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64th

# Minnesota Nutrition Conference

& Preconference Symposium: "The World of Corn"



# PROCEEDINGS

②

September 16-17, 2003

St. Paul, Minnesota



# 64<sup>th</sup> Minnesota Nutrition Conference

&

Pre-Conference Symposium:  
"The World of Corn"

September 16-17, 2003

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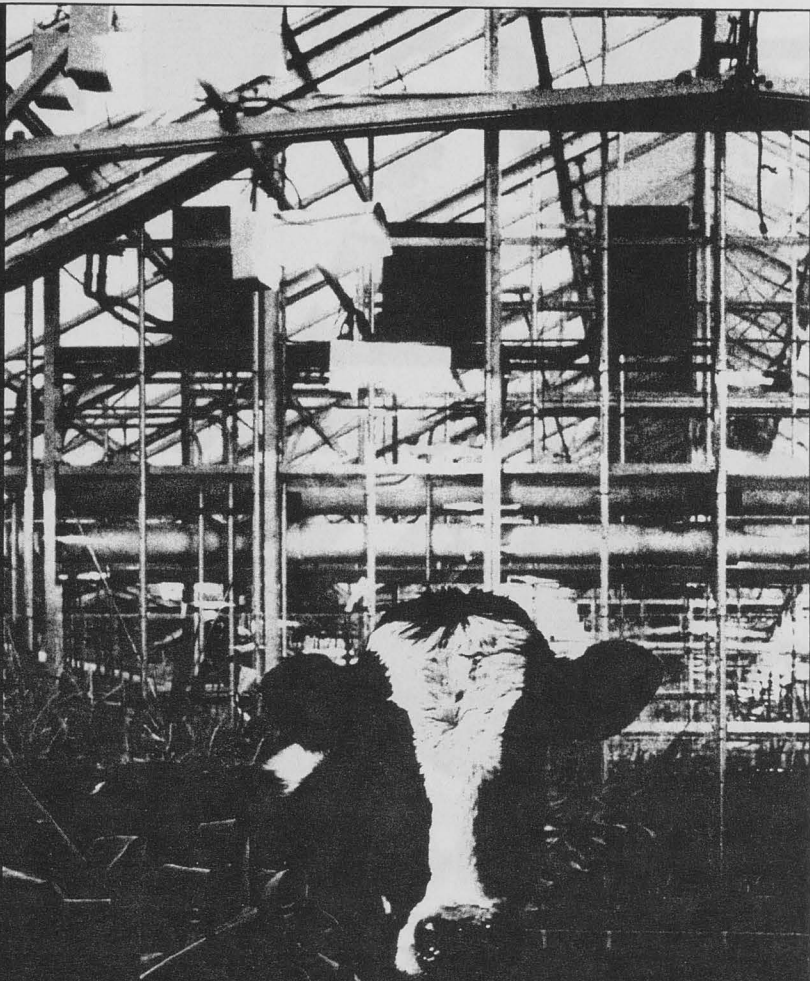


