# 1987 British Crop Protection Conference Weeds

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tobacco plants J. LEEMANS, M. DeBLOCK. K. D'HALLUIN, J. BOTTERMAN a	nd W.		
DeGREEF		8C-1	867
Selection for sulfonylurea herbicide tolerance in oilseed rape (Brassica	napus)		
using microspore culture P. D. KENYON, I. N. MORRISON and G. MARSHALL	el leve	8C-2	871
Herbicide resistance in black-grass (Alopecurus myosuroides)			
S. R. MOSS		8C-3	879
Field trials on the efficacy of herbicides on resistant black-grass (Alog	oecurus		
myosuroides) in different cultivation regimes J. H. ORSON and D. B. F. LIVINGSTON		8C-4	887
3. II. OLDON and D. D. P. LIVINGSTON		00 1	00.
Synergistic effects of 1-aminobenzotriazole on the phytotoxicity of chloro and isoproturon in a resistant population of black-grass (Alopecurus			
suroides) M. S. KEMP and J. C. CASELEY		8C-5	895
Further investigations into the resistance of chickweed (Stellaria me	dia) to		
mecoprop	<i>uiu)</i> to		
P. J. W. LUTMAN and H. S. SNOW		8C-6	901
Cross-resistance to paraquat and atrazine in <i>Conyza canadensis</i> E. PÖLÖS, J. MIKULÁS, Z. SZIGETI, G. LASKAY and E. LEHOCZKI		8C-7	909
The seed bank dynamics of triazine resistant and susceptible biotypes of	Senecio		
vulgaris - implications for control strategies		8C-8	917
D. WATSON, A. M. MORTIMER and P. D. PUTWAIN	9 89.5	80-8	311
The response of simazine-resistant and susceptible biotypes of Chan suaveolens, Epilobium ciliatum and Senecio vulgaris to other herbicides		00.0	005
D. V. CLAY	* **(****)	8C-9	925
SESSION 9A			
WEED COMPETITION AND THRESHOLDS – FUNDAME		SPECTS OF	
COMPETITION AND POPULATION DYNA	MICS		
Invited Papers			
The population ecology of weeds – implications for integrated weed manage	gement,		
forecasting and conservation A. M. MORTIMER		9A-1	935
The use of weed density - crop yield relationships for predicting yield lo	osses in		
the field M. L. POOLE and G. S. GILL		9A-2	945
Research Reports			
The effect of weed interference on the growth and yield of wheat			
THE PROPERTY OF TAXABLE PARTY AND MADDEN		9A-3	955

