

## ONE22-428 Research Project Results from an on-farm trial of improved grass varieties.

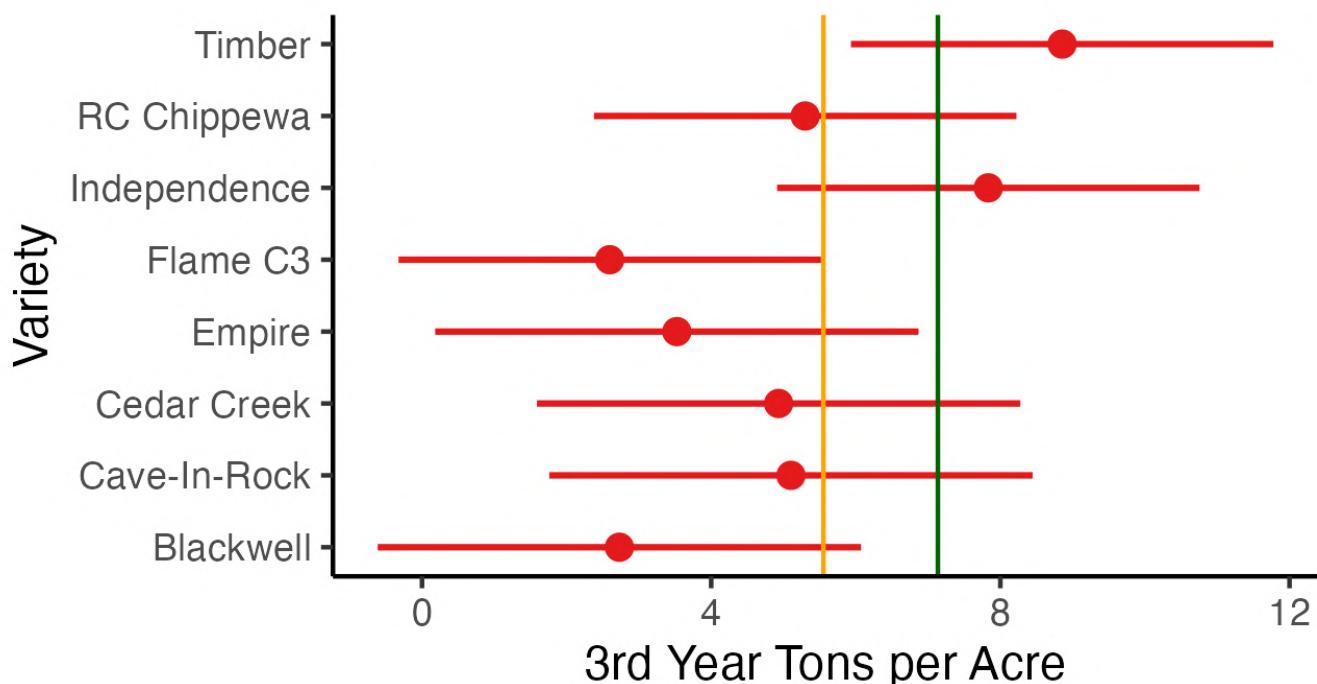
There are many potential switchgrass and big bluestem varieties to choose from when establishing new stands. This includes multiple lowland switchgrass cultivars which are less cold tolerant but have higher yield.

To test promising new grass cultivars, Association of Warm Season Grass Producers (AWSGP) established replicated trials of eight switchgrass cultivars across three farm fields to determine performance.

The three sites were in the same township, but had a range of soil depths and weed pressure, so these results should be informative for producers growing in other sites.