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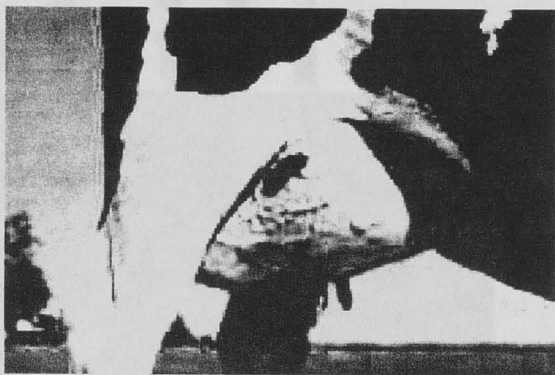
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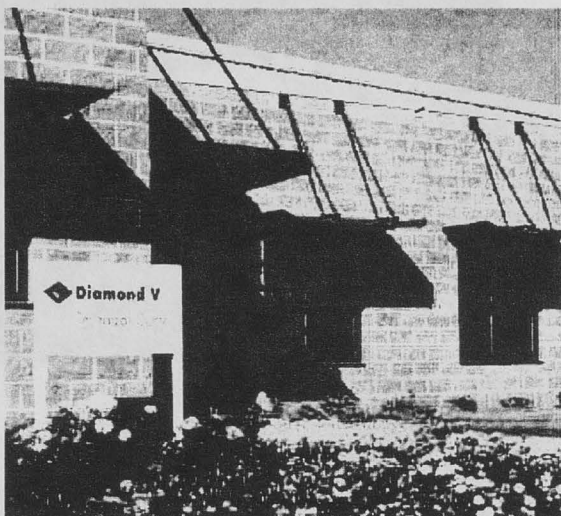
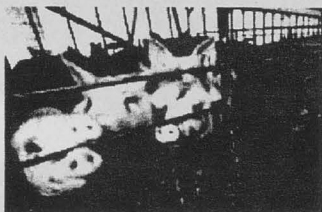
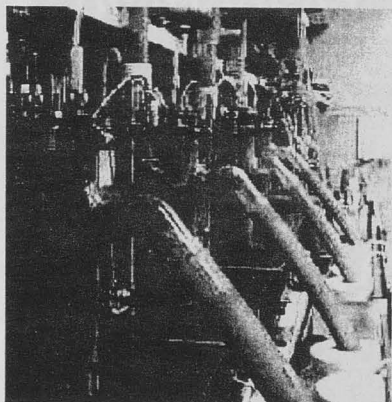
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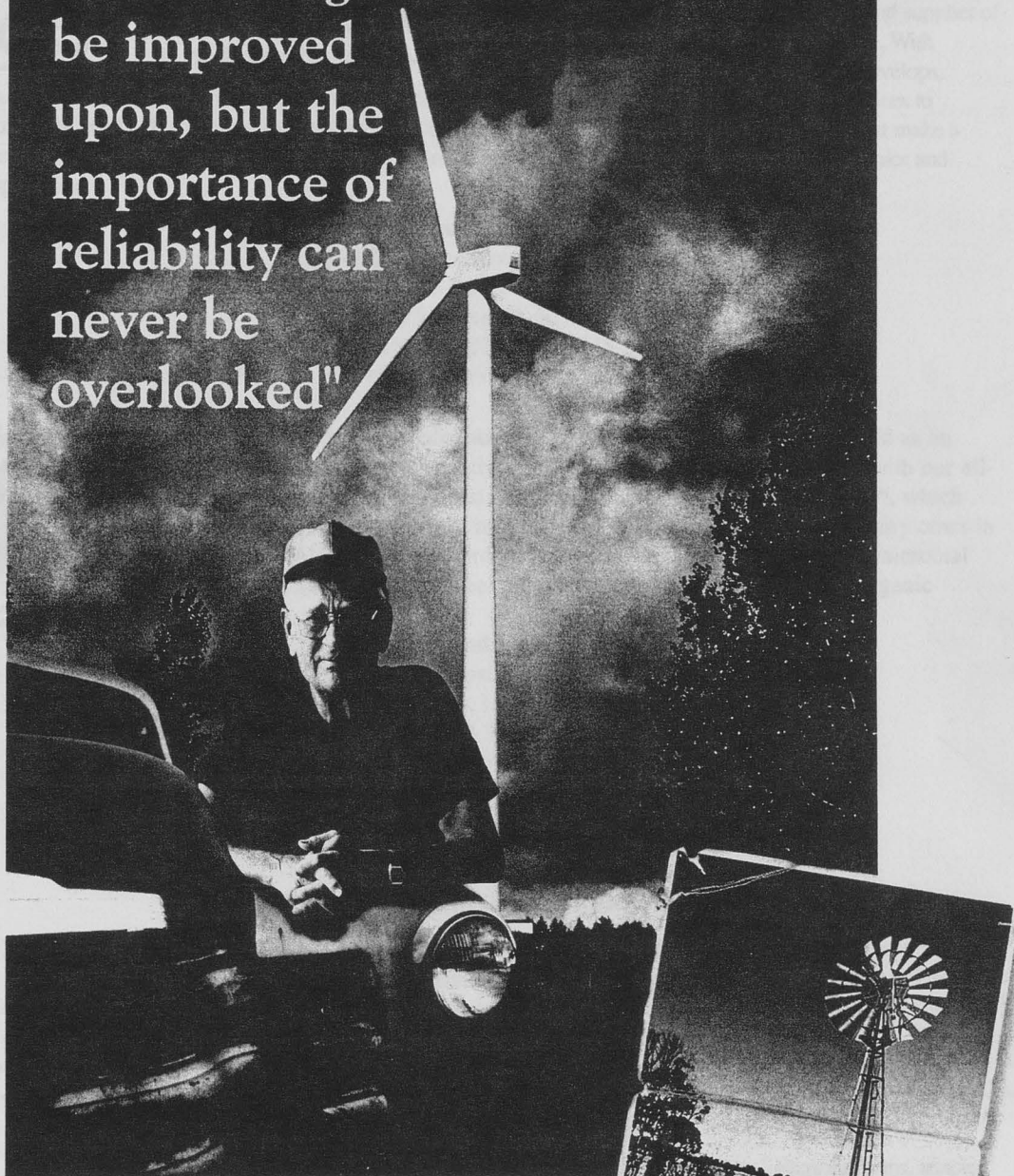


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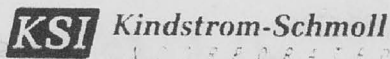
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# 64<sup>th</sup> Minnesota Nutrition Conference

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## Pre-Conference Symposium: "The World of Corn"



The Minnesota Nutrition Conference is recognized as an important forum for the nutrition industry. Local, national, and international animal nutritionists gather to learn about the current, innovative research being conducted at universities, in industry and at government centers.

This year's conference features dairy, beef, swine and poultry nutrition.

