

% crop injury and control of weeds - February 24, 1981
when wheat was in tillering stage

Treatment	lb/A	% wheat injury	% control				
			Malva	Mustard	Filaree	Clover	Canarygrass
Bromoxynil	.75	0	99	99	73	63	7
Tackle	.25	2	98	98	100	17	20
Tackle	.5	17	50	96	99	30	27
Tackle	.75	27	95	98	100	53	37
Glean	.02	7	27	75	77	33	10
Glean	.05	10	43	99	86	50	33
Glean	.09	23	37	99	98	27	53
Glean	.19	30	40	99	99	50	77
Check		0	0	0	0	0	0

Weed populations were variable in the test area making evaluation of weed control difficult.

In this test:

1. All rates of Tackle caused severe chlorosis of the wheat for about 2 weeks following application. These symptoms had disappeared by February 24.
2. Glean caused some stunting of wheat at every rate.
3. Bromoxynil gave good control of little malva. Control of malva with other herbicides was variable.
4. All treatments gave good control of black mustard except for Glean at 0.2 lb/A.
5. Filaree control was excellent with Tackle but variable with other treatments. Filaree was stunted severely by all rates of Glean.
6. No herbicide controlled annual yellow sweetclover or canarygrass.

Weed Control in Durum Wheat III

Stanley Heathman

Herbicides applied full coverage to foliage in 40 gpa water on February 12, 1981. Wheat planted over 40 in. beds and furrow irrigated. Soil was a silty loam and moist, wind calm, temperature 75° F. Plot size - 4 beds, 40 ft. long, replicated 3 times.

Plant size at application time

Wheat - tillering

Wild oat - 3 leaf to tillering - less than 1/sq. ft.

Canarygrass - 3 leaf to tillering more than 1/sq. ft.

London rocket - 6/sq. ft. - 50 cent size to 6 in. tall.

The wild oat and canarygrass were larger in size at time of application than was desirable for Hoelon and Carbyne. The field was disced up by the grower in April due to the heavy weed pressure in the untreated areas of the field.

% Weed Control - March 30, 1981

Treatment	lb/A	London Rocket	Annual grass*
SD 45328	.15	0	37
SD 45328	.2	0	68
Carbyne	.37	0	87
Hoelon	1.25	7	95
Banvel	.12	62	0
Banvel	.25	78	0
Bromoxynil	1.0	100	0
Check		0	0

*At this date no attempt was made to differentiate between wild oat and canarygrass. Most of the grass infestation was canarygrass.

In this test:

1. Bromoxynil gave excellent control of London rocket. Banvel stunted the weeds but very few were killed.
2. Hoelon and Carbyne severely reduced the growth of the annual grasses. SD 45328 gave poor control of annual grass weeds.
3. Wheat was not affected by any treatment.

EVALUATION OF SELECTED RODENTICIDES FOR THE CONTROL OF THE COMMON VALLEY POCKET GOPHER (*Thomomys bottae*) IN ARIZONA

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Summary

The common valley pocket gopher (*T. bottae*) is a serious problem throughout Arizona. In addition to consuming the succulent underground roots and some above ground portions of the plant, they create major economic damage to harvest machinery, ditch banks and other water containment structures.

These solitary and anti-social pests build extensive horizontal tunnels and live almost entirely underground. They possess strong and enlarged front teeth and claws and dig by pushing excess soil up vertical shafts to form above ground mounds.

Gopher burrows have caused considerable problems on ditch banks in flood irrigated alfalfa fields although the most severe problems that have been reported are in sprinkler irrigated sandy regions where gopher mounds disrupt harvesting and cause extensive damage to harvest equipment.

Several control techniques have been tried with varying degrees of success. The location, degree of infestation, irrigation technique and time of year are important considerations in planning a control program. Trapping, using the Macabee or California gopher box trap, hand baiting or fumigation are effective techniques only when the infestation is light or the affected area is small. These control methods have been most effective in flood irrigated areas where the degree of infestation is generally lighter and more confined. Repellents have been found to be short lasting and ineffective in alfalfa fields.