

Decades of Yield Progress Maturity Groups V, VI, and VIII

**Roger Boerma & Abdel-Haleem
Hussein**

**In cooperation with Southern Public
Breeders/Monsanto/Pioneer/Syngenta**

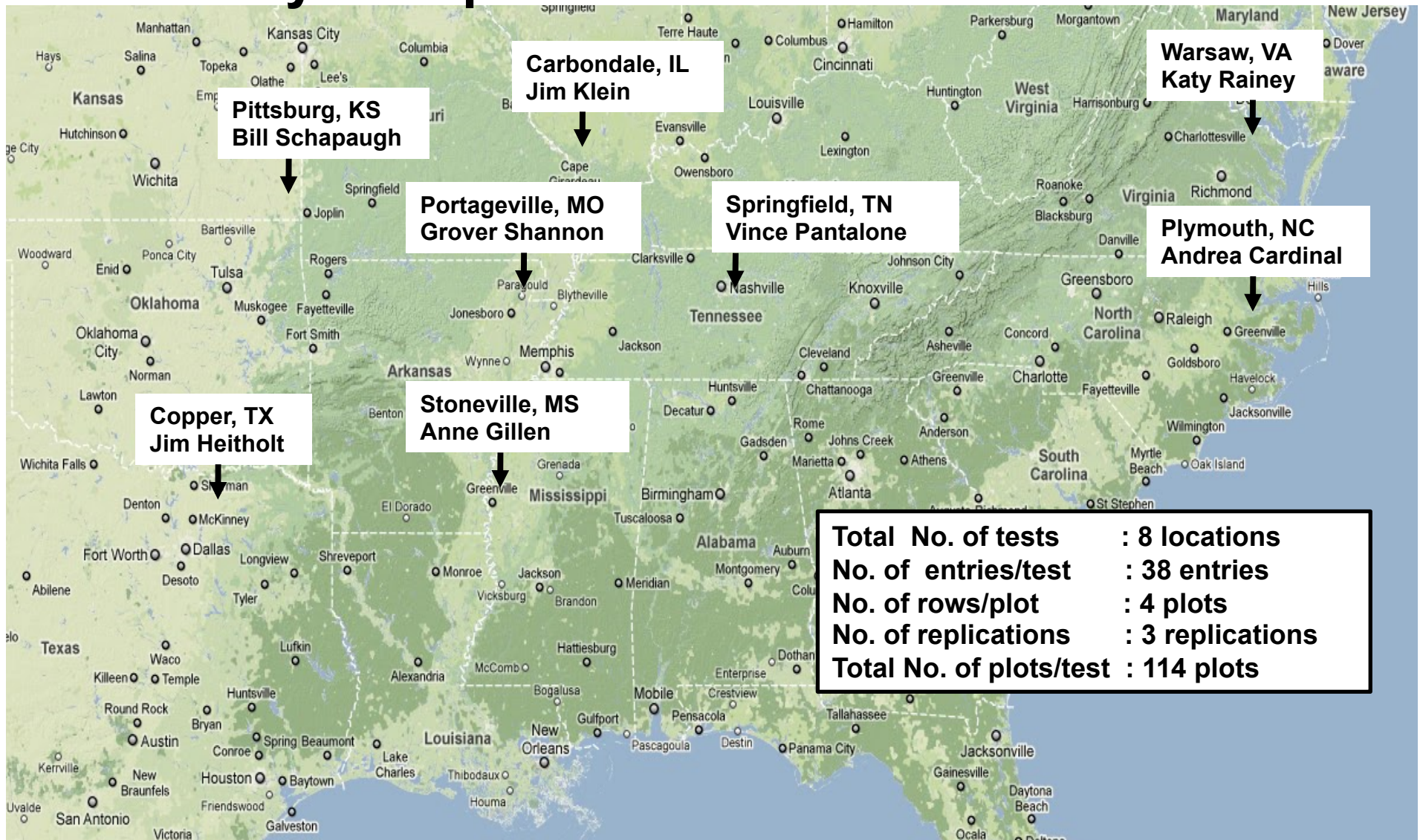
Previous MG V-VIII Studies

- **Boerma, 1979 (Crop Sci. 19:611-613)**
 - MG VI = 0.15 bu/a/yr
 - MG VII = 0.27 bu/a/yr
 - MG VIII = 0.22 bu/a/yr
- **Salado-Navarro, Sinclair, Hinson, 1993 (Crop Sci. 33:1204-1209)**
 - MG VI = no significant gain
 - MG VII = 0.24 bu/a/yr
 - MG VIII = 0.28 bu/a/yr

