

BOLT™ technology



A new herbicide system for cleaner fields and greater management flexibility

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Pioneer® brand soybeans with BOLT™ technology

What it is

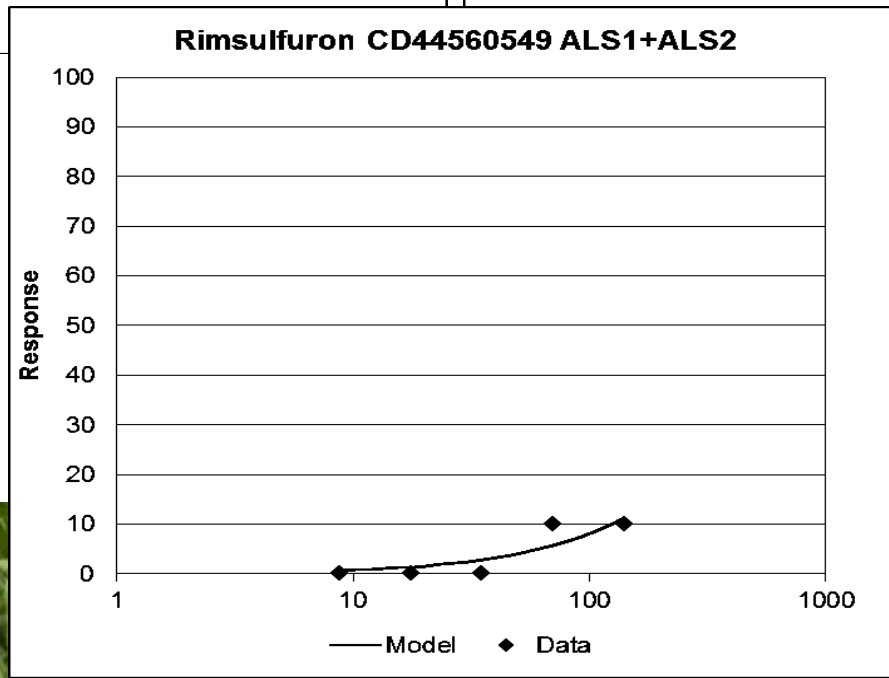
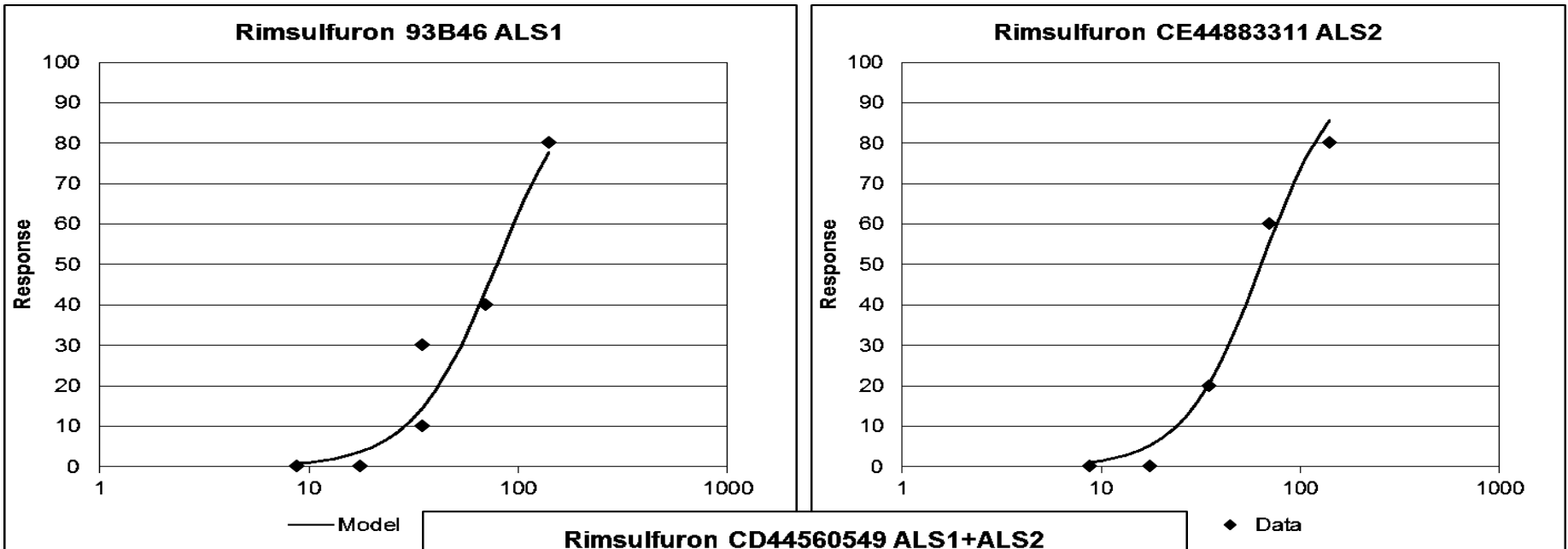
- BOLT = Als1 + Als2 non-transgenic herbicide-tolerant soybean trait
- Enables farmers to use certain sulfonyleurea chemistries with their soybeans in new ways for more weed control options
- Pioneer brand soybeans with BOLT technology also contain the Roundup Ready® trait

