



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada



# Overview of Prairie Recommending Committee for Wheat, Rye and Triticale (PRCWRT)

**Brian Beres, Ph.D., P.Ag.**  
Chair, PRCWRT  
Cereal Agronomist  
AAFC – Lethbridge, Alberta  
[brian.beres@agr.gc.ca](mailto:brian.beres@agr.gc.ca)

Presented 24 April 2012  
CSTA Winnipeg, MB

Canada 

# Outline

- PRCWRT – what it is and isn't
- Governance of the PRCWRT
- Membership of PRCWRT
- Process for request to support candidate cultivar
- Consideration of requests for support by PRCWRT
- Issues raised with the current system

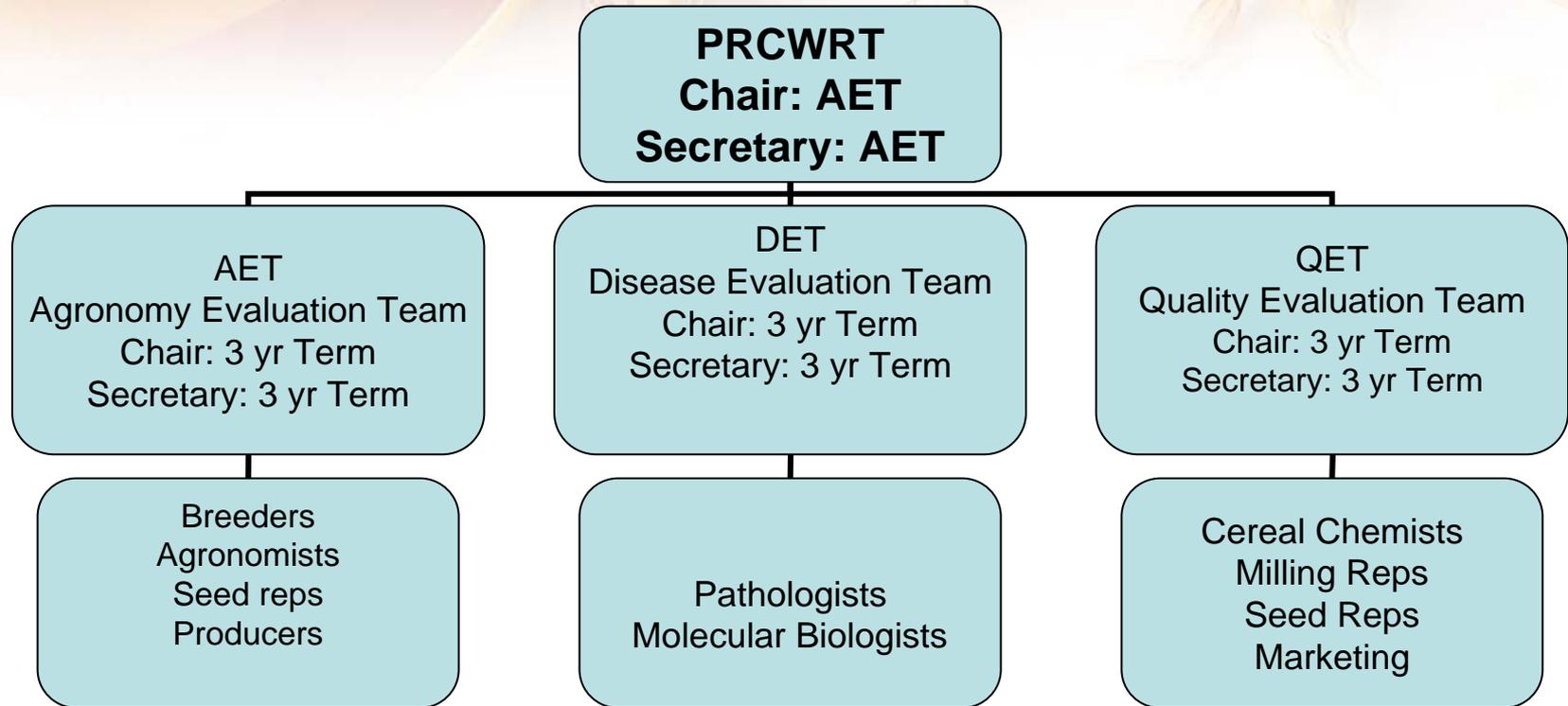
# PRCWRT

- NON-Gov't body established to provide science- and merit-based variety registration recommendations to CFIA for wheat, rye and triticale
- Governed by Operating Procedures written and approved by membership and approved by CFIA.
- Authority extends to recommendation only. CFIA and Variety Registration Office approve and issue the registrations.

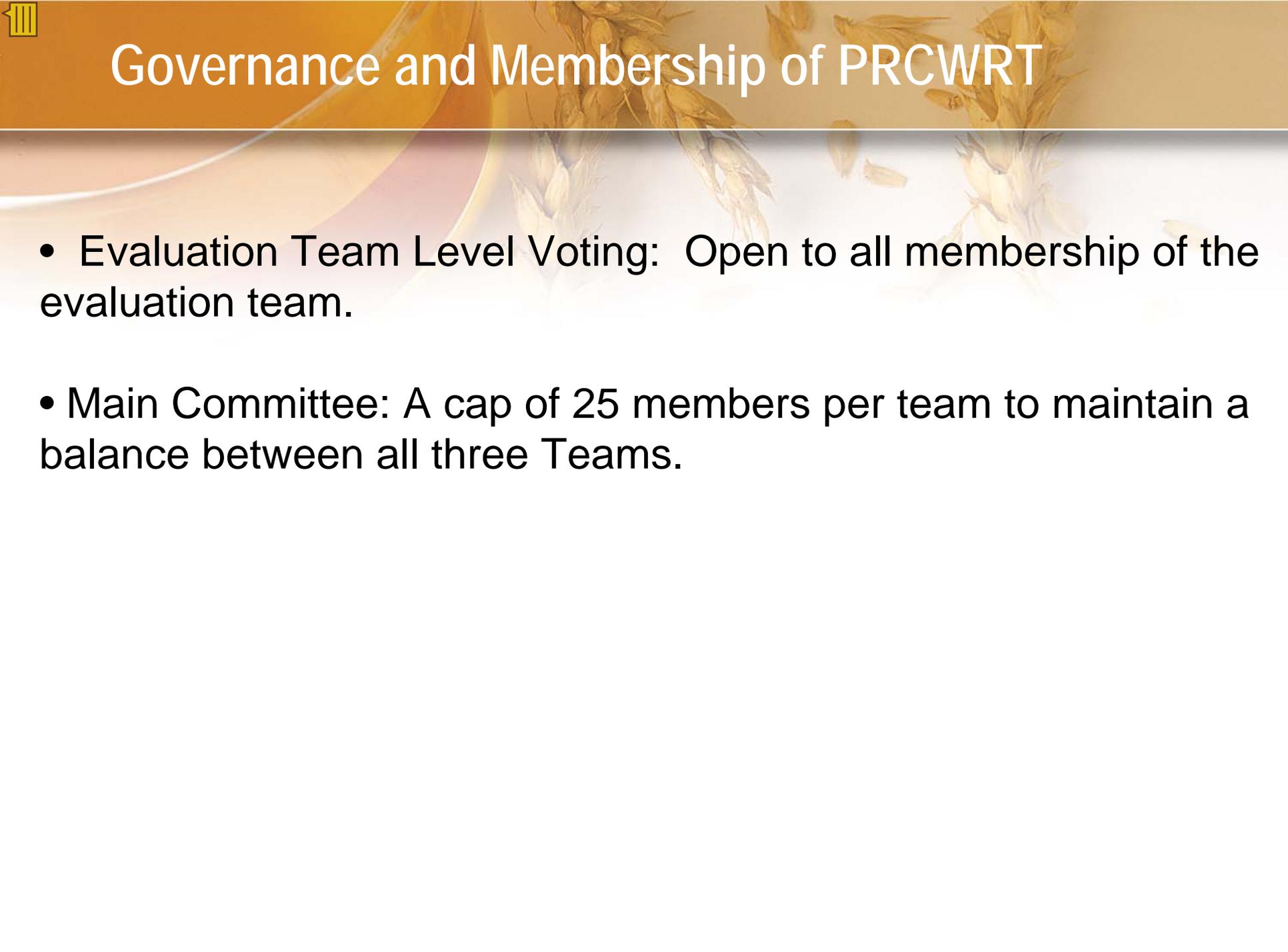
[http://pgdc.ca/committees\\_wrt.html](http://pgdc.ca/committees_wrt.html)