Maturity Group V Cultivars

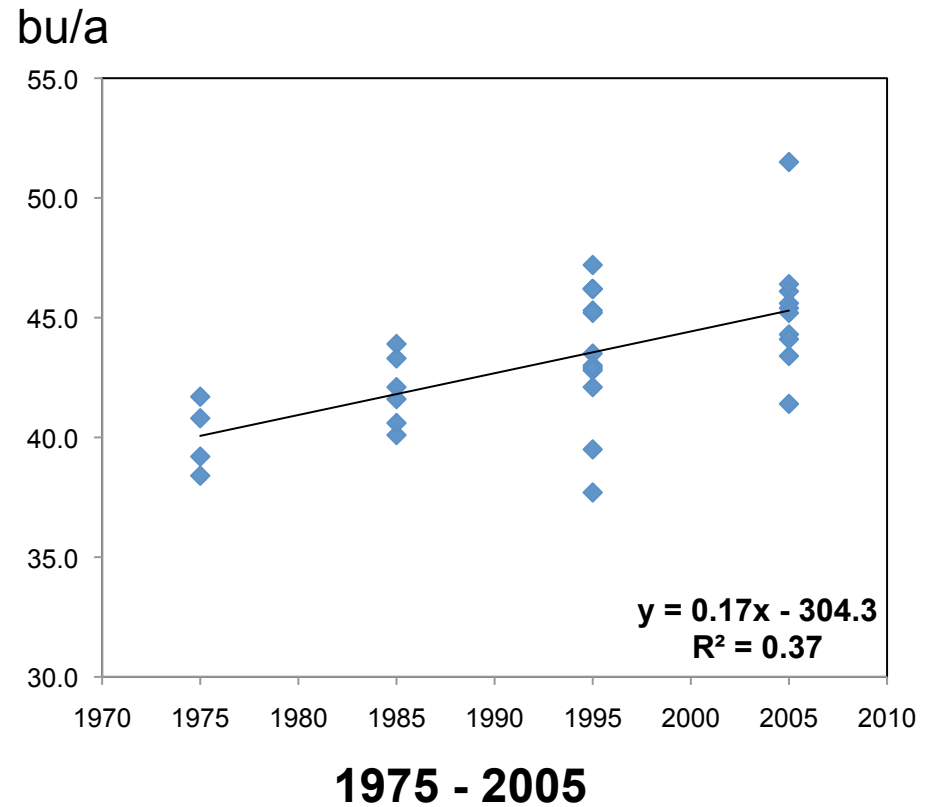
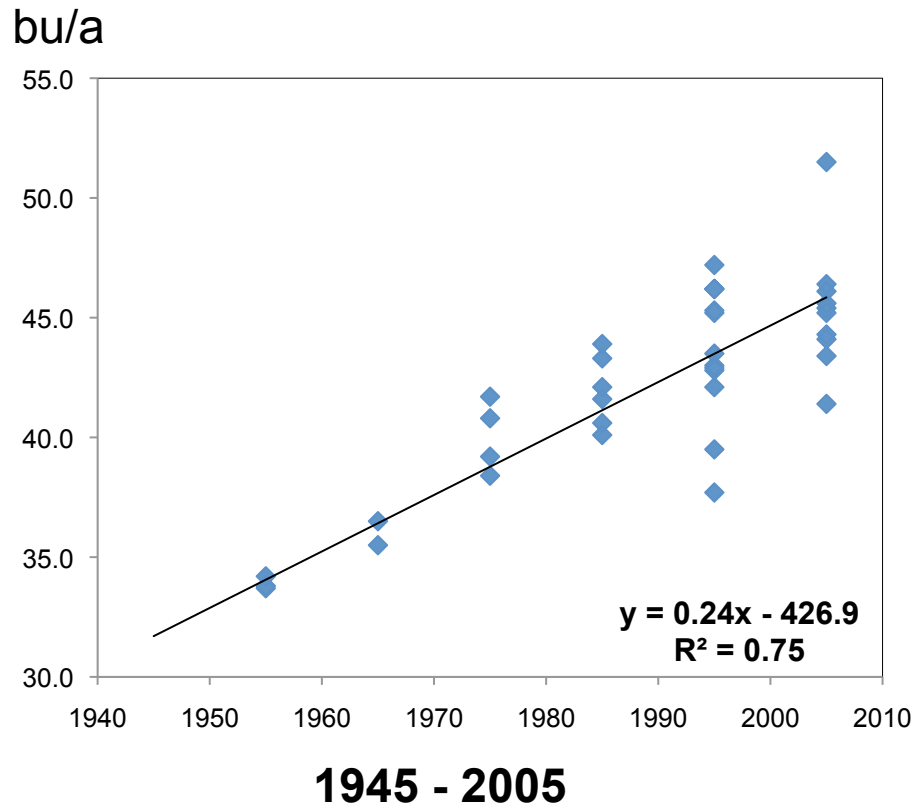
	Cultivars		
Decade	Public	Commercial	Total
1935	-	-	-
1945	S100	-	1
1955	Dorman, Hill	-	2
1965	Dare, York	-	2
1975	Essex, Forrest	2	4
1985	Hutcheson	5	6
1995	Holladay, Clifford, Graham	10	13
2005	5601T, Jake, Osage	7	10
Total	14	24	38

