The Interaction Between Ethanol and Cattle Feeding: Economics and Issues

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Overview

- Background Issues
- Model and Assumptions
- Results
- Conclusions and Challenges

Background

- By-Product Feeding Nothing New
  - But, DDGS a little different
- Cattle Feeding Presents Some Challenges
  - Location between DDGS and Cattle
  - Infrastructure, SFC, transportation, packing plants
  - Nutrients, phosphorus, sulphur

Model

- Partial Budget
- Simulation Model Incorporating Risk
  - Prices
  - Cattle performance
- 2 Placement Periods
  - May and October
- 4 Cattle Feeding Operations/States
  - TX, CO, KS, NE

Model Assumptions

- Base Ration
  - Corn, hay, sbm, minerals
- Alternatives
  - 15, 30% DDGS, WDGS
  - Reduced corn
  - SFC, DRC
- Average Daily Gain
  - Base 3.18
  - Alternatives from 3.0 (WDGS/SFC) to 4.07 (15% WDGS/DRC)
- Costs Adjusted For:
  - SFC, add'l capital costs, transportation, corn basis

Results

- In Each Case, 15% WDGS Least Cost
  - Increased cattle performance
- Cattle Performance Gain Enough to Offset Distance
  - Transport more than 200 miles before base ration favorable
- At 60 Miles 15% DDGS Became Second Best Over 30% WDGS
- WDGS/SFC Option Highest Cost of Gain

Conclusions/Challenges

- Cattle Performance Gains Critical
- Cattle Performance Gain Can Offset Distance
- Existing Infrastructure Challenge
  - SFC in TX and CO
  - Packing plants
  - Rail transportation in place, but …
- Improved Cost of Gain Possible, But Overall Ration Cost Higher

Conclusions/Challenges

- WDGS, DDGS More Feasible As Relative Prices Change
- Disinvest in SFC Milling?
- Does the Industry Move?
  - Regional advantages created