# Governance and Membership of PRCWRT

## CFIA – Variety Registration Office



- Cross-sectorial mix of government, academia, and industry
- Membership open to anyone that has interest AND the necessary expertise to contribute. Associate membership available in AET.



# Governance and Membership of PRCWRT

- Evaluation Team Level Voting: Open to all membership of the evaluation team.
- Main Committee: A cap of 25 members per team to maintain a balance between all three Teams.

# Process for Registration Recommendation

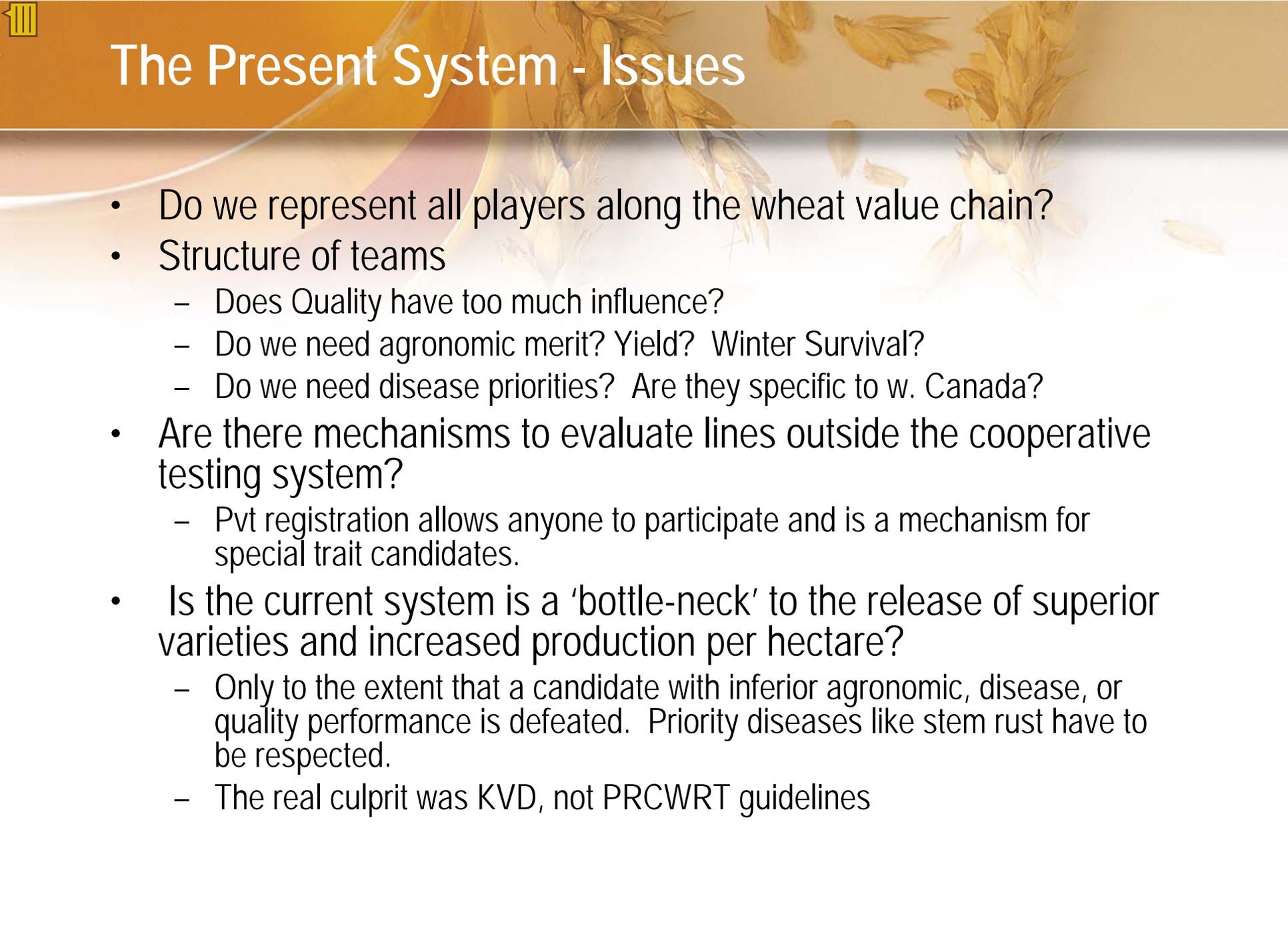
- Agronomic, disease and grain quality data generated in the region of the prairies where commercial production would occur.
- PRCWRT conducts cooperative or 'C' level trials to generate this information. In most cases, 3 calendar years (~24 site-years) of data required.
  - Candidate cultivars are promoted to this trial from pre-registration trial data
  - Promotion into and yearly advancement within coop trials involves consultation across all ET's and between coop Coordinator and sponsor agency
  - Limited space ~30 to 36 (includes 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> year entries)
- Private registration path allows Sponsor to generate prerequisite data without accessing the traditional coop 'C' level trial
- Using data generated outside the region of proposed production would be unacceptable – poor correlation between predicted vs. actual performance

