Grower Perspective: Selecting a Variety

- John Lindamood
- Lindamood Planting Co.
- Northwest TN
- 5200 Acres
- 3200 Acres of cotton 2010
- 90% No till

Discussion of Variety Selection

- Importance of Variety Selection
- Type of information needed
- Source of information
- The consultants role

Importance of Variety Selection

- Maximum yield potential is established at time of planting
- Not all varieties are created equal
- Yields and grades within varieties respond differently to various soil types and environments
- There is a need to coordinate weed control programs with the selection of appropriate genetic traits

Information needed in order to select the right varieties

- Relative maturities
- Seedling vigor
- Yield response across varying soil types and environments
- Grade qualities
- Storm resistance
- GMO's- herbicide traits
  - What products can we use
  - How effective are they
  - What damage can we expect to see to the crop

Sources of Information for Variety Selection

- Personal experience
  - Advantages
    - Your fields and soil types
    - Aware of any limiting factors affecting yield
    - Opportunity to look at varieties over multiple years and a variety of environments
  - Weaknesses
    - Producers tend to have short term memory

Sources Continued

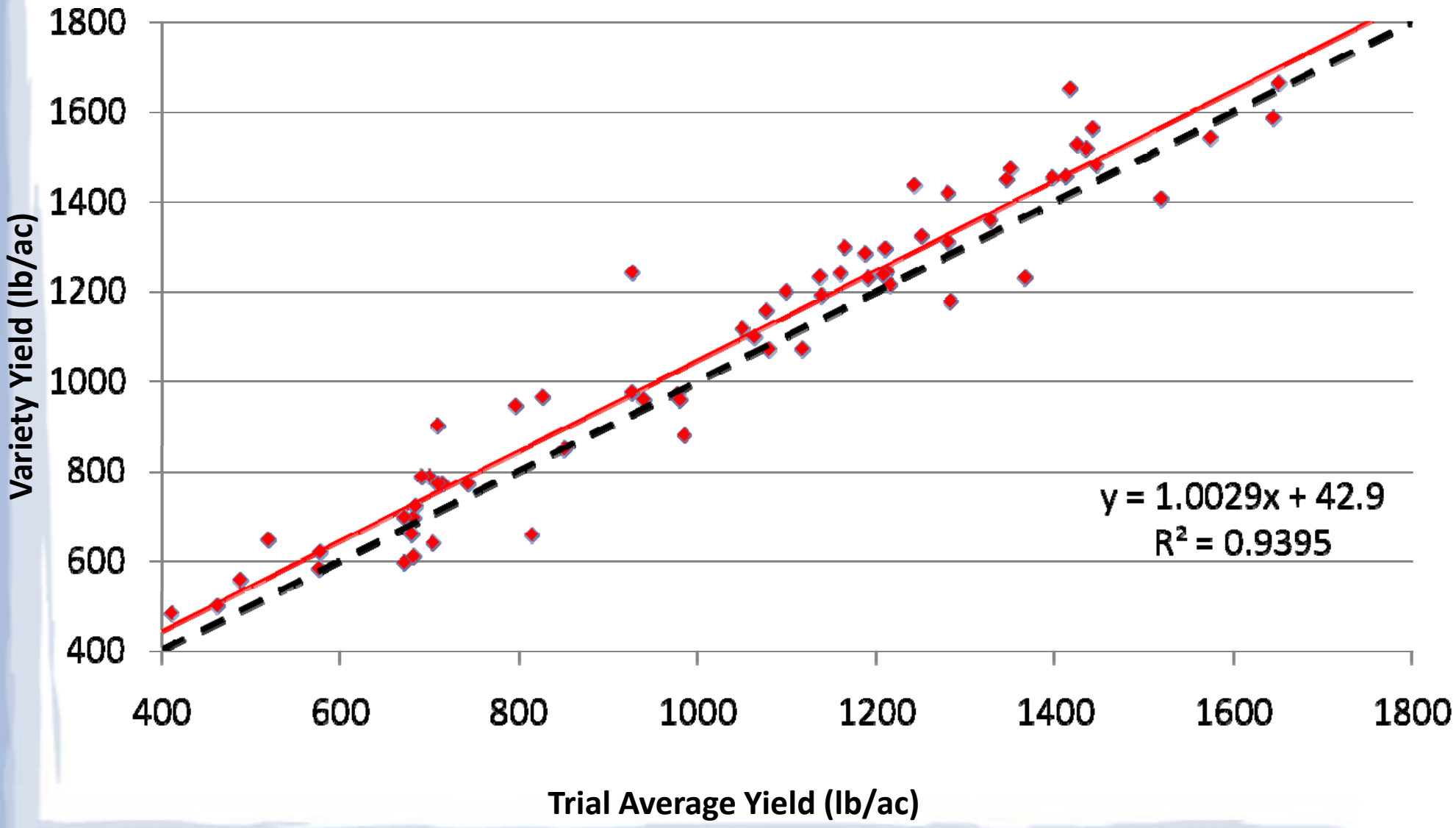
- Local Feedback
  - Advantages
    - Again, the conditions and soil types similar to your own
  - Disadvantages
    - Tendency to exaggerate strengths and weaknesses

