

Journal of Dairy Science

August 1981

Volume 64, Number 8

CONTENTS

NEWS AND EVENTS 4

GENERAL INTEREST:

- Administrative Information. 3
Memorial – Samuel A. Hinton 1756
Nominations for Miles-Marschall International Dairy Science Award 1757

RESEARCH PAPERS:

- Maternal-Fetal Relationships of Copper, Manganese, and Sulfur in Ruminants. A Review.
M. Hidirolou and J. E. Knipfel 1637
- Gas Chromatographic Quantitation of Sugars and Nonvolatile
Water-Soluble Organic Acids in Commercial Cheddar Cheese.
C. D. Harvey, R. Jenness, and H. A. Morris. 1648
- Beta-Adrenergic Receptor Involvement in Lipolysis of Dairy Cattle
Subcutaneous Adipose Tissue During Dry and Lactating State.
E. H. Jaster and T. N. Wegner 1655
- Dietary Fat Effects on Blood Insulin, Glucose Utilization, and Milk Protein Content
of Lactating Cows.
D. L. Palmquist and E. A. Moser. 1664
- Milk Yield, Feed Intake, Prolactin, Growth Hormone, and Glucocorticoid Response
of Cows to Supplemented Light.
R. R. Peters, L. T. Chapin, R. S. Emery, and H. A. Tucker 1671
- Dietary Fermented Ammoniated Condensed Whey and Postprandial Effects on Blood
and Urine Acid-Base Metabolites in Lactating Cows.
R. A. Erdman, L. S. Bull, and R. W. Hemken 1679
- Performance of Lactating Dairy Cows Fed Methionine or Methionine Analog at
Two Concentrations of Crude Protein.
M. R. Stokes, J. H. Clark, and L. M. Steinmetz 1686
- Effect of Fermentation and Formalin Preservation on the Protein Component
of Bovine Colostrum.
R. S. Bush, R. E. McQueen, and J.W.G. Nicholson 1695
- Effect of High but Nontoxic Dietary Intake of Copper and Selenium on
Metabolism in Calves.
M. S. Fehrs, W. J. Miller, R. P. Gentry, M. W. Neathery, D. M. Blackmon, and
S. R. Heinmiller 1700
- Joint Effects of Parity, Age, and Season of Kidding on Milk and Fat Yields in Dairy Goats.
B. W. Kennedy, C. M. Finley, E. J. Pollak, and G. E. Bradford 1707
- Estimation of a Utility Function from Semen Purchases from Holstein Sires.
M. Schneeberger, A. E. Freeman, and M. D. Boehlje. 1713

TECHNICAL NOTES:

Rapid and Specific Isolation of Radioactive Glucose from Biological Samples.
S. E. Mills, L. E. Armentano, R. W. Russell, and J. W. Young. 1719

Interference of Lipid with Determination of Bovine Serum Albumin
by Electroimmunodiffusion.
M. E. Mangino and N. L. Weissler 1724

Colostrum Immunoglobulin Concentrations Among Breeds of Dairy Cattle.
L. D. Muller and D. K. Ellinger. 1727

Total and Individual Amino Acids in Strained Ruminant Liquor from Cows
Fed Graded Amounts of Urea.
G. A. Broderick, J. H. Kang-Meznarich, and W. M. Craig 1731

Subsequent Performance of Calves Held at Near Birth Weight
for the First Three Weeks of Life.
B. F. Jenny and G. D. O'Dell 1735

Comparison of Estrus Detection Techniques in Dairy Heifers.
W. F. Williams, D. R. Yver, and T. S. Gross. 1738

Application of Cattle Waste on Sloping Cropland.
A. L. Sutton, D. W. Nelson, N. J. Moeller, and D. L. Hill. 1742

OUR INDUSTRY TODAY:

Change of Milk Production with Housing System and Herd Expansion.
R. J. Norell and R. D. Appleman 1749

ASSOCIATION AFFAIRS:

Memorial – Samuel A. Hinton 1756

Nominations for Miles-Marschall International Dairy Science Award 1757