



Evaluation of ILeVO Seed Treatment

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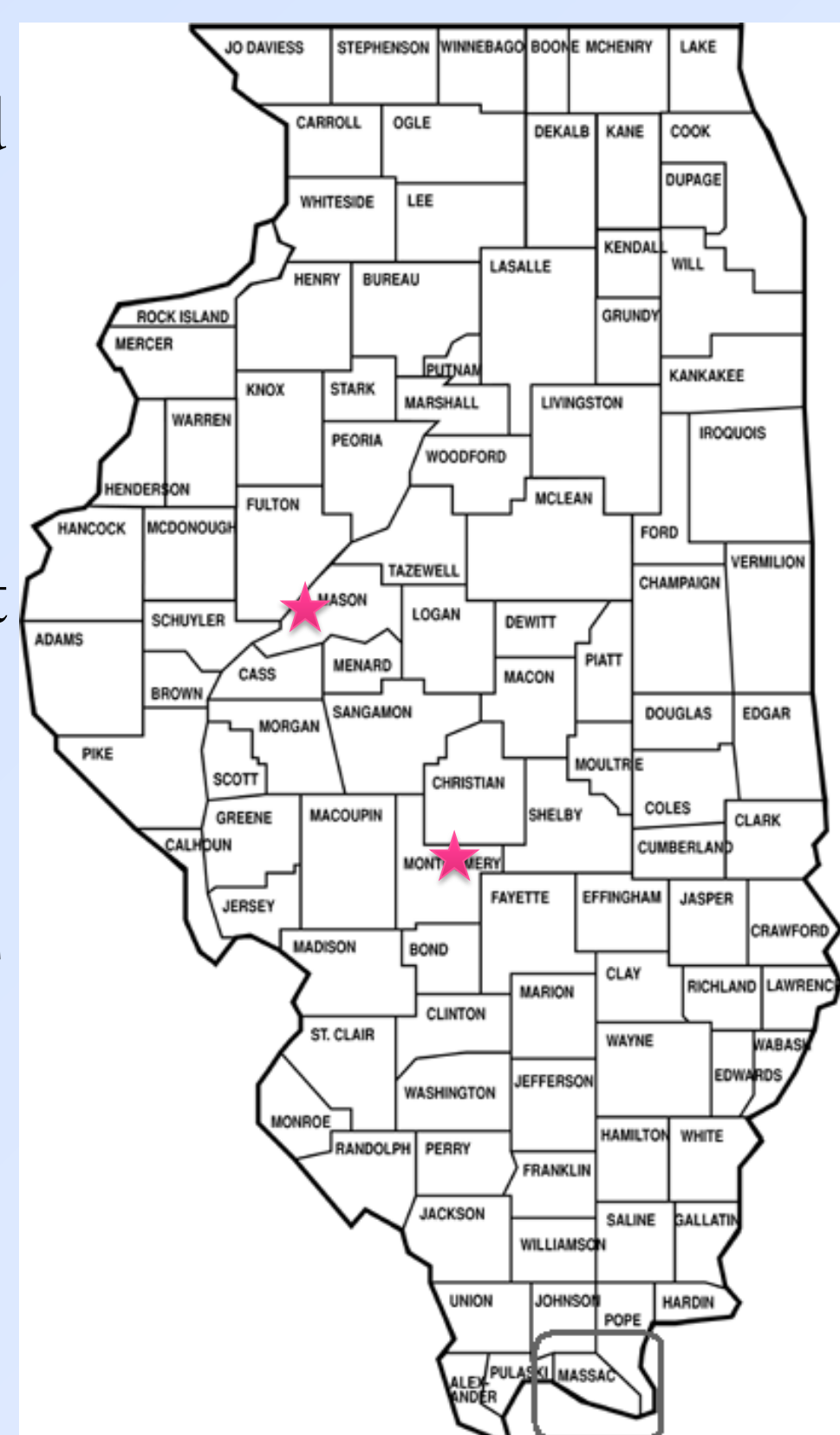
Introduction

ILeVO is a new seed treatment used to protect against Sudden Death Syndrome (SDS) and Soybean Cyst Nematode (SCN). My goal was to evaluate the effects of ILeVO on different soybean varieties. My objective was to identify the use of ILeVO and the effects it has on Sudden Death Syndrome severity and yield.



