

In-furrow DAP with Seed and Tolerance to Soil Acidity

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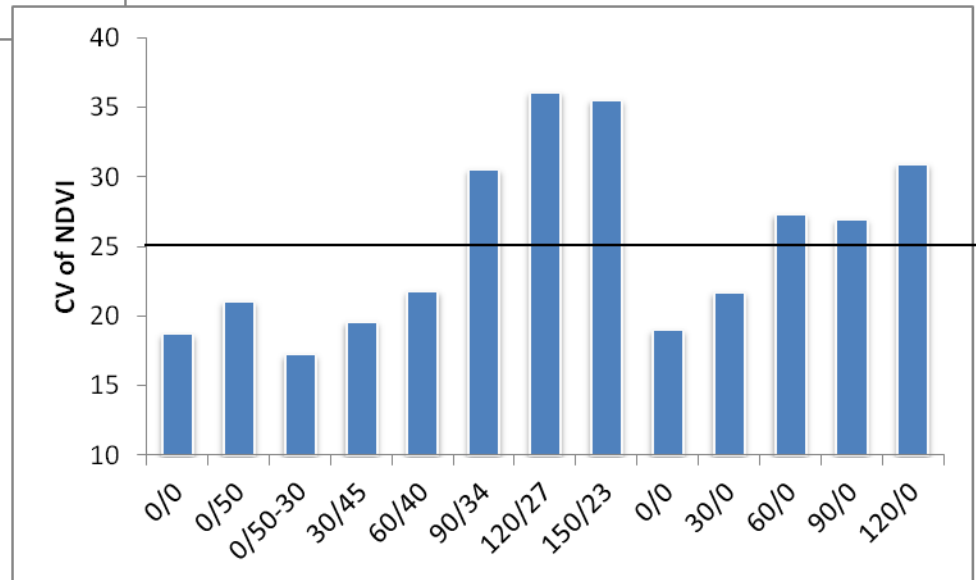
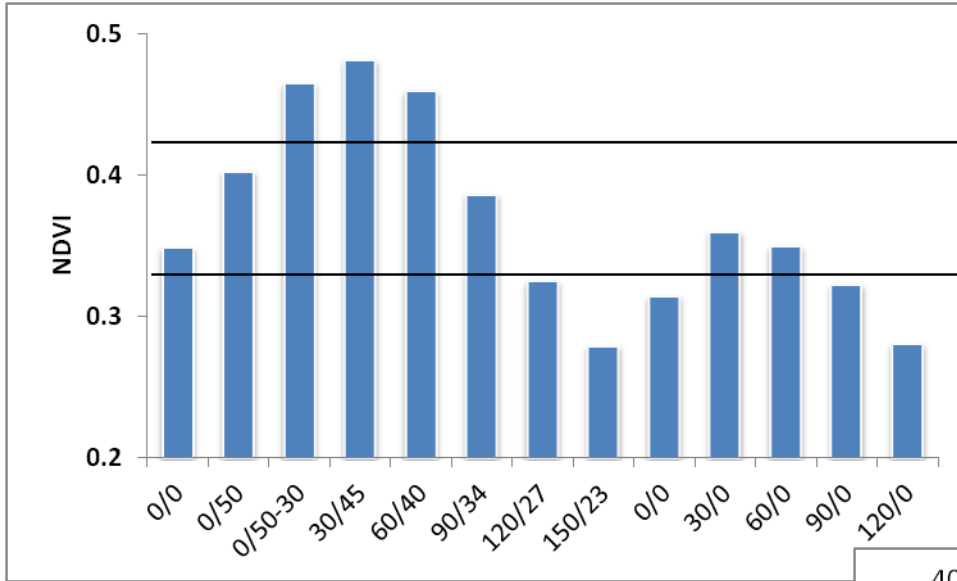
Oklahoma State University

Banded DAP with Seed

- Producers used to banding DAP with wheat for both means of starter and soil acidity alleviation.
- Canola however being a small oil seed is considered much more sensitive.
- 2 locs, Lahoma and Perkins