What it isn't

- BOLT technology is not the DuPont™ STS® gene = Als1 only



Synergy of *Als1* and *Als2*: basis of new patent application



BOLT Technology Benefits

- 1. Zero-day plant-back after key DuPont burndown herbicides like LeadOff®**
- 2. Peace of mind following DuPont™ Finesse® Cereal & Fallow herbicide use in wheat**
- 3. More ways to control problem weeds by using sulfonylurea herbicides* at rates labeled for DuPont™ STS® soybean**
- 4. Offers better tolerance to drift rates of certain ALS herbicides used on rice**



BOLT™ Soybeans

P49T09BR & P50T15BR

- ALS1 & ALS2
- Tolerant to SU herbicides
- Drift from rice herbicides
- Soybeans behind wheat herbicides
- Leadoff burndown

Non STS

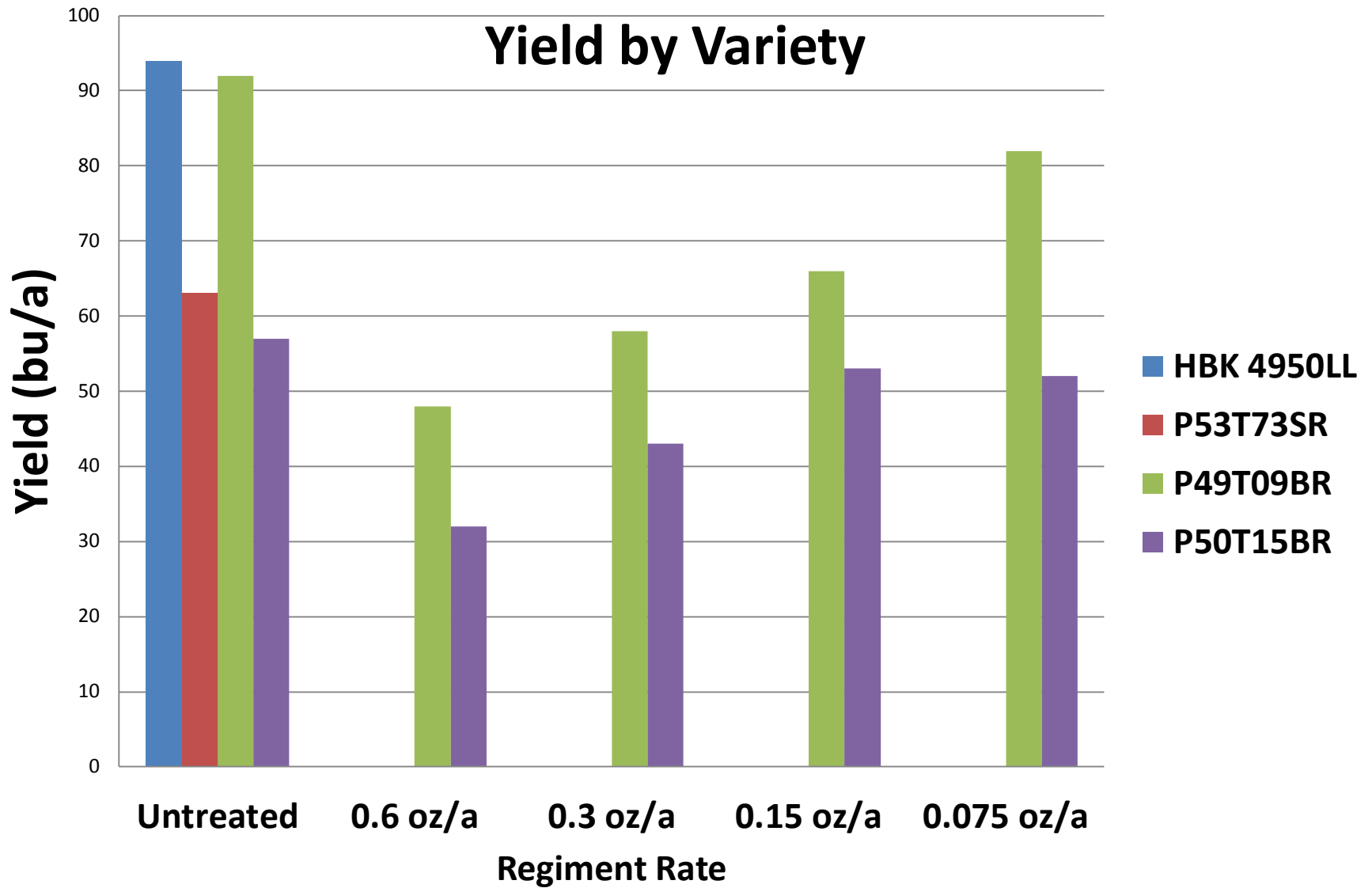
STS

P49T09BR



Drift simulation with Regiment (Bispyribac-sodium)

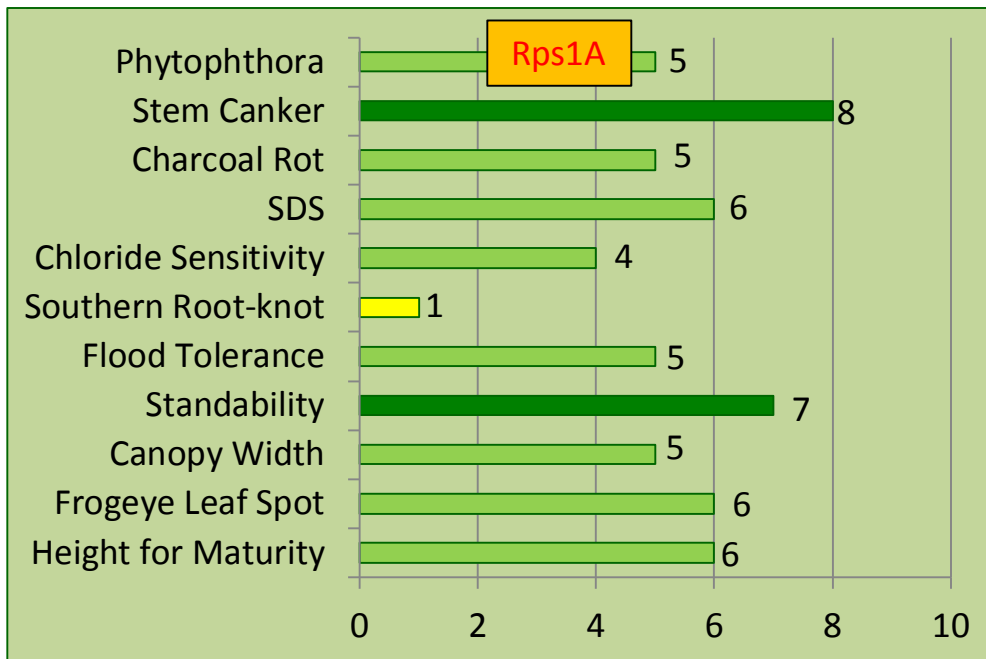




P49T09BR

RM 4.9

- New BOLT offering
- Highly suited for full season and double crop
- Fits most soil types
- Suited for limited irrigation and dryland
- Allows ALS herbicide flexibility

