

Herbicide evaluation to control smooth bedstraw



prepared by: Daniel Tassé OMAFRA New Liskeard office

Smooth Bedstraw – galium mollugo

- **Similar to cleavers-annual**
- **Long lived perennial**
- **Reproduction; vegetative & by seed**
- **25-120cm tall (10-48")**
- **Taproot –depth of 20"**
- **Woody rhizomes mostly in top 5cm (2")**



Smooth Bedstraw

- **Stems slender & soft**
- **Stems angular 4-5 ribs**
- **Leaves bright green 7-12 in a whorl (mostly 8)**
- **Flowers, white to greenish**



Smooth Bedstraw -reproduction

- Reproduces by rhizomes that produces new roots and shoots



Smooth Bedstraw – perennial weed often found in older hay, pasture fields with Trefoil



Herbicide evaluation to control smooth bedstraw

- **New Liskeard site**
Located on golf course road under hydro line
- **3 years project**
- **evaluation of « Milestone »**
- **low rate .10L/ac**
- **Higher rate .20L/ac**
- **with and without 2,4-D**

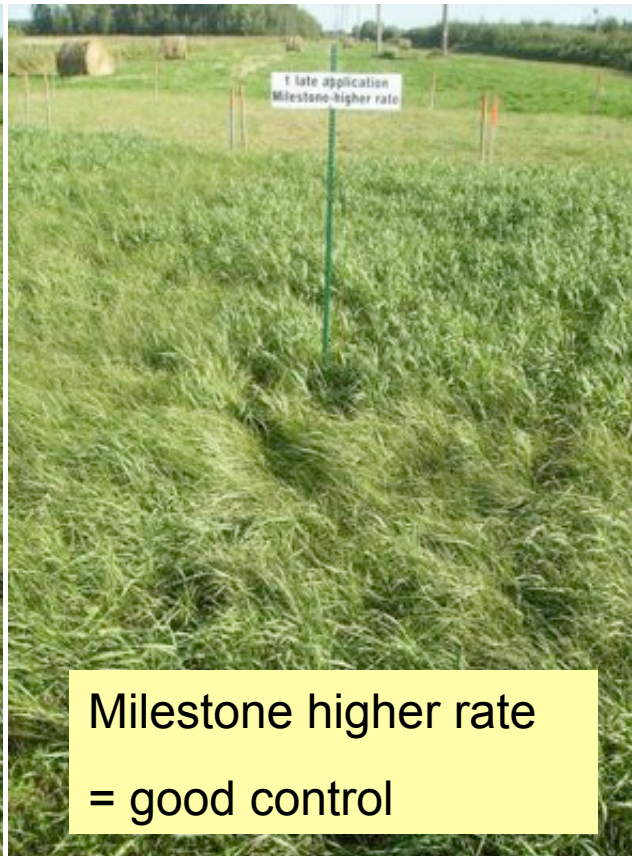




Milestone* Herbicide

GROUP 4 HERBICIDE	GROUPE 4 HERBICIDE
<p>• For control of broadleaf weeds and woody plants in rangeland, permanent pasture, industrial and other non-crop areas of Canada</p>	<p>• Pour la suppression des mauvaises herbes à feuilles larges et des plantes ligneuses dans les grands pâturages, dans les prés permanents, dans les zones industrielles et autres zones non cultivées</p>
COMMERCIAL	COMMERCIAL
READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN	LIRE L'ÉTIQUETTE ET LE LIVRET AVANT L'UTILISATION GARDER HORS DE LA PORTÉE DES ENFANTS
GUARANTEE: Aminopyralid 240 g/L (present as trisopropanolamine salt)	GARANTIE : Aminopyralid 240 g/L (présent en tant que sel de trisopropanolamine)
REGISTRATION NO. 28517 PEST CONTROL PRODUCTS ACT	N° D'HOMOLOGATION 28517 LOI SUR LES PRODUITS ANTIPARASITAIRES
NET CONTENTS: 1 L	CONTENU NET : 1 L
Dow AgroSciences Canada Inc. Suite 2100, 450 - 1 Street S.W. Calgary, Alberta T2P 5H1 1-800-667-3852	Dow AgroSciences Canada Inc. Suite 2100, 450 - 1 Street S.W. Calgary, Alberta T2P 5H1 1-800-667-3852
*Trademark of Dow AgroSciences LLC EPA Est. 62719-IN-1	*Marque de commerce de Dow AgroSciences LLC EPA Est. 62719-IN-1

1st year observation Milestone herbicide



•application June 23rd 2009

Herbicide evaluation :conclusion

- 1st year evaluation visual control is good with Milestone
- No benefits in adding 2,4-D
- Need to assess weed population in spring of 2010
- 2010: treat another section with early application i.e. vegetative stage
- do a cost analysis of herbicide program



2010 Tried another herbicide - Trophy

- Suggested by OMAFRA provincial weed specialist Mike Cowbrough
- Registered on wheat and barley, selective herbicide
- Effective on cleavers
- might be easier on the clovers, alfalfa and trefoil
- Lower cost per acre \$11
- Applied July 26th 2010, forage stand 30cm (12")
- 2nd range - with 3 strips of Trophy
- RESULTS: no visual control of bedstraw



