

**Research Poster from the**  
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**Why Does Farm Yield Growth Vary from Research Trials Yield Growth**

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Sixty to seventy percent of global yield improvements have been attributed to the consequences of breeding and genetics research on inbred line and hybrid development. However, recently researchers have recognized divergent trends for research trial yield indexes and realized yields of some crops in Canada. In 2010, Veeman and Gray examined the yields growth for corn, wheat, canola, and peas. They noted that area-weighted research trial yield indexes had very different exponential growth rates. For example the yield index for Canola increased by 75% since 1960, wheat yields only increased 22%. Despite these differences in area-weighted research trial yield indexes, the realized average farm yields follow a linear trends that are remarkably similar across crops.. These interesting results pose a potentially important research question as to how research advances are realized by producers. Understanding this relationship could have impacts for the evaluation of research and development, adoption, and productivity analysis.

This poster depicts the growing gap between realized and research trial yield indexes to highlight the necessity of some research in this area. We draw on the literature to propose a number of hypotheses explaining why the total effect of trial yield improvements does not appear in farmers hands. We look forward to comments, questions and alternative hypothesis to explore from the experts attending the conference.

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