

JOURNAL OF ANIMAL AND FEED SCIENCES

Vol. 11, No. 1

CONTENTS

2002

Environmental benefits of genetically modified crops: Global and European perspectives on their ability to reduce pesticide use R.H. Phipps and J.R. Park (Reading, United Kingdom)	1
Adaptation of dairy cows to change in a computer-controlled concentrates feeding routine N. Livshin, E. Maltz and A. Antler (Bet Dagan, Israel)	19
GH and CSN3 gene polymorphisms and their impact on milk traits in cattle D. Lechniak, T. Strabel, D. Przybyła, G. Machnik and M. Świtoński (Poznań, Poland)	39
Microsatellite polymorphism in DRB1 gene (MHC class II) and its relation to nematode faecal egg count in Polish Heath Sheep K.M. Charon, B. Moskwa, R. Rutkowski, J. Gruszczyńska and W. Świderek (Warszawa, Poland)	47
Growth performance and carcass characteristics of Awassi, Morkaraman and Tushin lambs grazed on pasture and supplemented with concentrate M. Macit, N. Esenbuga and M. Karaoglu (Erzurum, Turkey)	59
The effect of ruminal infusion of acetic acid on eating and rumination behaviour in sheep fed on various hay diets T. Fujihara, T. Harumoto and S.A. Abdulrazak (Shimane, Japan)	69
The effect of ruminal infusion of acetic and propionic acids on eating and rumination behaviour in sheep fed a low quality hay T. Fujihara, M. Sakaguchi and S.A. Abdulrazak (Shimane, Japan)	79
The effect of ruminal infusion of acetic, propionic and butyric acid on eating, rumination behaviour and feed utilization in sheep fed on urea-supplemented roughage T. Fujihara, S. Maeda and M.N. Shem (Shimane, Japan)	91
A derivation and evaluation of the von Bertalanffy equation for describing growth in broilers over time H. Darmani Kuhi, E. Kebreab (Reading, United Kingdom), S. Lopez (Léon, Spain) and J. France (Reading, United Kingdom)	109
Response of broiler chickens to feed restriction during brooding under tropical conditions A. Téguia, J. Awah Ndukum and S.B. Koumoum (Dschang, Cameroon)	127
A note on the effect of charcoal supplementation on the performance of Big 6 heavy tom turkeys T. Majewska, D. Pyrek and A. Faruga (Olsztyn, Poland)	135

Determination of free and protein primary amino acids in biological materials by high-performance liquid chromatography and photodiode array detection M. Czauderna, J. Kowalczyk, K.M. Niedźwiedzka and I. Wąsowska (Jabłonna, Poland)	143
Editorial news and events	169

Vol. 11, No. 2**2002**

Responses of cows to abomasal infusion of lysine and methionine at two levels of dietary protein S.J. Mabjeesh, E. Smoler, S.M. Abramson (Rehovot, Israel), I. Bruckental (Bet Dagan, Israel), S. Zamwel (Rehovot, Israel), K. Nanjappan (Namakkal, India) and A. Arieli (Rehovot, Israel)	171
Lactational responses to ruminally protected methionine in cows fed a low-protein grass silage-based diet P.M. Pisulewski, Z.M. Kowalski (Kraków, Poland) and M. Görgülü (Adana, Turkey)	189
Associations between bovine milk protein genotypes and haplotypes and the breeding value of Polish Black-and-White bulls S. Kamiński, J. Rymkiewicz-Schymczyk, E. Wójcik and A. Ruś (Olsztyn, Poland)	205
Ligand-binding activity of growth hormone receptor (GH-R) in bulls of different breeds with identified GH-R genotypes R. Grochowska (Jastrzębiec, Poland) A. Gajewska, M. Snochowski (Jabłonna, Poland) and L. Zwierzchowski (Jastrzębiec, Poland)	223
The influence of different factors on resistance of dairy cows to mastitis A.E. Bolgov, E.P. Karnanova, L.N. Muravja, V.E. Makarova, S.G. Shterkel and N.V. Grishina (Petrozavodsk, Russia)	237
Estimation of chosen blood diagnostic indices in imported cows and their progeny I. Prusinowska, K. Iwańczuk-Czernik and A. Wójcik (Olsztyn, Poland)	255
Are IGF-I, thyroid hormone and metabolite concentrations in calf plasma associated with growth rate, sex and age? A.V. Sirotkin, M. Svetlanská, A. Sommer, A.V. Makarevich, J. Szakács and M. Poláčiková (Nitra, Slovak Republic)	265
Studies on N-metabolism in different gastro-intestinal sections of sheep using the digesta exchange technique. 3. N secretion and reabsorption A. Sandek, K. Krawielitzki (Rostock, Germany), J. Kowalczyk (Jabłonna, Poland), F. Kreienbring, M. Gabel (Rostock, Germany), U. Schönhusen (Dummerstorf, Germany), T. Żebrowska (Jabłonna, Poland), H. Hagemeister and J. Voigt (Dummerstorf, Germany)	277
The evaluation of some physiological indices of Arabian mares during pregnancy and lactation M. Budzyńska (Lublin, Poland)	289
The influence of previous protein or energy restriction of young pigs on their daily gain composition G. Skiba, H. Fandrejewski, St. Raj. and D. Weremko (Jabłonna, Poland)	299

