Typical Steps in Developing Variable Rate Prescriptions

1. Zone Development
2. Productivity Assessment by Zone
3. Rate Assignment
4. Rate Assessment

A NEW CONCEPT IN VARIABLE RATE PRESCRIPTION DEVELOPMENT: D-R_X

THE CLEMSON “DIRECTED PRESCRIPTION” SYSTEM

The Clemson “Directed Prescription” System (D-R_X)

How It Works: D-R_X Idealized Concept

Yield Profit

Soil Characteristic

Directed Prescription

EC Data

Test Strip

Site-Specific Yield Response
HYBRID A: VARIABLE RATE CORN SEEDING

Hybrid A: Variable Rate Corn Seeding

Hybrid A: RAVIC* as Function of EC by Seeding Rate

Hybrid A: Maximum Returns

Hybrid A: Evaluating the Tested Rates

Hybrid A: D-Rx Seed Rate to Maximize Profitability
Hybrid A: Variable Rate Profitability = $4.6/ac

Hybrid B: Variable Rate Corn Seeding

Hybrid B: Maximum Returns

Hybrid B: D-R_x Seed Rate to Maximize Profitability

Hybrid C: Variable Rate Corn Seeding
Hybrid C: Maximum Returns

Hybrid C: D-Ry Seed Rate to Maximize Profitability

CONCLUSIONS

Conclusions

- Use of yield data from your own on-farm strip trials can help you maximize profitability
  - Regardless of whether or not you utilize VRA
  - Can be used to assess cost-benefit of VRA on your operation
  - Contact us...we can and want to help you set these tests up

Conclusions

- Seeding rate to maximize profitability will certainly vary across hybrids
- Variable rate seeding benefit WILL vary across hybrids
- Prescription to maximize yield may not match prescription to maximize profit
- Seeding rate to maximize profitability within a given zone may well-exceed the average rate to maximize profitability
- Optimum prescriptions for a given field are likely best generated from tests in that field
Thank you to:
• Walker Nix Farms (Barnwell Co., S.C.)
• Crapse Farms (Hampton Co., S.C.)