Sources Continued

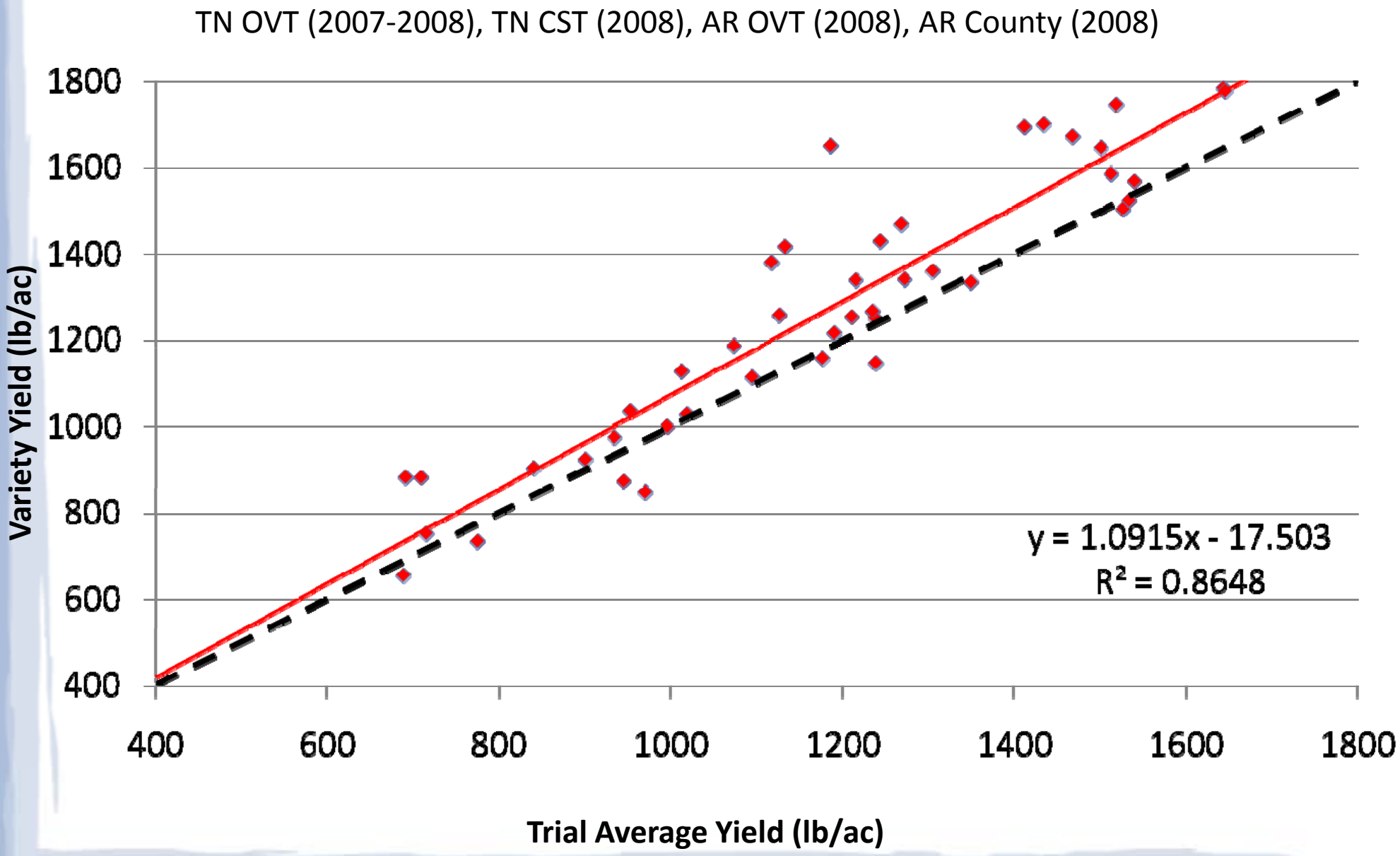
- University Data
  - Advantages
    - Organized and reliable, collected over time
    - Analyzed for both yields and grades
    - Data is collected over multiple sites
  - Weaknesses
    - Possibilities of different soil types and environments than your own

