Utilizing Precision Ag Technology Workshop

Albany, Georgia
March 31, 2022

Sponsored by:

National Institute of Food and Agriculture
U.S. Department of Agriculture

This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28585
Precision Agriculture Technology Training Needs Survey Results

141 Responses

Yangxuan Liu
Benefits of Precision Agriculture Technology

- Improve Productivity and Yield: 73%
- Increase Profitability: 59%
- Better Crop Input Management and Reduce Crop Input Costs: 35%
- Reduce Production Risk: 18%
- Better Information for Management Decisions: 17%
- Environmental Stewardship and Sustainability: 14%
- Improved Time Management: 10%
- Labor Cost Savings: 6%
- Collect Real-time Data: 4%
- Be at the Forefront of Agricultural Technology: 3%
<table>
<thead>
<tr>
<th>Barriers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Capital Costs</td>
<td>61</td>
</tr>
<tr>
<td>Farm Acreage Too Low to Make Precision Agriculture</td>
<td>36</td>
</tr>
<tr>
<td>Technologies Profitable</td>
<td></td>
</tr>
<tr>
<td>Uncertain of Benefits</td>
<td>27</td>
</tr>
<tr>
<td>Lack of Knowledge/Training in Handling Advanced</td>
<td>22</td>
</tr>
<tr>
<td>Technologies</td>
<td></td>
</tr>
<tr>
<td>Low Return on Investment (ROI)</td>
<td>20</td>
</tr>
<tr>
<td>Complexity of Technology</td>
<td>17</td>
</tr>
<tr>
<td>Trust and Accountability of Precision Agricultural</td>
<td>10</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>Lack of Infrastructure to Support the Technologies</td>
<td>10</td>
</tr>
<tr>
<td>Lack of Industry Service/Support/Consulting</td>
<td>9</td>
</tr>
</tbody>
</table>

Barriers for Adopting Precision Agriculture Technology
Irrigation Scheduling
Remote Sensing
Irrigation budget and partial budget
Sustainability and precision agriculture
Variable rate application
Soil mapping and sampling
Precision planting
Carbon market and precision agriculture
Data management and analysis
Cost and benefit analysis

Training Needs
Training Needs of Precision Agriculture Technology
Training Delivery Methods

- In-Person Workshops: 72
- Printed/Online Presentation Materials: 41
- One-on-One Personalized Training: 31
- Publications: 30
- Online Video Recordings: 21
- Webinar: 18
- Newsletter or Blogs: 16
Topics for Today’s Program

• Precision Planting
• Precision Soil Mapping and Soil Sampling
• Sustainability and Precision Agriculture

• Keynote: Economic and Decision-Making
Thank you!

• Questions?

• Feel free to contact me:
  • Yangxuan (Serinna) Liu
  • (229) 386-3512
  • Yangxuan.Liu@uga.edu

This Material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28585
Utilizing Precision Ag Technology Workshop

Keynote: Economic and Decision-Making

Sponsored by:

National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

This material is based upon work supported by USDA/NIFA under Award Number 2018-70027-28585
Precision Ag?

Cost?

Benefit?

Worth it?
Dr. Jordan Shockley is an Associate Extension Professor and the Farm Management Specialist at the University of Kentucky. Dr. Shockley has conducted economic research on precision agriculture for over 15 years and delivered numerous state, national, and international presentations on his research. Dr. Shockley also worked in the private sector for four years analyzing investment decisions, including precision agriculture technologies, for a corporate farming operation in the Southern US and South America.