

PROCEEDINGS OF THE
1979
BRITISH CROP PROTECTION CONFERENCE
PESTS AND DISEASES
(10th British Insecticide and Fungicide Conference)

VOLUME 1

19th to 22nd NOVEMBER 1979

**HOTEL METROPOLE, BRIGHTON
ENGLAND**

The Conference was organised by The British Crop Protection Council.
Copies of the proceedings may be obtained from Miss M. Billitt, 'Shirley',
Westfields, Cradley, Malvern, Worcester.

TUESDAY 20TH NOVEMBER 1979

CONTENTS

VOLUME 1

Session 1

THE SIXTH BAWDEN LECTURE

Paper No.	Page
1 Pesticide usage: prodigal or precise PROFESSOR T. R. E. SOUTHWOOD, FRS	(Vol. 3)

Session 2A

CEREALS I: CONTROL OF CEREAL PESTS AND DISEASES

2 Duration of cereal aphid populations and the effects on wheat yield and quality

3 Control of barley yellow dwarf virus with permethrin on winter barley in France

6 Practical experience with the combination thiabendazole/captafol against cereal foot rot and ear diseases

7 Broad-spectrum disease control in winter wheat with a mixture of carbendazim and mancozeb

8 Control of cereal insect pests by chlorpyrifos J. R. DOWSETT, P. J. JEFFERY, A. J. GILCHRIST	45
--	----

The development of prochloraz (BIS 40 542), a broad spectrum fungicide for the control of cereal diseases R. G. HARRIS, D. M. WEIGHTON, A. de St. BLANQUAT, I. D. G. ROSE .. 53

Session 2B

PEST AND DISEASE CONTROL IN TOP FRUIT

Session 3A

PEST AND DISEASE PROBLEMS IN OILSEED RAPE

Session 3B

PEST AND DISEASE CONTROL IN SOFT FRUIT AND HOPS

25 The principles of pest and disease control in hops and soft fruit
C. D. WALKER (Vol. 3)

Paper No.	Page
26 Field trials for the control of raspberry cane midge in Scotland J. A. T. WOODFORD, S. C. GORDON, P. OSBORNE, D. H. TURNER, G. N. FOSTER, J. BARKER	153
27 Resistance to pesticides in damson-hop aphid and red spider mite on English hops R. C. MUIR, J. E. CRANHAM	161
28 Recent changes in the health status of English hop plantings J. M. THRESH	169
29 Control of strawberry fruit rots caused by <u>Botrytis cinerea</u> and <u>Phytophthora cactorum</u> T. HUNTER, V. W. L. JORDAN, A. C. PAPPAS	177
30 The effect of systemic and other fungicides on the control of red core disease and on the yield of treated strawberries I. G. MONTGOMERIE, D. M. KENNEDY	185
31 Use of dicarboximide fungicides on strawberries and potential problems of resistance in <u>Botrytis cinerea</u> R. P. DAVIS, C. DENNIS	193

Session 4A

CEREALS II: PEST AND DISEASE CONTROL INPUTS IN CEREAL PRODUCTION

Session 4B

CONTROL OF SOIL BORNE PESTS

Session 4C

PESTICIDE ACTION: RESISTANCE AND SELECTIVITY

WEDNESDAY 21 NOVEMBER 1979

Session 5

THE ROLE OF RESISTANT VARIETIES IN CROP PROTECTION

Session 6A

SPRAY APPLICATION: THE PROSPECTS FOR REDUCING VOLUMES

VOLUME II

Session 8C

SAFETY ASPECTS OF PESTICIDES II. MEASURING SIDE-EFFECTS

THURSDAY 22 NOVEMBER 1979

Session 9

NEW COMPOUNDS AND FORMULATIONS

93	Diclobutrazol: a new systemic fungicide K. J. BENT, A. M. SKIDMORE	477
94	Field trials with procymidone against <u>Botrytis</u> spp. on various crops in France R. N. DURAND	485
95	EL-614, a novel acute rodenticide B. A. DREIKORN, G. O. P. O'DOHERTY, A. J. CLINTON, K. E. KRAMER	491
96	Fenarimol - a new fungicide for the control of powdery mildews and apple scab J. BUENDIA, L. CALVANI, D. M. FARRANT, M. J. FAULKNER, S. OBEID ..	499

Paper No.		Page
97	The control of airborne diseases of cereals with CGA 64250 P. A. URECH, F. J. SCHWINN, J. SPEICH, TH. STAUB	508
98	Propetamphos for the control of ectoparasites on cattle and sheep W. BERG, R. GOTHE	517
99	Etrimfos - a new insecticide for stored grain pest control G. L. PARTINGTON, M. R. REDBOND	525

Session 10

NEW COMPOUNDS AND FORMULATIONS

100	32,861 RP, a new product for the control of sucking insects, cockroaches and ants D. AMBROSI, G. BIC, J. DESMORAS, G. GALLINELLI, G. ROUSSEL	533
101	Further experiences with a new morpholine fungicide for the control of powdery mildew and rust diseases on cereals K. BOHNEN, H. SIEGLE, F. LÖCHER	541
102	Methfuroxam, a new systemic fungicide for the control of basidiomycete pathogens D. JACKSON	549
103	Effectiveness of granular and sprayable formulations of FMC 35001, a new insecticide/nematicide, for use on agricultural crops E. G. MAITLEN, N. A. SLADEN	557
104	Triadimenol seed treatments for the control of cereal diseases A. WAINWRIGHT, A. C. ROLLETT, D. B. MORRIS	565
105	Amidinohydrazone - a new class of insecticides J. BYRON LOVELL	575
106	A new group of fungicidally-active metal co-ordination compounds based on prochloraz R. J. BIRCHMORE, W. H. WELLS, L. G. COPPING	583
107	TF-138: A new fungicide T. KUSAKA, K. SUETOMI, T. IWASA, S. HARADA	589
108	The efficacy of newly developed dual-component granular insecticides against cabbage root fly A. R. THOMPSON, A. L. PERCIVALL, G. H. EDMONDS	597