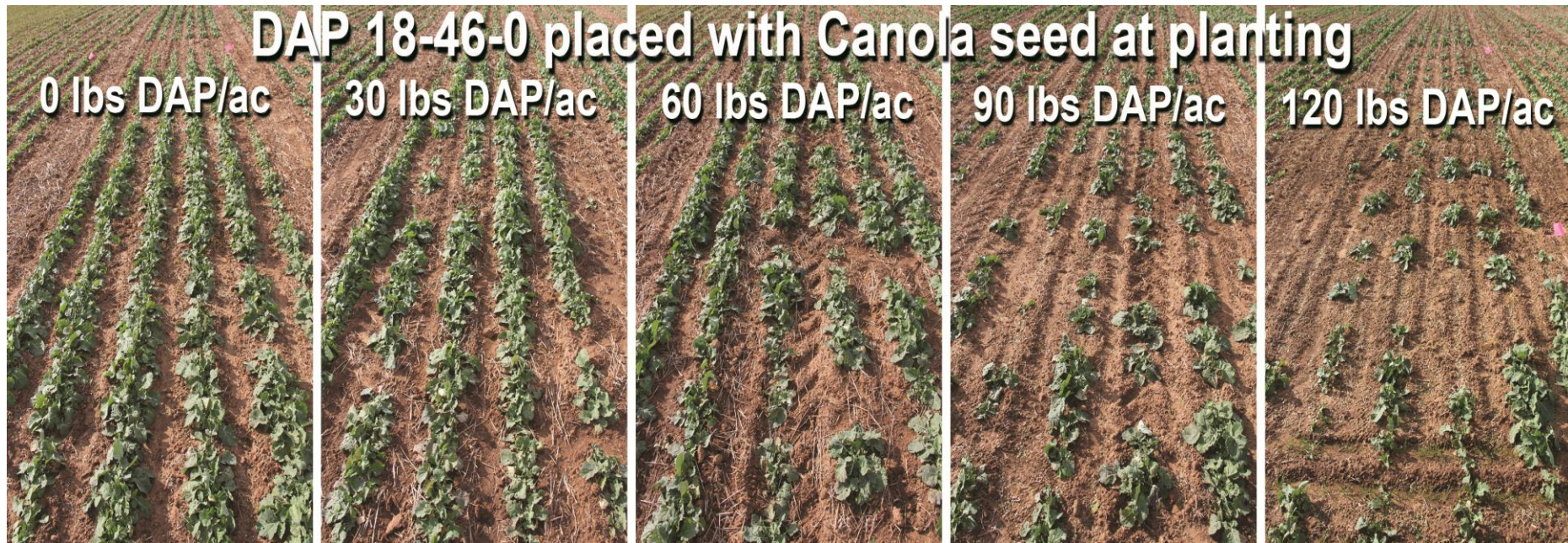
Trt	Lbs DAP w/seed	Lbs N/P with seed	N pre-plant	Top-dress N
1	0	0/0		
2	0	0/0	50	75
3	0	0/0	50 N / 30 P	75
4	30	5.4/13.8	44.6	75
5	60	10.8/27.6	39.2	75
6	90	16.2/41.4	33.8	75
7	120	21.6/55.2	27.4	75
8	150	27/69	23	75
9	0	0/0	0	125
10	30	5.4/13.8	0	119.6
11	60	10.8/27.6	0	114.2
12	90	16.2/41.4	0	108.8
13	120	21.6/55.2	0	103.4

