

Project title: Evaluation of a range of herbicides for use in establishing Blackcurrant Cuttings

Project number: SF 12 (180)

Location: Lee Priory Farm, Littlebourne, Kent

Keywords: blackcurrant, herbicide, Ben Hope, Casoron, dichlobenil, Ronstar, oxadiazon, Devrinol, napropamide, Stomp, pendimethalin, Lenacil, Flexidor, isoxaben, Butisan, metazachlor, Diuron, weed control

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Evaluation of a range of herbicides for use in establishing Blackcurrant Cuttings.

Summary of trial results and recommendations.

Introduction

The trial was carried out at Littlebourne, near Canterbury by kind permission of Stephen Twyman. Treatments were applied in March 2000 and the plots were assessed for weed numbers and growth of the cuttings in May and November 2000.

Treatments

The treatments are listed below each one was applied to four plots which were randomised.

Herbicide	Active Ingredient	Rate
Casoron	Dichlobenil	50kg/ha 100kg/ha 143kg/ha
Ronstar	Oxadiazon	8L/ha 12L/ha
Devrinol	Napropamide	7L/ha 10.5L/ha
Stomp	Pendimethalin	5L/ha 7.5L/ha
Lenacil		2.5kg/ha 3.75kg/ha
Flexidor	Isoxaben	2L/ha 3L/ha
Butisan	Metazachlor	2.5L/ha 3.75L/ha
Diuron		0.5L/ha 1L/ha

Results

The best weed control was achieved using Ronstar followed by Devrinol, Flexidor and Stomp.

The best bush establishment, measured by the height of the bushes and number of shoots, occurred in the Ronstar, Flexidor and Stomp plots.

Weed population assessments – November Ranked in order of effectiveness

Herbicide	Rate	Nov
Ronstar	12l/ha	1.8
Ronstar	8l/ha	2.5
Devrinol	7l/ha	2.8
Flexidor	2l/ha	3.3
Stomp	5l/ha	3.3
Casoron	100kg/ha	3.3
Lenacil	2.5kg/ha	3.3
Flexidor	3l/ha	3.5
Diuron	1l/ha	3.8
Casoron	50kg/ha	4.3
Devrinol	10.5l/ha	4.3
Diuron	0.5l/ha	4.5
Casoron	143kg/ha	4.5
Stomp	7.5l/ha	4.5
Butisan	2.5l/ha	4.8
Butisan	3.75l/ha	5.5
Lenacil	3.75kg/ha	5.8

0 = no weed

10 = full weed cover

Bush Establishment – November
Ranked in order of height

Herbicide	Rate	Stem Height (cm)
Lenacil	2.5kg/ha	26.3
Diuron	1l/ha	34.4
Devrinol	10.5l/ha	37.7
Lenacil	3.75kg/ha	43.5
Butisan	3.75l/ha	44.8
Devrinol	7l/ha	47.0
Casoron	50kg/ha	48.2
Diuron	0.5l/ha	49.2
Butisan	2.5l/ha	50.4
Stomp	5l/ha	60.8
Casoron	100kg/ha	61.8
Flexidor	3l/ha	63.6
Casoron	143kg/ha	63.7
Ronstar	8l/ha	63.9
Flexidor	2l/ha	66.1
Stomp	7.5l/ha	66.4
Ronstar	12l/ha	71.6

Summary & Conclusions

- It is important to assess potential weed problem for each site and apply the appropriate product or product mix to control the expected weeds. For the purposes of this trial only single products were used and the site was not heavily infested with groundsel or mayweed. Applying these single products on other sites with a different weed spectrum may give different results.
- The trial results showed that high levels of weed control had a beneficial effect on bush establishment and growth.
- Although Ronstar gave some early leaf damage due to the late timing of application, the cuttings grew through this and established well. In order to avoid any damage the material must be applied before bud burst.
- Ronstar, Flexidor and Stomp gave the best combination of weed control and bush growth.
- The use of Lenacil and Diuron should be avoided.

A full report of all the assessments and plot details is available from James Wickham.

- Further trials have been proposed to assess the cost and effectiveness of a range of herbicide mixtures on several soil types.