



Agriculture and
Agri-Food Canada

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APWS Overview

“A”-Priorities Without Solution
Weed Science Workshop, April 1, 2008
Pest Management Centre
PRR and MUP Programs

Canada

How are APWS's chosen?

- A top crop/pest combination is identified during the normal minor use priority-setting process
- A crop/pest combination is identified as an 'A' priority in round 3 of the process
- The 'A' priority has no known or viable solutions: therefore becomes an "APWS"

APWS Process

- At the end of each day of the priority-setting meeting, two selected APWS are ranked for the discipline (#1 and a runner up).
- If agreement cannot be reached on the #1 and #2 ranking at the meeting, then the default process is to consult with PMUC after the national meetings.
- PMC conducts screening trials the following year (or more, if required) to identify candidate solution(s).

APWS Process, Con't

If solution(s) are found, PMC will consult the commodity grower representative(s) and experts to review data and formulate an action plan:

- For #1 ranked APWS:
 - If a solution is efficacious, then it is upgraded to a Minor Use Priority, using an “A” priority in the subsequent year’s priority-setting workshop
- For #2 ranked APWS:
 - If a solution is efficacious, an URMULE project may proceed in 1 of 3 ways:

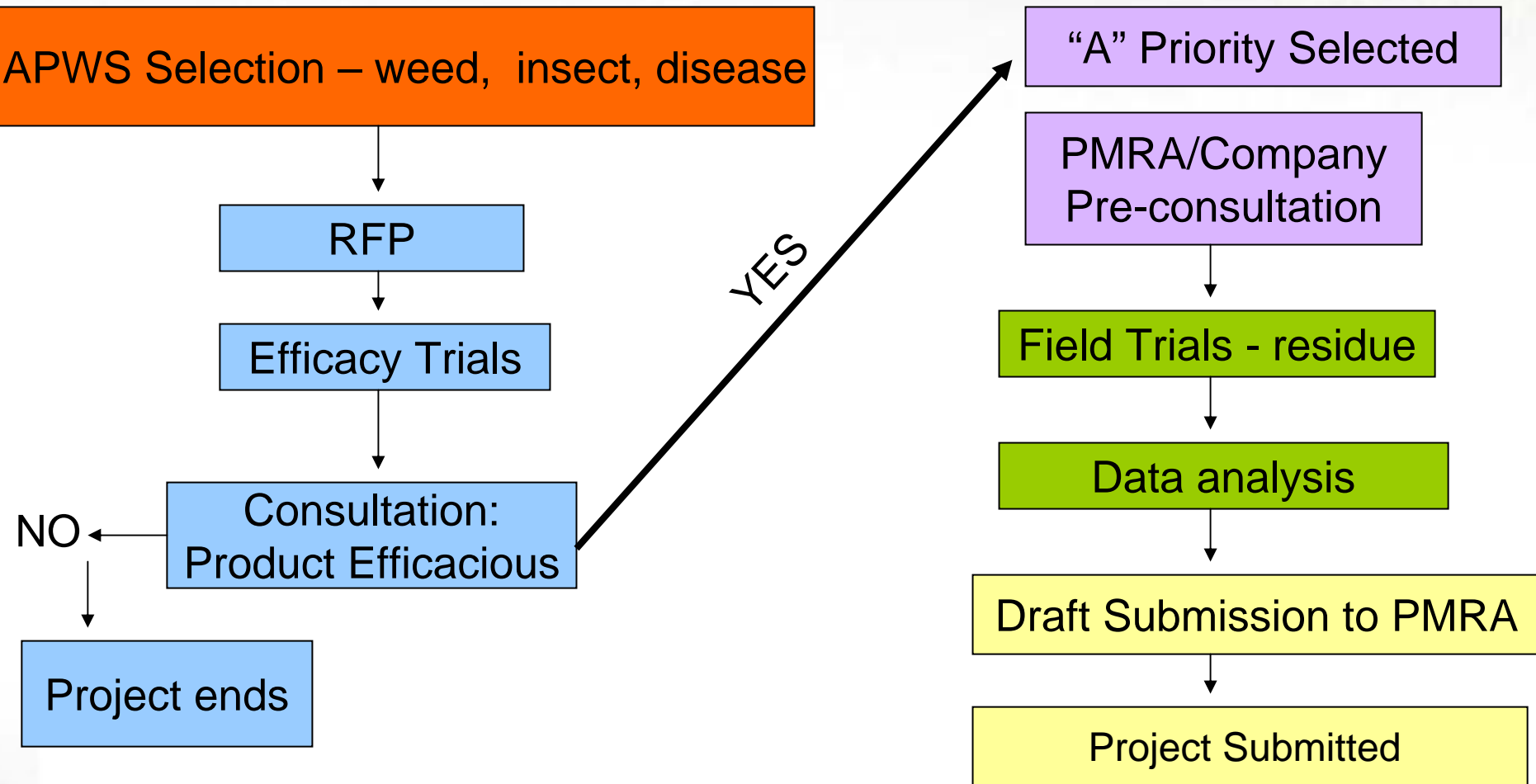
APWS Process Con't

1. It may be selected as one of the “A” priorities in the discipline through the usual priority setting process
OR
2. PMC may initiate a new URMULE if no additional data are required, or if requirements can be met through provision of data waiver rationales (project does not use a new “A” priority)
OR
3. A province via the PMUC may initiate a new URMULE if no additional data are required (residue, efficacy, tolerance).

Process to Select Projects for “A” Priorities Without Solutions (APWS)

“A” Priorities without Solutions (APWS)

Potential Solutions



APWS Process

- This process was formally put in place in March, 2007 at last year's priority-setting workshop
 - Selections made last year (2007) will therefore be subject to these procedures
- Selections made prior to this were pilots for the approach
 - Selections made previously are not subject to the rules presented
 - Results from trials conducted in the pilot phase are presented for consideration within the priority setting process

Weed Science APWS's selected in March 2007

#1 Cleavers in potato production

- To be addressed by PMC, 2008