ST 4554 B2RF

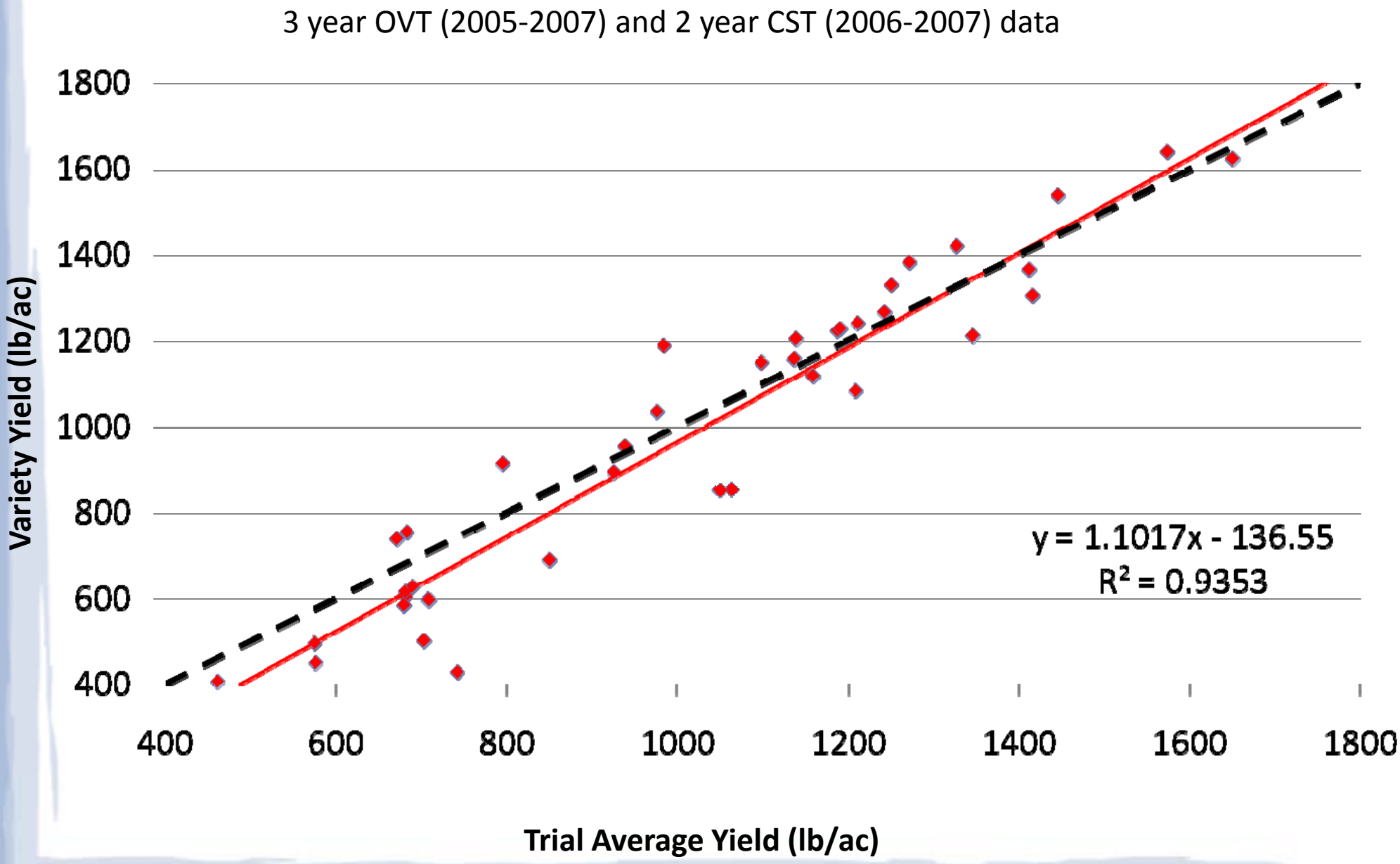
4 year OVT (2005-2008) and 3 year CST (2006-2008) data



