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

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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
• 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
Governance and Membership of PRCWRT

CFIA – Variety Registration Office

PRCWRT
Chair: AET
Secretary: AET

AET
Agronomy Evaluation Team
Chair: 3 yr Term
Secretary: 3 yr Term
Breeders
Agronomists
Seed reps
Producers

DET
Disease Evaluation Team
Chair: 3 yr Term
Secretary: 3 yr Term
Pathologists
Molecular Biologists

QET
Quality Evaluation Team
Chair: 3 yr Term
Secretary: 3 yr Term
Cereal Chemists
Milling Reps
Seed Reps
Marketing

• 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.
• 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 1st, 2nd, and 3rd 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 3rd 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 i.e. 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

- 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.