Thinning with lime sulphur – effect on flowers or on leaves?
Ausdünng mit Schwefelkalk – Effekte auf Blüten oder Blätter?

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Zusammenfassung

Behandlung von nicht nur der Blüten aber auch die Rosettenblätter mit Schwefelkalk vergrössert nicht den Ausdünnungseffekt. Das Entfernen (einen Teil) der Rosettenblätter verringerte den Fruchtansatz ein wenig .aber vergrösserte den Junifall stark. Die Schlußfolgerung war das Schwefelkalk ausdünnend wirkt durch Verbrennung der Blüte und nicht durch Schädigung der Blätter. In diesem Fall mit Handsprühgerät, wann die Blumen gut getroffen werden mit Schwefelkalk, ist die Ausdünnung sehr gut.

Introduction

The thinning effect of lime sulphur is thought to be caused by the burning of flower organs. If this product is capable of injuring flower tissues, it could also have a negative effect on the leaves. We know that injuring leaves may increase the June drop. We were curious to know whether the thinning effect is caused only by the burning of flower organs.

Method and materials

At full bloom, individual flower clusters were marked with numbered labels. Treatments were carried out on each individual cluster. There were 50 replications. The experiment was conducted on mature, vigorous Elstar under organic management. Spraying was done in the evening of a warm day with 1,6 % (w/w) of lime sulphur. The following days were dry and sunny. Flowers per cluster were counted at full bloom and fruitlets were counted after fruitset and after June drop.

Results: Number of fruitlets per 100 flowers after fruitset and after June drop.

	After fruitset		After June drop	
	Fruitlets / 100 flowers	% thinning	Fruitlets / 100 flowers	% thinning
Untreated	90.5		47.1	
50 % leaf area cut away	88.9	2	31.8	32
100 % leaf area cut away	84.0	7	33.0	30
Lime sulphur on flowers +leaves	54.2	40	20.6	56
Lime sulphur on flowers	51.4	43	20.4	57

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Conclusions

Spraying not only the flowers but also the cluster leaves caused no increase in thinning effect. In comparison, artificial injuring of leaves caused a slight reduction in fruitset but a severe increase in June drop. We conclude in this experiment that the thinning effect was caused by spraying the flowers and not by injuring the cluster leaves. Note that when flowers are well covered by the spray, the thinning effect of lime sulphur is very good.