

Journal of Dairy Science

August 1989

Volume 72, Number 8

CONTENTS

NEWS AND EVENTS	5
GENERAL INTEREST:	
Administrative Information.....	4
Memorial—C. R. Henderson.....	2203
Abstracts ADSA Southern Branch.....	2205
Abstracts ADSA Northeast Branch.....	2226
DAIRY FOODS RESEARCH PAPERS:	
Enzyme Activities of Lactic Streptococci and Their Role in Maturation of Cheese: A Review. K. M. Kamaly and E. H. Marth.....	1945
Evaluation of Milk for Cheese Production Based on Milk Characteristics and Formagraph Measures. R. Aleandri, J. C. Schneider, and L. G. Buttazzoni.....	1967
Characterization of Natural and Imitation Mozzarella Cheeses by Differential Scanning Calorimetry. M. H. Tunick, J. J. Basch, B. E. Maleeff, J. F. Flanagan, and V. H. Holsinger	1976
Effect of the Seasonal Variation of Fatty Acids in Milk Fat on the Sensitivity of a Test for Vegetable Fat Adulteration. J. R. Fox, A. H. Duthie, and S. Wulff	1981
PRODUCTION RESEARCH PAPERS:	
Metabolic Effects of Intraruminal Administration of 1,3-Butanediol or Tributyrin in Lactating Goats. J. K. Drackley, Y. Zhang, D. M. Amaral, and J. W. Young.....	1986
Milk Fatty Acid Composition and Plasma Energy Metabolite Concentrations in Lactating Cows Fed Medium-Chain Triglycerides. R. R. Grummer and M. T. Socha.....	1996
Effects of Source of Protein and Carbohydrate on Ruminal Fermentation and Passage of Nutrients to the Small Intestine of Lactating Cows. R. D. McCarthy, Jr., T. H. Klusmeyer, J. L. Vicini, J. H. Clark, and D. R. Nelson.....	2002
Effects of Amino Acids and Peptides on Rumen Microbial Growth Yields. J. L. Argyle and R. L. Baldwin	2017

Seasonal Effects of Parturition and Postpartum Fat and Niacin Feeding on Lactation Performance and Lipid Metabolism. T. C. Skaar, R. R. Grummer, M. R. Dentine, and R. H. Stauffacher	2028
Effects of Sodium Bicarbonate and Sodium Sesquicarbonate on Animal Performance, Ruminal Metabolism, and Systemic Acid-Base Status. G. R. Ghorbani, J. A. Jackson, and R. W. Hemken	2039
Effect of Heat Treatment of Alfalfa Prior to Ensiling on Nitrogen Solubility and In Vitro Ammonia Production. I. B. Mandell, D. N. Mowat, W. K. Bilanski, and S. N. Rai	2046
Apparent Digestibility of Nitrogen in Rumen and Whole Tract of Friesian Cattle Fed Direct-Cut and Wilted Grass Silages. P. Narasimhalu, E. Teller, M. Vanbelle, M. Foulon, and F. Dasnoy	2055
Impact of Noncorrosive Forage Stabilizers on Digestibility of Alfalfa Hay and Lactation Performance of Dairy Cows. D. A. Deetz, J. H. Harrison, F. R. Valdez, and D. W. Evans	2062
Effect of Chemical Treatment on In Vitro and In Situ Degradation of Canola Meal Crude Protein. G. R. Khorasani, P. H. Robinson, and J. J. Kennelly	2074
Effect of Feeding Silage of Early and Late Maturing Corn Planted at Two Population Densities to Lactating Dairy Cows. F. R. Valdez, J. H. Harrison, and S. C. Fransen	2081
Effect of Parturition Feeding on Milk Yield and Calf Growth Rate in Limited-Suckled and Nonsuckled Buffaloes. R. H. Usmani and E. K. Inskeep	2087
Blood Responses of Calves Fed Milk Substitutes Containing Hydrolyzed Fish Protein and Lime-Treated Corn Flour. M. Diaz-Castaneda and G. J. Brisson	2095
Performance of Growing Dairy Heifers Fed Diets Containing Soybean Meal or Animal By-Product Meals. P. E. Mäntysaari, C. J. Sniffen, T. V. Muscato, and M. L. Thonney	2107
Class I Alleles of the Bovine Major Histocompatibility System and Their Association with Economic Traits. T. R. Batra, A. J. Lee, J. S. Gavora, and M. J. Stear	2115
Prediction Error Variance and Restricted Maximum Likelihood Estimation for Animal Model with Relationship Grouping. Y. Da, M. Grossman, and I. Misztal	2125

Genetic and Economic Responses of Breeding Programs
That Consider Mastitis.
E. Strandberg and G. E. Shook..... 2136

Multiphasic Analysis of Milk and Fat Yield Curves
of Israeli Holsteins.
J. A. De Boer, J. I. Weller, T. A. Gipson, and M. Grossman..... 2143

Influence of Sire Selection and Milking Frequency
on Milking Characteristics in Holstein Cows.
M. A. Barnes, G. W. Kazmer, and R. E. Pearson 2153

Effects of Age, Parity, Season of Calving, and Sire on Milk
Yield of Carora Cows in Venezuela.
F. Morales, R. W. Blake, T. L. Stanton, and M. V. Hahn 2161

Effect of Bovine Follicular Fluid and Follicle-Stimulating
Hormone on Follicular Growth in Unilaterally Ovariectomized
Prepuberal Heifers.
**M. T. Moser, H. A. Garverick, M. F. Smith, and
R. S. Youngquist** 2170

Effect of Dietary Protein and Exogenous Gonadotropin-Releasing
Hormone on Circulating Progesterone Concentrations
and Performance of Holstein Cows.
J. P. Sonderman and L. L. Larson..... 2179

AC Voltages on Water Bowls: Effects on Lactating Holsteins.
**R. C. Gorewit, D. J. Aneshansley, D. C. Ludington,
R. A. Pellerin, and X. Zhao** 2184

PRODUCTION TECHNICAL NOTES:

Effects of Handling, Administration of a Local Anesthetic,
and Electrical Dehorning on Plasma Cortisol
in Holstein Calves.
K. E. Boandl, J. E. Wohlt, and R. V. Carsia 2193

Use of B-Mode, Linear Array Ultrasonography for
Evaluating the Technique of Bovine Artificial Insemination.
W. E. Beal, R. B. Edwards, III, and J. M. Kearnan..... 2198

ASSOCIATION AFFAIRS:

Memorial—C. R. Henderson 2203

Abstracts ADSA Southern Branch 2205

Abstracts ADSA Northeast Branch..... 2226