

2013 Report of the Pesticide Working Group (PWG) *Poplar Council of Canada* Cees van Oosten – Chair PWG

Introduction

The Pesticide Working Group (PWG) consists of a ‘partnership’ between the Poplar Council of Canada (PCC) and several corporate and individual PCC members who have been actively involved in providing financial and/or in-kind resources to accomplish PWG goals (Table 1).

Table 1

Aaron Hayward	Fred Radersma	Shannon Poppy *	Grant Harrison **
Tim Gylander	Ken Van Rees	Richard Krygier	Faith Martin **
Larry White	Roger Touchette	Cees van Oosten ***	

* Shannon Poppy left her position at the Saskatchewan Research Council in 2013

** Grant Harrison withdrew from the PCC Board of Directors in 2013

*** Faith Martin left her position at AESB in 2013

**** Chair of PWG to the end of 2013

The PWG has been pursuing labelling of useful pesticides for the management of fast-growing poplar and willow as agronomic crops for various end uses. These fast-growing crops are referred to as ‘short-rotation-intensive-culture’ woody crops, or simply ‘SRIC poplar and willow’ or ‘SRIC’. SRIC has been recognized as an agronomic crop by the Pest Management Regulatory Agency (PMRA) of Health Canada.

During 2012 and 2013 several members resigned or were transferred to other positions. Although the continued existence of the PWG was unanimously endorsed by its partnership at the June 2012 phone conference, the resignation of several members puts the continuation of the PWG in some doubt.

The PWG Chair (Cees van Oosten) announced he will not continue as Chair for 2014.

URMULE process

The PMRA reviews applications to have certain pesticides labelled in Canada for minor uses (such as ours). This often requires field trials, analyses and reports that may take two to three years from initiation to labelling for each ‘new’ product. The process is referred to as ‘user-requested minor use label expansion’ or simply ‘URMULE’. To qualify for the URMULE process, active ingredients used in these products must already be approved and registered in Canada for use in various (major) crops. Although most URMULEs require field trials, which are typically carried out by PWG partners, the process can be expedited through the use of existing published data from external sources, or by providing a solid rationale why a minor use label should be allowed.

For a more complete listing of the products labelled for use in SRIC poplar and willow, and of products currently in the regulatory pipeline, a detailed report is posted on the PCC website¹.

Pesticide re-evaluation process

The PMRA periodically conducts a re-evaluation of active ingredients (a.i.), which can lead to lengthy delays of the URMULE process for an a.i. under re-evaluation. Such was the case in 2009 with the active ingredient (a.i.) linuron (in products such as Lorox L - PCP# 16279); a decision by PMRA regarding its fate has yet to be made. Note that Lorox L (a.i. linuron - PCP# 16279) continues to be labelled for use as a post-emergent herbicide in SRIC poplar in western Canada only; the re-evaluation process affects our proposed use for pre-emergent use in both poplar and willow on a national basis.

Prairie Pesticide Minor Use Consortium (PPMUC)

The PWG continues its membership in the Prairie Pesticide Minor Use Consortium² (PPMUC) for 2013. The PPMUC is located in Brooks (AB) and has several agricultural crop growers as members (e.g. Viterra Inc. Special Crops, Alberta Pulse Growers, Peace Region Forage Seed Association, etc.).

Membership in the PPMUC was renewed for 2013 at the Gold (highest) level. The PPMUC provides administrative, technical and analytical services through the Minor Use Procurement Officer (Ken May), who deals with all the chemical companies (the product 'Registrants'), obtains their agreement to support minor use labelling of their products for our uses, and handles all the business dealings with the PMRA. All PWG work dealing with pesticide registration now runs through the PPMUC.

The total PPMUC membership fee for 2013 was \$5,000 (plus GST) and was generated from surpluses from previous years with an extra contribution from the Poplar Council of Canada of \$334.05 to ensure the total amount could be paid.

PPMUC membership for 2014 will have to be decided in light of various resignations of PWG members and the reduced level of need due to the drop in corporate commercial interest for poplar farming and the hesitancy of many to adopt SRIC willow at a larger commercial scale. With this drop of commercial interest, the PWG would be hard pressed to interest potential registrants in supporting the registration of their products for our uses. Despite this development, the PWG has laid the basis for continued progress, should SRIC crops take off again in the future.

Pesticide Working Group – 2013 highlights

Herbicides

▪ *Sinbar – herbicide for poplar & willow*

Four 2011 trials with the herbicide Sinbar (a.i. terbacil - PCP# 10628) confirmed that lowering rates from the 2010 trial for poplar was justified.

