BULLETIN ENVIRONMENTAL
CONTAMINATION & TOXICOLOGY Vol. 8 #1
JULY 1972

PESTICIDE LEVELS IN DEER
by W. W. Benson and P. Smith 1

THE PERSISTENCE AND FATE OF FENITROTHION INSECTICIDE IN A FOREST ENVIRONMENT
by W. R. Yule and J. R. Dolly 10

DDT IN FOREST TREES AND LUMBER
by W. W. Yule, M. J. Hildebrand, C. J. Smith, and R. S. Fox 19

INTESTINAL ABSORPTION OF POLYCHLORINATED BIPHENYLS IN RATS
by P. W. Albro and L. Fishbein 26

CHARACTERIZATION OF THE COMPONENTS OF TECHNICALLY POLYCHLORINATED BIPHENYL MIXTURES—II
by A. G. Rai and G. A. Gauthier 32

POTENTIAL RESIDUE PROBLEM ASSOCIATED WITH LOW VOLUME SPRAYS ON CITRUS IN CALIFORNIA
by G. E. Cannon, W. E. Westlake, and F. A. Gunther 38

AVOIDANCE OF PESTICIDES BY UNTRAINED MOSQUITOFISH, GAMBUSIA AFFINIS
by D. J. Hansen, E. Matthews, S. L. Nall, and D. P. Dumas 46

ANALYSIS OF A POLYCHLORINATED TERPHENYL (AROCLOR 5460) AND ITS DEPOSITION IN THE CHESAPEAKE BAY
by R. F. Addison, G. L. Fletcher, S. Bay, and J. Doane 52

METABOLISM OF DIAZINON BY FISH LIVER MICROSOMES
by J. M. Hogan and C. G. Kayahan 61

VOL 8 #2 SEPT 1972

DDE THINS SCREECH OWL EGGSHELLS
by M. A. R. McLane and L. C. Hall 65

ORGANOCHLORINE INSECTICIDE, HERBICIDE AND POLYCHLORINATED BIPHENYL (PCB) INHIBITION OF NaK-ATPase IN RAINBOW TROUT
by P. H. Wells, J. M. Friedhoff, and G. A. Wedemeyer 69

ETHYL *p*-HYDROXYCARBANILATE CARBAMILATE (EP-478) METABOLISM IN SUGAR BEETS
by C. O. Knowles and B. R. Sonawane 73

MERCURY UPTAKE FROM SOIL BY VARIOUS PLANT SPECIES
by M. K. John 77

METABOLISM OF DDT BY FRESH WATER DIATOMS
by S. Miyazaki and A. J. Thanabalasingam 81

BROWN PELICAN EGGSHELLS: X-RAY DIFFRACTION STUDIES
by R. W. Gould 84

METHYL MERCURY: ITS EFFECT ON EGGSHELL THICKNESS
by D. B. Peakall and J. L. Lincer 89

THE EFFECT OF INCREASED TEMPERATURE UPON THE ACUTE TOXICITY OF SOME HEAVY METAL IONS
by R. Rehwoldt, L. W. Wempesco, B. Rovira, and D. Alessandrello 91

MASS SPECTROMETRIC IDENTIFICATION OF MIREX RESIDUES IN CRUDE EXTRACTS AND IN THE PRESENCE OF POLYCHLORINATED BIPHENYLS
by S. Un, C. M. Himel, and T. J. Dietz 97

CHROMOUS CHLORIDE REDUCTION VII. STEREOCHEMISTRY AND STRUCTURE OF THE MAJOR PRODUCT EMPLOYED IN THE CONFIRMATION OF ENDRIN RESIDUES
by A. S. Y. Chau and B. J. Wilkinson 105

DETERMINATION OF *o*-SEC-BUTYLPHENYL *N*-METHYL-*N*-THIOPHENYL-CARBAMATE (RE-11775) IN WATER, SOIL AND VEGETATION
by W. E. Westlake, H. Ring, and F. A. Gunther 109

INFLUENCE OF CARBON MONOXIDE UPON SOME RESPIRATORY ENZYMES OF THE CHICK EMBRYO
by C. F. Tsumenaris and F. B. Baker 113

RESIDUES OF DDT AND ITS DEGRADATION PRODUCTS IN COD LIVER FROM THE NORWEGIAN FJORDS
by J. Skaarevoo and J. Ronning 120

WILDLIFE KILL RESULTING FROM THE MISUSE OF ARSENIC ACID HERBICIDE
by B. C. Sedgwick, C. I. Whitehead, Jr., A. Conley, and F. E. Rothrig 122

BULLETIN ENVIRONMENTAL
CONTAMINATION & TOXICOLOGY Vol. 8 #3 SEPT 1972
APR 10 1973

EFFECTS OF AROCLOR 1242® (A POLYCHLORINATED BIPHENYL) AND DDT ON CULTURES OF *Daphnia*, PROTOZOAN, DAPHNID, ISOTRICHID, AND GUPPY
by J. R. Mauger 129

