

Table S1. Ineligible literature for the review.

Authors	Date	Title	Journal of publication	The criterion of ineligibility for the review
Rickard, L. G, Zimmerman, G. L., Hoberg, E. P. and Wallace, W. H.	1991	Effect of ivermectin delivered from a sustained-release bolus on the productivity of beef cattle in Oregon	Veterinary Parasitology	Biological Sciences
Sutherst, R.W. and Tozer, R.S.	1995	Control of buffalo fly (<i>Haematobia irritans exigua</i> de Meijere) on dairy and beef cattle using traps	Australian Journal of Agricultural Research	Biological Sciences
Oro, K.	2000	The development of beef cattle breeding in Chiburi-Jima Island, Shimane prefecture	Japanese Journal of Human Geography	Biological Sciences
DelCurto, T., Porath, M., Parsons C. T. and Morrison, J. A.	2005	Management Strategies for Sustainable Beef Cattle Grazing on Forested Rangelands in the Pacific Northwest	Rangeland Ecology & Management	Biological Sciences
M. Mellado and A. Olvera and A. Quero and G. Mendoza	2005	Dietary overlap between prairie dog (<i>Cynomys mexicanus</i>) and beef cattle in a desert rangeland of northern Mexico	Journal of Arid Environments	Biological Sciences
Nkrumah, J.D., Okine, E.K., Mathison, G.W., Schmid, K., Li, C., Basarab, J.A., Price, M.A., Wang, Z. and Moore, S.S.	2006	Relationships of feedlot feed efficiency, performance, and feeding behavior with metabolic rate, methane production, and energy partitioning in beef cattle	Journal of Animal Science	Description of tools, indexes or indicators
D. Villalba and I. Casasús and A. Sanz and A. Bernués and J. Estany and R. Revilla	2006	Stochastic simulation of mountain beef cattle systems	Agricultural Systems	Biological Sciences
Milan, MJ and Bartolome, J and Quintanilla, R and Garcia-Cachan, MD and Espejo, M and Herraiz, PL and Sanchez-Recio, JM and Piedrafita, J	2006	Structural characterisation and typology of beef cattle farms of Spanish wooded rangelands (dehesas)	Livestock Science	Biological Sciences
Nkrumah, JD and Okine, EK and Mathison, GW and Schmid, K and Li, C and Basarab, JA and	2006	Relationships of feedlot feed efficiency, performance, and feeding behavior with metabolic rate, methane production, and	Journal of Animal Science	Biological Sciences

Price, MA and Wang, Z and Moore, SS		energypartitioning in beef cattle		
de Figueiredo, Darcilene Maria and de Oliveira, Andre Soares and LimaSales, Maykel Franklim and Paulino, Mario Fonseca and do Vale, SoniaMaria Leite Ribeiro	2007	Economic analysis of four supplementation strategies for growth andfinish beef cattle in a pasture-supplement system	Brazilian Journal of Animal Science	Biological Sciences
Demircan, Vecdi and Koknaroglu, Hayati	2007	Effect of farm size on Sustainability of beef cattle production	Journal of Sustainable Agriculture	Biological Sciences
Coffey, M.P., Roughtledge, T. and Simm, G.	2008	Tools for genetic improvement of maternal traits in beef cattle	Cattle Practice	Biological Sciences
Demircan, V.	2008	The effect of initial fattening weight on sustainability of beef cattle production in feedlots	Spanish Journal of Agricultural Research	Biological Sciences
Demircan, V.	2008	The effect of initial fattening weight on sustainability of beef cattleproduction in feedlots	Spanish Journal of Agricultural Research	Biological Sciences
Reis, Ricardo Andrade and Ruggieri, Ana Claudia and Casagrande, DanielRume and Pascoa, Adriano Gomes	2009	Supplementation of beef cattle as strategy of pasture management	Brazilian Journal of Animal Science	Application/Adoption of existing methods
Assmann, T.S., Assmann, A.L., Assmann, J.M., Soares, A.B. and Bortolli, M.A.	2010	Beef cattle and oat pasture production in a crop-livestock system in presence and absence of clover and nitrogen	Brazilian Journal of Animal Science	Biological Sciences
Sigua, G.C., Coleman, S.W., Albano, J. and Williams, M.	2010	Spatial distribution of soil phosphorus and herbage mass in beef cattle pastures: Effects of slope aspect and slope position	Nutrient Cycling in Agro-ecosystems	Biological Sciences
Assmann, Tangriani Simioni and Assmann, Alceu Luiz and Assmann, JoiceMari and Soares,	2010	Beef cattle and oat pasture production in a crop-livestock system inpresence and absence of clover and nitrogen	Brazilian Journal of Animal Science	Biological Sciences