Methods

This study took place in two locations: Raymond, IL with drummer soil and good drainage; Havana, IL with sandy soil and adequately irrigation throughout the growing season. Both locations were planted at 156,000 plants per acre. Two varieties were observed with two different seed treatments and one control. All seeds were treated with Pioneer Premium Seed Treatment (PPST), a fungicide/insecticide. One treatment was only PPST treated seeds as the control. Clariva, a nematicide, was applied along with PPST for one treatment. ILeVO, a fungicide, was applied along with PPST for another treatment. Observations on all three treatments were taken throughout the growing season noting severity and vigor ratings.

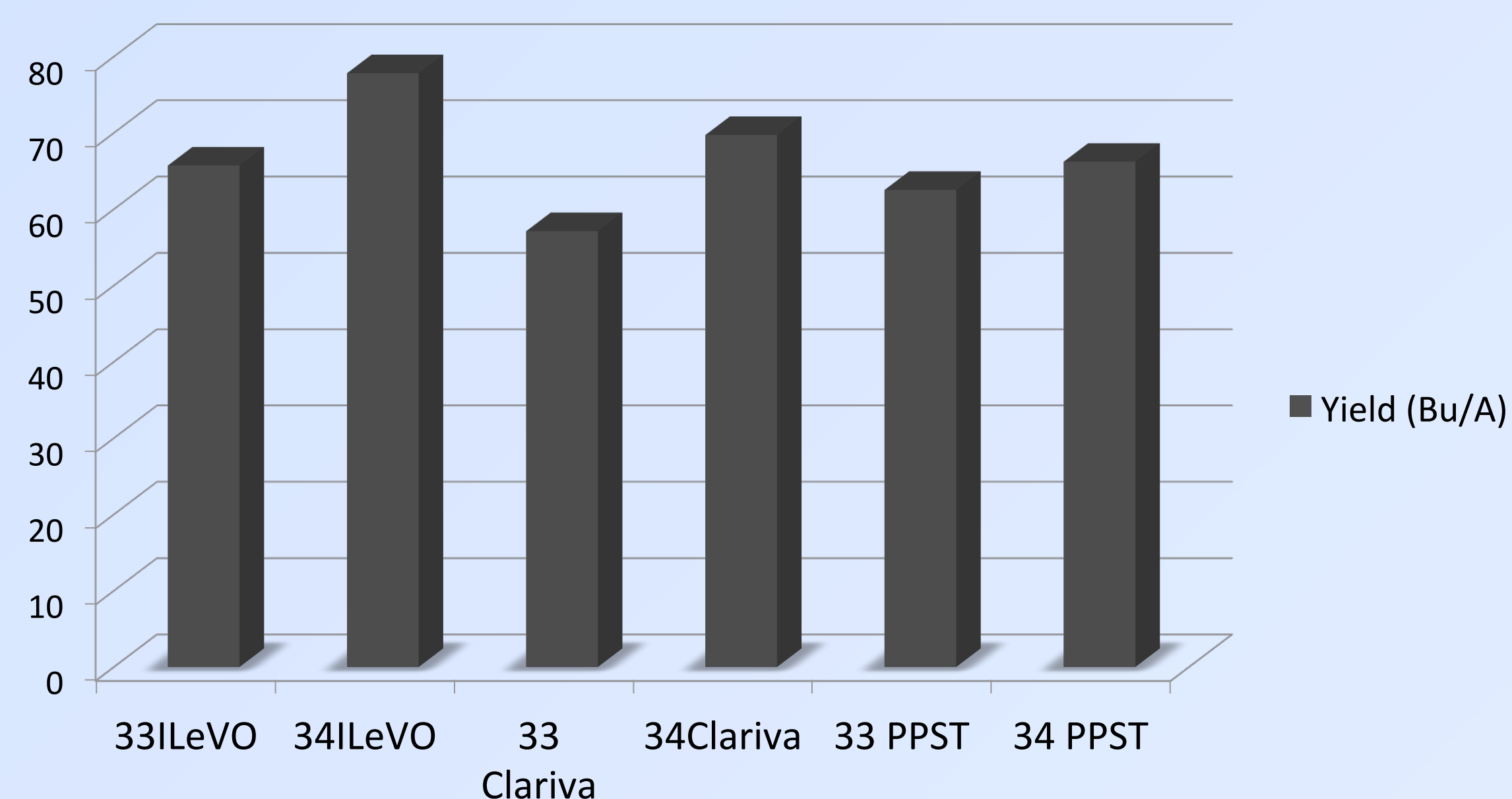


Soil samples were taken at both locations to identify SCN severity. Tissue samples were taken at R3 and sent to Pioneer Headquarters to isolate for SDS fungus, *Fusarium virguliforme*.