Lahoma January

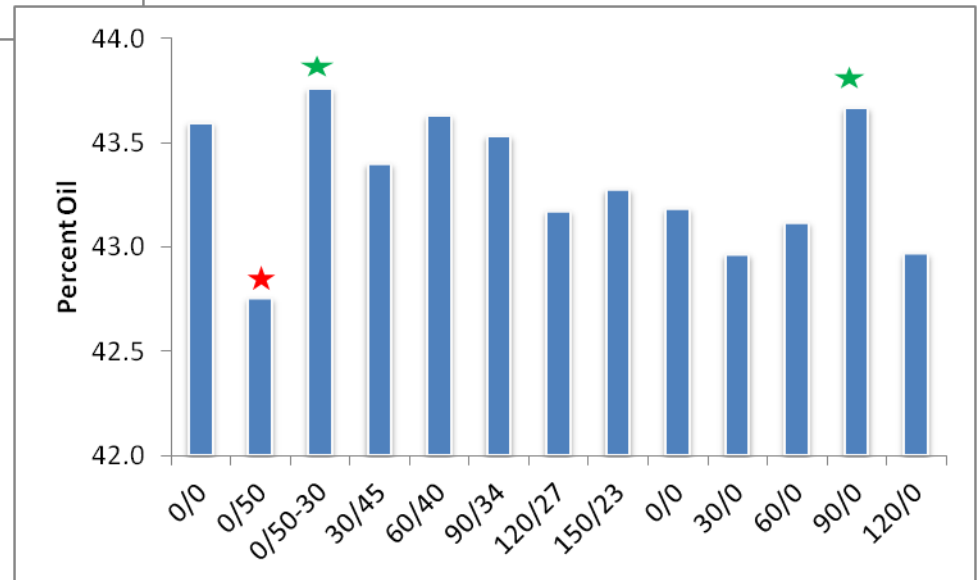
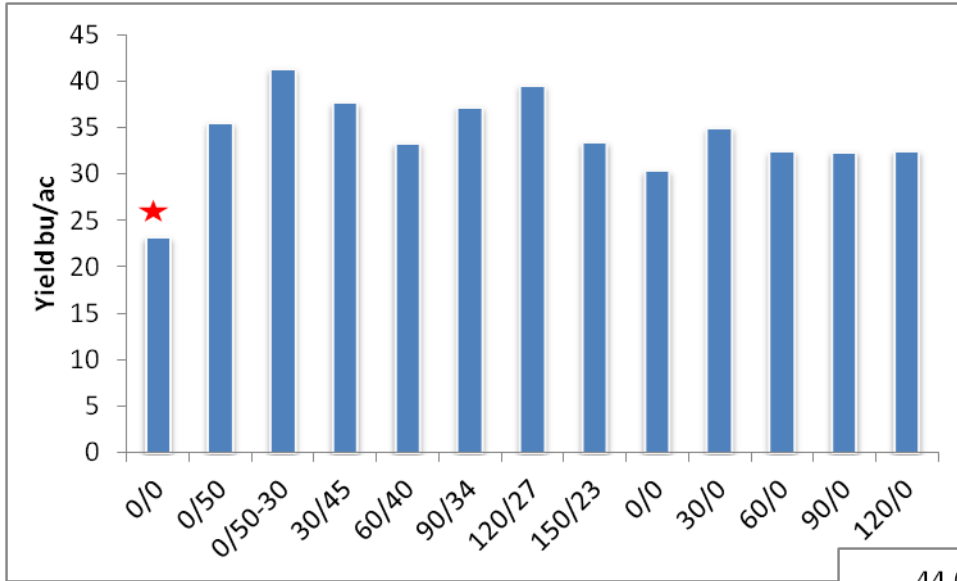


Lahoma in January

- Visible stand reduction in all plots with 60+ DAP in furrow with seed.