Andre Brugnara and de Bortolli, Marcos Antonio				
Nerea Mandaluniz and Arantza Aldezabal and Luis M. Oregui	2011	Diet selection of beef cattle on Atlantic grassland-heathland mosaic: Are heathers more preferred than expected?	Livestock Science	Biological Sciences
Sigua, Gilbert C. and Coleman, Samuel W. and Albano, Joseph and Williams, Mimi	2011	Spatial distribution of soil phosphorus and herbage mass in beef cattle pastures: effects of slope aspect and slope position	Nutrient Cycling in Agro-ecosystems	Biological Sciences
Wulfhorst, J.D., Kane, S., Ahola, J.K., Hall, J.B. and Hill, R.A.	2012	Producer Awareness and Perceptions about Feed Efficiency in Beef Cattle	Feed Efficiency in the Beef Industry	Application/Adoption of existing methods
Neiberger, H.L. and Johnson, K.A.	2012	Alpharma Beef Cattle Nutrition Symposium: Nutrition and the genome	Journal of Animal Science	Biological Sciences
Neiberger, H. L. and Johnson, K. A.	2012	Alpharma Beef Cattle Nutrition Symposium: Nutrition and the genome	Journal of Animal Science	Biological Sciences
Nielsen, M.K., MacNeil, M.D., Dekkers, J.C.M., Crews, D.H., Rathje, T.A., Enns, R.M. and Weaver, R.L.	2013	Life-cycle, total-industry genetic improvement of feed efficiency in beef cattle: Blueprint for the Beef Improvement Federation	Professional Animal Scientist	Description of tools, indexes or indicators
Stür, W., Khanh, T.T. and Duncan, A.	2013	Transformation of smallholder beef cattle production in Vietnam	International Journal of Agricultural Sustainability	Biological Sciences
Regev-Shoshani, G., Church, J.S., Cook, N.J., Schaefer, A.L. and Miller, C.	2013	Prophylactic nitric oxide treatment reduces incidence of bovine respiratory disease complex in beef cattle arriving at a feedlot	Research in Veterinary Science	Biological Sciences
Regev-Shoshani, G. and Church, J. S. and Cook, N. J. and Schaefer, A. L. and Miller, C.	2013	Prophylactic nitric oxide treatment reduces incidence of bovine respiratory disease complex in beef cattle arriving at a feedlot	Research in Veterinary Science	Biological Sciences
Chuntrakort, P., Otsuka, M., Hayashi, K., Takenaka, A., Udchachon, S. and Sommart, K.	2014	The effect of dietary coconut kernels, whole cottonseeds and sunflower seeds on the intake, digestibility and enteric methane emissions of Zebu beef cattle fed rice straw based diets	Livestock Science	Biological Sciences
Tamura, S. and Fujie, K.	2014	Material cycle of agriculture in miyakojima Island:	Sustainability (Switzerland)	Biological Sciences