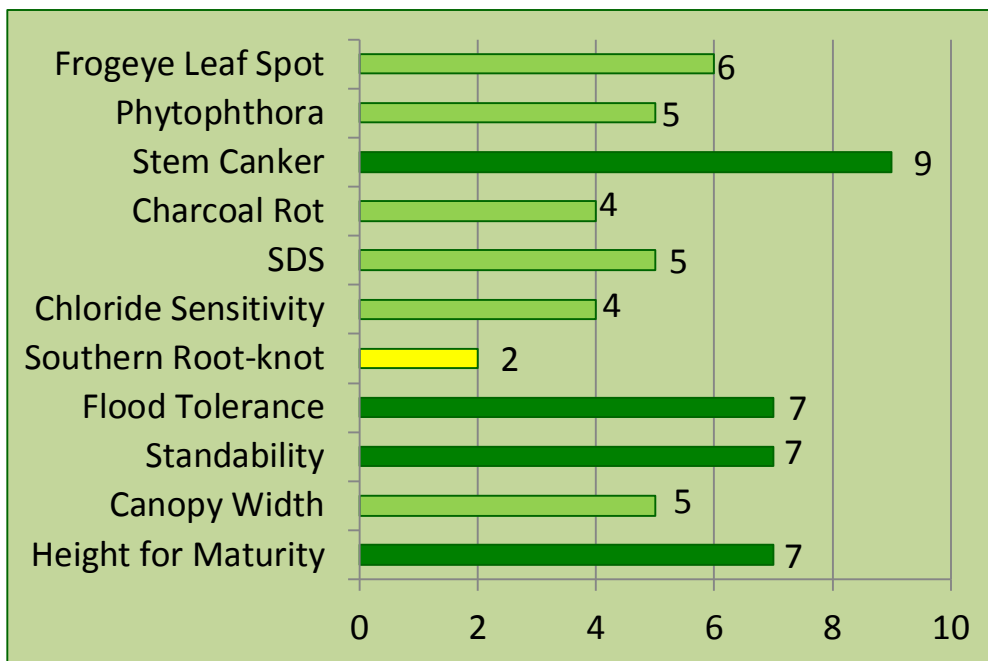


Metribuzin: Tolerant PPO: Susceptible

P50T15BR

RM 5.0

- New BOLT offering
- Highly suited for full season and double crop
- Fits mixed to light soils
- Suited for limited irrigation and dryland
- Allows ALS herbicide flexibility



Metribuzin: Tolerant PPO: Susceptable



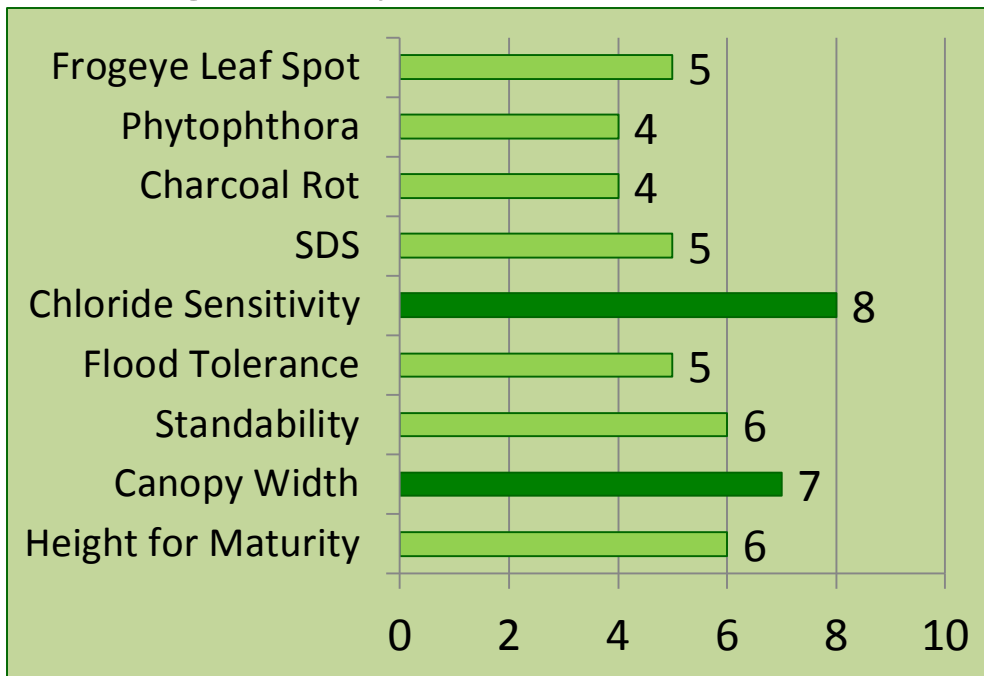
P38T61BR

RM 3.8

- New 3.8 Bolt™ variety
- Wide canopy
- Suited for most soil types
- Irrigated and productive dryland
- Light tawny/brown

NEW PRODUCT!

TESTING IN 2016



Metribuzin: Tolerant PPO: Resistant



HERBICIDE RESISTANT
SEE TAG



PIONEER
BRAND

**SOYBEAN
SEED**

CRACK
the
YIELD CODE
with a



T Series Soybeans