Cambridge Core

Access leading journals in your subject

Explore today at cambridge.org/core





animal









DECEMBER 2018 VOLUME 12 ISSUE S2

CONTENTS

Editorial Cassar-Malek, I., Baumont, R., Bannink, A., Teixeira, I., Mayberry, D. and Kyriazakis, I. Herbivore nutrition supporting sustainable intensification and agro-ecological approaches	s185
Herbivore nutrition in a globalized world Mottet, A., Teillard, F., Boettcher, P., De' Besi, G. and Besbes, B. Review: Domestic herbivores and food security: current contribution, trends and challenges for a sustainable development	s188
Ayantunde, A. A., Duncan, A. J., van Wijk, M. T. and Thorne, P. Review: Role of herbivores in sustainable agriculture in Sub-Saharan Africa	s199
Dumont, B., Groot, J. C. J. and Tichit, M. Review: Make ruminants green again – how can sustainable intensification and agroecology converge for a better future?	s210
Microbial ecosystems and herbivore nutrition Mizrahi, I. and Jami, E. Review: The compositional variation of the rumen microbiome and its effect on host performance and methane emission	s220
Denman, S. E., Morgavi, D. P. and McSweeney, C. S. Review: The application of omics to rumen microbiota function	s233
Precision herbivore nutrition González, L. A., Kyriazakis, I. and Tedeschi, L. O. Review: Precision nutrition of ruminants: approaches, challenges and potential gains	s246
Shalloo, L., O' Donovan, M., Leso, L., Werner, J., Ruelle, E., Geoghegan, A., Delaby, L., and O'Leary, N. Review: Grass-based dairy systems, data and precision technologies	s262
Nutrition to improve milk and meat quality Toral, P. G., Monahan, F. J., Hervás, G., Frutos, P. and Moloney, A. P. Review: Modulating ruminal lipid metabolism to improve the fatty acid composition of meat and milk. Challenges and opportunities	s272
Ladeira, M. M., Schoonmaker, J. P., Swanson, K. C., Duckett, S. K., Gionbelli, M. P., Rodrigues, L. M. and Teixeira, P. D. Review: Nutrigenomics of marbling and fatty acid profile in ruminant meat	s282
Feed resources and sustainable diets Halmemies-Beauchet-Filleau, A., Rinne, M., Lamminen, M., Mapato, C., Ampapon, T., Wanapat, M. and Vanhatalo, A. Review: Alternative and novel feeds for ruminants: nutritive value, product quality and environmental aspects	s295
van Lingen, H. J., Fadel, J. G., Bannink, A., Dijkstra, J., Tricarico, J. M., Pacheco, D., Casper, D. P. and Kebreab, E. Multi-criteria evaluation of dairy cattle feed resources and animal characteristics for nutritive and environmental impacts	s310
Feed conversion efficiency towards productivity and reduction of excreta Cantalapiedra-Hijar, G., Abo-Ismail, M., Carstens, G. E., Guan, L. L., Hegarty, R., Kenny, D. A., McGee, M., Plastow, G., Relling, A. and Ortigues-Marty, I. Review: Biological determinants of between-animal variation in feed efficiency of growing beef cattle	s321
Løvendahl, P., Difford, G. F., Li, B., Chagunda, M. G. G., Huhtanen, P., Lidauer, M. H., Lassen, J. and Lund, P. Review: Selecting for improved feed efficiency and reduced methane emissions in dairy cattle	s336
Interactions between nutrition, genetics and environment Roche, J. R., Berry, D. P., Delaby, L., Dillon, P. G., Horan, B., Macdonald, K. A. and Neal, M. Review: New considerations to refine breeding objectives of dairy cows for increasing robustness and sustainability of grass-based milk production systems	s350
Chavatte-Palmer, P, Velazquez, M. A., Jammes, H., and Duranthon, V. Review: Epigenetics, developmental programming and nutrition in herbivores	s363
Wild herbivores Gordon, I. J. Review: Livestock production increasingly influences wildlife across the globe	-272
Forbey, J. S., Liu, R., Caughlin, T. T., Matocq, M. D., Vucetich, J. A., Kohl, K. D., Dearing, M. D. and Felton, A. M. Review: Using physiologically based models to predict population responses to phytochemicals by wild vertebrate herbivores	s372 s383
Nutritional management of health and welfare Plaizier, J. C., Danesh Mesgaran, M., Derakhshani, H., Golder, H., Khafipour, E., Kleen, J. L., Lean, I., Loor, J., Penner, G. and Zebeli, Q. Review: Enhancing gastrointestinal health in dairy cows	s399
Neave, H. W., Weary, D. M. and von Keyserlingk, M. A. G. Review: Individual variability in feeding behaviour of domesticated ruminants	s419
Adaptation of herbivores to climate changes and diverse environments Sejian, V., Bhatta, R., Gaughan, J. B., Dunshea, F. R. and Lacetera, N. Review: Adaptation of animals to heat stress	s431
Henry, B. K., Eckard, R. J. and Beauchemin, K. A. Review: Adaptation of ruminant livestock production systems to climate changes	s445
Converting scientific knowledge into innovation in herbivore nutrition Lapierre, H., Larsen, M., Sauvant, D., Van Amburgh, M. E. and Van Duinkerken, G. Review: Converting nutritional knowledge into feeding practices: a case study comparing different protein feeding systems for dairy cows	s457
Lapierre, H., Larsen, M., Sauvant, D., Van Amburgh, M. E. and Van Duinkerken, G. Corrigendum: Converting nutritional knowledge into feeding practices: a case study comparing different protein feeding systems for dairy cows	s467

Cambridge Core For futher information about this journal please go to the journal web site at: cambridge.org/animal



