



Impact of Seeding Depth and Simulated Bird Damage on Corn Yield

2014 Learning Center Demo Report
Monsanto Learning Center at Scott, MS



Study Guidelines



- A corn demonstration trial was conducted at the Monsanto Learning Center at Scott, MS, to determine the impact of two planting depths on both kernel feeding and seedling damage by birds.
- Two DEKALB[®] brand corn products (DKC66-97 and DKC62-08 brands) were chosen for this demonstration.
- Corn was planted on April 21, 2014 and harvested on August 10, 2014.
- Planting depth for each corn product was 1.5 inches and 2.75 inches.
- All field work was according to local standards.

Study Guidelines



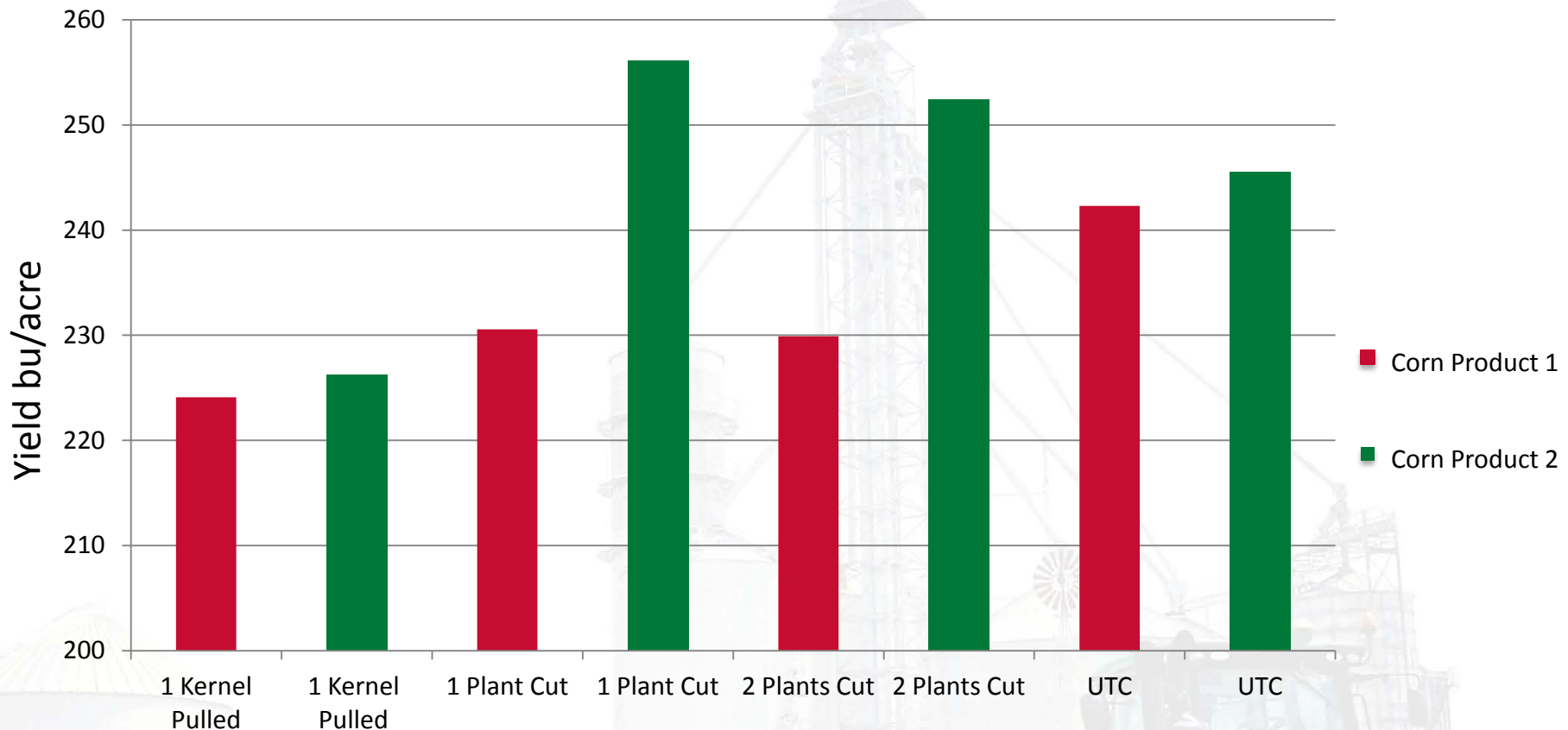
- Bird damage treatments included 50 samples each of the following 4 plant treatments at 2 planting depths:
 1. Untreated check (UTC) – 5 plants undamaged.
 2. One kernel removed from the soil. This simulated removal of a kernel from the soil by birds.
 3. One plant cut. This simulated a plant pulled on and broken by a bird attempting to feed on the plant.
 4. Two plants cut. This simulates twice as much bird damage as three above.
- Treatments were imposed when plants reached 1 true leaf.
- All corn was planted enough out of synch with other corn in the area so it experienced little or no natural bird damage.
- Each 5-plant sample was collected and individually hand shelled for yield estimations.

