1975

1975 Trials on doublegee

D J. Gilbey

SUMMARY OF 1975 FIELD TRIALS ON DOUBLEGEE

D.J. GILBEY
FEBRUARY 1976.

No. 75 A 16

TITLE : Doublegee Control in Pasture-Herbicides

LOCALITY : Avondale Research Station

PASTURE SPECIES : Daliak/Geraldton mixture

SPRAYED ON : 10/6/75 when doublegee had 3-4 leaves and clover 6-8 trifoliate leaves.

RESULTS

Treatment		Doublegee/m^2	Clover/m^2
Tribunil	500 g/ha	1.3	62
"	1000 g/ha	0.1	67
Brominil	700 mls/ha	14.0	68
"	1400 mls/ha	4.6	71
Cyanatryn	125 ga.i./ha	5.6	68
"	250 ga.i./ha	0.8	75
Asulam	750 mls/ha	4.9	71
"	1.5 l/ha	0.4	64
"	3.0 l/ha	0.3	59
Dosanex	500 g/ha	7.1	80
"	1000 g/ha	1.1	81
"	2000 g/ha	0.1	69
Unsprayed Control		19.6	85

No. 75 WH 21

TITLE : Doublegee Control in Pasture-Herbicides

LOCALITY : Wongan Hills Research Station

PASTURE SPECIES : Geraldton

SPRAYED ON : 1/7/75 when doublegee had 4-5 leaves and clover 6-8 trifoliate leaves.

RESULTS

Treatment		Doublegee/m^2	Clover/m^2
Tribunil	500 g/ha	11.3	126
"	1000 g/ha	4.5	129
Brominil	700 mls/ha	10.7	133
"	1400 mls/ha	4.4	117
Cyanatryn	125 g a.i./ha	13.7	138
"	250 g a.i./ha	5.5	95
Asulam	750 mls/ha	8.1	139
"	1.5 l/ha	2.7	110
"	3.0 l/ha	1.1	84
Dosanex	500 g/ha	31.4	119
"	1000 g/ha	12.1	95
"	2000 g/ha	5.6	47
Unsprayed Control		63.1	197

No. 75 C 13

TITLE : Doublegee Control in Pasture-Herbicides

LOCALITY : Chapman Research Station

PASTURE SPECIES : Geraldton

SPRAYED ON : 29/5/75 when the doublegee had up to 12 leaves and the clover had more than 8 trifoliate leaves.

RESULTS

Treatment		* % composition Doublegee	Clover rating **
Tribunil	500 g/ha	1.5	0
"	750 g/ha	1.9	0.3
"	1000 g/ha	2.6	0
"	1500 g/ha	1.1	0
Brominil	700 mls/ha	1.9	0
"	1400 mls/ha	2.6	0
Cyanatryn	125 g a.i./ha	0.9	0
"	250 g a.i./ha	2.8	0
Asulam	750 mls/ha	0.4	0.3
"	1.5 l/ha	0.3	0.7
"	3.0 l/ha	0.1	1.7
Dosanex	500 g/ha	6.5	0
"	1000 g/ha	3.6	1.0
"	2000 g/ha	1.1	2.0
24 DB	1.5 l/ha	2.4	0.7
"	3.0 l/ha	0,9	0.7
Unsprayed Control		8.6	0

* Measured at the end of the growing season using a line transect

** 0 = no effect of treatment on clover
6 = complete kill of clover

No. 75 MO 36

TITLE : Doublegee Control Pasture-Herbicides

LOCALITY : Watheroo

PASTURE SPECIES : Geraldton

SPRAYED ON : 30/4/75 when doublegee had 3 leaves and clover had 3 trifoliate leaves.

RESULTS

Treatment		Doublegee % Control	* Clover rating
Tribunil	500 g/ha	8	0
"	1000 g/ha	67	0
Brominil	700 mls/ha	0	0
"	1400	0	0
Cyanatryn	125 g a.i./ha	8	0
"	250 g a.i./ha	25	0
Asulam	750 mls/ha	17	0
"	1.5 l/ha	58	0.3
"	3.0 l/ha	65	1.0
Dosanex	500 g/ha	0	0
"	1000 g/ha	33	0
"	2000 g/ha	67	0
Unsprayed Control		0	0

* 0 = no effect of treatment on clover
6 = complete kill of clover

No. 75 A 17, 75 WH 22, 75 MO 37

TITLE : Doublegee Control in Pasture - Late Spraying

LOCALITY : Avondale Research Station, Wongan Hills Research Station, Watheroo.

TIME OF SPRAYING : All sites were sprayed when the doublegees had 12 leaves or more with the following treatments.

Tribunil	750 g/ha
"	1500 g/ha
Dosanex	1000 g/ha
"	2000 g/ha
24 DB	1.5 l/ha
"	3.0 l/ha

RESULTS - No treatments gave satisfactory control of doublegee.

COMMENT: By the time doublegees have grown 12 leaves or more there is no treatment that will selectively control this weed in pasture.

No. 75 A 16

TITLE : Effect of removing doublegees on the growth of other pasture species.

LOCALITY : Avondale Research Station

METHOD : Pasture growth was sampled on the unsprayed and Tribunil 500 g/ha plots of the herbicide trial at two time intervals each of five weeks. The first time was in the early part of the growing season (mid July - late August) and the second time in the middle of the growing season (late August - late September).

RESULTS

Treatment	Growth Rate of Grass gms/5m^2/week from mid July - late August
Unsprayed	28
Tribunil 500 g/ha	47

LSD $p < 0.05 = 15$

COMMENT : Growth of capeweed grass and clover was measured separately and the only significant response detected was that the grasses grew more rapidly in the early part of the growing season on the sprayed plot.

However the small difference shown cannot be converted into a clear economic advantage in favour of spraying pasture for doublegee control.

BIOLOGICAL CONTROL OF DOUBLEGEE

The weevil Apion antiquum was again released at two sites in the wheatbelt and one site in the south west of WA.

RESULTS

Very little insect activity was observed on the wheatbelt sites and further liberations of large numbers of weevils bred from a colony at South Perth are proposed for 1976.

Considerable adult insect feeding was observed on doublegee at the south west site and insect larvae were recovered up to 30m from the release point. Further liberations of insect throughout the state are proposed for 1976 and the number of sites used will be determined by the number of insects available.