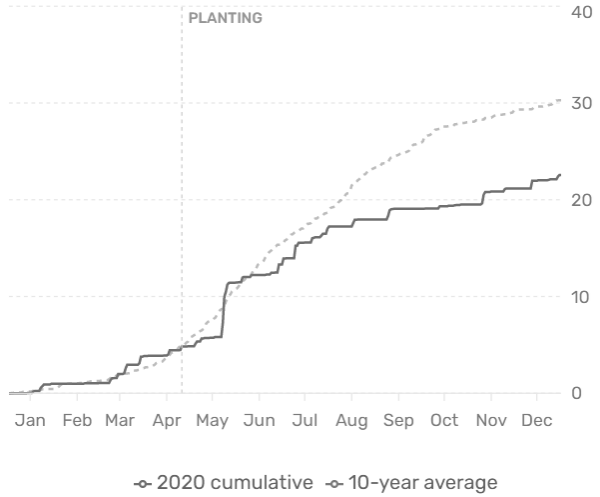
Group 2.1 versus Group 3.4 Soybean Maturity

Study ID: 1118121202001
County: Merrick
Soil Type: Lex loam occasionally flooded; Cozad loam wet sub-stratum
Planting Date: 4/25/20
Harvest Date: 9/22/20
Seeding Rate: 185,000
Row Spacing (in): 10
Reps: 4 total, 3 for yield, moisture, and net return
Previous Crop: Seed Corn
Tillage: No-Till
Herbicides: ***Pre:*** 6 oz/ac Authority® Supreme, 3 oz/ac Spartan® FL 4F on 4/10/20; 36 oz/ac Durango® on 4/30/20 ***Post:*** 1.33 pt/ac Me-Too-Lachlor™ II on 6/2/20; 3 pt/ac Warrant® on 6/20/20
Seed Treatment: PPST 2030, PPST 120+
Foliar Insecticides: None
Foliar Fungicides: None
Fertilizer: None
Irrigation: Pivot
Rainfall (in):



Introduction: With early planting of soybean (in April or as close to May 1 as possible), a longer-season variety may help take advantage of the longer growing season. However, some growers are also obtaining high yields with mid-group 2 varieties. The goal of this study was to determine if growers need to plant a longer-season maturity soybean to achieve optimum yields when planting early. A group 2 (Pioneer® P21A20) and group 3 (Pioneer® P34A50) were evaluated. The soybeans were planted on April 25 and harvested on September 22.

Results:

	Stand Count (plants/ac)	Moisture (%)	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Group 2.1 (Pioneer® P21A20)	142,750 A*	10.2 A	72 B	608.52 B
Group 3.4 (Pioneer® P34A50)	104,200 A	11.1 A	80 A	686.35 A
P-Value	0.114	0.669	0.073	0.074

*Values with the same letter are not significantly different at a 90% confidence level.
†Yield values are from cleaned yield monitor data. Bushels per acre corrected to 13% moisture.
‡Marginal net return based on $9.50/bu soybean, $78.37/ac for Pioneer® P21A20-21, and $80.11/ac for Pioneer® P34A50-34.

Summary:

- There were no differences in stand count or moisture between the two varieties evaluated. Variability in stand counts between the treatments may be due to adjustments made to the drill after the first replication to try to better hit the target seeding rate.
- The Pioneer® P34A50 yielded 8 bu/ac higher and had $77.83/ac greater profit than the Pioneer® P21A20.

Sponsored by: University of Nebraska Lincoln

In Partnership with: Nebraska CornBoard; Nebraska Soybean Checkoff; Nebraska CornGrowers Association; Nebraska Dry Bean Commission

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