Results and Discussion



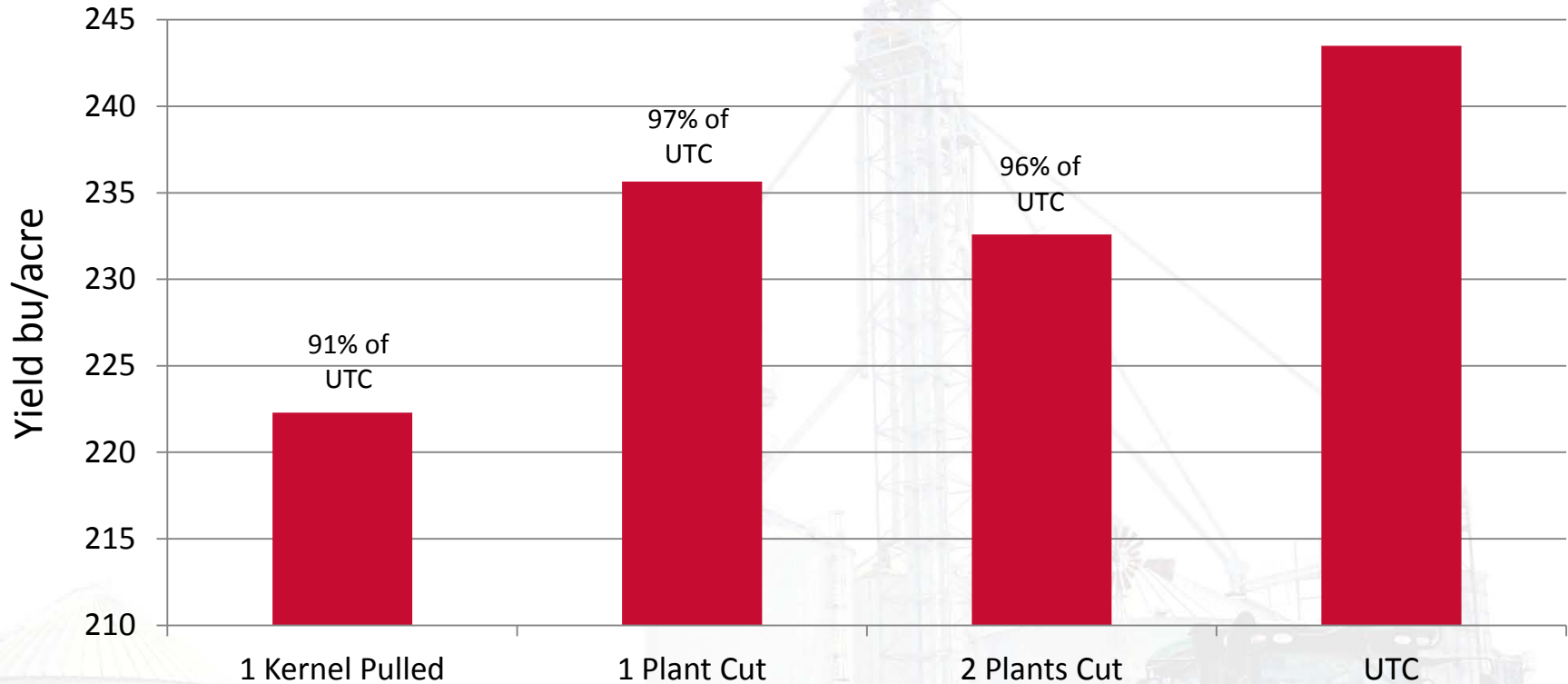
- Corn planted at 2.75 inches averaged about 11 bu/acre more than corn planted at 1.5 inches.
- Removing one kernel to simulate bird feeding resulted in a yield reduction of about 10 bu/acre and was the lowest yielding treatment.
- Cutting damage treatments across the 2 corn products resulted in an average yield reduction of about 4 bu/acre.
- These treatments affected 20% or 40% of the treatment population (1 plant = 20% and 2 plants = 40%).

