



Control of Phragmites with Arsenal® Powerline and Habitat™ Aqua

Phragmites Working Group,
Waterloo ON, 18 January 2018
Scott MacDonald

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Arsenal[®] Powerline[™]

Herbicide

- ▶ Registered in 2016 for control of Phragmites in terrestrial areas (roadsides and other non-agricultural lands)
- ▶ Contains ***imazapyr***
 - Acts on an enzyme found only in plants
 - Highly systemic
 - Disrupts protein synthesis in roots and shoot
 - Applied in late summer - early autumn
 - Long history of use in USA

Arsenal Powerline™

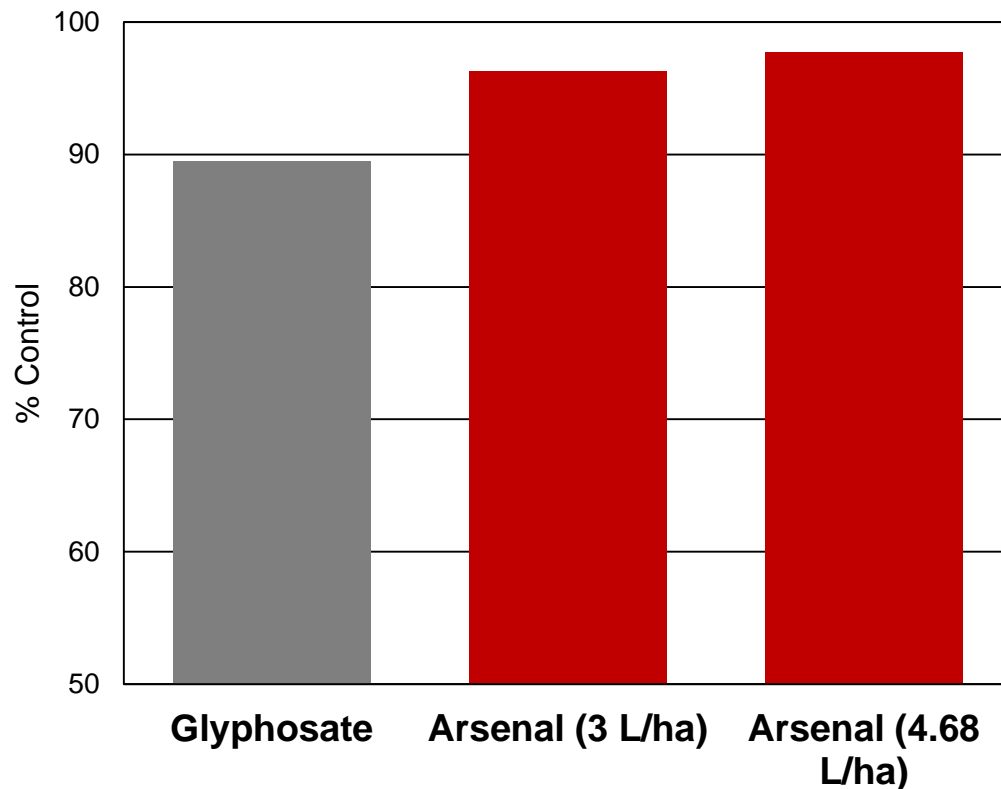
Herbicide

- Application in treatment year are translocated to the roots of Phragmites
- Vegetation does not re-grow and/or biomass is greatly reduced in the year following treatment
- Non target native vegetation re-populates treated area in years following treatment



Photo: Control of dog strangling vine. Two year following treatment. Cain Vegetation research trial, Orono ON (2010)

Phragmites control 1 year after treatment Wyoming ON (2015)



Source: BASF, 1 year after treatment
with Aresnal Powerline at 3 L/ha,
Wyoming ON (2015)

Aresnal Powerline[™]
Herbicide

BASF
We create chemistry

Establishment of native species following treatment, Wyoming ON (2016-2017)



Photo: BASF. 1 year (left) and 2 years (right)
following application of 3 L/ha Arsenal Powerline.
Wyoming ON (2016, 2017)

Habitat™ Aqua Herbicide

Research Update

- This product is currently being considered for registration under the Pest Control Products Act.
- The information presented here is for research purposes only.
- **The product cannot be manufactured, imported, distributed or used in Canada at this time**, unless explicit authorization has been obtained from Health Canada to use this product for the purpose of conducting research under the Pest Control Products Regulations.

Habitat™ Aqua

- **Registration submission** made to the Pest Management Regulatory Agency of Health Canada in mid 2015
- **Emergency Uses** granted for ground applications to water:
 - ▶ Spartina spp in British Columbia, 2013 – present (operational)
 - ▶ Flowering rush in Alberta, 2016-present (research only)
 - ▶ Phragmites on CPRS rights of way in Alberta, 2016 (operational)
- **Research Authorization** submitted for:
 - ▶ Aerial application for over-water use to help manage Phragmites
 - Potential operational use on Fighting Island (near Windsor) in 2018 for demonstration purposes (TBD pending PMRA and Provincial approvals)

Thank you

For more information, contact:
Bradley.Hayhoe@basf.com
Market Manager, Professional
Solutions