Maturity Group V: Collaborators and Locations



Yield vs. Year of Release

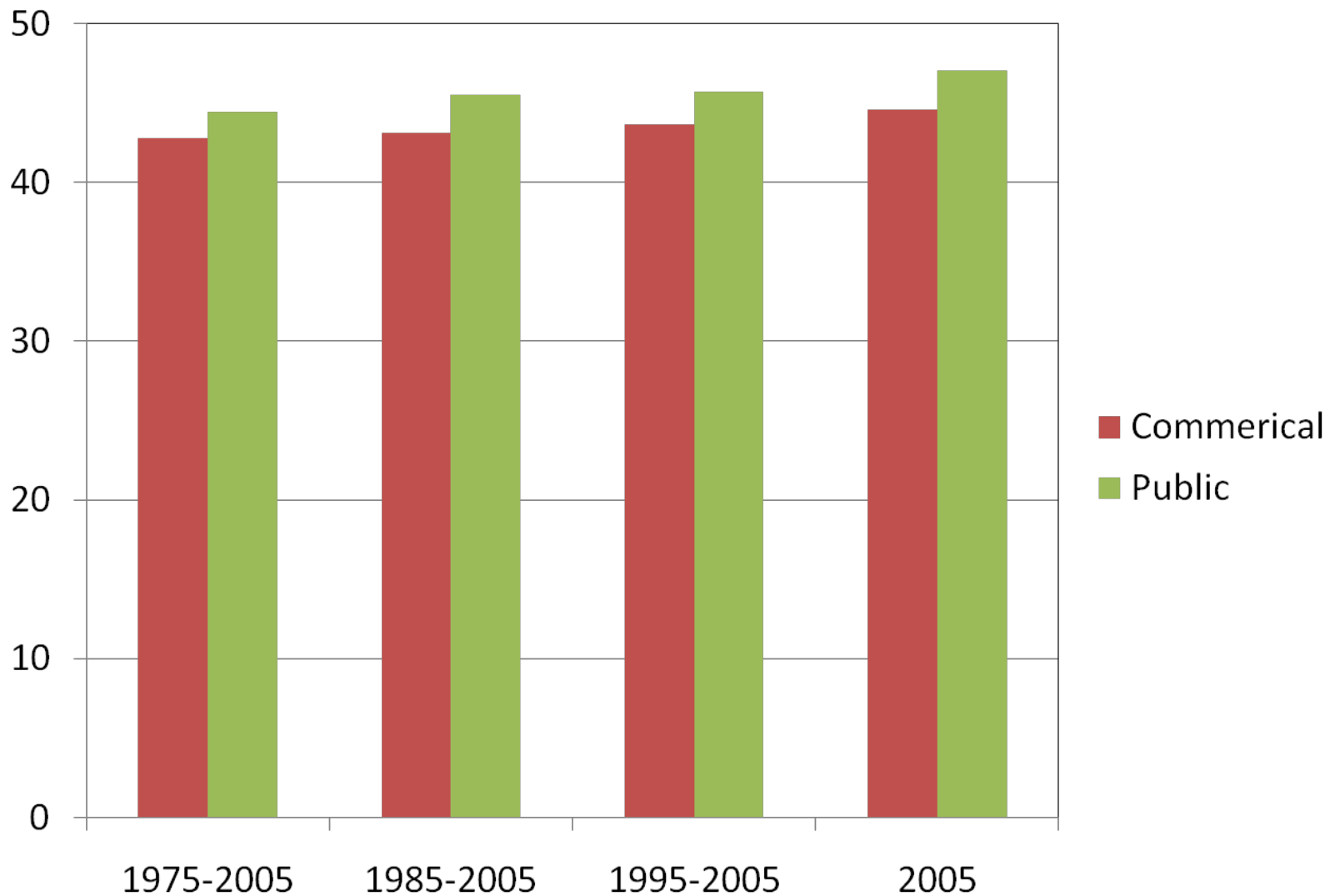
Maturity Group V



Commercial vs. Public (1975-2005)