Impact of simulated bird damage on yield potential of two corn products



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Impact of simulated bird damage on corn yield potential



Corn kernel removed to simulate bird damage



Impact of Seeding Depth and Simulated Bird Damage on Corn Yield

Corn plant cut to simulate bird damage



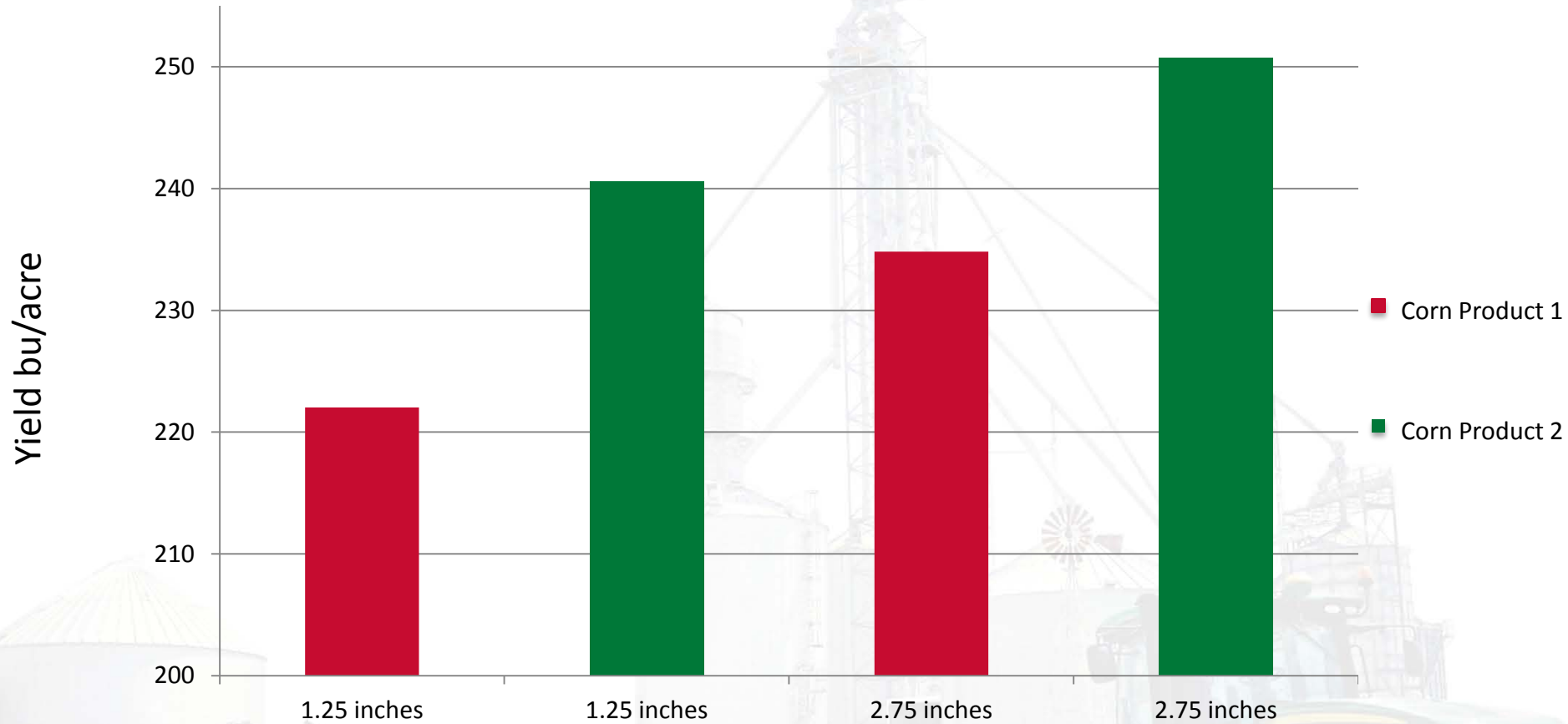
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Two corn plants cut to simulate bird damage