NOTE ON THE FLAMELESS ATOMIC ABSORPTION RESPONSE OF MERCURY WITHOUT ADDED REDUCING AGENT
by W. H. Gutenmann, B. J. Lisk, and H. Grier 138

INHIBITION OF MITOCHONDRIAL ELECTRON TRANSPORT BY GUTHION, SOME RELATED INSECTICIDES, AND DEGRADATIVE PRODUCTS
by J. C. Hoskins and R. S. Pardini 141

SUSCEPTIBILITY OF CHICKENS FED *p,p'*-DDT TO HISTONONIASIS
by C. V. Radhakrishnan, N. P. Thompson, and D. J. Forrester 147

UV IRRADIATION OF AROCLOR 1254
by J. L. Herring, E. A. Woods, and D. D. Gills 153

EFFECT OF HEPTACHLOR AND RELATED COMPOUNDS ON GROWTH OF *STAPHYLOCOCCUS AUREUS*
by B. E. Langlois and K. G. Sides 158

PESTICIDE MORTALITY OF YOUNG WHITE-FACED IBIS IN TEXAS
by E. L. Fitzhugh and G. L. Hunter 166

CONFIRMATION OF PESTICIDE RESIDUE IDENTITY, III. DERIVATIVE FORMATION IN SOLID MATRIX FOR THE CONFIRMATION OF ENDRIN BY GAS CHROMATOGRAPH
by A. S. Y. Chau 169

EFFECTS OF DIELDRIN AND GAMMA BHC ON SERUM PROTEINS AND PIB
by M. Wassermann, D. Wassermann, E. Meisr, M. Ephraimson, and S. Cocos 177

THE CYTOCHROME P-450 SUBSTRATE OPTICAL DIFFERENCE SPECTRA OF PESTICIDES WITH MOUSE HEPATIC MICROSOMES
by R. B. Matthews and E. Hodgson 185

VOL 8 #4 OCT. 1972

DDE AT LOW DIETARY LEVELS KILLS CAPTIVE AMERICAN KESTRELS
by R. D. Porter and S. N. Wiemeyer 193

FATE OF MIREX-^{14}C IN THE RAT AND PLANTS
by H. M. Mahmoudian, L. Fishbein, M. Fields, and N. B. Matthews 200

DISCRIMINATION BETWEEN PCB AND DDT RESIDUES BY GAS A CHROMATOGRAPHIC-MASS SPECTROMETRIC TECHNIQUE
by D. G. Shaw 206

THE GC AND DIRECT INLETS MASS SPECTRA OF HEPTACHLOR AND 1-HYDROXYCHLORDENE
by A. Dunaiye and M. Combs 212

POLYCHLORINATED BIPHENYLS: PHOTOLYSIS OF 3,4,3',4'-TETRACHLOROBIPHENYL AND 2,4,5,2',4',5'-HEXACHLOROBIPHENYL IN SOLUTION
by L. O. Ruzo, M. J. Zabik, and R. D. Schuetz 217

IN VIVO AND *IN VITRO* EPOXIDATION OF ALDRIN BY AQUATIC FOOD CHAIN ORGANISMS
by M. A. Q. Khan, A. Kamal, R. J. Wolke, and J. Hamuda 219

PERSISTENCE OF 2, 4, 5-T IN GRASSLANDS OF TEXAS
by R. W. Bovey and J. R. Baur 229

GAS CHROMATOGRAPHIC DETERMINATION OF THE RATE CONSTANT FOR THE HYDROLYSIS OF HEPTACHLOR
by A. Dunaiye 234

ORGANOCHLORINE PESTICIDES IN RAINWATER, OAHU, HAWAII, 1971-1972
by A. Bevenue, J. N. Ogata, and J. W. Hylin 238

FORMALDEHYDE AS A POSSIBLE CARCINOGEN
by H. S. Rosenkranz 242

ACUTE INTRAPERITONEAL TOXICITY OF DDT AND PCB'S IN MICE USING TWO SOLVENTS
by V. Lewis, W. A. McClain, and F. H. Wells 245

ORGANOCHLORINES IN THE SEASTAR *ACANTHASTER PLANCI*
by L. E. McCloskey and R. H. Stoddart 251

MONS 097497

10-02
APR 15
MONS 097498

BULLETIN ENVIRONMENTAL
CONTAMINATION & TOXICOLOGY

VOL 8 #5 Nov. 1972

TOTAL AND ORGANIC MERCURY IN MARINE FISH
by J. B. Rivers, J. E. Pearson, and C. D. Shultz 257

FACTORS INFLUENCING TRANSLOCATION AND TRANSFORMATION OF MERCURY IN RIVER SEDIMENT
by F. Mohammam, Y. Golah, and G. M. Roush 267

TOTAL MERCURY-MONOMETHYLMERCURY CONTENT OF SEVERAL SPECIES OF FISH
by L. R. Kamps, R. Carr, and H. Miller 273

LEAD: LEVELS IN ROADSIDE INVERTEBRATES AND SMALL MAMMALS
by P. Williamson and P. R. Evans 280