Lahoma Yld and Oil



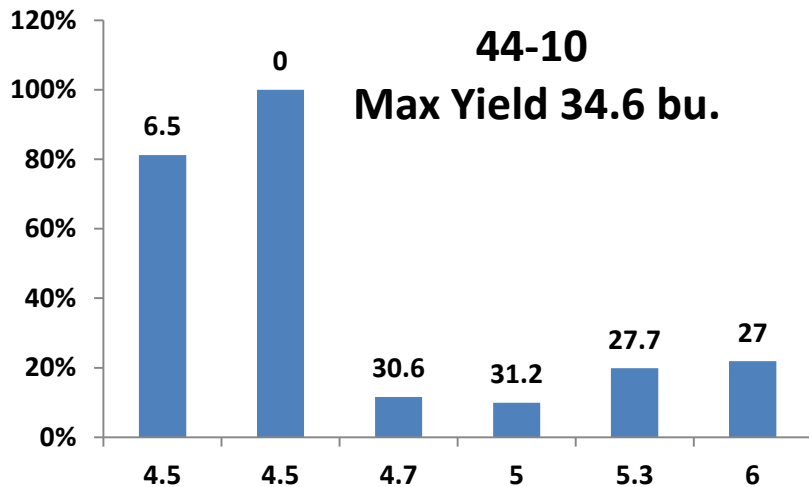
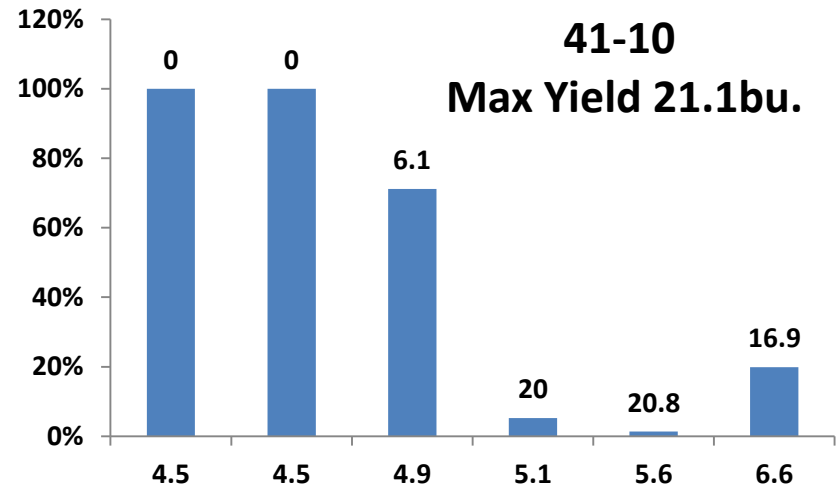
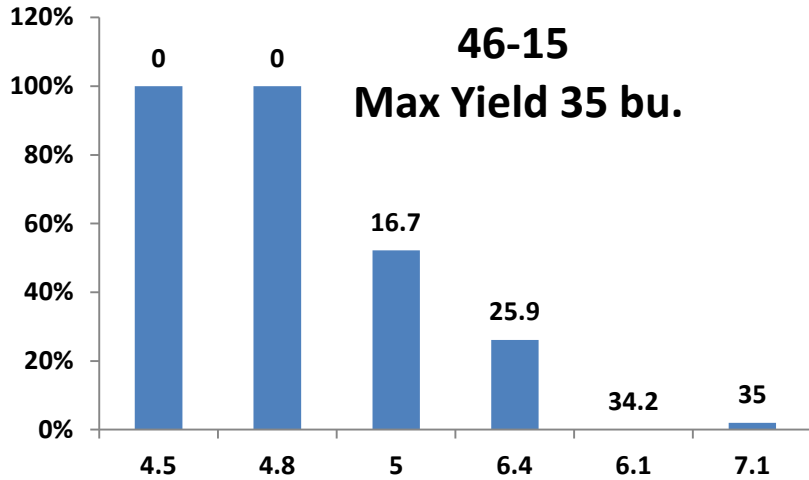
2012 Summary

- Lahoma Low STP, Perk no-till low pH
- Perkins, yields <15 bu/ac
- Both locations N only trt had significantly lower oil content.
- At Lahoma stand loss little impact on yield. However environment was very good.
- Recommendation of 30 lbs of DAP with seed for promoted early season growth.

