

Index

INDEX FOR RECT VOL. 221

- Acetoanilide pesticides, leaching characteristics, **221**: 73
- Acetoanilide pesticides, soil column leaching (table), **221**: 62–65
- Anthropogenic emissions, zirconium, **221**: 109
- Arylalkanoate pesticides, leaching characteristics, **221**: 73
- Arylalkanoate pesticides, soil column leaching (table), **221**: 62–65
- Bioavailability in soils, zirconium, 221**: 110
- Biodegradation effects, pesticide mobility, **221**: 23
- Biodegradation rate, method effects, **221**: 24
- Biogeochemical behavior effects, zirconium speciation, **221**: 113
- Carbamate pesticides, soil column leaching results (table), **221**: 54–57
- Carbamate pesticides, soil leaching results, **221**: 53
- Chemical degradation, microbe involvement, **221**: 25
- Clay effects, soil sorption processes, **221**: 20
- Climate effects, soil column leaching, **221**: 14
- Climate effects, zirconium release, **221**: 112
- Colloids, pesticide transport effects, **221**: 7
- Dissolved organic matter, pesticide transport effects, **221**: 7, 8
- Earthworm burrows, pesticide leaching effects, **221**: 33
- Earthworms, soil macropore formation, **221**: 6
- Elution medium effects, pesticide mobility (table), **221**: 37
- Facilitated transport, pesticides in soil, **221**: 42
- Fertilizer effects, pesticide mobility in soil, **221**: 43
- Field leaching, pesticides, **221**: 16
- Field vs. laboratory studies, pesticide leaching, **221**: 53
- Flyash amendment of soil, pesticide mobility effects, **221**: 40
- Groundwater contamination risk, mobility indices (table), 221**: 27
- Groundwater ubiquity score (GUS), relative soil mobility (diag.), **221**: 30
- GUS, relative pesticide mobility, **221**: 30
- Humic acid amendment of soil, pesticide mobility effects, 221**: 40
- Hysteresis effects, pesticide absorption-desorption, **221**: 21
- Laboratory vs. field studies, pesticide leaching, **221**: 53
- Leaching behavior, pesticides, **221**: 2

- Leaching characteristics, pesticide classes, **221**: 73
- Leaching study types, relative reliability, **221**: 53
- Lysimeter (outdoor) results, pesticides (diag.), **221**: 72
- Lysimeter advantages, pesticide mobility measurement, **221**: 16
- Lysimeter studies, pesticide loss rate, **221**: 15
- Lysimeter studies, use of radiotracers, **221**: 15
- Lysimeters (outdoor), measuring pesticide mobility, **221**: 14
- Macropore** disruption, soil tillage, **221**: 31
- Macropores in soil, definition, **221**: 4
- Macropores, formation in soils, **221**: 5
- Mathematical modeling, pesticide transport in soil, **221**: 50
- Method effects, pesticide dissipation rate, **221**: 24
- Microbe involvement, chemical degradation, **221**: 25
- Mobility indices, groundwater contamination risk (table), **221**: 27
- Mobility indices, pesticides, **221**: 26
- Mobility of pesticides, soil column leaching studies, **221**: 52
- Model, pesticide soil mobility (diag.), **221**: 46
- Modeling soil mobility, pesticides, **221**: 45
- Modeling, pesticide transport in soil, **221**: 50
- Organophosphorous** pesticides, soil column leaching results (table), **221**: 54–57
- Organophosphorous** pesticides, soil leaching results, **221**: 53
- Peat** amendment of soil, pesticide mobility effects, **221**: 40
- Peat effects, pesticide soil leaching, **221**: 44
- Pesticide absorption-desorption, hysteresis effects, **221**: 21
- Pesticide biodegradation effect, plant material amendment of soil, **221**: 41
- Pesticide biodegradation rate, method effects, **221**: 24
- Pesticide degradation, mobility effects, **221**: 19
- Pesticide degradation, soil macropore effects, **221**: 33
- Pesticide dissipation rate, soil & method effects, **221**: 24
- Pesticide leaching effects, colloids & dissolved organic matter, **221**: 7, 8
- Pesticide leaching effects, earthworm burrows, **221**: 33
- Pesticide leaching, laboratory vs. field studies, **221**: 53
- Pesticide leaching, lysimeter (outdoor) results (diag.), **221**: 72
- Pesticide leaching, soil adsorption effects, **221**: 26
- Pesticide leaching, soils, **221**: 1 ff.
- Pesticide leaching, turf thatch effects, **221**: 18
- Pesticide loss rate, from soil lysimeters, **221**: 15
- Pesticide mobility determination, soil column apparatus (diag.), **221**: 12
- Pesticide mobility effect, preferential flow, **221**: 32
- Pesticide mobility effects, soil vegetation, **221**: 41
- Pesticide mobility in soil, fertilizer effects, **221**: 43
- Pesticide mobility measurement, lysimeter advantages, **221**: 16
- Pesticide mobility, biodegradation effects, **221**: 23
- Pesticide mobility, degradation effects, **221**: 19
- Pesticide mobility, elution medium effects (table), **221**: 37
- Pesticide mobility, groundwater ubiquity score, **221**: 30
- Pesticide mobility, in agriculture, **221**: 3
- Pesticide mobility, modeling & simulation methods, **221**: 45
- Pesticide mobility, outdoor lysimeter methods, **221**: 14
- Pesticide mobility, prospective groundwater studies, **221**: 17
- Pesticide mobility, soil amendment & vegetation effects, **221**: 34
- Pesticide mobility, soil amendment effects (table), **221**: 37
- Pesticide mobility, soil amendment effects, **221**: 36
- Pesticide mobility, soil column leaching method, **221**: 11
- Pesticide mobility, soil column leaching studies, **221**: 52
- Pesticide mobility, soil factor effects, **221**: 31
- Pesticide mobility, soil macropore effects, **221**: 3
- Pesticide mobility, soil moisture effects, **221**: 31

