

# CONTENTS OF JOURNAL OF ANIMAL AND FEED SCIENCES

## Volume 5

**VOL. 5, No. 1**

**1996**

Yeast cells as a feed supplement for cattle. 3. New yeast preparations for cows in the first period of lactation J. A. Strzetelski (Kraków, Poland), J. Kowalczyk (Jabłonna, Poland), K. Bilik, T. Stasiniewicz, M. Soroka and B. Nowińska (Kraków, Poland) .....	1
A comparison of calcium and phosphorus requirements according to different standards in dry cows S. Kinal, J. Preś (Wrocław, Poland), A. Korniewicz, E. Chrzęszcz and T. Kistowski (Czechnica, Poland) .....	11
Nitrogen compounds and volatile fatty acids absorption from the caecum and colon of sheep B. Skiba, J. Kowalczyk and T. Żebrowska (Jabłonna, Poland) .....	25
Seasonal changes of melatonin secretion in relation to the reproductive cycle in sheep T. Misztal, K. Romanowicz and B. Barcikowski (Jabłonna, Poland) .....	35
The use of dehulled or fat supplemented yellow lupin seeds in feeding growing pigs M. Flis, W. Sobotka and Z. Meller (Olsztyn, Poland) .....	49
The chemical composition and nutritive value of low alkaloid varieties of white lupin. 1. Seed, cotyledon and seed coat characteristics Z. Zduńczyk, J. Juśkiewicz, M. Flis, R. Amarowicz and B. Krefft (Olsztyn, Poland) .....	63

- The chemical composition and nutritive value of low alkaloid varieties of white lupin. 2. Oligosaccharides, phytates, fatty acids and biological value of protein  
Z. Zduńczyk, J. Juśkiewicz, M. Flis, and S. Frejnagel (Olsztyn, Poland) .. 73
- Evaluation of solubility in potassium hydroxide as an *in vitro* method of predicting organic matter digestibility of ruminant feeds  
A. M. Antoniewicz (Kraków, Poland), J. de Boever (Melle-Gontrode, Belgium), F. Brzóska, R. Ostrowski and B. Marek (Balice, Poland) ..... 83

## VOL. 5, No 2

1996

- Memorial: Bjørn Ottar Eggum ..... 63
- The effect of undegradable crude protein supplementation on milk production and composition and reproduction of early-lactating cows  
I. Bruckental (Bet Dagan, Israel), H. Tagari, A. Arieli, S. Zamwell (Rehovot, Israel), Y. Aharoni and A. Genizi (Bet Dagan, Israel) ..... 95
- Legume - cereal forage mixtures for silage. 1. Effect of pea variety, maturity and sowing density of mixture on dry matter yield and silage chemical composition  
A. Urbański (Lipowa, Poland) and F. Brzóska (Balice, Poland) ..... 107
- Legume - cereal forage mixtures for silage. 2. Nutritive value of silage for dairy cows  
A. Urbański (Lipowa, Poland) and F. Brzóska (Balice, Poland) ..... 117
- A note on the chemical composition of rapeseed hulls and their feeding value for ruminants  
Th. Keller, W. Kracht, S. Dänicke and H. Jeroch (Halle/Saale, Germany) 127
- Effects of experimental subclinical fasciolosis on the feeding behaviour of sheep  
I. Ferre, J.González-Gallego, F.A.Rojo-Vázquez and J.P. Barrio (León, Spain) ..... 135

Improving the reproductive traits of turkey hens with regard to tom selection

K. Wawro, J. Jankowski and A. Faruga (Olsztyn, Poland) ..... 147

A note on the performance of medium type turkeys fed on practical diets containing different level of supplemental vitamins and trace minerals during the rearing period

J. Jankowski and A. Faruga (Olsztyn, Poland) ..... 157

Effect of feeding cholesterol enriched diet on plasma and tissue cholesterol and atherosclerosis in rabbits

A.M. Konecka, T. Jezierski and A. Wnuk (Jastrzębiec, Poland) ..... 163

Effect of sampling technique on ileal pH, short chain fatty acids concentrations and digestibility of peas in pigs

N. Canibe, K.E. Bach Knudsen and B.O. Eggum (Foulum, Denmark) .. 175

### Vol. 5, No 3

1996

Estimation of protein and amino acid metabolism using [<sup>15</sup>N] and [<sup>14</sup>C] labeled tracer amino acids

K. Krawielitzki, F. Kreienbring, R. Schadereit, M. Gabel (Rostock, Germany) and V.V.A. Schreurs (Wageningen, Netherlands) ..... 187

The influence of molasses and yeast culture on the performance of growing bulls on grass silage-based diet

P. Huhtanen (Jokioinen, Finland) and K. Hissa (Helsinki, Finland) ..... 201

The effects of heating and NaOH treatments on the nutritive value of nonlinted whole cottonseeds