# Requests for Support and Consideration of Request by PRCWRT

- If line is promoted to 3<sup>rd</sup> year and possesses desirable merit - a request for support is prepared by breeder-agency.
- PRCWRT meets annually in February to consider Requests for Support
  - Prior to Main PRCWRT meeting, Evaluation Teams meet and vote on the request for support ie. Support, Do Not Object, Object, Abstain
  - PRCWRT Main Committee meeting meets the following day and a secret ballot is used to vote on lines
  - Proposer is given the opportunity to make presentation of merit/rationale for requesting support

# Requests for Support and Consideration of Request by PRCWRT

- The Voting Process:
  1. Evaluation Team vote results are presented
  2. Motion to Support
  3. Presentation by breeder or sponsor
  4. Questions/Discussion
  5. Ballot is marked
  6. Ballot results for all lines announced at end of meeting
- Maximum of 25 votes per Evaluation Team
  - Very transparent
  - Prevents one team running 'rough-shod'
- Secret ballot overcomes block voting and allows people to freely vote at the main committee.



# The Present System - Issues

- Do we represent all players along the wheat value chain?
- Structure of teams
  - Does Quality have too much influence?
  - Do we need agronomic merit? Yield? Winter Survival?
  - Do we need disease priorities? Are they specific to w. Canada?
- Are there mechanisms to evaluate lines outside the cooperative testing system?
  - Pvt registration allows anyone to participate and is a mechanism for special trait candidates.
- Is the current system is a 'bottle-neck' to the release of superior varieties and increased production per hectare?
  - Only to the extent that a candidate with inferior agronomic, disease, or quality performance is defeated. Priority diseases like stem rust have to be respected.
  - The real culprit was KVD, not PRCWRT guidelines

