

# Traceability Implementation Project (TIP)

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**Tracking Product Movement  
from Formulator to Field**  
*An Ag Retailer's Perspective*



# Importance of Product Traceability

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- **Food Safety Issues**  
(e.g., tomatoes, then serrano peppers linked to *Salmonella Saintpaul*; spinach contaminated with *E.Coli* )
- **Economic Consequences**  
(e.g., decline in fresh tomato sales of 60%)

# Importance of Product Traceability

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- **Traceability Will Help Pinpoint Source in Event of Food, Environmental or Public Safety Issue**
- **Traceability Will Improve Efficiencies, Profitability in Crop Input Supply Chain**



# Proactive Development of Ag Product Traceability: A Brief History

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- **2004:** MACA Forms Track & Trace Committee
- **2005:** MACA Begins Funding Traceability Implementation Program (TIP)
- **2006:** TIP Pilot With Three Ag Retailers Begins
- **2006-Now:** Testing of Traceability Concept & Enabling Technologies

# Ag Retailers: Industry Action Point

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- Ag Retail:  
“Industry Action Point” Where Last Knowledge of Product Resides
- Traceability Can Electronically Connect Crop Input Supply Chain



# Success of TIP Depends On



Connection between stakeholders

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1. Connection Between all Stakeholders (manufacturers, distributors, ag retailers, growers)
2. Choice & Seamless Integration of Business Tools: Inventory Management Devices, Software
3. Efficient, Cost Effective Replication Across Industry

# Technologies Used in an Innovative Way

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- TIP participating retailers are testing existing technologies *now*:
- Wireless Barcode/RFID Chip Scanner



Wireless antenna installed on warehouse

# Technologies Used in an Innovative Way

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- Software that integrates into retail accounting systems; and has Web-based applications
- Handheld device for custom applicators



Antenna & components provide signal anywhere in warehouse

# Technologies Used in an Innovative Way

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## Wireless scanner allows retailers to

- Track incoming shipments
- Track outgoing sales
- Track customer returns
- Track returns to distributors



# Technologies Used in an Innovative Way

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## **Inventory management software allows the retailer to**

- Integrate with accounting system
- Create shipping documents
- Reduce costly shrinkage

# Technologies Used in an Innovative Way

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## Inventory management software allows the retailer to

- Maintain more up-to-date inventory
- Bill on a more real-time basis



# Technologies Used in an Innovative Way

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## Handheld device for remote locations

- Allows custom applicator drivers to call up scheduled orders in the field
- Calculates quantities of product needed for each load
- Transfers completed orders to retailer's server and schedule program
- Serves as record in case of liability issues
- Saves driver time, headaches



# Technologies Used in an Innovative Way

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- Reduces manual error
- Maintains records of current and historical field data

# Technologies Used in an Innovative Way

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## **Web-based application**

- Allows growers to access maps and enter crop inputs applied on a field-by-field basis.
- Allows retailers to share crop plans, application orders with grower customers
- Creates opportunities for consultative selling

# Traceability Benefits Growers

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## **TIP has identified several grower benefits**

- Enhanced awareness of crop inputs by field, input package performance
- Improved efficiency, profitability
- Assurance that custom applied products are applied in regulatory compliance
- Leverage of GPS equipment, yield monitors, etc.

# TIP Will Succeed With Ag Influencers' Help

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- Retailers and regulatory officials are needed to communicate advantages of traceability to growers
- Work with progressive farmers is needed to test traceability concepts and technologies
- Teamwork will make TIP a success



# Mid America CropLife Association

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The Mid America CropLife Association (MACA) is a non-profit association of manufacturers, distributors/formulators and allied industry of crop protection products in 13 Midwestern states.



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