterial and methanogenic archaea diversity in response to feeding condensed tannins-containing pine bark diet to goats using 16S rDNA amplicon pyrosequencing. 2013. B. R. Min, S. Solaiman, R. Shange, and J. S. Eun. *J. Anim. Sci.* Vol. 91, E-Suppl. 2/*J. Dairy Sci.* Vol. 96, E-Suppl. 1 pp. 795.
21. The effects of condensed tannin-rich pine bark diet on gastrointestinal parasite infection in meat goats. 2013. B. R. Min, S. Solaiman, A. Wilson, N. Gurung, and J. Miller. *J. Anim. Sci.* Vol. 91, E-Suppl. 2/*J. Dairy Sci.* Vol. 96, E-Suppl. 1 pp. TH381.
22. Fatty acid profile and lipid oxidation of meat goats fed varying levels of pine bark. 2013. Min, B.R., S. Solaiman, N. Gurung, and E. Taha. *J. Anim. Sci.* (E-suppl. 2) 75.
23. Effects of silvopasture systems on ruminal fermentation and methanogen population in meat goats. 2012. Jasmyn, M., B.R. Min, A. Reys, O. Bolden-Tiller, N. Gurung, J. S. Eun, A. Kumi, and D. Alexander. Page 13 in *The 70th Annual Professional Agricultural Workers Conference (PAWC)*. Tuskegee University, AL.
24. Gastrointestinal methanogenic archaea diversity dynamics associated with condensed tannins-containing pine bark diet in goats using 16S DNA amplicon pyrosequencing. 2012. Anderson, S., B. R. Min, S. Solaiman, R. Shange, N. Gurung, A. Reyes, and O. Bolden-Tiller. Page 7 in *The 70th Annual Professional Agricultural Workers Conference (PAWC)*. Tuskegee University, AL.
25. Effect of feeding tannins-containing pine bark on growth performance, rumen fermentation, digestibility, blood metabolites, and carcass traits in Kiko-cross goats. **Min, B. R.**, and S. Solaiman. 2012. 11th International Goats Conference, Canary Isles, Spain, September 24-27.
26. Nutrient optimization for sustainable goat production systems in southern USA. S. Solaiman, and **B. R. Min**. 2012. 11th International Goats Conference, Canary Isles, Spain, September 24-27.
27. Effect of feeding tannin-containing pine bark on performance, parasite load and blood metabolites in goats. E.A. Wilson, S. Solaiman, **B.R. Min**, N. Gurung, W. McElhenny, and J. Miller. *J. Anim. Sci.* 91: (E-Suppl. 1) T391, 2012.
28. Impact of different stocking rates of goats under pine silvo pasture systems on undestroy biomass crown cover density, and animal productivity. I. Howard, A.S. Kumi, N. Gurung, U. Karki, R. Smith, S.G. Solaiman, W.H. McElenney, and **B.R.Min**. *J. Anim. Sci.* 91: (E-Suppl. 1) T371. 2012.
29. Assessment of chestnut tannin extract supplementation on animal performance and ruminal fermentation profiles in feedlot finishing diets. 2012. Seig, J. M., J.S. Eun, ZoBell, D.R., and **B.R. Min**. *Proc. West. Am. Soc. Anim. Sci.* 63.

30. Effect of tannins-containing pine bark as feed ingredient on dry matter intake, digestibility, nitrogen balance and mineral retention in goats. **Min, B.R.**, S. Solaiman, E. Taha, and N. Gurung. *J. Anim. Sci.* 90: (E-Suppl. 2) 95. 2012.
31. Effect of feeding tannin-containing pine bark on fecal bacterial population and methane gas production in Kiko-cross goats. 2011. **B.R. Min**, S. Solaiman, R. Shange, and R. Ankumah. *J. Anim. Sci.* 89: (E-Suppl. 1) M427.
32. Effects of tannin extracts on *in vitro* growth of selected food-borne pathogenic bacteria. 2011. B.J. Min, **B.R. Min**, J.M. Sieg, J.S. Eun, D.R. ZoBell and D.C. Tice. *J. Anim. Sci.* 89: (E-Suppl. 1) M375.
33. Evaluation of crude glycerin on performance and carcass characteristics of growing meat goats. K.B. Tuoho, N.K. Gurung, S. Solaiman, **B.R. Min**, J.S. Eun, and W.H. McElhenney. *J. Anim. Sci.* 89: (E-Suppl. 1).
34. Tannin-free and tanniferous legumes in lactating dairy diets affect *in vitro* ruminal fermentation characteristics and methane production by mixed ruminal microbiota in continuous cultures. Williams, C. M., J.-S. Eun, J. W. MacAdam, A. J. Young, V. Fellner, and **B. R. Min**. 2010. Page in 159 in Proceedings of the 4th International Conference on Greenhouse Gases and Animal Agriculture. Banff, Canada. Agriculture and Agri-Food Canada, Lethbridge, Canada.