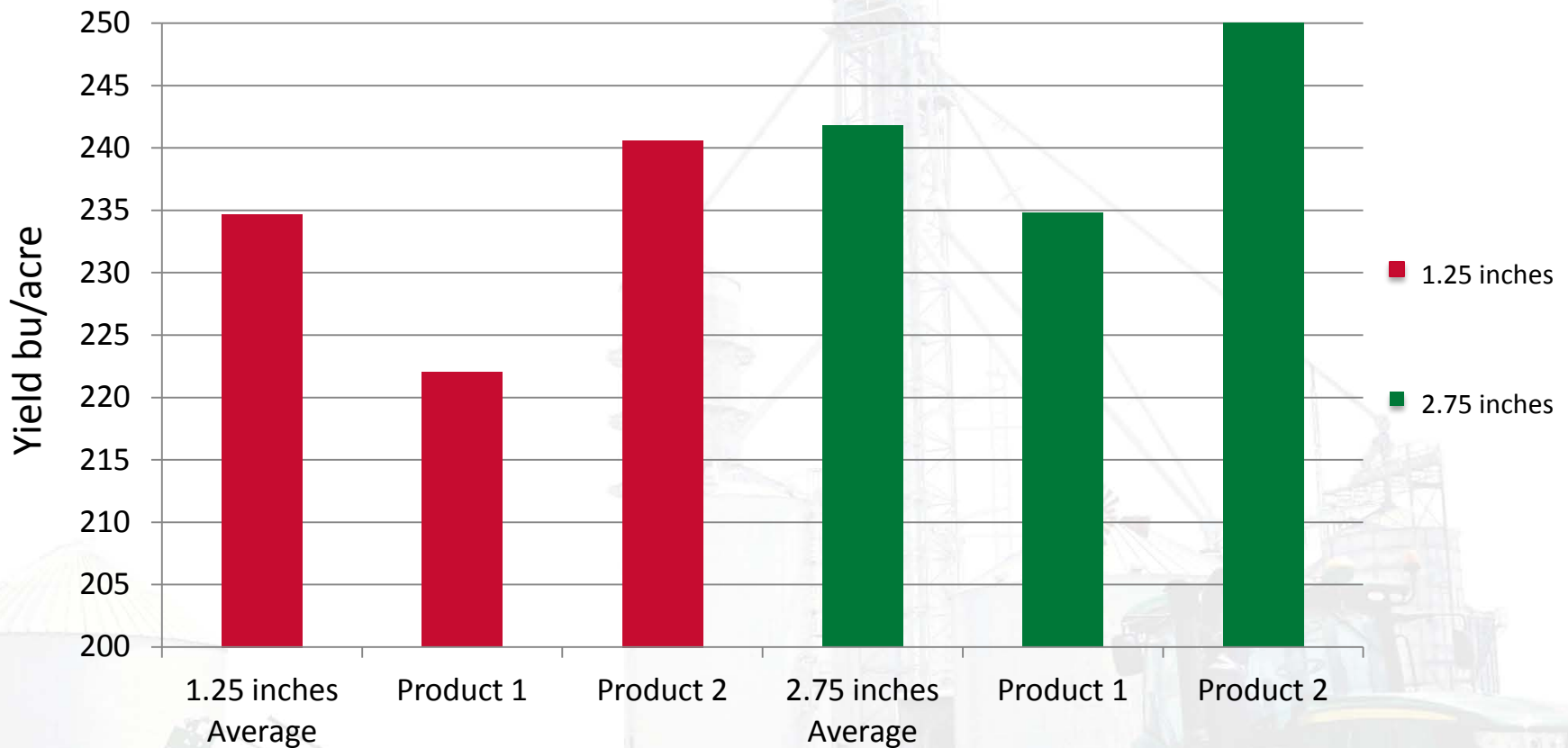
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Impact of planting depth on yield potential of two corn products



Impact of Seeding Depth and Simulated Bird Damage on Corn Yield

Impact of two planting depths on two corn products



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Legal Statements




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THANK YOU

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