Preconference Symposium: "The World of Corn" — September 16, 2003, 8:30 a.m.-12 noon

Sponsored by: Pioneer, a DuPont Company

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**64<sup>th</sup> Minnesota Nutrition Conference**  
&  
Pre-Conference Symposium:  
"The World of Corn"

**TUESDAY, SEPTEMBER 16, 2003**

**Technical Symposium: "The World of Corn" — Sponsored by Pioneer, A DuPont Company**

**Morning**

- 8:00 Registration - Coffee and Pastries
- 8:30 Welcome and Introduction  
— *Bill Mahanna*, Coordinator, Pioneer Nutritional Sciences
- 8:45 Global GMO Issues and Challenges  
— *Marj Faust*, Director, External Research, ABS Global, Inc.
- 9:30 Mold and Mycotoxin Review  
— *Gary Munkvold*, Research Coordinator, Pioneer, A DuPont Company
- 10:15 Assessing Corn Energy for Monogastrics  
— *Dan Jones*, Monogastric Nutritionist, Pioneer, A DuPont Company
- 10:45 Analytical Approaches to the Nutritional Value of Corn  
— *Don Sapienza*, Nutritional Research Manager, Pioneer, A DuPont Company
- 11:30 Discussion – Questions and Answers
- 12:00 Lunch - Sponsored by Pioneer, A Dupont Company

**Afternoon**

**64<sup>th</sup> Minnesota Nutrition Conference**  
**GENERAL SESSION - GUT PHYSIOLOGY SYMPOSIUM**

- 1:15 Gut as an immune tissue  
— *J. Ernest Minton*, Kansas State University
- 1:55 Response of the gut and microbial populations to feedstuffs: the nonruminant story  
— *Jim Pettigrew*, University of Illinois
- 2:30 Break
- 3:00 Response of the gut and microbial populations to feedstuffs: the ruminant story  
— *T. G. Nagaraja*, Kansas State University
- 3:35 Development of antibiotic resistance in livestock production  
— *Alan Mathew*, University of Tennessee
- 4:15 Discussion – Questions and Answers
- 5:00 Adjourn
- 5:30-7:00 Reception - Sponsored by Northwest Feed Manufacturers Association

# 64<sup>th</sup> Minnesota Nutrition Conference

## WEDNESDAY, SEPTEMBER 17, 2003

### RUMINANT SESSION

Morning		Afternoon	
8:00	Registration / Coffee and pastries	12:15	Lunch – <i>Sponsored by Diamond V Mills</i>
9:00	<b>Immunity in dairy cows</b> — <i>Trevor Ames</i> , University of Minnesota	1:15	<b>Glucose balance in the dairy cow</b> — <i>Chris Reynolds</i> , Ohio State University
9:40	<b>Mineral nutrition and the immune response in beef cattle</b> — <i>John Arthington</i> , University of Florida	1:55	<b>Lifetime impacts of management on beef carcass quality and profitability</b> — <i>Larry Berger</i> , University of Illinois
10:20	Break	2:30	Break
10:50	<b>Nutrition to optimize calf health and performance</b> — <i>Arlyn Jud Heinrichs</i> , Pennsylvania State University	3:00	<b>Nutrition and management manipulations to enhance consumer appeal and safety of beef</b> — <i>Deb Roeber</i> , University of Minnesota
11:30	Panel discussion with morning speakers	3:40	<b>Dairy cow handling...Does it affect the bottom line?</b> — <i>Marcia Endres</i> , University of Minnesota
		4:15	Panel discussion with afternoon speakers
		4:45	Adjourn

### NON-RUMINANT SESSION

Morning		Afternoon	
8:00	Registration / Coffee and pastries	12:15	Lunch – <i>Sponsored by Diamond V Mills</i>
9:00	<b>Critique of amino acid ratios for swine and poultry</b> — <i>Brian Kerr</i> , USDA Swine Research Center	1:15	<b>Troubleshooting mycotoxin problems</b> — <i>John Doerr</i> , University of Maryland
9:40	<b>Nutritional cost of immune activation in poultry</b> — <i>Elizabeth Koutsos</i> , California Polytechnic State University	1:55	<b>Digestible Amino Acids: Determination and use</b> — <i>Hans Stein</i> , South Dakota State University <i>Sponsored by Hubbard Feeds, Inc.</i>
10:20	Break	2:30	Break
10:50	<b>Use of omega-3 fatty acids in sow diets</b> — <i>John Rooke</i> , Scottish Agricultural College <i>Sponsored by United Feeds, Sheridan, IN</i>	3:00	<b>Value of invitro amino acid digestibility assays</b> — <i>Theo van Kempen</i> , North Carolina State University <i>Sponsored by Novus International, Inc.</i>
11:30	Panel discussion with morning speakers	3:40	Panel discussion with afternoon speakers
		4:15	Adjourn

## Technical Symposium and Conference Speakers

**Dr. Trevor Ames**

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**Dr. John D. Arthington**

University of Florida Range Cattle Research  
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# 64<sup>th</sup> Minnesota Nutrition Conference

## & Pre-Conference Symposium: "The World of Corn"

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