35. Rumen bacterial diversity dynamics associated with changing from bermudagrass hay to grazed winter wheat diets. 2010. Pitta, D.W., W.E. Pinchak, S.E. Dowd, J. Osterstock, V. Gontcharova, E. Youn, K. Dorton, I. Yoon, **B.R. Min**, J.D. Fulford, T.A. Wickersham, and D.P. Malinowski. *J. Anim. Sci.* 88: (E-Suppl. 2) 1048.
36. Rumen bacterial population dynamics of steers grazing winter wheat forage and a yeast culture supplement. 2010. Pitta, D.W., W.E. Pinchak, S.E. Dowd, J. Osterstock, V. Gontcharova, E. Youn, K. Dorton, I. Yoon, **B.R. Min**, J.D. Fulford, T.A. Wickersham, and D.P. Malinowski. *J. Anim. Sci.* 88: (E-Suppl. 2) W357.
37. Solaiman, S., **B.R. Min**, N. Gurung, J. Behrends, E. Taha, and C.M. Hill, 2010. Effects of breed and slaughter endpoint on feed intake, growth performance, and carcass traits of purebred Boer and Kiko goat kids. *J. Anim. Sci.* 88 (E-Suppl. 2) T451.
38. Solaiman, S., **B.R. Min**, N. Gurung, J. Behrends, and E. Taha. 2010. Assessing feed intake, growth performance, organ growth, and carcass characteristics of pure breed Boer and Kiko male kids fed high concentrate diet. *Int. Goats Conf.*, Brazil.
39. Krueger, W.K., H.G. Banuelos, W.E. Pinchak, **B.R. Min**, R.C. Anderson, G.E. Carsten, R.R. Gomez, and N.A. Krueger. 2008. Effect of added dietary tannins on animal performance, carcass traits, and methane producing activity in finishing calves. *Journal of Animal Science* 86: E-suppl. 2, W275, pp 286
40. **Min, B.R.**, W.E. Pinchak, K. Hernandez, C. Hernandez, M.E. Hume, E. Valencia, and J.D. Fulford. 2008. Effects of tannins supplementation on animal growth and *in vivo* ruminal bacterial populations associated with bloat in heifers grazing wheat forage. *Journal of Animal Science* 86: E-suppl. 2, W247, pp 277.
41. **Min, B.R.**, G. Giovanni, N. Garcia, E. Casarez, H.Y. Kim, M.K. Ho, J. Chang, L. Chang, C. Bae, and P. Dyer. 2008. Bacteroidales PCR for universal, human, hog, and ruminant fecal pollution markers. *Journal of Animal Science*, 86, E-suppl. 2. W174, pp 252.
42. **Min, B.R.**, W.E. Pinchak, R.C. Anderson, and R. Puchala. 2007. The effect of plant tannins and yucca extracts on *in vitro* ruminal fermentation and methane gas production. *Journal of Animal Science* 85, (Suppl. 1) M200.
43. Pinchak, W.E., **B.R. Min**, D.P. Malinowski, J.W. Sij., J.D. Fulford, and R. Puchala. 2007. The effect of forage allowance and stage of growth on average daily gain, frothy bloat, and rate of ruminal *in vitro* gas production in steers grazing wheat pasture. *Journal of Animal Science* 85 (Suppl. 1) 412:531.

44. Valentin, K.A.H. **B.R. Min**, E. Valencia, A. Rodriguez, W.E. Pinchak, J.E. Miller, and J.P. Muir. 2007. In vitro larval activity and in vivo gastro-intestinal parasites infestation in goats grazing tropical legumes. Journal of Animal Science 85 (Suppl. 1) 433: 595.
45. Malinowski, D.P., B.A. Kramp, **B.R. Min**, J. Baker, W.E. Pinchak, and J.C. Rudd. 2006. Physiological and morphological traits for selection of dual-use wheat with improved forage production. p. 246-247. In R.C. Schwartz, R.L. Baumhardt, and J.M. Bell (eds.). Proc. 28th Southern Conservation Systems Conf., 26-28 June 2006. Amarillo, Texas. USDA-ARS Conservation and Production Research Laboratory Report No. 06-1, Bushland, TX.
46. Sij, J., Lemon, K., Pinchak, W. and **Min, B.R.** 2006. Invited Presentation. Fluid Fertilizer Forum. "Nitrogen Management in No-till and Conventional-till Dual-Purpose Wheat/Stocker Production Systems". 13-14 Feb., 2006, Scottsdale, AZ.
47. Sij, J., Lemon, K., Pinchak, W. and **Min, B.R.** 2006. "Nitrogen Management in No till and Conventional-till Dual-Purpose Wheat/Stocker Production Systems". Proc. Fluid Fertilizer Forum. 13-14 Feb 2006. Scottsdale, AZ.