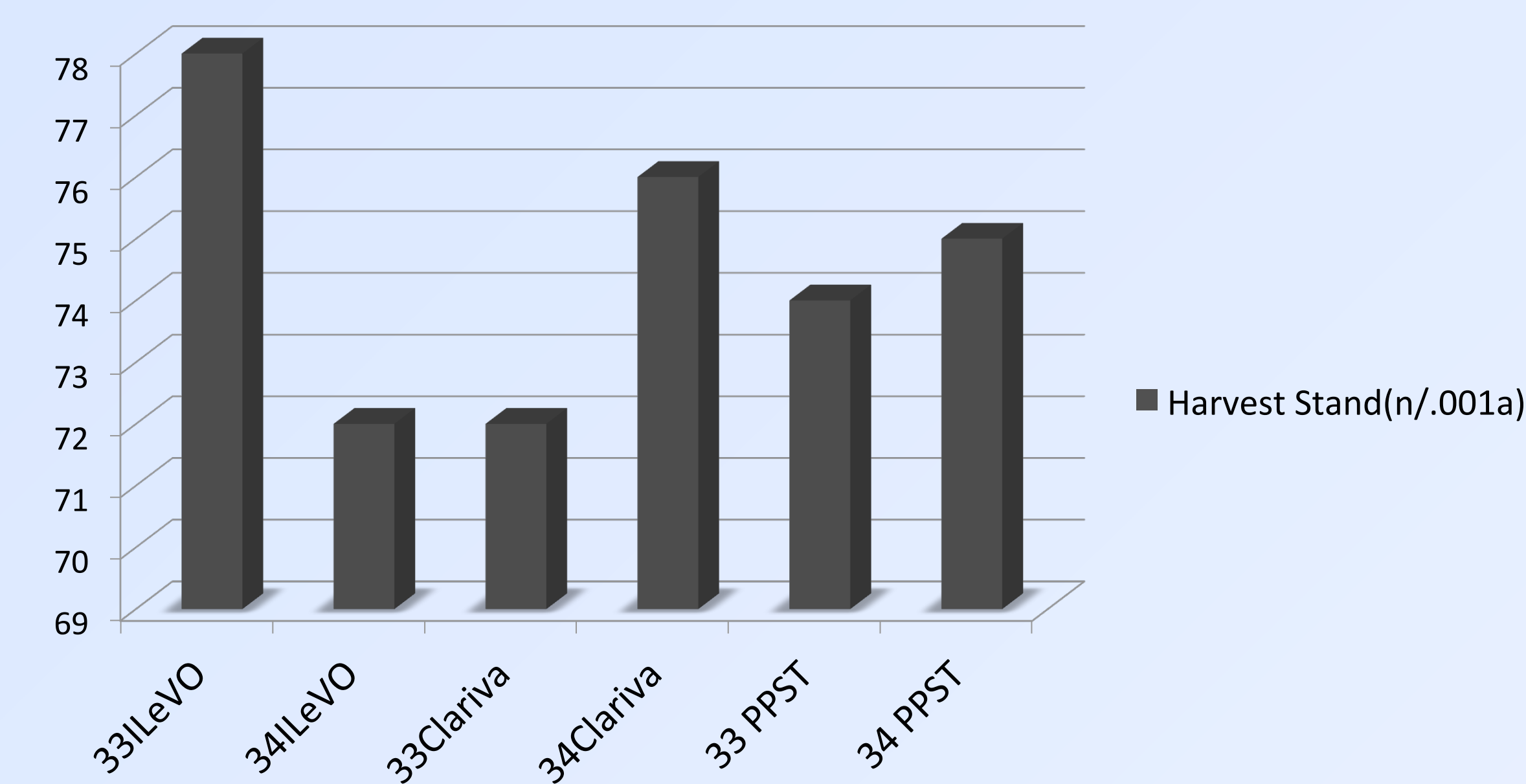


Results

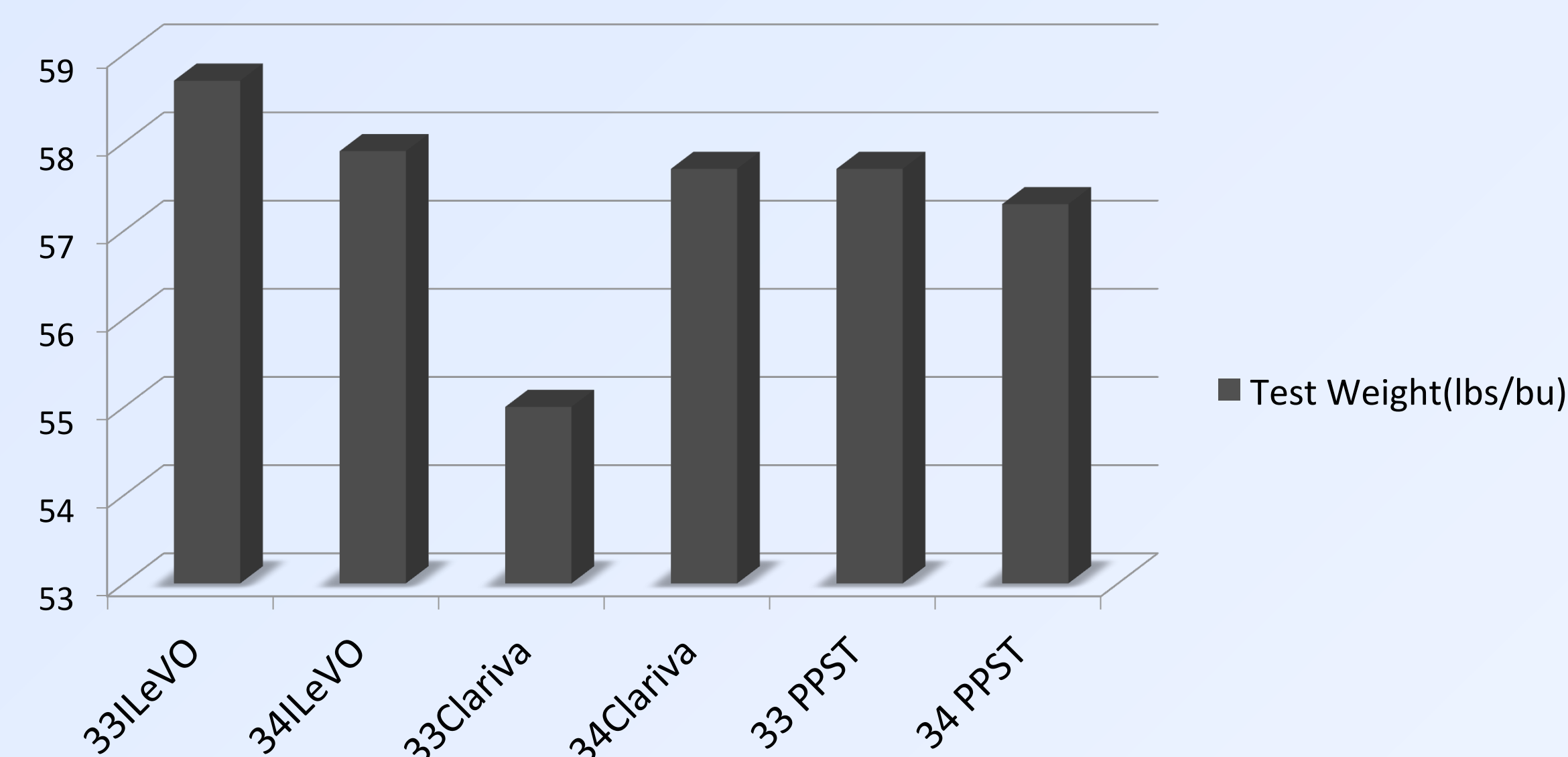
Yield Havana, IL



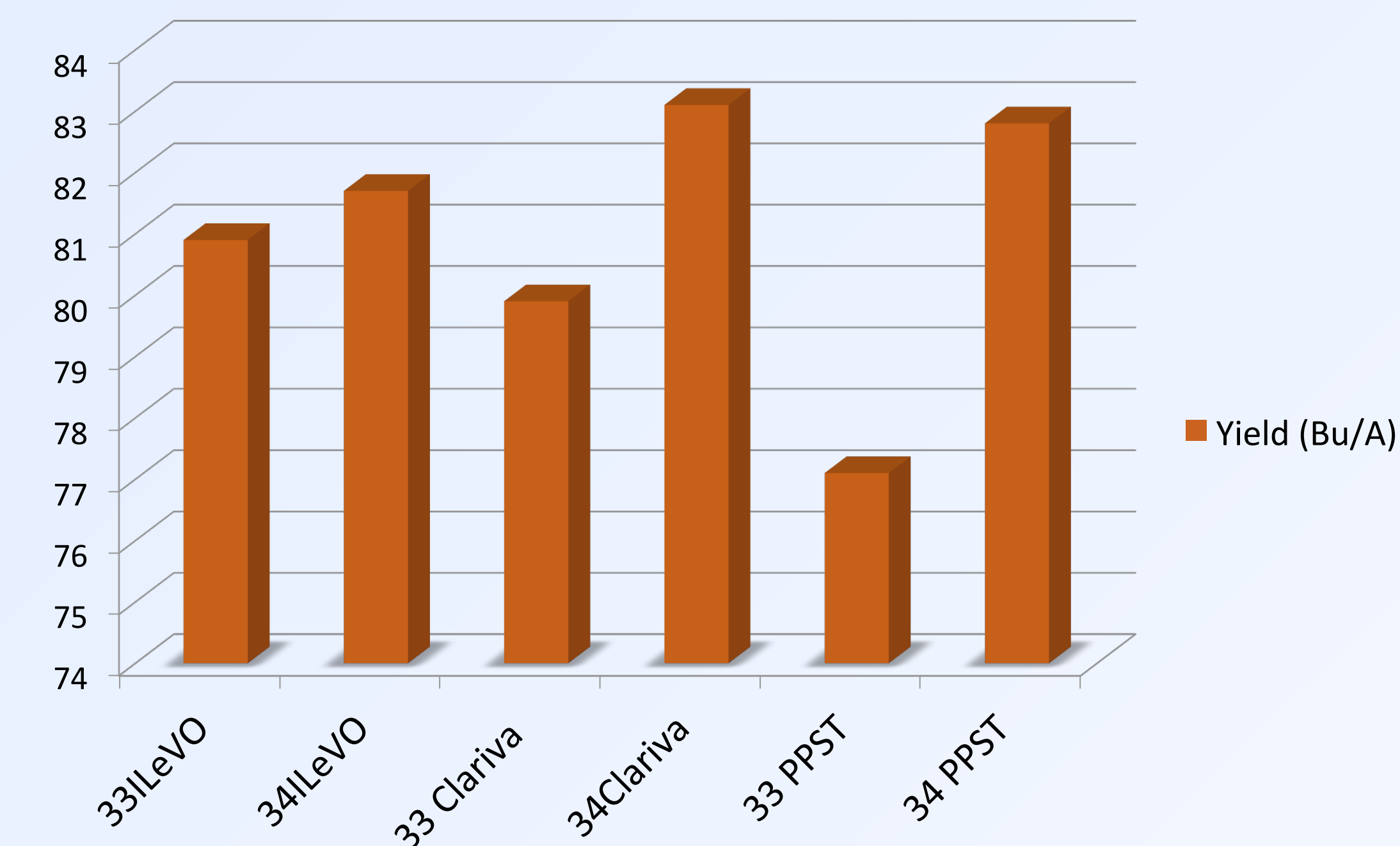
Harvest Stand Havana, IL



Test Weight Havana, IL

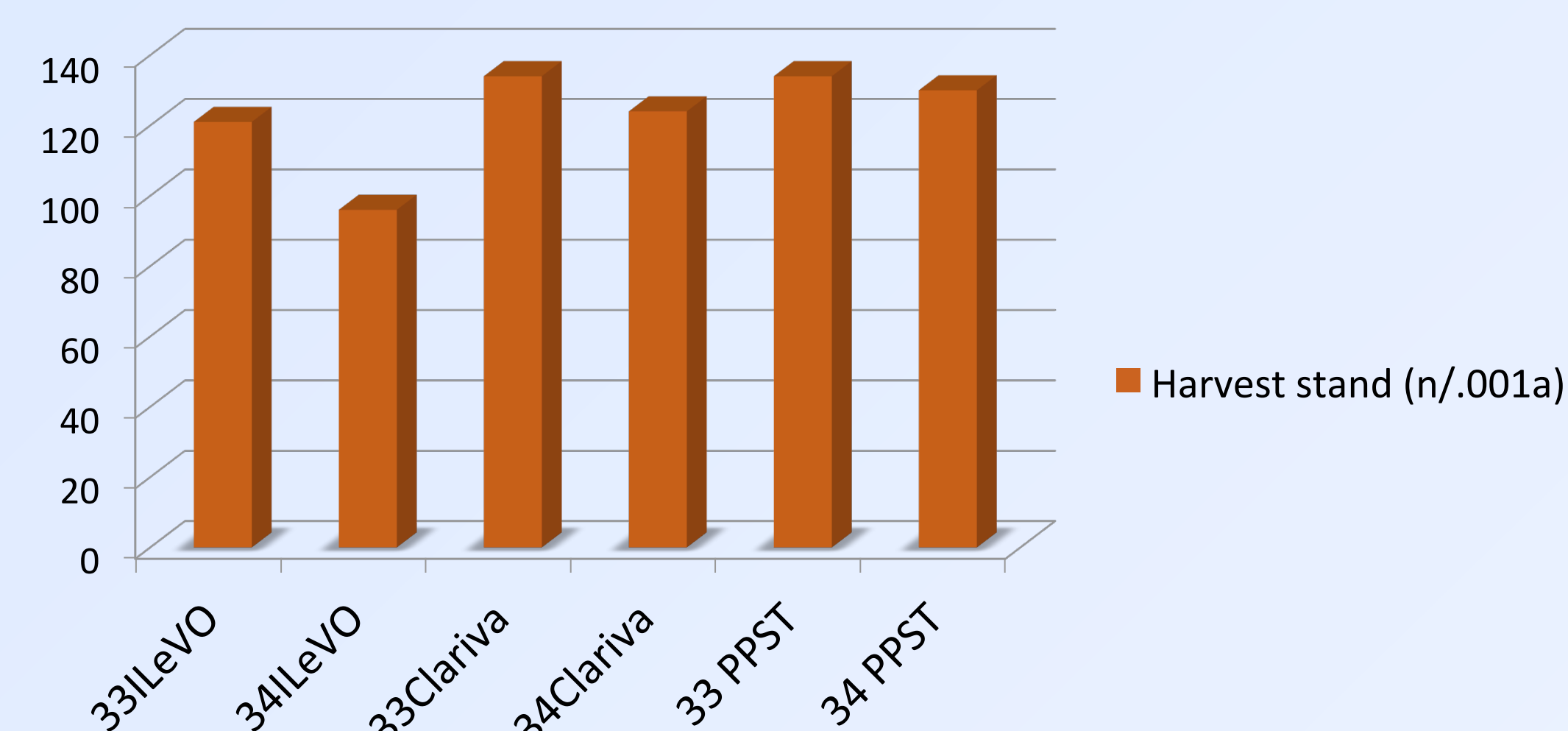