Response of broiler chickens to the dietary inclusion of <i>Chromolaena odorata</i> leaf meal A. Donkoh, C.C. Atuahene, D.M. Anang, E.K. Badu-Botah and K.T. Boakye (Kumasi, Ghana)	309
A note on the use of breadfruit meal (<i>Artocarpus incisus</i>) as a feed ingredient for broiler chickens C.C. Atuahene, A. Donkoh, D.M. Anang and J. Boateng (Kumasi, Ghana)	321
A HPLC method with UV detection for analysing of 2,6-diaminopimelic acid in rumen bacteria and intestinal digesta M. Czauderna and J. Kowalczyk (Jabłonna, Poland)	331
Editorial news and events	347

Vol. 11, No. 3**2002**

Maintenance enErgy requirements in adult and growing organisms - an unresolved problem J.S. Keller (Warszawa, Poland)	351
A dynamic simulation model of nutrient digestion in the rumen of dairy cows H. Petruzzi, A. Danfær (Tjele, Denmark) and P. Nørgaard (Frederiksberg, Denmark)	367
Effect of monensin on rumen fermentation and digestion and milk production in lactating dairy cows E.D. Mackintosh, R.H. Phipps, J.D. Sutton, D.J. Humphries (Reading, United Kingdom) and J.I.D. Wilkinson (Greenfield, USA)	399
Milk yield, composition and cholesterol level in dairy cows fed ration supplemented with zinc and fatty acids calcium salts F. Brzóska (Balice, Poland) and J. Kowalczyk (Jabłonna, Poland)	411
Copper, phosphorus and calcium in bovine blood and seminal plasma in relation to semen quality L. Máchal, G. Chládek and E. Straková (Brno, Czech Republic)	425
Effects of <i>Fusarium</i> toxin contaminated wheat grain and of a detoxifying agent on rumen physiological parameters and <i>in sacco</i> dry matter degradation of wheat straw and lucerne hay in wethers S. Dänicke (Braunschweig, Germany)	437
A note on the effect of low dietary inclusion of extruded wheat on growth performance of post-weaning piglets F. Vangroenweghe (Merelbeke, Belgium)	453
Effect of glucose supplemented diet on natural and gonadotropin induced puberty attainment in gilts A.J. Zięcik (Olsztyn, Poland), W. Kapelański (Bydgoszcz, Poland), M. Zaleska (Olsztyn, Poland) and J. Riopérez (Madrid, Spain)	461
Effect of diet composition and frequency of feeding on postprandial insulin level and ovarian follicular development in prepubertal pigs A.J. Zięcik (Olsztyn, Poland), W. Kapelański (Bydgoszcz, Poland), M. Zaleska (Olsztyn, Poland) and J. Riopérez (Madrid, Spain)	471

