Yellow toadflax control with DPX-MAT28

The study objective was to evaluate DPX-MAT28 (aminocyclopyrachlor) for long-term yellow toadflax control in rangeland compared to Tordon. DPX-MAT28 was applied at 1.5 or 3 oz ai/A or at 2 oz tank mixed with Telar. Tordon was applied at 2 pt/A. Treatments were applied at vegetative stage, flowering, and late fall. Treatments were applied in 2008 and evaluated in 2009 and 2010. Toadflax density was measured before application in 2008 and again in 2009 and 2010. Tordon provided poor toadflax control at any stage. DPX-MAT28 provided excellent control after 1 year with any rate. However, after 2 years, control with the 1.5 oz rate dropped off significantly, while the 3 oz rate still maintained excellent control. Toadflax control with DPX-MAT28 + Telar was 8-13% lower than with 3 oz. No treatment caused more than 6% grass injury.

Table. Yellow toadflax control with DPX-MAT28. (0949)

			Yellow toadflax control		Yellow toadflax density			Grass injury	
Treatment[ab]	Rate	Timing	Jul 8 2009	Sep 10 2010	Aug 4 2008	Jul 14 2009	Sep 15 2010	Jul 8 2009	Sep 10 2010
			----------%----------		----------sq ft----------			----------%----------	
Untreated			0	0	9.6	11.9	8.7	0	0
DPX-MAT28	1.5 oz	Vegetative	93	55	8.3	0.2	3.1	5	0
DPX-MAT28	1.5 oz	Flowering	95	62	6.1	1.0	3.4	1	0
DPX-MAT28	1.5 oz	Fall	90	64	7.8	1.0	1.7	1	0
DPX-MAT28	3 oz	Vegetative	100	98	8.3	0	0	5	0
DPX-MAT28	3 oz	Flowering	100	99	7.6	0	0	3	0
DPX-MAT28	3 oz	Fall	100	99	5.9	0	0	3	0
Tordon	2 pt	Vegetative	23	0	6.2	5.8	7.2	1	0
Tordon	2 pt	Flowering	32	0	10.0	6.8	7.0	1	0
Tordon	2 pt	Fall	60	13	6.4	2.9	3.8	1	0
DPX-MAT28 + Telar	2 oz + 0.75 oz	Vegetative	99	85	7.9	0.1	0.6	4	0
DPX-MAT28 + Telar	2 oz + 0.75 oz	Flowering	100	91	7.1	0	0.3	6	0
DPX-MAT28 + Telar	2 oz + 0.75 oz	Fall	100	92	8.6	0	0.7	3	0
Untreated			0	0	6.1	6.4	5.0	0	0
LSD (0.05)			7	15	NS	2.4	2.8	NS	NS
CV			6	17	40	56	57	111	0

[a] *All treatments applied in 2008 (Jul 8, Sep 11, and Oct 16).*

[b] *DPX-MAT28 and Tordon applied with MSO (1%)*