Maturity Group V

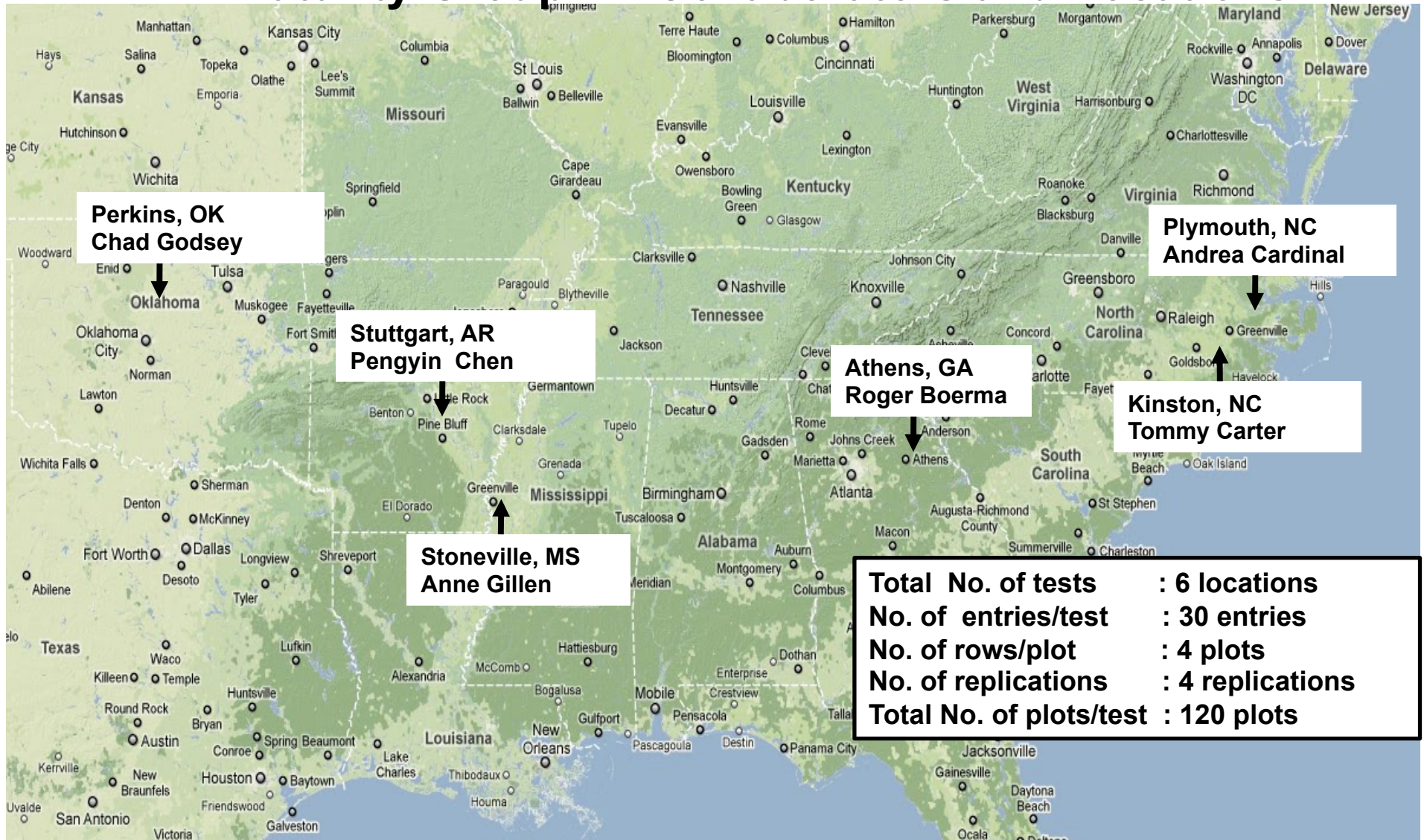
bu/a



Maturity Group VI Cultivars

	Soybean Cultivars		
Decade	Public	Commercial	Total
1935	Arksoy	-	-
1945	Ogden	-	1
1955	Lee, Hood	-	2
1965	Davis, Pickett	-	2
1975	Tracy, Centennial	2	4
1985	Young, Leflore	2	6
1995	Brim, Dillon, Boggs	6	13
2005	Musen, NC Roy	5	10
Total	15	15	30

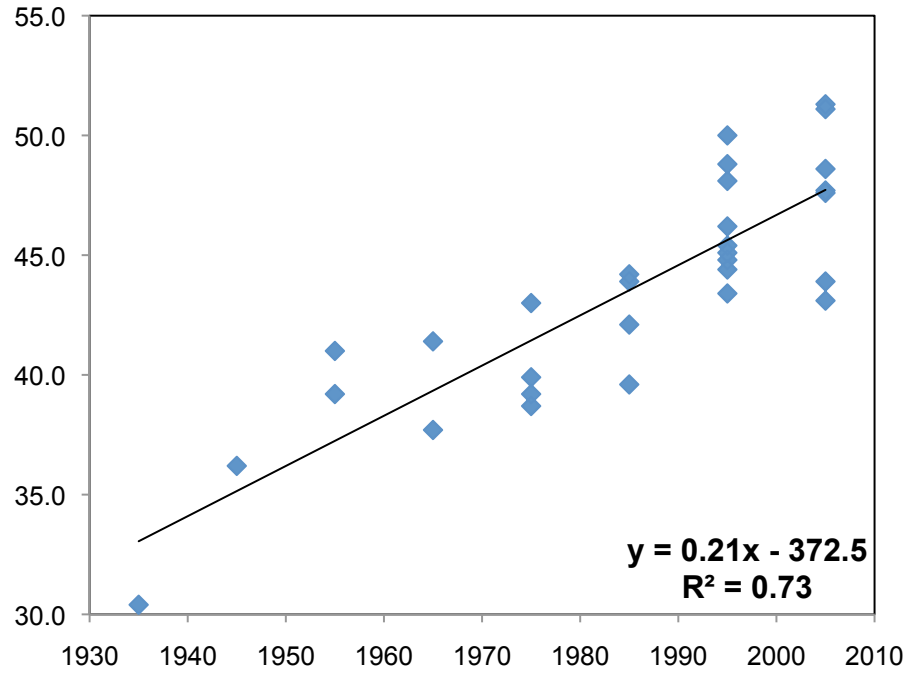
Maturity Group VI: Collaborators and Locations