A. Arieli (Rehovot, Israel), Y. Aharoni (Haifa Post, Israel), H. Tagari, S. Mabweesh and S. Zamwell (Rehovot, Israel) ..... 215

Nutritive value of faba bean hulls for ruminants

D. Minakowski H., Skórko-Sajko and A. Falkowska (Olsztyn, Poland) . 225

Effects of pressing technology of oil separation and heat treatment on the protein value of low-glucosinolate rapeseed cake for non-ruminants R. Nyström (Kirkonummi, Finland), B. Pastuszewska, L. Buraczewska (Jabłonna, Poland), U. Tulisalo (Kirkonummi, Finland) and A. Ochtabińska (Jabłonna, Poland) .....	235
Effect of dietary phosphorus level and supplemental phytase on performance of Hisex Brown laying hens and egg shell quality B.Z. Kamińska, B. Skraba and J. Koreleski (Balice, Poland) .....	249
Effect of lupin alkaloid fractions level on performance and blood parameters in chickens L. Uziębło (Szczecin, Poland), K. Gulewicz (Poznań, Poland), Z. Tarasiewicz (Szczecin, Poland), M. Bednarczyk (Zakrzewo, Poland), D. Szczubińska and M. Ligocki (Szczecin, Poland) .....	261
Availability of manganese from different manganese oxides and their effect on performance of broiler chickens W. Korol, S. Wójcik, S. Matyka (Lublin, Poland) and T.S. Hansen (Vaagsbygd, Norway) .....	273
Effect of dehulling white lupine ( <i>Lupinus albus</i> ) on protein utilization by rats Z. Zduńczyk, J. Juśkiewicz and M. Flis (Olsztyn, Poland) .....	281
The effect of pinealectomy on oxygen consumption and rectal temperature of adult hens M. Pietras (Balice, Poland) .....	289
A device for quantitative urine collection from male sheep in balance trials J. Kowalczyk, B. Skiba, Z. Buczkowski and B. Kowalik (Jabłonna, Poland) .....	297

Validation of a mathematical model to explain variation in apparent ileal amino acid digestibility of diets fed to pigs P. van Leeuwen (Wageningen, The Netherlands), J. Gdala (Jabłonna, Poland), S. Boisen (Foulum, Denmark), S. Buraczewski (Jabłonna, Poland), G.J.M. van Kempen, M.W.A. Vestegen and G. Schaafsma (Wageningen, The Netherlands) .....	303
Effect of level of intake during the milk-feeding period on post-weaning growth in lambs T. Manso, A.R. Mantecón, P. Lavin, F.J. Giraldez, R. Peláez and F.J. Ovejero (León, Spain) .....	317
Comparison of chemical composition and <i>in vitro</i> organic matter digestibility of herbage samples at different stages of maturity before and after collection through oesophageal fistula C. Valdés C., F.J. Giráldez, A.R. Mantecón and F.F. Bermúdez (León, Spain) .....	327
A comparison between protein disappearance from the mobile bag and acid detergent solubility of nitrogen as estimates of protein digestibility in ruminants E. Kusumanti (Semarang, Indonesia), M.R. Weisbjerg and T. Hvelplund (Folulum, Denmark) .....	337
Protein and amino acid degradability in the rumen and digestibility in total intestinal tract of different roughages determined <i>in situ</i> B. Skiba (Jabłonna, Poland), M.R. Weisbjerg and T. Hvelplund (Foulum, Denmark) .....	347
The effects of calcium and sodium loading on organic matter digestibility and mineral absorption in sheep. 3. Changes in the Ca, Mg, Zn and Cu concentrations in rumen fluid M.A. Gralak, H. Leontowicz, M. Leontowicz, V. Leśniewska and G.W. Kulasek (Warszawa, Poland) .....	365

Effect of rye level, fat source and enzyme supplementation on fat utilization, diet metabolizable energy, intestinal viscosity and performance of broiler chickens S. Smulikowska and A. Mieczkowska (Jabłonna, Poland) .....	379
The relationship between serum lysozyme activity and reproductive performance in turkeys I. Prusinowska and J. Jankowski (Olsztyn, Poland) .....	395
Chemical composition and carbohydrate content of seeds from several lupin species J. Gdala and L. Buraczewska (Jabłonna, Poland) .....	403
A note on the chemical composition and nutritional value of hulless barley grain D. Boros, B. Rek-Cieply and M. Cyran (Radzików, Poland) .....	417
Effect of ionophores and 2-bromoethanesulphonic acid in hen caecal methanogenic cultures M. Marounck, V. Rada and V. Benda (Prague, Czech Republic) .....	425
Simultaneous determination of purine derivatives in urine by high-performance liquid chromatography M. Czauderna and J. Kowalczyk (Jabłonna, Poland) .....	433
Author index .....	441
Contents of Journal of Animal and Feed Sciences, Volume 5 .....	449