PHY 375 WRF


TN OVT (2007-2008), TN CST (2008), AR OVT (2008), AR County (2008)
Variety Yield (lb/ac)
1800
1600
1400
1200
1000
800
600
400
400
600
800
1000
1200
1400
1600
1800
Trial Average Yield (lb/ac)
y = 1.0915x - 17.503
R² = 0.8648

DP 117 B2RF


3 year OVT (2005-2007) and 2 year CST (2006-2007) data
Variety Yield (lb/ac)
1800
1600
1400
1200
1000
800
600
400
y = 1.1017x - 136.55
R² = 0.9353
400
600
800
1000
1200
1400
1600
1800
Trial Average Yield (lb/ac)

OVT Top 20

Table OVT1. Lint yield, gin turnout, and fiber quality of 42 entries in the 2008 Tennessee Official Variety Trial averaged across five test locations, listed by yield rank.

Yield Rank	Variety	Gin Turnout	Lint Yield	Micronaire	Fiber Length	Fiber Strength	Uni-formity	Color Grade
		%	lb/ac		in	g/tex	%	
1	PHY 375 WRF	38.5	1590	4.2	1.12	29.3	82.1	41
2	PHY 370 WR	38.0	1547	4.5	1.10	29.9	82.3	41
3	ST 5458 B2RF	37.8	1546	4.6	1.14	30.9	81.5	41
4	FM 1740 B2F	39.1	1545	4.4	1.12	29.8	82.4	31
5	BCSX0727B2F	37.1	1497	4.7	1.13	29.3	81.6	41
6	BCSX0721B2F	38.9	1469	4.5	1.15	29.6	82.1	41
7	DP 444 BG/RR	38.3	1467	4.1	1.11	29.4	82.4	41
8	NG 3331 B2RF	36.5	1453	4.6	1.11	30.7	83.1	41
9	DP 0935 B2RF	38.9	1451	4.3	1.12	29.9	81.6	31
10	DG 2570 B2RF	38.0	1440	4.4	1.12	29.8	82.2	31
11	ST 4427 B2RF	36.6	1439	4.2	1.13	30.1	82.2	41
12	ST 5327 B2RF	37.6	1426	4.3	1.12	30.7	82.3	41
13	ST 4498 B2RF	37.0	1425	4.2	1.13	31.2	82.7	31
14	PHY 485 WRF	36.7	1422	4.6	1.13	31.2	82.9	41
15	AM 1550 B2RF	38.0	1415	4.4	1.10	28.2	81.5	31
16	CG 3220 B2RF	38.1	1414	4.4	1.13	29.1	81.9	31
17	DG 2400 RF	38.7	1409	4.4	1.13	29.8	82.6	31
18	PHY 315 RF	37.7	1400	4.2	1.13	29.1	81.1	41
19	NG 4370 B2RF	36.3	1396	4.4	1.13	30.1	82.7	41
20	NG 4377 B2RF	36.9	1391	4.4	1.11	29.2	82.5	41

Sources Continued

- Seed Representatives
  - Advantages
    - They have a thorough knowledge of their varieties
    - Can aid in placement and management
  - Disadvantages
    - Self interest

Consultants Role

- Provide a depth of experience both on your farm and from other producers
- To collect and help analyze data across the various sources
- To help with the final selection of variety mix representing tried and true varieties on the majority of acres, while selecting new varieties for evaluation