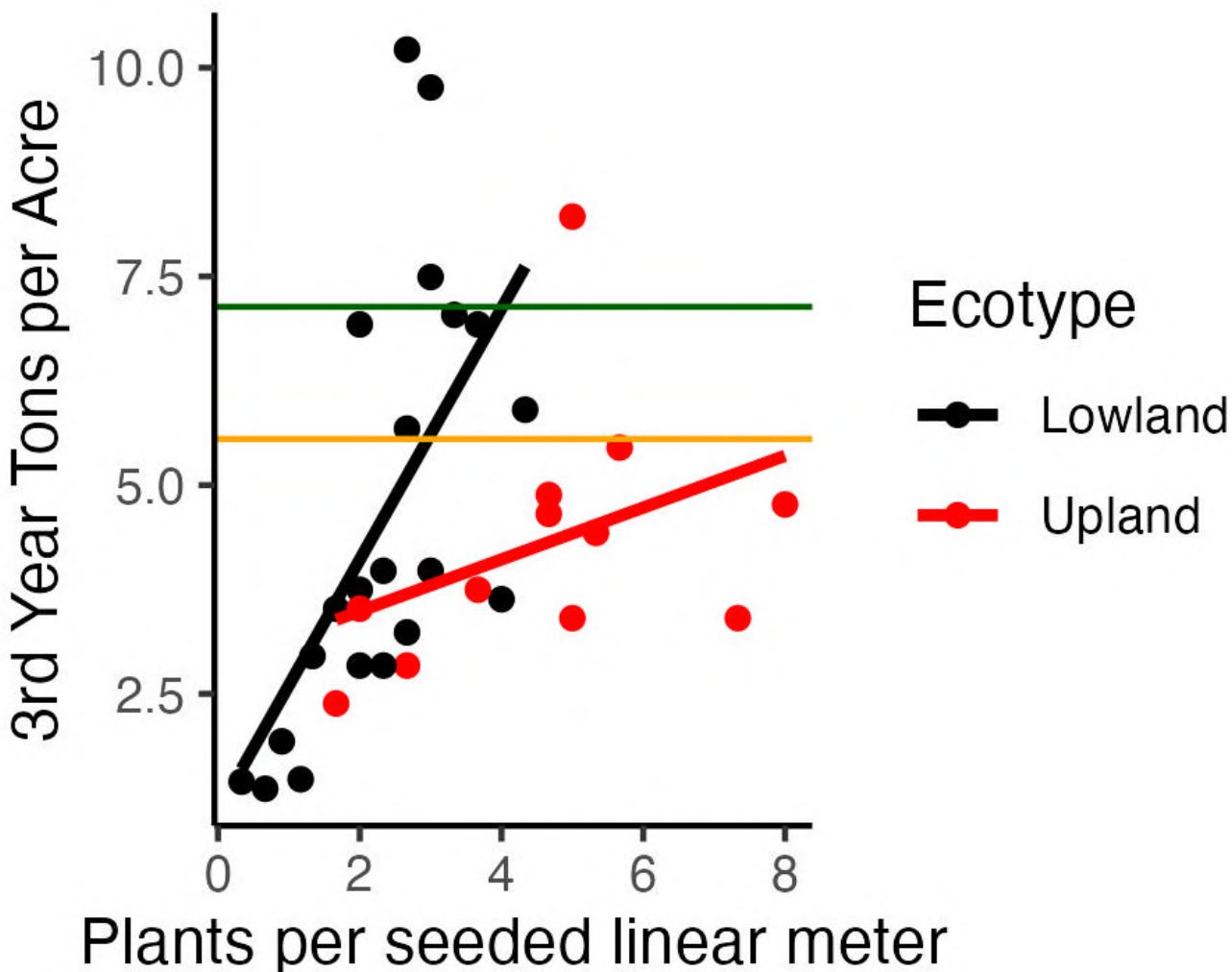
### Conclusions

- Average 2<sup>nd</sup> year yield was 1.19 tons per acre, but 3<sup>rd</sup> year was over 4 tons per acre.
- In the third year, Timber and Independence produced an average of 40% more biomass than the next best upland switchgrass cultivars (RC Chippewa and Cave-In-Rock).



Above: Yields of eight cultivars across three sites. The vertical lines indicate the average yield of fully established upland (orange) and lowland (green) switchgrass production fields. Red bars indicate 95% confidence intervals.

Below: the relationship between establishment success and 3<sup>rd</sup> year yield for upland and lowland switchgrass.



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*Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.*

