

## Subject Index

### A

Activation energy, 129  
 Adjuvants, 167  
     concentration, 192  
     spray, 182  
     spray tank, 77  
 Aerial application, 93  
 Aerosol, 138, 145  
 Agricultural chemicals, solvent  
     choice for, 21  
 Alcohol ethoxylate  
     linear, 192  
     secondary, 182, 213  
 Alkylpolyglycosides, 167  
 ASTM standards, 51  
 Avermectins, 129

### B

Barley, 182, 213  
 Biodegradation, nonylphenol, 3  
 Bloom, emulsion, 51  
 Bout marking, 152  
 Buffer zones, 93

### C

CIPAC methods, 51  
 CIPC, 138, 145  
 Collaborative International  
     Pesticide Analytical  
     Council, 51  
 Cotton, sprayer tests with, 104  
 Crystal growth, 36

### D

Degradation kinetics, 129  
 Dicofol, 114  
 Disodium dodecyl diphenyloxide  
     disulfonate, 36  
 Dispersion, 51  
 Dodecylbenzene, 51  
 Dose response, 93

Drift, 77, 93, 104  
     management, 114  
 Droplet spread, 182, 213  
 Drop size, 57  
 Dye, fluorescent, 104

### E

Emamectin benzoate, 129  
 Emulsifiable concentrates, 51  
 Environmental fate,  
     nonylphenol, 3  
 Ethylene oxide, 192

### F

Fertilizers, 36  
 Filters, 104  
*Fiscus benjamina*, 167  
 Fluazifop-P, 192  
 Fluorescent dye, 104  
 Foam and foam assessment, 152

### G

Glyphosate, 114, 182, 192  
 Green foxtail, 182, 213

### H

Hildebrand parameter, 21

### I

Inhibitor, 138, 145  
 Isopropyl N-(3-chlorophenyl)  
     carbamate, 138, 145

### K

Kinetic energy, 57  
 Kochia, 182, 213

## 216 PESTICIDE FORMULATIONS AND APPLICATION SYSTEMS

### L

Laboratory for Pest Control  
Application Technology,  
114  
Leaf imaging, 192  
Lima beans, 114

### M

Mass balance model, 145  
Methanol, 138  
Methyl esters, 167  
Models  
aerial application prediction  
model, 93  
mass balance, 145

### N

Nonylphenol, 3  
Nozzle, spraying, 57  
double nozzle, 114  
flat fan, 104

### O

Octylphenol ethoxylate, 213  
Ostwald ripening, 36  
Owens-Wendt, 167

### P

Permeability, cell membrane, 213  
Phytotoxicity, 182, 213  
Plant foliage, 57  
Poly(ethylene oxide), 77  
Polymers, 77  
Poly(vinyl alcohol), 77  
Poly(vinyl pyrrolidone), 77  
Polypropylene, foam life test,  
152  
Potassium nitrate, 36  
Potatoes, 138, 145, 213

### R

Rainfall simulator, 57  
Rainfastness, 57  
Redroot pigweed, 182, 213  
River studies, 3

### S

Scanning electron microscopy,  
182  
Secondary alcohol ethoxylate,  
182  
Sethoxydim, 182  
Sodium dodecyl benzene  
sulfonate, 77  
Solubility parameters, 21  
Solvents, 129  
choice, 21  
Solvolytic, 129  
Soybeans, 114  
Spray drift, 77, 93, 114  
Sprayers, 77, 93, 104, 114  
Stability, 51, 152  
emulsion, 167  
Standards  
ASTM, 51  
CIPAC methods, 51  
Storage, potatoes, aerosols for,  
138, 145  
Surface chemistry, 167  
Surface tension, 167, 192  
Surfactants, 77, 167  
linear alcohol ethoxylate, 192  
nonylphenol ethoxylates, 3  
octylphenol ethoxylate, 213  
secondary alcohol ethoxylate,  
182, 213  
Suspension concentrates,  
nonaqueous, 36

### T

Thermal aerosol generators, 138, 145  
Toxicity  
nonylphenol to aquatic  
organisms, 3  
Tristyryl phenol ethoxylate, 36  
Turf, artificial, foam life test, 152

### V

Velocity distributions, 57  
Viscosity, extensional, 77

### W

Wetting, 167  
Wheat, 192