S. P. MILROY and N. A. GOODCHILD	9A-4 963								
Relative time of emergence, leaf area development and plant height as major factors in crop-weed competition W. JOENJE and M. J. KROPFF	0.1.5								
SESSION 9B									
MODE OF ACTION AND METABOLISM OF HERBICIDI	es: III								
Research Reports  Induction of tetrapyrrole accumulation by diphenylether-type herbicides  M. MATRINGE and R. SCALLA	9B-1 981								
The role of photosynthetic electron transport in the mode of action of nitro-									
diphenyl ether herbicides J. R. BOWYER, B. HALLAHAN, S. A. LEE and P. CAMILLERI	9B-2 989								
The effects of acifluorfen on membrane integrity in Galium aparine leaves and									
protoplasts P. M. DERRICK, A. H. COBB and K. E. PALLETT	9B-3 997								
The mode of action of the herbicide WL 110547 M. W. KERR and D. P. WHITAKER	9B-4 1005								
The mode of action of diflufenican: its evaluation by hplc G. BRITTON, P. BARRY and A. J. YOUNG	9B-5 1015								
SESSION 10A									
SESSION 10A  WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATION THRESHOLDS	ATIONS OF WEED								
WEED COMPETITION AND THRESHOLDS - PRACTICAL APPLICA	ATIONS OF WEED								
WEED COMPETITION AND THRESHOLDS - PRACTICAL APPLICATION THRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal									
WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATION THRESHOLDS  Research Reports									
WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATION THRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF  The effect of volunteer barley on the yield and profitability of rapeseed in	10A-1 1025								
WEED COMPETITION AND THRESHOLDS - PRACTICAL APPLICATION THRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF	10A-1 1025								
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WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATHRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF  The effect of volunteer barley on the yield and profitability of rapeseed in Western Canada J. T. O'DONOVAN, A. K. SHARMA, K. KIRKLAND and E. A. De St REMY  Population dynamics and competitive effects of Cyperus esculentus (yellow nutsedge) – prediction and cost effective control strategies J. LAPHAM	10A-1 1025 10A-2 1035 10-3A 1043								
WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATION THRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF  The effect of volunteer barley on the yield and profitability of rapeseed in Western Canada J. T. O'DONOVAN, A. K. SHARMA, K. KIRKLAND and E. A. De St REMY  Population dynamics and competitive effects of Cyperus esculentus (yellow nutsedge) – prediction and cost effective control strategies	10A-1 1025 10A-2 1035 10-3A 1043								
WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATHRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF  The effect of volunteer barley on the yield and profitability of rapeseed in Western Canada J. T. O'DONOVAN, A. K. SHARMA, K. KIRKLAND and E. A. De St REMY  Population dynamics and competitive effects of Cyperus esculentus (yellow nutsedge) – prediction and cost effective control strategies J. LAPHAM  Variability in the growth of cleavers (Galium aparine) and their effect on wheat yields B. J. WILSON and K. J. WRIGHT  Using decision thresholds for the control of grass and broadleaved weeds at the	10A-1 1025 10A-2 1035 10-3A 1043								
WEED COMPETITION AND THRESHOLDS – PRACTICAL APPLICATHRESHOLDS  Research Reports  Development and implementation of weed economic thresholds in the Federal Republic of Germany R. HEITEFUSS, B. GEROWITT and W. WAHMHOFF  The effect of volunteer barley on the yield and profitability of rapeseed in Western Canada J. T. O'DONOVAN, A. K. SHARMA, K. KIRKLAND and E. A. De St REMY  Population dynamics and competitive effects of Cyperus esculentus (yellow nutsedge) – prediction and cost effective control strategies J. LAPHAM  Variability in the growth of cleavers (Galium aparine) and their effect on wheat yields B. J. WILSON and K. J. WRIGHT	10A-1 1025 10A-2 1035 10-3A 1043								

# SESSION 10B

# MODE OF ACTION AND METABOLISM OF HERBICIDES: III (Continued)

Research Reports							
Behaviour of glufosinate-ammonium in weed P. HAAS and F. MÜLLER	ls 			***		10B-1	1075
Mode of crop tolerance to pyridate in corn ar A. ZOHNER	nd peanuts			***		10B-2	1083
The mode of action of the herbicidal qu	inolinecarb	oxylic	acid,	Quinm	erac		
(BAS 518H) R. BERGHAUS and B. WUERZER			1404.40	***		10B-3	1091
The selectivity of clopyralid in sugar beet: St	tudies on et	hylene	evolut	tion			
L. M. L. THOMPSON and A. H. COBB			***	***		10B-4	1097
c : 1 : 1 : 1 : 1	1		: L :L :L ::				
Synergism and antagonism of herbicides wit Z. EKLER and G. R. STEPHENSON	n monooxyg	genase	ınnıbı	tors		10B-5	1105
Z. EKLER and G. R. STEFHENSON	#1518 A.5151		• • •	•••	•••	10D-0	1100
Biochemical aspects of safener action: Effect		hione,	glutatl	nione –	S -		
transferase and acetohydroxy acid synthetas N. D. POLGE, A. D. DODGE and J. C. CASEI						10B-6	1113
II. D. I OLGE, A. D. DODGE and S. C. CABEI		15.545		(A. 1865)			