Soil Acidity Impact on Canola

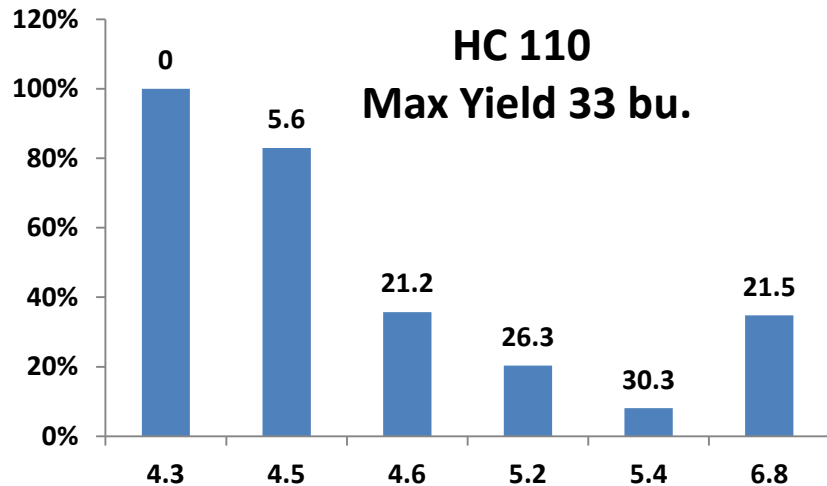
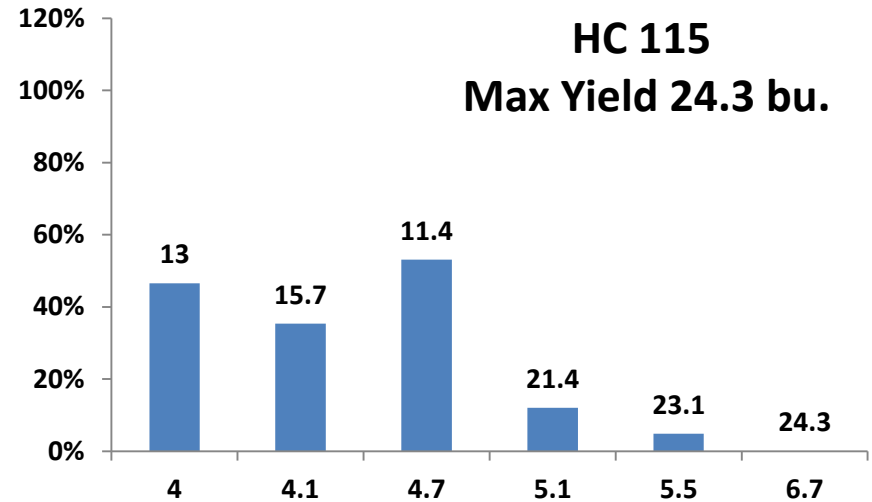
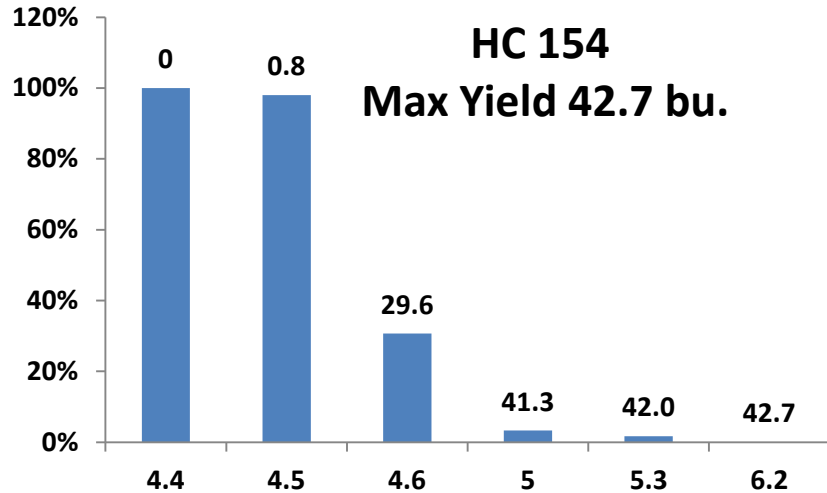
- Across Oklahoma many Canola producers noticed low spots in fields. In many cases the poor growth was in low pH.
- This study evaluated 6 of the most popular cultivars grown in a range of soil pH of 4 to 7.
- Cultivars
 - DK 41-10 HC 110
 - DK 44-10 HC 115
 - DK 46-15 HC 154

Dekalb % yld loss



41-10 had significant Shattering across all plots (except 2 lowest pH) 15-20 % loss, not accounted for in graph.