Yield Raymond, IL

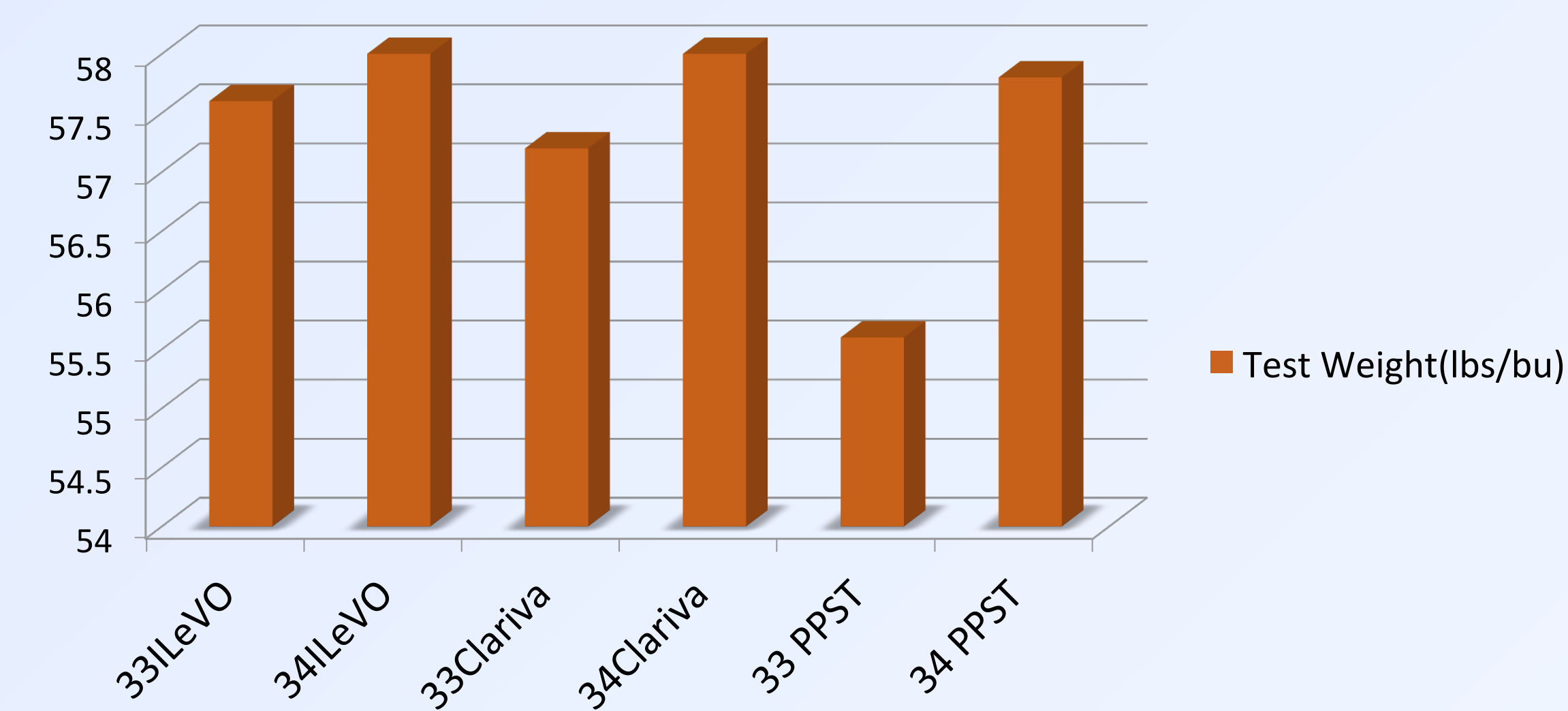


Results (Continued)

Harvest stand Raymond, IL



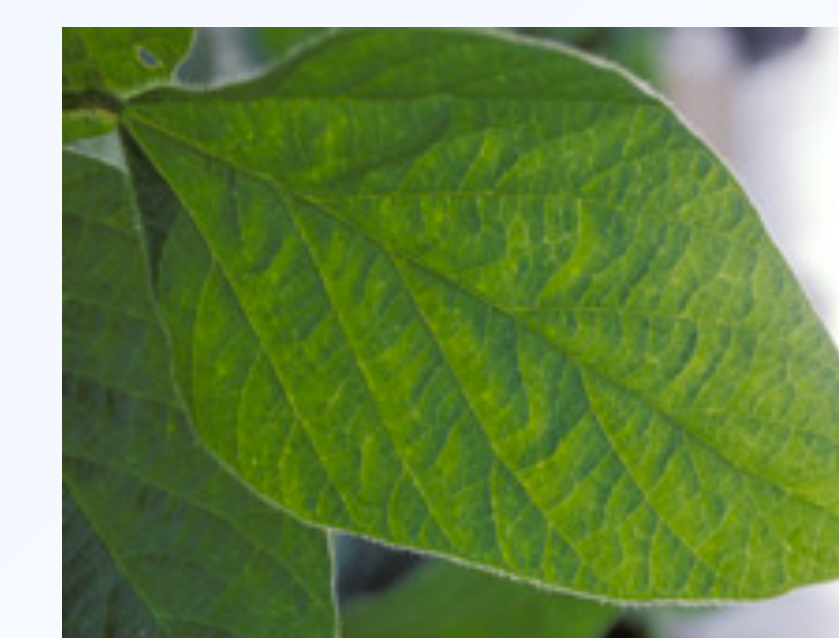
Test Weight Raymond, IL



Conclusion

- Havana location under heavy SCN pressure and sandy soil conditions, ILeVO controlled SDS severity and had some effect on SCN count
 - ILeVO averaged higher in yield and test weight
 - Variety 33 treated ILeVO showed signs of high stands
 - SDS severity ratings using ILeVO were low
- Raymond location with no SCN pressure, no past SDS severity, and drummer soil ILeVO was not as effective
 - ILeVO treatment did not change any variable

This information is conclusive to two locations with different circumstances. In conclusion, locations with high SDS and SCN should use the ILeVO seed treatment to see improvements in yield and test weight. Locations with no past pressure will possibly not benefit from using the ILeVO seed treatment.



Acknowledgements