¹ <http://www.poplar.ca/upload/documents/pwgrep2013list.pdf>

² [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/opp5982](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/opp5982)

The 2011 trials with willow showed that lowering rates from 2010 levels still injured willow. Four new willow crop tolerance trials with Sinbar were re-established in 2012 at the Centre de recherche sur les grains inc. (CÉROM - Marie-Édith Cuerrier) near St-Mathieu-de-Beloeil (QC), Agri-Environment Services Branch - AAFC (AESB - Faith Martin) at Indian Head (SK), PRT Growing Services Ltd. (PRT - Patrick Graveley and John Kitchen) near Beaverlodge (AB) and the Conservation Learning Centre (CLC - Larry White) near Prince Albert (SK). Willow was tested in post-plant applications at a lower range of rates, which proved satisfactory.

Analyses of data for both poplar and willow will be undertaken by the PPMUC later in 2013, followed by submission to PMRA for consideration of a minor use label for poplar and willow.

▪ ***Prowl H₂O – herbicide for poplar & willow***

The PWG received correspondence from PMRA informing us that we can proceed with a pre-submission consultation (start of the URMULE process) for the product Prowl H₂O (a.i. pendimethalin - PCP#29542). This product is not labelled for use in the Prairie Region due to its persistence; however, we originally planned to present a rationale why this product should also be considered for use in SRIC poplar and willow in the Prairie Region, based on the length of the crop rotations.

Due to reduced interest on the part of PWG members and the reduction of commercial activities with both SRIC poplar and willow, these plans are on hold indefinitely.

• ***Lontrel 360 – herbicide willow***

There has been no progress on the 2009 URMULE for Lontrel 360 (a.i. clopyralid - PCP#23545) as a post-emergent herbicide in SRIC willow crops and planting stock production. The a.i. clopyralid for Lontrel 360 passed re-evaluation in 2011 and work on an URMULE can now continue. We expect to complete a rationale for this project, assuming no field trials will be required. Reports on the lack of crop injury from our US (willow) colleagues are still pending. Data are in, but need analysis; we will re-new our request for assistance.

▪ ***Grass herbicide for poplar & willow***

The PWG decided not to pursue another grass herbicide at this point. There are two herbicides registered for poplar (Venture L - a.i. fluazifop-P-butyl - PCP#21209 and Poast Ultra - a.i. sethoxydim - PCP#24835). Both are still available. These would work for willow as well; however, that use would technically be off-label.

For future consideration we would opt for the a.i. clethodim (e.g. Centurion, Select, Arrow, Shadow, Compass).

All products described above are Group 1 herbicides and are suitable for 'over-the-top' applications to control grasses in an actively-growing crop of poplar or willow.

Fungicides

- **Folicur 432F – fungicide poplar & willow**

The fungicide Folicur 432F (a.i. tebuconazole - PCP#25940) was approved by PMRA on 30 September 2011 for use on poplar and willow. The label was finally posted by PMRA in July 2012.

- **Cabrio EG Fungicide – fungicide poplar & willow**

We have identified the a.i. pyraclostrobin (in various products such as Cabrio EG Fungicide (PCP#27323 from BASF Canada Inc.) as another fungicide that will control *Melampsora* rust spp. on poplar and willow. Roger Touchette has had good results with this fungicide in controlling *Melampsora* rust in poplar. This fungicide's a.i. pyraclostrobin is required over and above the a.i. tebuconazole in Folicur 432F to avoid development of resistance in *Melampsora* rust spp. to tebuconazole. The Registrant BASF agreed to support in principle an URMULE for our use; however, the PWG will not pursue for the time being due to reduced interest on the part of PWG members and the reduction of commercial activities with both SRIC poplar and willow, these plans are on hold indefinitely.

Insecticides

- **Matador 120EC and Warrior – insecticides for poplar & willow**

In 2012 PMRA approved the insecticides Matador 120EC (PCP#24984) and Warrior (PCP# 26837); both have the a.i. lambda-cyhalothrin. These products protect SRIC poplar and willow crops against damage from grasshoppers (various spp.), potato leafhopper (*Empoasca fabae*; willow especially), tarnished plant bug (*Lygus* spp., including *Lygus lineolaris*), Prairie tent caterpillar (*Malacosoma* spp.) and Ugly-nest caterpillar (*Archips cerasivorana*).

According to the US label for the a.i. lambda-cyhalothrin, both products would also control sawflies; however, that use in Canada would be off-label.

- **Coragen – insecticide for poplar & willow**

In 2012 AI-Pac obtained another Emergency Registration (ER) label for the insecticide Coragen (a.i. chlorantraniliprole, PCP#28982) to control an outbreak of sawflies (*Nematus* spp.); sawflies caused considerable damage in 2010, but in 2011 the ER label allowed AI-Pac to effectively control a similar outbreak. The outbreak in 2012 was also effectively controlled by Coragen.

We plan to prepare an URMULE in support of a minor use label for both SRIC poplar and willow (and the production of planting stock), based on the results in 2011 and 2012 and a rationale why this product should be labelled for our use on both poplar and willow.

Cees van Oosten

Nanaimo, 22 May 2013