High Class % yld loss

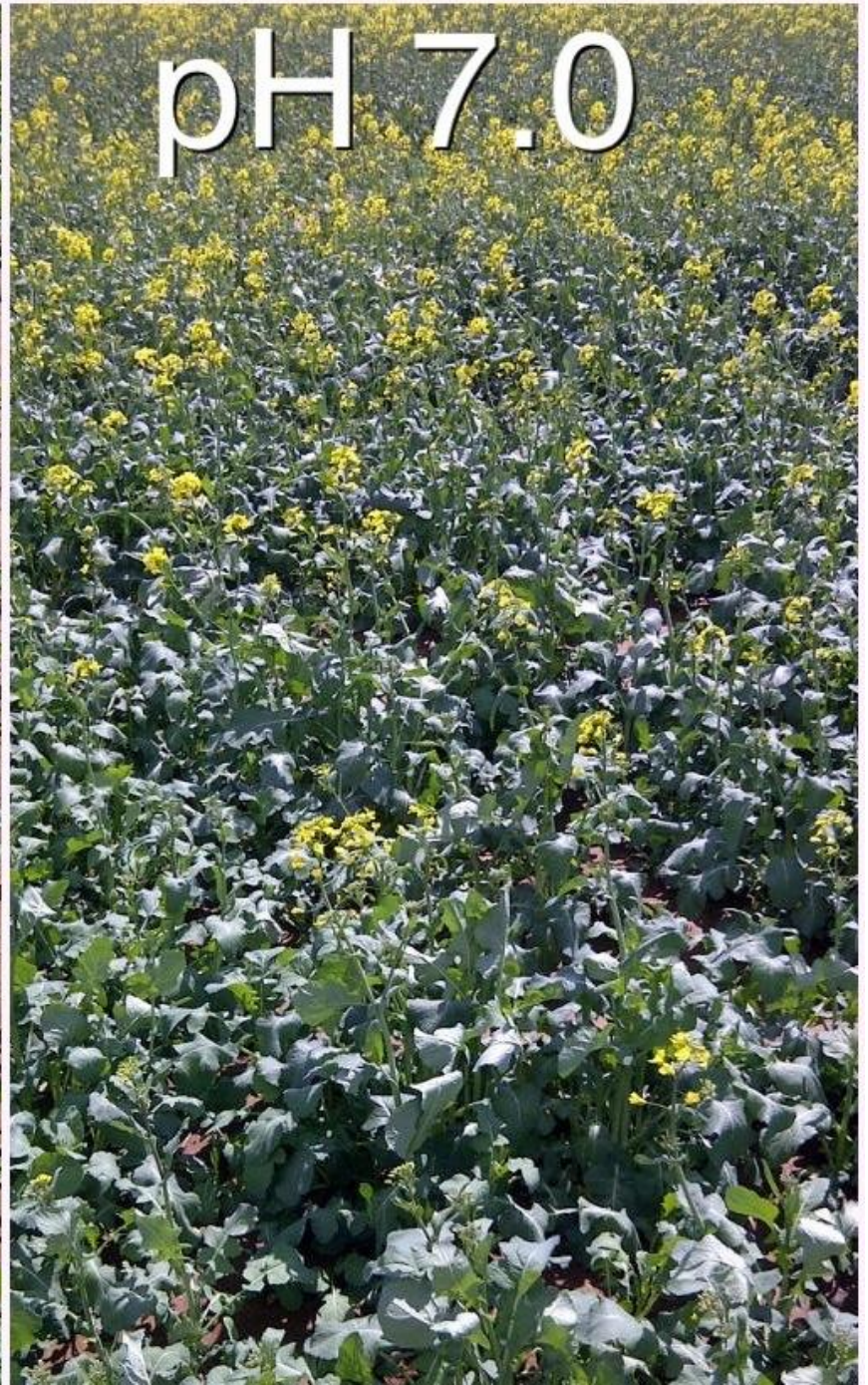


HC 115 had significant Shattering across all plots 20-25% loss, not accounted for in graph.

pH 4.0



pH 7.0



Soil Acidity x Cultivar

- In several Cultivar pH impacted Maturity/dry down. Higher pH's matured quicker and resulted in high % shatter.
- Soil pH < 4.5 resulting in 95% loss in all but 1.
- HC 115 Most tolerant
- DK 44-10 Second most tolerant
- Critical Soil pH level of 5.5

Thank you!!!



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