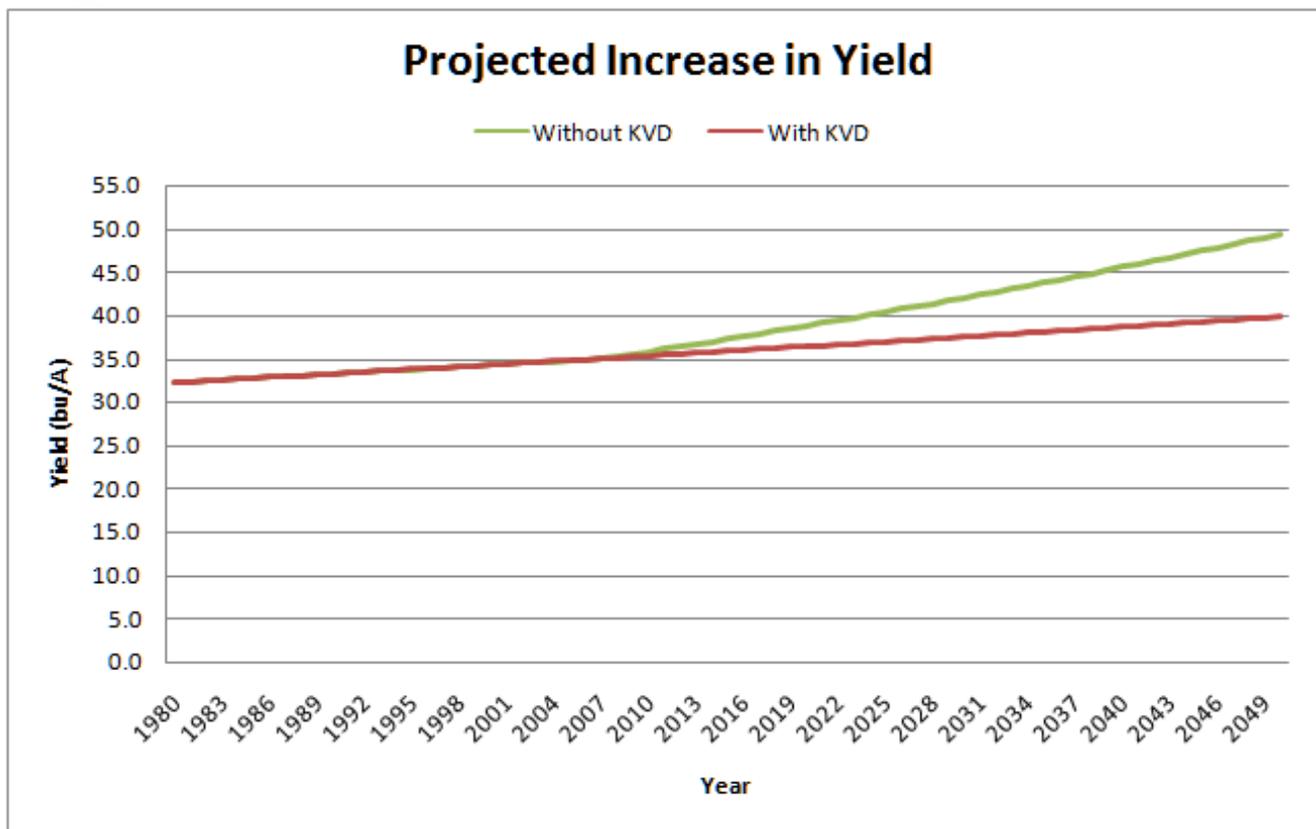
# Production Constraints of KVD – Case Study

