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Editorial news and events

Book reviews

Proceedings of the Society of Nutrition Physiology, G. Breves (Ed.), DLG-Verlag Frankfurt (Main), Vol. 13, 2004, 242 pp. Price: € 28,00 plus postage, Softcover, ISBN 3-7690-4097-X

The 58th Annual Meeting of the Society of Nutrition Physiology of Germany was held at Goettingen from 9 to 11 March 2004.

The Proceedings of the meeting comprise 125 abstracts, one review paper on genomics of cattle (9 pp.), five contributions (32 pp.) of the workshop "Nutrition, metabolism and diseases of high yielding cows", six contributions (10 pp.) of the workshop "Nutrition of dairy cows in organic farming" and two communications of the Committee for Requirement Standards of the German Society of Nutrition Physiology.

The abstracts (one page each) are attributed to the following topics:
1. Minerals and trace elements (13 papers)
2. Amino acids and nitrogen (22 papers)
3. Transport- and epithelial physiology (8 papers)
4. Fat and lipids (7 papers)
5. Digestion (23 papers)
6. Metabolism, growth, lactation (11 papers)
7. Energetics (3 papers)
8. Free topics (15 papers)
9. Additives (23 papers)

Most of the papers are presented from scientists of German Institutes of Animal Nutrition and Animal Physiology, but contributions of scientists from other European countries as well as from overseas are also included.

The invited lecture prepared by T. Leeb from the Institute of Animal Breeding and Genetics of the University of Veterinay Medicine Hannover (Germany) is entitled "Genome analysis and performance traits in cattle". The author sum-

marized the present knowledge in this field. The techniques to determine the complete mammalian genome sequence are now well-established. Cattle is scheduled to be among the first livestock species to be completely sequenced within the very near future. Knowledge of the genome sequence will allow the realization of functional genomics experiments that might complement the traditional gene identification strategies. This global view of functional genomics experiments may help us to better understand the complex genetics of performance traits.

Contributions of the workshop "Nutrition, metabolism and disease in high yielding cows" deal with feeding of cows, adaptation and regulation of epithelial functions in the gastrointestinal tract, the molecular basis of lactation, metabolism in liver cells, metabolic performances of the mammary gland and interactions between milk yield and production diseases in dairy cows.

The topics of the workshop "Nutrition of dairy cows in organic farming" were headed feeding in organic farming, controlling of organic farms, influences on udder health, survey for feeding and metabolic health of dairy cows in ecological producing farms, aspects of nutrient supply in calves kept under organic farming conditions and health stage in organic dairy farming - metabolic disorders, mastitis, lameness.

The Committee of Requirement Standards of the German Society of Nutrient Physiology published a "Prediction of metabolizable energy (ME) in total mixed rations (TMR) for ruminants" (4 pp.) and "Recommendations of energy and nutrient supply of growing fattening turkeys" (34 pp.) The highest level of accuracy of estimation of metabolizable energy in TMR was calculated under consideration of enzymatically degradable organic matter (EDOM):

$$
\begin{aligned}
ME\ (MJ/kg\ DM) = {} & 1.5473 \\
& + 0.00764 \times EDOM\ (in\ g/kg\ DM) \\
& + 0.23292 \times XL\ (in\ g/kg\ DM) \\
& - 0.002760 \times XL \times XL \\
& - 0.000021 \times XF \times XF\ (in\ g/kg\ DM)
\end{aligned}
$$

with XL (crude fat) and XF (crude fibre), $r^2 = 0{,}90$; $S_{y.x} = 0.19$ MJ/kg DM

Including of other parameters (NDF, crude protein, crude ash) did not increase the accuracy of equations.

The energy and nutrient requirements for growing/fattening turkeys include recommendations for metabolizable energy, protein and amino acids, fatty acids, major and trace elements, fat and water soluble vitamins.

The next meeting of the Society of Nutrition Physiology of Germany (the 59th one) will be held in Stuttgart-Hohenheim from 01 to 03 March 2005.

The Proceedings of the 58th Meeting (Vol.13, 2004) are available from the DLG-Verlag, Eschborner Landstraße 122, D-60489 Frankfurt am Main, Germany.

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