2010 Soil and Crop Tour



Final year - 2011



8.6.2011

Final Year 2011-



**Low rate – 3years later –
beautiful stand of Brome grass**



Final Year 2011- population count by species



Untreated section - check



45% bedstraw

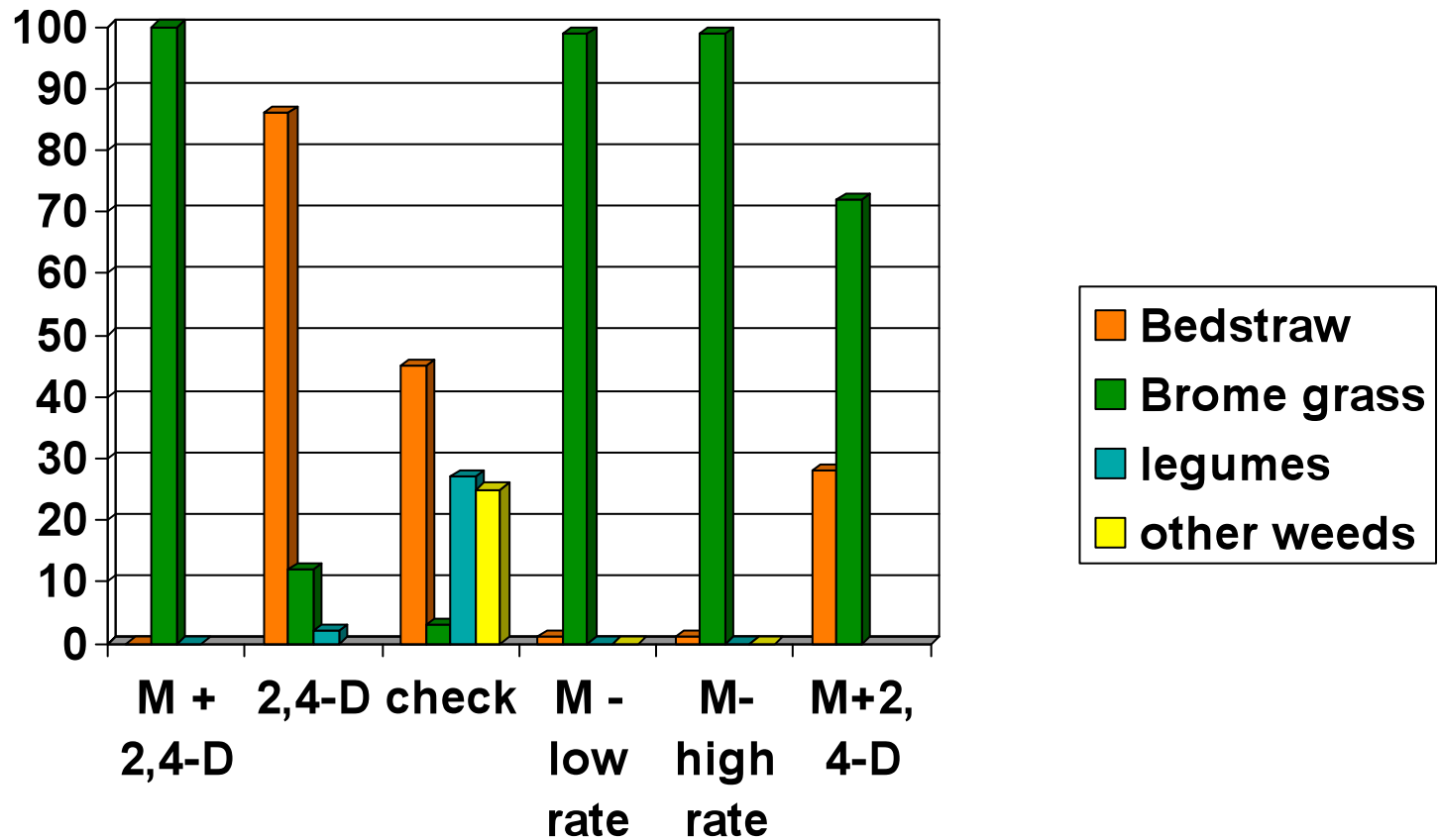
25% other weeds; daisies, dandelions

16% alfalfa

11% trefoil

3 Brome grass

3 years after the herbicide application



M = Milestone .10L or .20L per acre

Cost of herbicide - Milestone

- At the low rate .10L per acre \$30 and high rate .20L per acre \$60
- custom application rate another \$10 per acre
- Total cost : \$40 or \$70 per acre
- Cost to reseed a forage stand (OMAFRA sample budget) \$270 per acre



Projected yield (with no fertilizer) – hand harvested

e



- **Milestone Low rate** (.10L per acre)
- **2.8- 3.4 tonne dry matter per acre**

or the equivalent of

- **4 bales per acre**
(4x5ft at 18%)



Thank You!

- Ontario Soil and Crop
- NEOSCIA
- Temiskaming Crops Coalition
- Graham Gambles- regional communication coordinator
- Chandel Gambles- OMAFRA summer student 2009
- NLARS