## Western Winter Wheat Co-op Trial (1994 – 2005)

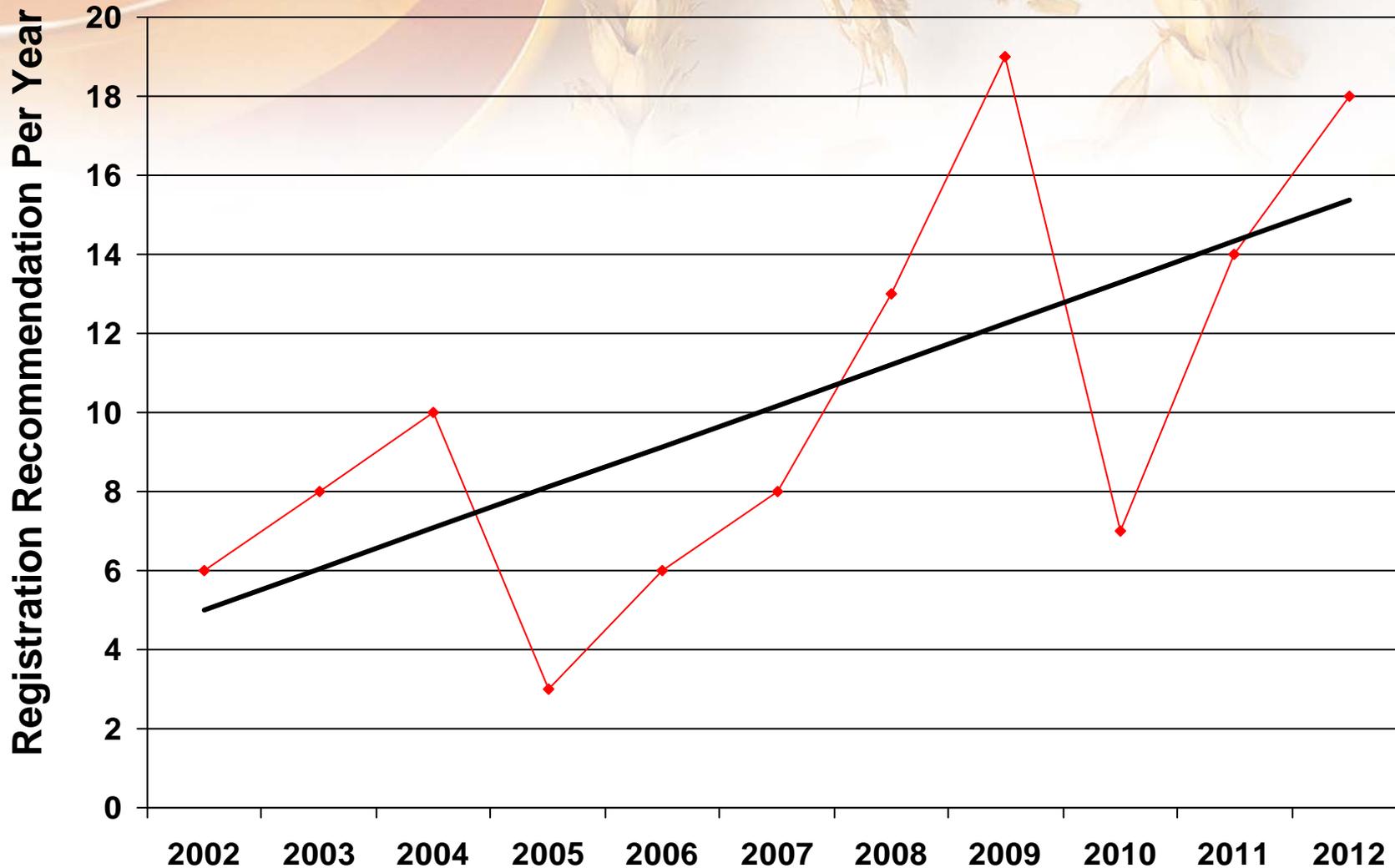
- Years with KVD conflicts were 15% higher yielding
  - Years without conflicts = 3.9 t/ha (n=4)
  - Years with conflicts = 4.5 t/ha (n=8)

# The future without KVD

- Increased rate of yield improvement
- Gains will not be instantaneous



# Trend of Annual Wheat Registration Recommendations



## The Future?

- PRCWRT seems to have the ability to respond to the evolving changes in wheat development and marketing.

- The ability stems from the composition and dedication of all 3 Evaluation Teams





# Canada