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Summary of 1974 Dock control field trials

J M. Allen

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1974

SUMMARY OF 1974 DOCK
CONTROL FIELD TRIALS

J.M. ALLEN

FEB. 1975

DOCK CONTROL - SPRAY GRAZE EVALUATIONS

73BY8 73HA4 73BU5 73MA6 73DE6
 Locality - Capel, Harvey, Busselton, Manjimup, Denmark
 Dock Species - R. Pulcher
 Treatment - Autumn 1973 and 1974.
 Moderate grazing with cattle one week after
 spraying.
 Assessment - Dock plant counts 20 x .05 m² per plot (old
 plants and seedlings separately) in spring
 '73 and '74.

Results 1. OLD DOCK PLANTS PER M² SPRING 1973

Herbicide l per ha	Capel	Harvey	Busselton	Manjimup	Denmark	Mean all sites
2,4D Amine 1.4	15.2a	1.8a	18.3a	33.6c	50.7a	21.2b
2,4D Amine 2.1	7.8a	1.0a	12.1a	29.8c	41.2a	15.3b
MCPA 1.4	11.5a	0.7a	18.2a	49.8bc	50.1a	21.2b
MCPA 2.8	13.5a	0.8a	14.4a	58.8ab	42.1a	21.0b
Asulox 1.4	6.6a	0.2a	16.7a	32.5c	36.4a	14.6b
Control	21.9a	2.9a	39.8a	84.6a	44.4a	34.3a

Data analysed using \sqrt{x} transformation
 Figures followed by the same letter within
 the same column do not differ ($P > .05$).

Results 2

OLD DOCK PLANTS PER M²
SPRING '74.

Herbicide l per ha	Capel	Harvey	Busselton	Manjimup	Denmark
2.4-D Amine 1.4l	17.3	1	3.0	56.0	85.0
2.4-D Amine 2.1l	5.7	0	7.0	44.0	66.7
MCPA 1.4l	20.7	0	18.0	57.7	57.0
MCPA 2.8l	13.0	0.3	5.0	77.0	67.0
Asulox 1.4l	42.3	0.7	15.7	43.3	79.6
Control	44.0	4.0	60.0	68.7	59.6

Comment

Two consecutive years of spray graze has given excellent control of old dock plants at Capel, Busselton and Harvey.

Seedling counts as high as 100 per m² have been common. The rate of survival of seedlings has generally been low. Where there has not been sufficient cover of other species seedling survival has resulted in poor overall control.

At Capel on an adjoining site spring treatment was inferior to autumn treatment.

Spray graze using 2.4-D amine at 1.4 li per ha is recommended as a cheap means of checking the growth of docks in pasture. Asulox has not given consistent results.

DOCK CONTROL - DICAMBA IN PASTURES

73AL38, 73BU9, 73AR9

Locality - Mt. Many Peaks, Margaret River, Baldivis

Dock Species - R. Pulcher

Treatment - 1973 - Spring application Dicamba
 1974 - Cultivated and sprayed autumn

Assessment - Dock plant counts 20 x .05m² per plot.

Results

Dock Plants m²

Treatment		Many Peaks	Margaret River	Baldivis
1973	1974			
Dicamba	Control	58.1	31.0	35.2
Dicamba	Banex clover	1.9	0.5	8.7
Dicamba	Rye Banex	1.9	2.1	8.0
Dicamba	Rye Banex	2.8	1.8	7.5
	Control	127.5	49.2	16.8
	Banex clover	25.7	7.1	8.2
	Rye Banex	12.8	4.1	8.2
	Rye Banex	21.2	3.1	9.0

N.B. All plots except controls cultivated March 1974.

DOCK CONTROL - SUMMER CULTIVATION + HERBICIDES
73BU6

Locality - Marsh - Alexandra Bridge
 Species - R. Pulcher
 Treatment - Cultivation immediately prior to rain 1973
 Not cultivated 1974
 Herbicides applied 11/5/73
 15/5/74
 Assessment - Dock plant counts
 20 x .05m² per plot
 15.8.74

Results

Treatment	Dock plants m ²	
	Seedlings	Established Plants
Cultivated Nil	187	187
Cultivated Asulox 2.0 li/ha ¹	652	11
Cultivated Asulox 3.0 li/ha	379	19
Cultivated Banex 3.0 li/ha ²	469	20
Cultivated Banex 1.5 li/ha	259	24
Nil	189	196
Asulox 2.0 li/ha ¹	638	29
Asulox 3.0 li/ha	314	10
Banex 3.0 li/ha ²	510	23
Banex 1.5 li/ha	223	25

Comment

Asulox and Banex have given good kill of established dock plants.

Seedling numbers are greater where the ground has been bared by herbicides.

The cultivation was too close to the opening rain in 1973 to effectively control old dock plants.