Yield vs. Year of Release

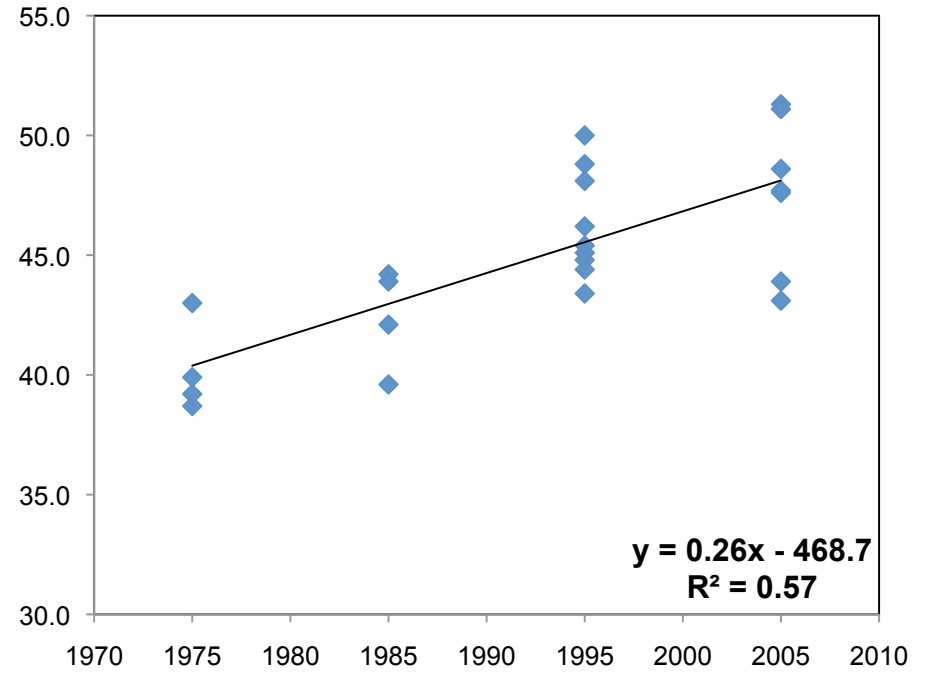
Maturity Group VI

bu/a



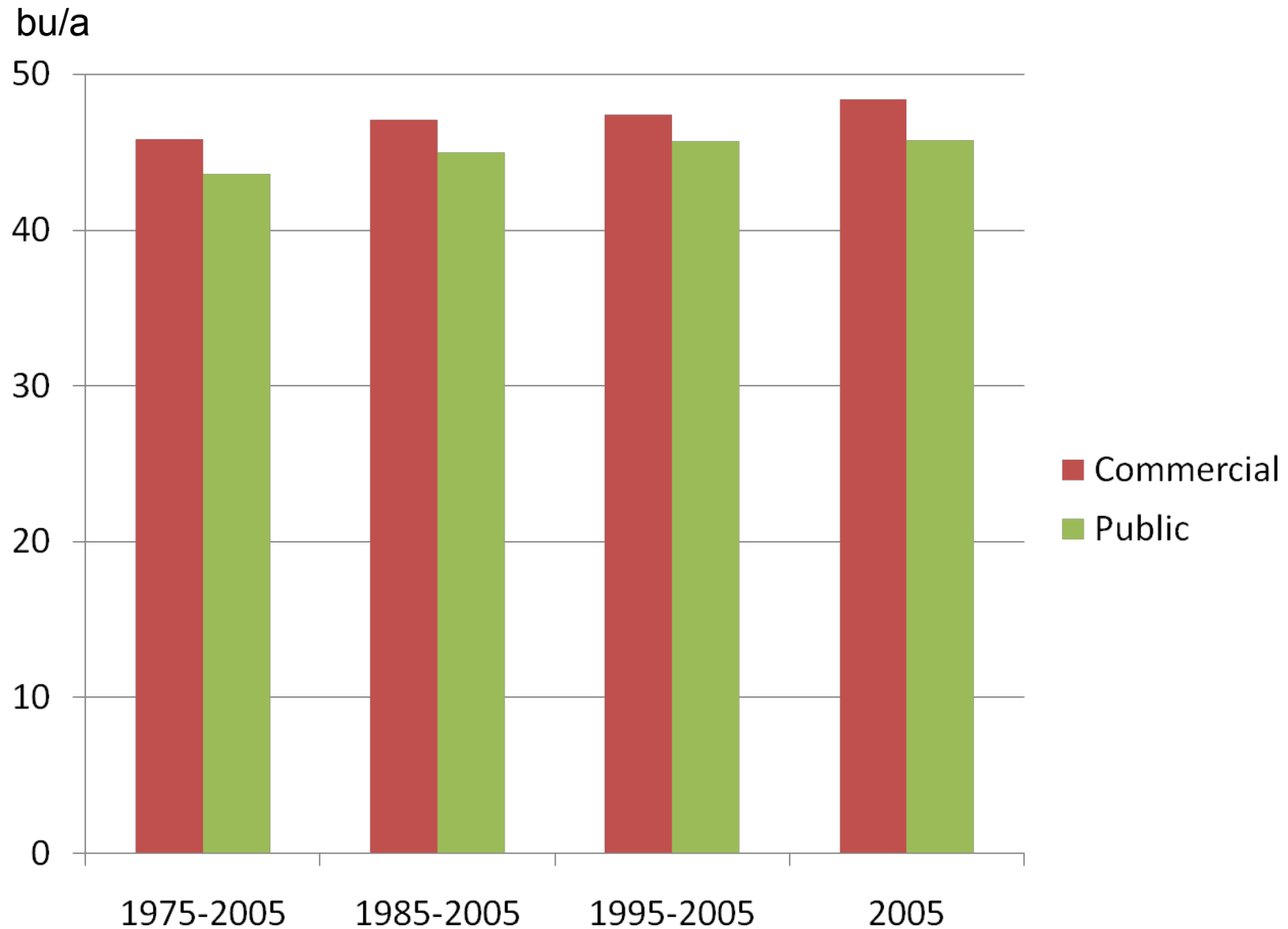
1935 - 2005

bu/a



1975 - 2005

Commercial vs. Public (1975-2005) Maturity Group VI

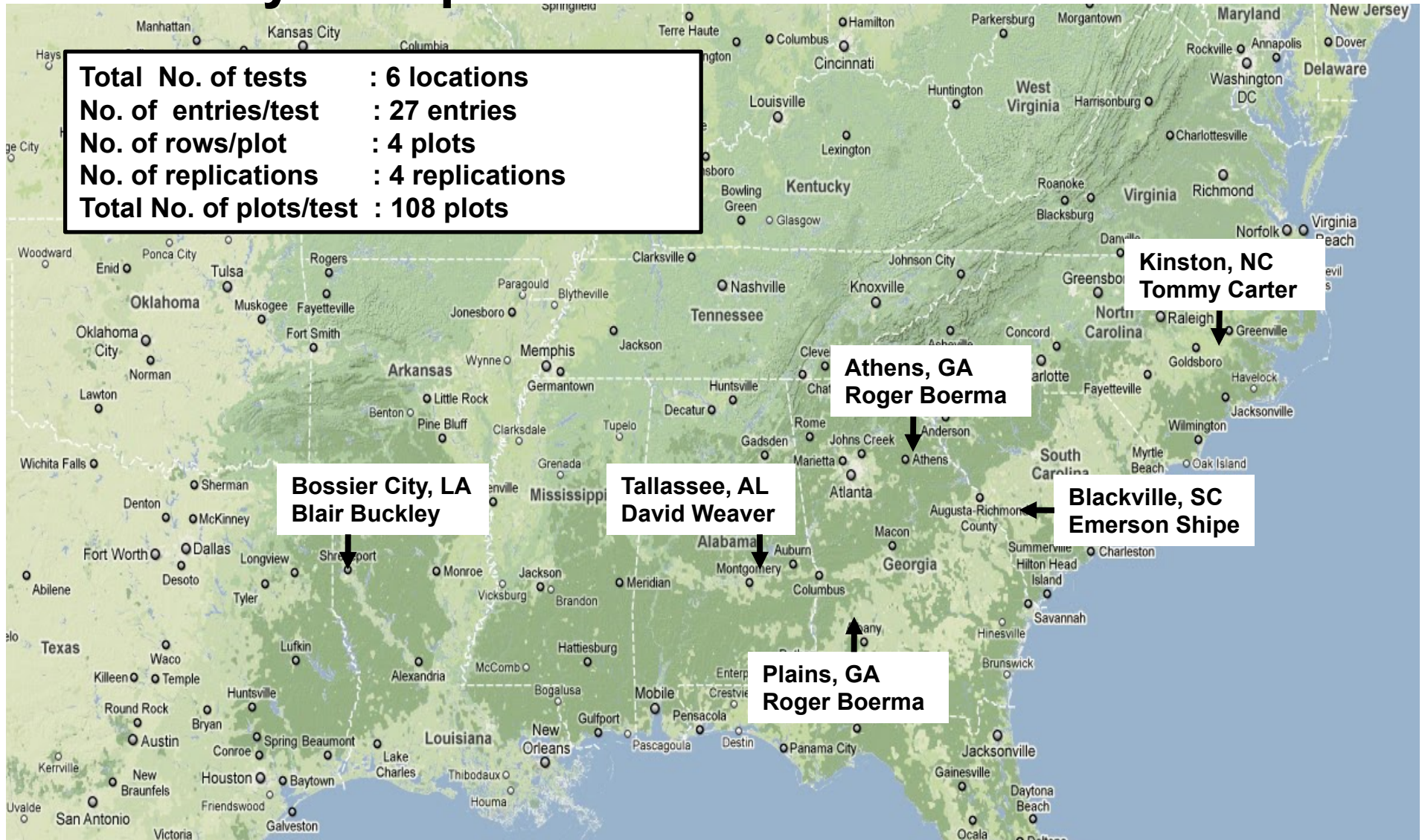


Maturity Group VII Cultivars

	Soybean Cultivars		
Decade	Public	Commercial	Total
1935	-	-	-
1945	CNS, Roanoke	-	1
1955	Jackson	-	2
1965	Bragg	-	2
1975	Ransom, GaSoy17, Braxton	1	4
1985	Thomas, Stonewall	3	6
1995	Hagood, Cook, Benning	3	13
2005	NC Raleigh, Woodruff, N7002	5	10
Total	15	12	27

Maturity Group VII: Collaborators and Locations

Total No. of tests : 6 locations
No. of entries/test : 27 entries
No. of rows/plot : 4 plots
No. of replications : 4 replications
Total No. of plots/test : 108 plots