48. **Min, B.R.**, Anderson, R.A. and Pinchak, W.E. 2005. In vitro growth and gas production of rumen bacteria and potential bloat mitigation with condensed tannins in winter wheat. Gastrointestinal Function Conference. Chicago, 30.
49. **Min, B.R.**, Pinchak, W.E., Fulford, J.D., and Puchala, R. 2005. Effect of feed additives on in vitro and in vivo rumen protein characteristics and frothy bloat dynamics in steers grazing wheat pasture. Gastrointestinal Function Conference. Chicago, 33.
50. **Min, B.R.**, Pinchak, W.E., and Fulford, J.D. 2005. In vitro and in vivo rumen fermentation and gas production: influence of corn and mineral oils and their bloat potential. Proc. Western Section, American Society of Animal Science, 56:369-371.
51. Pinchak, W.E. and **Min, B.R.** 2005. The effect of bloat on ingestive behavior patterns of steers grazing wheat forage. Proc. Western Section, American Society of Animal Science. 56:61-64.
52. Pinchak, W.E., **Min, B.R.**, D.P. Malinowski, Fulford, J.D., et al. 2005. Re-evaluation of the frothy bloat complex in cattle grazing winter wheat in the southern plains: evolution of a new integrated research paradigm. Gastrointestinal Function Conference. Chicago, 36.
53. Robinson, D.L., Sij, J.W., Pinchak, W.E., Malinowski, **Min, B.R.**, and Hill, R. 2005. Grazing and grain responses to residual and maintenance applications of phosphorus on winter wheat. Proc. Wheat and Stocker Cattle Field Day, Texas Agricultural Experiment Station, Vernon, TX.
54. Sij, J.W., Pinchak, W.E., Ott, J.P., **Min, B.R.**, Malinowski, D.P., and Robinson, D.L. 2005. Wheat pasture response to maintenance phosphorus and nitrogen fertilizer in dual-use, wheat/stocker systems on the Texas Rolling plains. Belt Wide Cotton Conference.
55. Sij, J.W., Ott, J.P., Pinchak, W.E., and **Min B.R.** 2005. Nitrogen management in no-till and conventional till dual-purpose wheat/stocker production systems. Proc. Wheat and Stocker Cattle Field Day, Texas Agricultural Experiment Station, Vernon, TX.
56. **Min, B.R.**, Pinchak, W.E., Fulford, J.D., Puchala, R., and Gill, R.J. 2004. Wheat pasture bloat dynamics and mitigation with tannins. Journal of Animal Science 82 (Suppl. 2) 23:92.
57. **Min, B.R.**, Miller, D., Loetz, E., Tomita, G., Hart, S.P. and Sahlu, T. 2003. Direct effects of condensed tannins on gastrointestinal nematodes in grazing Angora goats. J. Anim. Sci. 81 (Suppl. 2) 23:90
58. Puchala, R., **Min, B.R.**, Goetch, A. and Sahlu, T. 2003. The effect of condensed tannins on methane gas emission in goats. J. Animal Sci. 81 (Suppl. 2) 18:70.
59. Soryal, K., Zeng, S., Hart, S., **Min, B.R.**, and Tesfai. K. 2003. Fatty acid composition of milk and Domiati cheese from grazing Alpine goats during a whole lactation. J. Anim. Sci. 81 (Suppl. 2) 28:108.
60. Joemat, R. Goetsch, A.L., Horn, G.W., Sahlu, T., Puchala, R., **Min, B.R.**, Luo, J. & Smuts,

- M. 2003. Growth of yearling meat goat doelings with changing plane of nutrition. J. Anim. Sci. 81 (Suppl. 2) 25:97.
61. **Min, B.R.**, and Hart, S.P. 2002. Tannins for suppression of internal parasites (invited paper). J. Anim. Sci. 80 (Suppl. 1):145:578.
62. **Min, B.R.**, Tomita, G., Hart, S. P., Pomroy, W. and Sahlu, T. 2002. The effect of diet on somatic cell count, mastitis and gastro-intestinal parasite infestation in dairy goats. J. Anim. Sci. 80 (Suppl. 2), 30:116.
63. **Min, B.R.**, Soryal, K.A., Hart, S.P., Zeng, S., Sahlu, T. 2002. The effect of diet on milk production, lactation curve, composition and its processing characteristics in dairy goats. J. Anim. Sci. 80 (Suppl. 1):317:1269.
64. **Min, B.R.**, Pomroy, W.E., Hart, S. and Sahlu, T. 2002. The effect of condensed tannins on gastrointestinal parasite infection in grazing wether goats. J. Anim. Sci. 80 (Suppl. 1):31:123
65. **Min, B.R.** Attwood, G.T., Barry, T.N. and McNabb, W.C. 2002. The effect of condensed tannins from *Lotus corniculatus* on the proteolytic activities and growth of rumen bacteria. J. Anim. Sci. 80 (Suppl. 1):399:1602.