Impact of data transformation on the heritability estimates of reproductive traits in laying hens P. Piotrowski and T. Szwaczkowski (Poznań, Poland)	485
Influence of processing temperature on chemical composition of solar-dried blood meal and on performance of broiler chickens A. Donkoh, D.M. Anang, C.C. Atuahene and M.A.S. Hagan (Kumasi, Ghana)	497
Effect of caprylic, capric and oleic acid on growth of rumen and rabbit caecal bacteria M. Marounek, V. Skřivanová and O. Savka (Uhřetěves, Czech Republic)	507
A highly efficient method for derivatization of fatty acids for high performance liquid chromatography M. Czaundera, J. Kowalczyk, K.M. Niedźwiedzka and I. Wąsowska (Jabłonna, Poland)	517
Evaluation of HPLC method for the rapid and simple determination of α -tocopherol acetate in feed premixes M. Pieszka (Balice, Poland), R. Gąsior (Morawica, Poland) and T. Barowicz (Balice, Poland)	527
Editorial news and events	537

Vol. 11, No. 4**2002**

Some thoughts on feed resource management in different ecosystems and socio-economic circumstances E.R. Ørskov (Craigiebuckler, United Kingdom)	545
Influence of lucerne/fescue silage mixtures on milk production of early-lactation Holstein cows D.J.R. Cherney, J.H. Cherney and L.E. Chase (Ithaca, USA)	555
A note on evaluation of wet and dry brewers' grains in concentrate supplements for growing Anglo-Nubian x Fiji local goats in the tropical environment of Samoa E.M. Aregheore and S. Ting (Apia, Western Samoa)	565
Influence of supplemental fat on rumen volatile fatty acid profile, ammonia and pH level in sheep feed standard diet M. Szumacher-Strabel, A. Potkański (Poznań, Poland), J. Kowalczyk (Jabłonna, Poland) A. Cieślak (Poznań, Poland), M. Czaundera (Jabłonna, Poland), A. Gubała and P. Jędroszkowiak (Poznań, Poland)	577
Studies on N-metabolism in different gastro-intestinal sections of sheep using the exchange digesta technique. 4. Whole body protein metabolism A. Sandek, K. Krawielitzki (Rostock, Germany), J. Kowalczyk (Jabłonna, Poland), M. Gabel (Rostock, Germany), T. Żebrowska (Jabłonna, Poland), F. Kreienbring (Rostock, Germany), H. Hagemester and J. Voigt (Dummerstorf, Germany)	589
Differences in the secretion pattern of growth hormone and insulin-like growth factor - I in sheep of two crossbreeds after dietary protein restriction A. Wójcik-Gładysz (Jabłonna, Poland), P. Krejčí (Uhřetěves, Czech Republic) and J. Polkowska (Jabłonna, Poland)	601

Use of nylon bags of different porosity to study the role of different groups of rumen ciliates in <i>in situ</i> digestion of hay in sheep T. Michałowski, G. Bełżeczki and J.J. Pająk (Jabłonna, Poland)	611
Activity and stability of a fungal 1,4-beta-endo-xylanase preparation in the rumen in sheep Á. Bata, J. Kutasi (Ócsa, Hungary), V. Jurkovich (Budapest, Hungary), H. Fébel (Herceghalom, Hungary) and P. Rafai (Budapest, Hungary)	627
Cholinergic control of pacemaker initiating phase III of the migrating myoelectric complex in sheep K.W. Romański and P. Sławuta (Wrocław, Poland)	637
The effect of feeding sows conjugated linoleic acid (CLA) in late pregnancy on blood thyroid hormone and cholesterol levels in piglets M. Pietras, T. Barowicz and M. Pieszka (Balice, Poland)	651
Effect of extender composition and storage temperatures on motility of preserved boar semen L. Fraser, M. Lecewicz, R. Krasicki and J. Strzeżek (Olsztyn, Poland)	661
Effect of changes in live body weight and feed conversion ratio as influenced by enzyme supplements on basic post-slaughter measurements of broiler chickens fed cereal-based diets W. Szczurek and J. Koreleski (Balice, Poland)	671
The influence of digesta viscosity on the development of the stomach, on <i>in vitro</i> intestinal small motility and on digestion of nutrients in broiler chickens S. Smulikowska, A. Mieczkowska, C.V. Nguyen, and M. Bąbewska (Jabłonna, Poland)	683
The solubility and availability of magnesium from calcium-magnesium carbonate and magnesium carbonate W. Żyzak (Grodziec Śląski, Poland), F. Brzóska, B. Brzóska (Balice, Poland) and J. Michałec-Dobija (Grodziec Śląski, Poland)	695
Author index	709
Contents of Journal of Animal and Feed Sciences, Volume 11	715