- Pesticide mobility, soil process effects, **221**: 18
- Pesticide mobility, soil property effects, **221**: 3
- Pesticide mobility, soil thin-layer chromatography, **221**: 10
- Pesticide mobility, soil tillage effects (table), **221**: 35
- Pesticide mobility, soil tillage effects, **221**: 34
- Pesticide mobility, surfactant effects, **221**: 18
- Pesticide mobility, urea amendment effects, **221**: 36
- Pesticide mobility, vegetation effects (table), **221**: 37
- Pesticide soil leaching, achieving material balance, **221**: 132
- Pesticide soil leaching, tannic acid effects, **221**: 44
- Pesticide soil leaching, peat amendment effects, **221**: 44
- Pesticide soil mobility, conceptual model (diag.), **221**: 46
- Pesticide sorption, soil mobility effects, **221**: 19
- Pesticide transport effects, colloid effects, **221**: 7
- Pesticide transport in soil, mathematical modeling, **221**: 50
- Pesticide transport, dissolved organic matter effects, **221**: 7
- Pesticides (misc.), leaching characteristics, **221**: 74
- Pesticides in soil, equilibrium vs. non-equilibrium transport, **221**: 46
- Pesticides in soil, facilitated transport, **221**: 42
- Pesticides, field leaching, **221**: 16
- Pesticides, leaching behavior, **221**: 2
- Pesticides, leaching methods, **221**: 10
- Pesticides, mobility indices, **221**: 26
- Pesticides, structures (appendix), **221**: 77
- Pesticides, terrestrial field dissipation studies, **221**: 17
- Pesticides, transport processes, **221**: 2
- pH effects, on zirconium behavior, **221**: 112
- pH effects, soil sorption processes, **221**: 20
- Phytotoxicity, zirconium, **221**: 107 ff.
- Plant distribution, zirconium, **221**: 115
- Plant growth inhibition, zirconium, **221**: 117
- Plant material amendment of soil, pesticide biodegradation effect, **221**: 41
- Plant toxicity, zirconium, **221**: 107 ff., 116
- Plant translocation rate, zirconium, **221**: 116
- Plant translocation, zirconium, **221**: 114
- Plant uptake from soil, zirconium, **221**: 114, 115
- Plant uptake, zirconium, **221**: 107 ff.
- Preferential flow, pesticide mobility effect, **221**: 32
- Preferential flow, through soil macropores, **221**: 32
- Prospective groundwater studies, pesticide mobility, **221**: 17
- Pyrethroid pesticides, soil column leaching results (table), **221**: 54–57
- Pyrethroid pesticides, soil leaching results, **221**: 53
- Soil adsorption effects, pesticide leaching, **221**: 26
- Soil amendment effects, pesticide mobility (table), **221**: 37
- Soil amendment effects, pesticide mobility, **221**: 34, 36
- Soil behavior modeling, pesticides, **221**: 45
- Soil bioavailability, zirconium, **221**: 110
- Soil column elution, experimental methods, **221**: 13
- Soil column leaching effects, dissolved organic matter, **221**: 8
- Soil column leaching studies, pesticide mobility, **221**: 52
- Soil column leaching, acetanilide pesticides (table), **221**: 62–65
- Soil column leaching, arylalkanoate pesticides (table), **221**: 62–65
- Soil column leaching, carbamate pesticides (table), **221**: 54–57
- Soil column leaching, climate effects, **221**: 14
- Soil column leaching, diphenyl ether pesticides (table), **221**: 62–65
- Soil column leaching, dissolved organic matter effects, **221**: 9
- Soil column leaching, measuring pesticide mobility, **221**: 11
- Soil column leaching, misc. pesticides (table), **221**: 66–71
- Soil column leaching, organophosphorous pesticides (table), **221**: 54–57
- Soil column leaching, pyrethroid pesticides (table), **221**: 54–57
- Soil column leaching, triazine pesticides (table), **221**: 62–65
- Soil column leaching, typical apparatus (diag.), **221**: 12
- Soil column leaching, urea & sulfonyleurea herbicides (table), **221**: 58–61
- Soil column leaching, water-dispersible colloid effects, **221**: 9