DIELDRIN LEVELS IN RELATION TO TOTAL, NEUTRAL, AND PHOSPHOLIPID COMPOSITION IN SELECTED PORK MUSCLES
by M. K. Yoshida, M. E. Zabik, and H. Funk 289

GAS CHROMATOGRAPHIC DETERMINATION OF PENTACHLOROPHENOL IN HUMAN BLOOD AND URINE
by J. B. Rivers 294

EFFECTS OF SOME ORGANOPHOSPHORUS INSECTICIDES ON VITAMIN E AND OTHER BLOOD CONSTITUENTS AND ON THE APPARENT INDUCEMENT OF DIARRHEA IN NEONATAL CALVES
by L. M. Hunt and R. T. McCarty 297

EFFECT OF ONE POLYCHLORINATED BIPHENYL ON SIZE AND ACTIVITY OF THE GULL THYROID
by D. J. Jefferies and J. L. F. Parslow 306

EFFECTS OF ORATHRIN SYSTEMIC FUNGICIDES ON VARIOUS BIOLOGICAL SYSTEMS
by B. E. Mather 311

SERUM VITAMIN A ELEVATION IN DDT EXPOSED VOLUNTEERS
by J. E. Kiel, S. H. Sandifer, J. H. Fleldon, and L. E. Priester 317

VOL 8 #6 DEC. 1972

TRANSPORT OF DDT, DDE, AND DIELDRIN IN HUMAN BLOOD
by D. P. Morgan, C. C. Rose, and E. H. Paschal 321

SEPARATION OF ALDRIN FROM AROCLOR 1254
by E. J. Hannan and D. D. Bird 327

DDT RESIDUES IN A VINEYARD SOIL AFTER 24 YEARS OF EXPOSURE
by R. J. Kuhr, A. C. Davis, and E. F. Taschenberg 329

INSECTICIDE TOLERANCES OF TWO CRAYFISH POPULATIONS (*PROCAMBARUS ACUTUS*) IN SOUTH CENTRAL TEXAS
by D. W. Allough 334

A METHOD FOR SAMPLING AND ANALYSIS OF PROPOXUR IN AIR
by C. W. Miller, M. T. Shultz, and F. J. Biros 339

PCB RESIDUES IN ATLANTIC ZOOPLANKTON
by R. W. Risebrough, V. Vreeland, G. R. Harvey, H. P. Miklas, and G.M. Cantwell 345

ORGANOCHLORINE RESIDUES IN WILD RING-NECKED PHEASANTS FROM SOUTHWESTERN IDAHO
by J. P. Mussleh 356

ORGANOPHOSPHATE RESIDUES ON COTTON IN ARIZONA
by G. W. Ware, B. Estesen, and W. P. Cahill 361

THE GAS CHROMATOGRAPHIC DETERMINATION OF PARAQUAT IN WATER
by C. J. Sedquist and G. G. Choby 363

MIREX RESIDUES IN WILD POPULATIONS OF THE EDIBLE RED CRAWFISH (*PROCAMBARUS CLARKII*)
by G. P. Rhodes, J. N. Ford, and J. C. Hawthorne 368

NITROSATION OF SARCOSINE: CHEMICAL KINETICS AND GASTRIC ASSAY
by M. A. Friedman 378

WATER POLLUTION CONTROL

VOL 72 #1 1973

PRESIDENTIAL ADDRESS of John T. Calvert, C.B.E., M.A., F.I.C.E., F.R.I.C. 5

PAPERS PRESENTED AT BRANCH MEETINGS

The Management of Water in Northern Ireland, with Particular Reference to Water Pollution, *by R. Spence and M. G. W. Bell* 10

Experimental Work on the Continuous Monitoring of Water Quality, *by R. G. Toms, D. C. Hinge and J. Austin* 20

Practical Aspects of Sewage Treatment: The Pros and Cons of Forty Years' Experience of Water Pollution Control, *by S. C. Enos* .. 38

Operating Experiences with Tertiary Treatment at the Sewage Works of Cannock Urban District Council, *by H. H. Hopper* 46

Experiences with Tertiary Treatment at Sewage Works of the Lichfield RDC, *by K. G. Pullin* 52

Experiences with Tertiary Treatment in Shropshire, *by P. Ward* .. 60

Some Aspects of Sludge Disposal on Agricultural Land, *by A. Spotswood and M. Rayner* 71

Control of Filter Pressing at Sheffield, *by K. H. Smurthwaite* 78

The Use of Storm Tanks for Tertiary Treatment of Sewage, *by J. O'Neill* 87

The Use of Activated Carbon for Improving the Quality of Polished Sewage Effluent (*Discussion*) 91

The Application of Ultrafiltration to the Treatment of a Bone Degreasing Effluent, *by D. R. Ashworth and G. R. Tristram* 94

WELSH BRANCH: INAUGURAL MEETING 100

WATER SUPPLY AND UTILISATION OF THE VAAL RIVER: A SYMPOSIUM .. 101

CAPITAL AND OPERATING COSTS OF SEWAGE TREATMENT 103