		Material flow analysis for sugar cane, pasturage and beef cattle		
Chuntrakort, P. and Otsuka, M. and Hayashi, K. and Takenaka, A. and Udchachon, S. and Sommart, K.	2014	The effect of dietary coconut kernels, whole cottonseeds and sunflowerseeds on the intake, digestibility and enteric methane emissions of Zebu beef cattle fed rice straw based diets	Livestock Science	Biological Sciences
Waldrip, H.M., Cole, N.A. and Todd, R.W.	2015	Nitrogen sustainability and beef-cattle feedyards: I. Introduction and influence of pen surface conditions and diet	Professional Animal Scientist	Biological Sciences
Dufey, P.A.	2015	Utilisation of whey on mountain pastures by beef cattle	Agrarforschung Schweiz	Biological Sciences
Waldrip, H.M., Cole, N.A. and Todd, R.W.	2015	Nitrogen sustainability and beef-cattle feedyards	The Professional Animal Scientist	Biological Sciences
Nasca, J. A. and Feldkamp, C. R. and Arroquy, J. I. and Colombatto, D.	2015	Efficiency and stability in subtropical beef cattle grazing systems in the northwest of Argentina	Agricultural Systems	Description of tools, indexes or indicators
Escribano, A.J., Gaspar, P., Mesias, F.J. and Escribano, M.	2016	The role of the level of intensification, productive orientation and self-reliance in extensive beef cattle farms	Livestock Science	Biological Sciences
McGinn, S.M., Janzen, H.H., Coates, T.W., Beauchemin, K.A. and Flesch, T.K.	2016	Ammonia emission from a beef cattle feedlot and its local dry deposition and re-emission	Journal of Environmental Quality	Biological Sciences
McGinn, S. M. and Janzen, H. H. and Coates, T. W. and Beauchemin, K. A. and Flesch, T. K.	2016	Ammonia Emission from a Beef Cattle Feedlot and Its Local Dry Deposition and Re-Emission	Journal of Environmental Quality	Biological Sciences
Meyer, L., Powell, J., Kutz, B., Looper, M., Brown, A.H. and Rosenkrans, C.	2017	Associations of single nucleotide polymorphisms in the bovine prolactin gene with phenotypic traits in beef cattle	Agri Gene	Biological Sciences
Regev-Shoshani, G., McMullin, B., Nation, N., Church, J.S., Dorin, C. and Miller, C.	2017	Non-inferiority of nitric oxide releasing intranasal spray compared to sub-therapeutic antibiotics to reduce incidence of undifferentiated fever and bovine respiratory disease complex in low to moderate	Preventive Veterinary Medicine	Biological Sciences

		risk beef cattle arriving at a commercial feedlot		
Gléria, A.A., Silva, R.M., Santos, A.P.P., Santos, K.J.G. and Paim, T.P.	2017	Beef cattle production in crop-livestock systems	Archivos de Zootecnia	Biological Sciences
Cristel, S., Fiel, C., Anziani, O., Descarga, C., Cetrá, B., Romero, J., Fernández, S., Entrocasso, C., Lloberas, M., Daniel Medus, D. and Steffan, P.	2017	Anthelmintic resistance in grazing beef cattle in central and northeastern areas of Argentina	Veterinary Parasitology: Regional Studies and Reports	Biological Sciences
Regev-Shoshani, G. and McMullin, B. and Nation, N. and Church, J. S. and Dorin, C. and Miller, C.	2017	Non-inferiority of nitric oxide releasing intranasal spray compared to sub-therapeutic antibiotics to reduce incidence of undifferentiated fever and bovine respiratory disease complex in low to moderate risk beef cattle arriving at a commercial feedlot	Preventive Veterinary Medicine	Biological Sciences
Ramirez-Restrepo, C.A. and Vera, R.R.	2018	Bodyweight performance, estimated carcass traits and methane emissions of beef-cattle categories grazing <i>Andropogon gayanus</i> , <i>Melinis minutiflora</i> and <i>Stylosanthes capitata</i> mixed swards and <i>Brachiaria humidicola</i> pasture	Animal Production Science	Biological Sciences
Kaewpila, C., Sommart, K. and Mitsumori, M.	2018	Dietary fat sources affect feed intake, digestibility, rumen microbial populations, energy partition and methane emissions in different beef cattle genotypes	Animal	Biological Sciences
Cannizzo, F. T., Cucuzza, L. S., Divari, S., Berio, E., Scaglione, F. E. and Biolatti, B.	2018	Gene expression profile associated with thymus regeneration in dexamethasone-treated beef cattle	Domestic Animal Endocrinology	Biological Sciences
Mullenix, M. K. and Rouquette, F.M.	2018	Cool-season annual grasses or grass-clover management options for extending the fall-winter-early spring	The Professional Animal Scientist	Biological Sciences

		grazing season for beef cattle		
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