

Yellow toadflax control in rangeland 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, 2010, and 2011. Toadflax density was measured before application in 2008 and again each year after. 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. After 3 years, the 3 oz rate is still providing ≥95% control at any stage, while the 2 oz rate + Telar provided 76-89% control.

Treatment ^a	Rate	Stage	Injury			Weed Control			Density			
			Grass			Yellow Toadflax						
			7-Aug-09	10-Sep-10	22-Aug-11	7-Aug-09	10-Sep-10	22-Aug-11	4-Aug-08	14-Jul-09	15-Sep-10	25-Aug-11
			-----%-----						-----sq ft-----			
Untreated			0	0	0	0	0	0	9.6	11.9	8.7	9.9
DPX-MAT28	1.5 oz	Veg.	5	0	0	93	55	27	8.3	0.2	3.1	4.9
DPX-MAT28	1.5 oz	Flow.	1	0	0	95	62	43	6.1	1	3.4	3.1
DPX-MAT28	1.5 oz	Fall	1	0	0	90	64	40	7.8	1	1.7	4.1
DPX-MAT28	3 oz	Veg.	5	0	0	100	98	95	8.3	0	0	0.3
DPX-MAT28	3 oz	Flow.	3	0	0	100	99	95	7.6	0	0	0.2
DPX-MAT28	3 oz	Fall	3	0	0	100	99	98	5.9	0	0	0
Tordon	2 pt	Veg.	1	0	0	23	0	0	6.2	5.8	7.2	9.1
Tordon	2 pt	Flow.	1	0	0	32	0	0	10	6.8	7	11.9
Tordon	2 pt	Fall	1	0	0	60	13	10	6.4	2.9	3.8	6.9
DPX-MAT28 + Telar	0.75 oz	Veg.	4	0	0	99	85	76	7.9	0.1	0.6	1
DPX-MAT28 + Telar	0.75 oz	Flow.	6	0	0	100	91	89	7.1	0	0.3	1.3
DPX-MAT28 + Telar	0.75 oz	Fall	3	0	0	100	92	86	8.6	0	0.7	0.9
Untreated			0	0	0	0	0	0	6.1	6.4	5	8.4
LSD (0.05)			7	15	17	NS	NS	NS	NS	2	3	3
CV			6	17	22	111	0	0	40	56	57	45

^a All treatments applied with MSO (1%)