Kinston, NC
Tommy Carter

Athens, GA
Roger Boerma

Bossier City, LA
Blair Buckley

Tallassee, AL
David Weaver

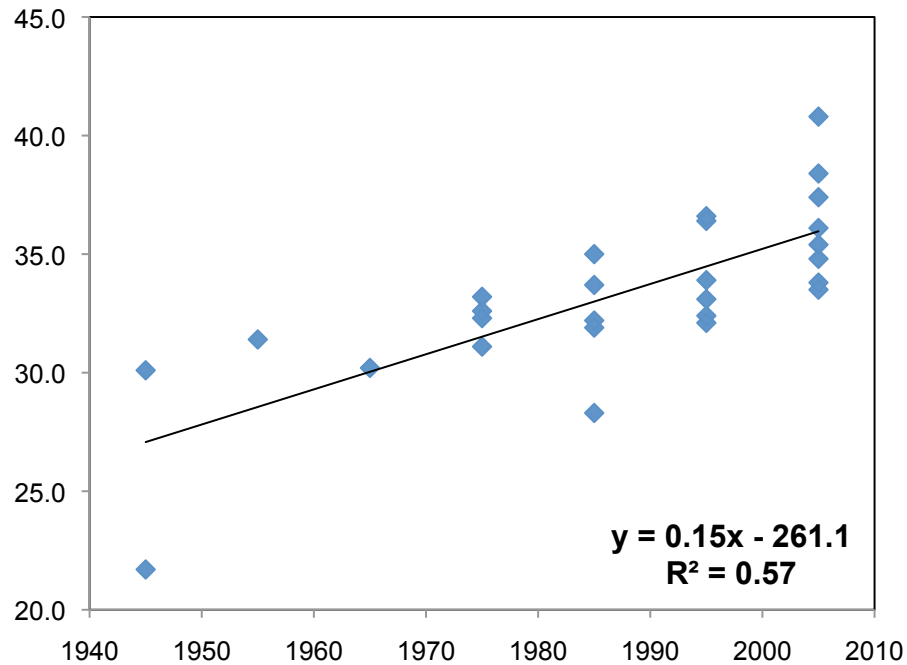
Blackville, SC
Emerson Shippe

Plains, GA
Roger Boerma

Yield vs. Year of Release

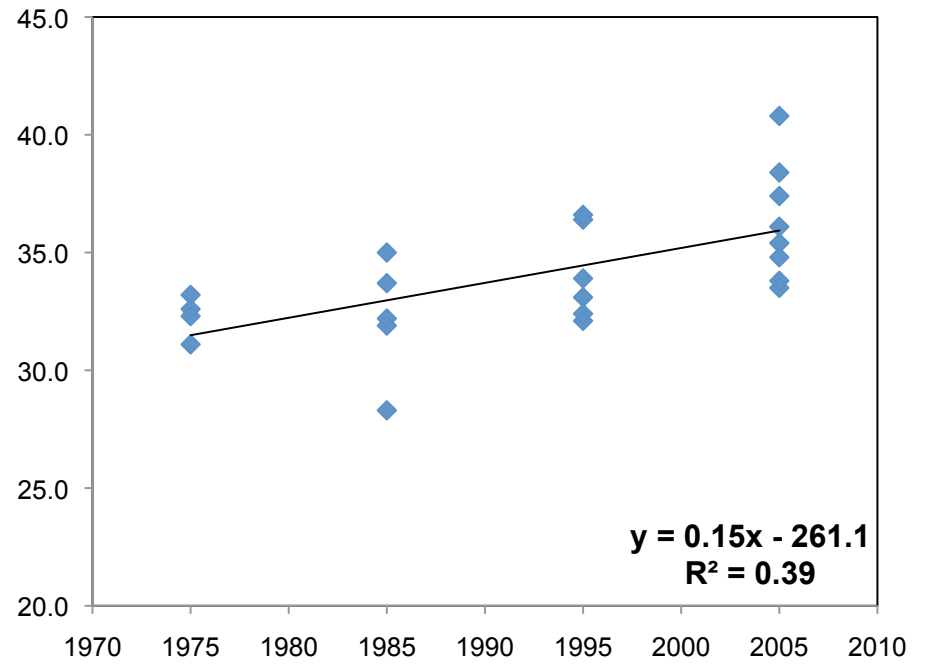
Maturity Group VII

bu/a



1945 - 2005

bu/a

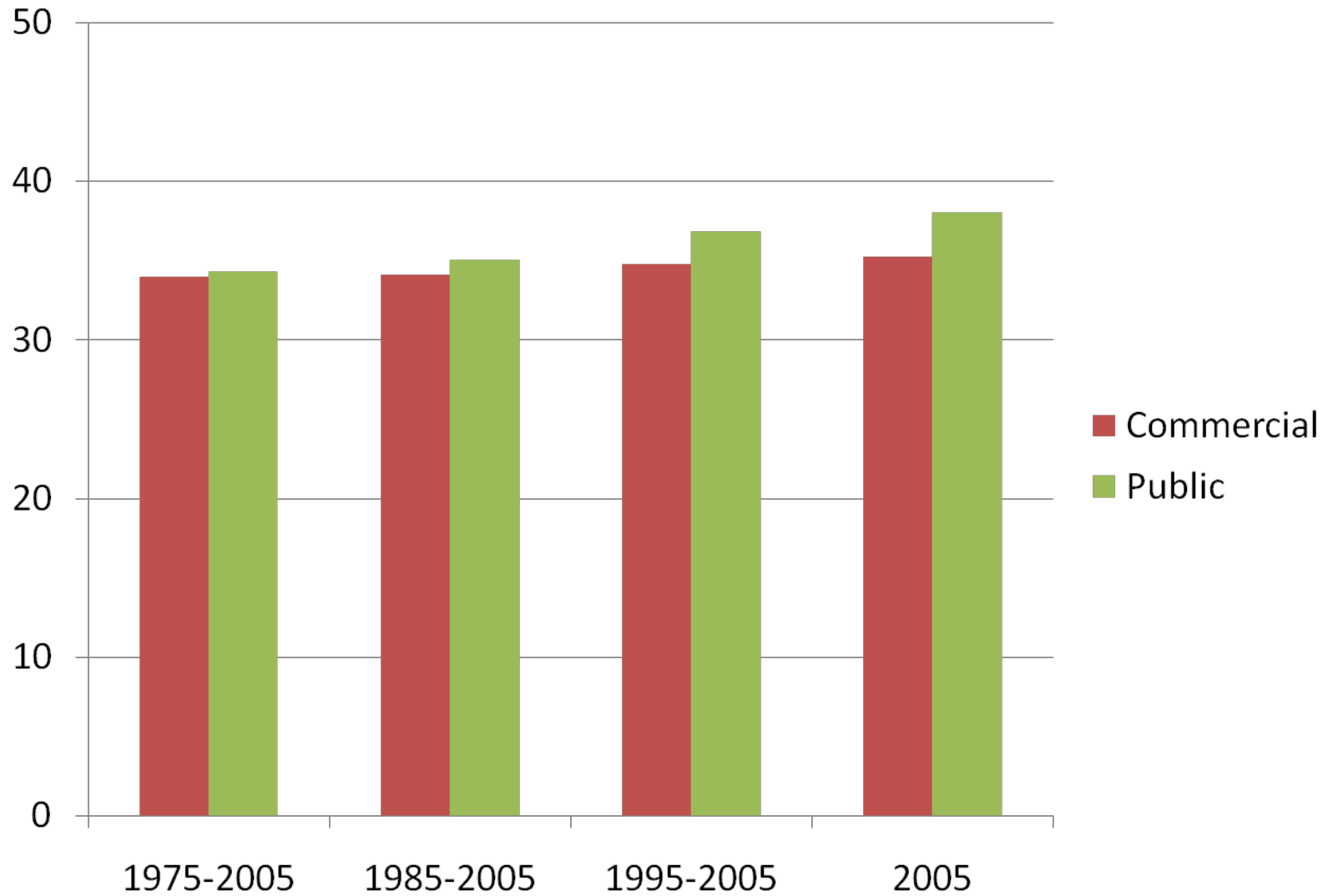


1975 - 2005

Commercial vs. Public (1975-2005)

Maturity Group VII

bu/a



Summary

- **Soybean breeders (public and commercial) continue to make genetic gain in seed yield**
- **The rate of gain does not appear to have increased in MG V, VI, and VIII since the enactment of Plant Variety Protection Act**
- **Public-sector varieties were greater in seed yield in MG V and VII and commercial-sector varieties in MG VI, but public cultivars lack desired transgenic herbicide tolerance**
- **We need a second year of data especially in MG VII**