66. Pomroy, W.E., Hart, S. and **Min, B.R.** 2002. Titration of efficacy of Ivermectin and Moxidectin against an ivermectin-resistant *Haemonchus contortus* derived from goats in the field. J. Anim. Sci. 80 (Suppl. 2), 30:117.
67. Soryal, K.A., Zeng, S., Hart, S., **Min, B.R.**, Bah, B., Sahlu, T., Goetsch, A. and Puchala, R. 2002. Goat milk constituents and processing characteristics with different feeding systems. J. Anim. Sci. 80 (Suppl. 2), 110:28.
68. Soryal, K.A., Zeng, S.S., **Min, B.R.**, Hart, S., Bah, B. and Tesfai, K. 2002. Effect of feeding systems on composition and organoleptic quality of goat milk cheese. J. Anim. Sci. 80 (Suppl. 1). 149:595.
69. Soryal, K.A., Zeng, S.S., **Min, B.R.**, Hart, S., Tesfai, K. and Sahlu, T. 2002. Effect of pasture feeding and lactation stage on the biochemical composition of goat milk and cheese flavor. J. Anim. Sci. 80 (Suppl. 1). 193:770.
70. Pomroy, W. E., Hart, S.P. and **Min, B.R.** 2002. Rotational grazing as a parasite management tool for goats. J. Anim. Sci. 80 (Suppl. 1). 193:771. 3rd Int. Conf., Novel Approaches – A workshop meeting on helminth control in livestock in the new millenium, pp 18, Moredun, PZ.
71. Hart, S.P., and **Min, B.R.** 2002. Forage based dairy goat management. Goats Field Day, E (Kika) dela Garza Institute for Goat Research, Langston University, April,
72. **Min, B.R.**, Hart, S.P. and Sahlu, T. 2001. Sustainable dairy goat production from forages. J. Anim. Sci. 79 (Suppl. 2): 32-33.
73. **Min, B.R.**, Hart, S.P. and Barry, T.N. 2001. Condensed tannins and ruminant nutrition (Invited paper). J. Anim. Sci. 79 (Suppl. 2), 31.
74. **Min, B.R.**, Attwood, G.T., Barry, T.N. and McNabb, W. 2001. The effect of condensed tannins on proteolytic rumen bacterial populations and on nitrogen flux into the abomasum of sheep. J. Anim. Sci. 79 (Suppl. 1), 163: 676.
75. **Min, B.R.**, Puchala, R. and Hart, S.P. 2001. Effects of diet on milk allantoin and its relationship with milk production in dairy goats. J. Anim. Sci. 79 (Suppl. 1), 163: 360:1492.
76. Hart, S.P. and **Min, B.R.** 2001. Effects of concentrate and forage on milk production and quality. American Dairy Goat Association. Fortland.
77. Fernandez, J.M., **Min, B.R.** & Barry, T.N. 2000. Goat production and marketing in New Zealand: Similarities with the meat goat industry in the Gulf Coast region. Journal of Animal Science 78 (Supp.1).
78. Fernandez, J. M. and **Min B.R.** 2000. Meat goat production and marketing opportunities in the United States: Lessons from Down-Under. Proceedings of the Third Annual Missouri Goat Marketing Conference, Lincoln University, Marshfield,

MO, September 9.

79. Molan, A.L., Waghorn, G.C., **Min, B.R.** and McNabb, W.C 1998. The effect of condensed tannins from *Lotus pedunculatus* on in-vitro protein degradation, bacterial growth and nematode larval migration. Proc. of the 8th World Conference on Animal Production ON 1-1, 2-3.
80. **Min, B.R.**, Barry, T.N., Barry, T.N., Kemp, P.D., Waghorn, G.C. and McDonald, M.F. 1998. The effect of condensed tannins upon reproductive efficiency in sheep grazing *Lotus corniculatus* . Proc. of the 8th World Conference on Animal Production ON 4-1, 200-201.
81. Molan, A.L., Waghorn, G.C., **Min, B.R.** and McNabb, W.C 1998. The effect of condensed tannins from *Lotus pedunculatus* on in-vitro protein degradation, bacterial growth and nematode larval migration. Proc. of the 8th World Conference on Animal Production ON 1-1, 2-3.
82. **Min, B.R.**, Barry, T.N., McNabb, W.C. and Camp. P.D. 1997. The effect of condensed tannins in *Lotus corniculatus* on wool production and its processing characteristics in grazing sheep. Proc. of the Nutrition Society of New Zealand 22:263.
83. Molan, A., McNabb, W.C., Barry, T.N., Attwood, G. and **Min, B.R.** 1997. The effect of condensed tannins from two lotus species on protein degradation and