- Soil columns for pesticide leaching, described, **221**: 12
- Soil columns, pesticide leaching, **221**: 1 ff.
- Soil effects, pesticide dissipation rate, **221**: 24
- Soil facilitated transport, pesticides, **221**: 42
- Soil factor effects, pesticide mobility, **221**: 31
- Soil leaching methods, pesticides, **221**: 10
- Soil leaching results, organophosphorous & carbamate pesticides, **221**: 53
- Soil leaching results, synthetic pyrethroid insecticides, **221**: 53
- Soil leaching, pesticides, **221**: 1 ff., 2
- Soil macropore effects, pesticide degradation, **221**: 33
- Soil macropores, characteristics, **221**: 4
- Soil macropores, dye studies, **221**: 4
- Soil macropores, earthworm role, **221**: 6
- Soil macropores, formation, **221**: 5
- Soil macropores, pesticide mobility, **221**: 3
- Soil macropores, preferential flow, **221**: 32
- Soil mobility of pesticides, conceptual model (diag.), **221**: 46
- Soil mobility of pesticides, fertilizer effects, **221**: 43
- Soil mobility, groundwater ubiquity score (GUS; diag.), **221**: 30
- Soil mobility, zirconium, **221**: 111
- Soil moisture effects, pesticide mobility, **221**: 31
- Soil organic matter effects, zirconium mobility, **221**: 112
- Soil process effects, pesticide mobility, **221**: 18
- Soil properties, vs. K_d values, **221**: 22
- Soil property effects, pesticide mobility, **221**: 3
- Soil retention & mobility, zirconium, **221**: 110
- Soil sorption effects, pesticide mobility, **221**: 19
- Soil sorption processes, pH & clay effects, **221**: 20
- Soil sorption, processes, **221**: 19
- Soil texture effects, zirconium behavior, **221**: 112
- Soil thin-layer chromatography, pesticide mobility, **221**: 10
- Soil tillage effects, pesticide mobility (table), **221**: 35
- Soil tillage effects, pesticide mobility, **221**: 34
- Soil tillage, macropore disruption, **221**: 31
- Soil to plant transfer, zirconium, **221**: 115
- Soil vegetation, pesticide mobility effects, **221**: 41
- Soil-plant system behavior, zirconium, **221**: 107 ff.
- Soil-plant transfer, zirconium, **221**: 114
- Soils, structure & character, **221**: 3
- Speciation, zirconium, **221**: 113
- Sulfonylurea herbicides, leaching characteristics, **221**: 73
- Sulfonylurea herbicides, soil column leaching (table), **221**: 58–61
- Surfactant effects, pesticide mobility, **221**: 18
- Tannic acid effects, pesticide soil leaching, **221**: 44
- Terrestrial field dissipation studies, pesticides, **221**: 17
- Triazine pesticides, leaching characteristics, **221**: 73
- Triazine pesticides, soil column leaching (table), **221**: 62–65
- Turf thatch effects, pesticide leaching, **221**: 18
- Urea amendment effects, pesticide mobility, **221**: 36
- Urea herbicides, characteristics, **221**: 73
- Urea herbicides, soil column leaching (table), **221**: 58–61
- Vegetation effects, pesticide mobility (table), **221**: 37
- Vegetation effects, pesticide mobility, **221**: 34
- Water-dispersible colloids, pesticide leaching effects, **221**: 7
- World mine production trend, zirconium (diag.), **221**: 110
- Zirconium, plant uptake & distribution, **221**: 115
- Zirconium behavior, pH & soil texture effects, **221**: 112
- Zirconium behavior, soil-plant systems, **221**: 107 ff.
- Zirconium isotopes, described, **221**: 109, 110
- Zirconium minerals, described, **221**: 109
- Zirconium mobility, soil organic matter effects, **221**: 112
- Zirconium release, climate effects, **221**: 112
- Zirconium speciation, biogeochemical behavior effects, **221**: 113
- Zirconium toxicity, plant defenses, **221**: 117
- Zirconium, commercial uses, **221**: 109

- Zirconium, crustal abundance, **221**: 113
Zirconium, description, **221**: 108
Zirconium, factors affecting mobility & bioavailability, **221**: 112
Zirconium, mineral structure, **221**: 111
Zirconium, minerals & isotopes, **221**: 108
Zirconium, organism toxicity, **221**: 116
Zirconium, plant growth inhibition, **221**: 117
Zirconium, plant translocation rate, **221**: 116
Zirconium, plant translocation, **221**: 114
Zirconium, plant uptake from soil, **221**: 114
Zirconium, soil bioavailability, **221**: 110
Zirconium, soil mobility, **221**: 111
Zirconium, soil retention & mobility, **221**: 110
Zirconium, soil to plant transfer, **221**: 115
Zirconium, sources & abundance, **221**: 108
Zirconium, speciation, **221**: 113
Zirconium, toxicity, **221**: 116
Zirconium, worldwide production trend (diag.), **221**: 110