#2 Broadleaf weeds in Crop Group #4

- Trial conducted in 2007 with follow-up planned for 2008.

#3 Canada thistle in seedling & established alfalfa seed production

- Under discussion: no activity planned for 2008.

APWS Herbicide Screening Trials: Results

Three herbicide screening projects have been undertaken while APWS was in pilot phase:

- Broadleaf weeds in ginseng (*selected in 2005 in consultation with PMUC*)

- Broadleaf weeds in crop group #4

- Broadleaf weeds in processing peas

} *Selected by stakeholders at March 2006 priority setting workshop*

APWS: Broadleaf weeds in Ginseng

- Study conducted 2006 and spring 2007 at Simcoe, ON by R. Grohs / J. O'Sullivan
- Ginseng (*Panax quinquefolius*), seedling and established plantings
- Two trials (1 year-old and 2 year-old plantings), RCB design, 4 reps of 1m X 7m plots
- 7 reduced-risk herbicides evaluated at 3 rates each
- Data collected included plant injury and root yields (spring 2007)



APWS: Broadleaf weeds in Ginseng

Results:

Of the 7 RR herbicides tested, only one emerged as a candidate for use in ginseng

- **Dimethenamid-P** applied in crop, PRE weeds @ .5X, 1X, and 2X rates:
 - no crop injury
 - no significant reduction in root yields the following growing season



APWS: Broadleaf weeds in Crop Group #4

- Trial conducted summer 2007 in Simcoe, ON by R. Grohs / J. O'Sullivan
- Crop Group #4 : leafy vegetables
 - Crops included in study:
 - Arugula, Swiss chard, Spinach, Lettuce
- RCB design, 4 reps of 1.5m X 10m plots
- 10 herbicides (2-3 rates) & 1 practice (flaming) were evaluated



APWS: Broadleaf weeds in Crop Group #4

Results:

- No candidate herbicides were identified in this trial
- All treatments had unacceptable crop injury levels
- Recommendation to conduct a follow-up study with multiple applications at micro rates (1/10 to ¼ of label rate)
- PMC is conducting a follow-up to this trial, summer 2008



APWS: Broadleaf weeds in Processing Peas

- Trial conducted summer 2007 in Simcoe, ON by R. Grohs / J. O'Sullivan
- Peas: *Pisum sp.* Var. Encore
- 7 herbicides evaluated at different rates for total of 23 treatments including controls
- RCB design, 4 reps of 2m X 10m plots
- Evaluated crop injury and efficacy against 4 common weed species



APWS: Broadleaf weeds in Processing Peas

Results

4 herbicides were assessed in this study as being safe for peas:

- Odyssey (imazamox + imazethapyr)
- Chateau (flumioxazin)
- Outlook (dimethenamid-P)
- Sandea (halosulfuron-methyl)





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