

Journal of Dairy Science

November 1987

Volume 70, Number 11

CONTENTS

NEWS AND EVENTS	5
GENERAL INTEREST:	
Administrative Information	4
Call for Papers	2465
DAIRY FOODS RESEARCH PAPERS:	
Identification and Cloning of Plasmid Deoxyribonucleic Acid Coding for Abortive Phage Infection from <i>Streptococcus lactis</i> ssp. <i>diacetylactis</i> KR2. N. J. Laible, P. L. Rule, S. K. Harlander, and L. L. McKay	2211
Improvement of Lactic Acid Production in Ultrafiltered Milk by the Addition of Nutrients. V. V. Mistry, F. V. Kosikowski, and W. D. Bellamy	2220
Calcium and Calmodulin-Dependent Phosphorylation of κ -Casein by a Bovine Mammary Casein Kinase. C. L. Brooks	2226
PRODUCTION RESEARCH PAPERS:	
Protein Kinases in the Lactating Mammary Gland. E. W. Bingham	2233
Secretion and Mammary Gland Uptake of Prolactin in Dairy Cows During Lactogenesis. P. V. Malven, H. H. Head, and R. J. Collier	2241
Periparturient Changes in Secretion and Mammary Uptake of Insulin and in Concentrations of Insulin and Insulin-Like Growth Factors in Milk of Dairy Cows. P. V. Malven, H. H. Head, R. J. Collier, and F. C. Buonomo	2254
Regulation of Calf Renal 25-Hydroxyvitamin D-Hydroxylase Activities by Calcium-Regulating Hormones. G. W. Engstrom, J. P. Goff, R. L. Horst, and T. A. Reinhardt	2266
Nonlinear Pharmacokinetics and Conversion to Glucose of Intravenous Sodium Propionate in Dairy Cattle. Y. Gröhn, M. L. Bruss, and E. M. Huffman	2272
Effect of Prepartum Energy, Body Condition, and Sodium Bicarbonate on Health and Blood Metabolites of Holstein Cows in Early Lactation. Y. Boisclair, D. G. Grieve, O. B. Allen, and R. A. Curtis	2280
Characterization of In Situ Dry Matter and Nitrogen Digestion of Various Corn Grain Forms. J. E. Nocek	2291

Ruminal Nitrogen Metabolism in Steers as Affected by Feed Intake and Dietary Urea Concentration. J. L. Firkins, L. L. Berger, N. R. Merchen, G. C. Fahey, Jr., and R. L. Mulvaney	2302
Effects of Feed Intake and Dietary Urea Concentration on Ruminal Dilution Rate and Efficiency of Bacterial Growth in Steers. J. L. Firkins, S. M. Lewis, L. Montgomery, L. L. Berger, N. R. Merchen, and G. C. Fahey, Jr.	2312
In Vitro Protein Degradation of Cool Season Forages Planted with Minimum Tillage and No Fertilization. J. Hafley, W. A. Nipper, W. M. Craig, R. W. Adkinson, and A. S. Achacoso.	2322
Small Grains for Forage. Z. R. Helsel and J. W. Thomas	2330
Comparison of Sweet White Lupin Seeds with Soybean Meal as a Protein Supplement for Lactating Dairy Cows. B. Guillaume, D. E. Otterby, J. G. Linn, M. D. Stern, and D. G. Johnson	2339
Effect of Excess Iron in Milk Replacer on Calf Performance. K. J. Jenkins and M. Hidirglou	2349
Effects of Sixty-Day Milk Yield on Postpartum Breeding Performance in Holstein Cows. H. Hamudikuwanda, H. N. Erb, and R. D. Smith	2355
Effects of Previous Days Open, Previous Days Dry, and Present Days Open on Lactation Yield. D. A. Funk, A. E. Freeman, and P. J. Berger	2366
Ordered Categorical Sire Evaluation for Dystocia in Holsteins. M. Djemali, P. J. Berger, and A. E. Freeman	2374
Intercorrelations Among Milk Production Traits and Body and Udder Measurements in Holstein Heifers. C. Y. Lin, A. J. Lee, A. J. McAllister, T. R. Batra, G. L. Roy, J. A. Vesely, J. M. Wauthy, and K. A. Winter	2385
Breakeven Costs for Embryo Transfer in a Commercial Dairy Herd. T. A. Ferris and B. W. Troyer.	2394

PRODUCTION TECHNICAL NOTES:

Concentrations of Glucosinolates and S-Methylcysteine Sulfoxide in Ensiled Rape (<i>Brassica napus</i> L.). S. L. Fales, D. L. Gustine, S. C. Bosworth, and R. J. Hoover	2402
Changes in Triglyceride Fatty Acid Composition of Mammary Secretions During Involution. W. L. Hurley, G. J. Warner, and R. R. Grummer	2406
Factors Affecting Days of Discarded Milk Due to Clinical Mastitis and Subsequent Cost of Discarded Milk. D. Morse, M. A. DeLorenzo, R. P. Natzke, and D. R. Bray.	2411

OUR INDUSTRY TODAY:

Physical Properties of Food and Milk Components: Research Needs to Expand Uses. J. E. Kinsella	2419
Calcium in Dairy Products. M. H. Tunick	2429

Antibiotics for Bull Semen Frozen in Milk and Egg Yolk Extenders. K. Ahmad, R. H. Foote, and M. Kaproth	2439
--	------

SYMPOSIUM: BIASES IN GENETIC EVALUATION

Impact of Somatotropin and Other Biochemical Products on Sire Summaries and Cow Indexes. E. B. Burnside.	2444
Potential Bias in Genetic Evaluations from Differences in Variation Within Herds. W. E. Vinson	2450
Contemporary Groups for Genetic Evaluations. L. D. Van Vleck	2456

ASSOCIATION AFFAIRS:

Call for Papers	2465
---------------------------	------

FUTURE ANNUAL MEETINGS

- 1988 – University of Alberta, Edmonton, June 26–29
- 1989 – Lexington, Kentucky, August 1–4
- 1990 – North Carolina State University, June 24–27

NOTICE: Page Charges for Publication

The page charge per printed page is \$50 for members and \$100 for nonmembers for papers published in *Journal of Dairy Science* for papers submitted for publication after July 1, 1985.

In cases where only the authors' personal funds are available for payment, and where such payment would be a hardship, authors may request – prior to publication – a page charge waiver from the Executive Secretary, 309 W. Clark Street, Champaign, IL 61820. Authors who apply for page charge waiver may not order reprints.