

Subject Index

A

Adjuvants, 71, 93
 Agglomeration, 38
 Airborne dust measurements, 42
 Application rate control, 111,
 126, 140
 drift, 156, 142, 170, 184, 204
 Assessment, risk, 3, 11
 Assimilation, carbon dioxide, 84
 Atomizer, 84, 170, 142, 184
 Atrazine, 26
 Avian toxicity, 38

B

Birch, white, 93
 Boom tube, 140

C

Calibration, multivariate, 111
 Canopy partitioning, 184
 Carriers, 71
 dust measurements, 42
 granular, 38, 42
 inert, 42
 Chemigation, 26
 Contamination
 groundwater, 17, 26
 reduced, 140
 Corn, 71
 Cyclodextrin, 26

D

Deposit density, 56
 Dietary risk level, 3
 Diffuse reflectance, 111
 Direct injection, 126
 Dosage, spray deposit, 56
 Drift, 156, 184, 204
 modeling, 170
 potential, 142
 spray, loss, 170

Droplet drying, 93
 Droplet frequency analyzer, 170
 Droplet size, 56, 142, 156, 170
 Droplet spreading, 93
 Dry flowable pesticides, 126
 Dust, airborne, carrier, 42

E

Efficacy, pesticide, 184
 cyclodextrin, 26
 insecticide spray, 56
 Encapsulation, 17
 Environmental Protection
 Agency, 11
 Environmental risk, 3, 11

F

Fertilizer
 dry granular, 140
 inert granular carrier, 38
 Fire ants, 248
 Flat plate collectors, 204
 Florida beggarweed, 26
 Frequency analyzer, 170
 Fungicide, inert granular
 carrier, 38

G

Gelatinization, starch, 17
 Glyphosate, 93
 Granular carrier, 38, 42
 Granular formulation, for
 sprayer, 126
 Gravimetric dust
 measurements, 42
 Green foxtail, 71
 Groundwater contamination,
 17, 26
 Grub control, 236

HHeliothis, 56**Herbicides**

- cyclodextrin evaluation, 26
- dry and liquid, 140
- encapsulated, 17
- Fluazifop-P, 71
- inert granular carrier, 38
- sensor for application, 111
- translocation, 93

Hydraulic nozzle, 126, 142

I

Image analysis, 184

Inerts, 38, 42
testing, 11**Injection systems**

- mound, 248
- subsurface, 236

Insecticides

- fire ants, 248
- grub control, 236

Heliothis, 56

- inert granular carrier, 38
- injection systems,
 - subsurface, 236
- orchard, air-assisted
 - sprayed, 204
- turfgrass, 236

L

Laser, 156, 170

- dust measurement method, 42

Leaf wax, cuticular, 71

M

Metering techniques, 126, 140

Metribuzin, 26

Morningglory, smallflower, 26

Mound, fire ant, treatment, 248

NNear infrared reflectance
techniques, 111**Nozzles**

- agricultural fan, 156, 226
- hydraulic, 126, 142
- hydraulic versus electrostatic
 - charged, 184
- movement, 142
- patternator, 226

OOff-target spray losses, 170, 204,
226

Oranges, 84

Orchard, air-assisted sprayer,
204

Organic matter sensor, 111

P

Paraquat, 184

Particle size control, 17

reduction, 126

Pesticides (See also Herbicides;

Insecticides; specific types)

application rate control, 111,
126, 140

drift, 156, 142, 170, 184, 204

cyclodextrin, 26

dispersion times, 126

dry flowable, 126

dust, airborne carrier, 42

inert granular carrier, 38

inerts testing, 11

regulating, 3, 11

uptake, 56, 71, 84, 93

Phase doppler particle analyzer,
156

Phytotoxicity, 71, 84

Pneumatic applicator, 140

Polymers, 93

R

Regulatory issues, 3, 11

Release rate, 17, 26

Residue analysis, 236

Respiration, dark, 84

Risk assessment, 3, 11

Rotorods, 204

S

Sensor, organic matter, 111
 Silwet L-7607, 93
 Simazine, 26
 Solvents, 11, 71
 Spectrometry, 142
 Spray cloud dynamics, 142
 Spray deposit characteristics, 56
 Spray oil, petroleum, 84
 Spray pattern displacement, 226
 Spray patternator, 226
 Spray system
 agricultural fan nozzles, 156
 air-assisted, 204
 airblast, 184
 atomizer, 84, 170, 184
 boom, 184, 226
 bounce, 226
 fan nozzles, 226
 fire ant control, for, 248
 hydraulic nozzles, 126, 142
 versus electrostatic
 charged, 184
 nozzle movement, 142
 Sta-Put, 93
 Starch encapsulation, 17

Stomatal conductance, 84
 Sunspray, 84
 Surface tension, 93

T

Tank-mix concentration, 56
 Texas panicum, 26
 Tomatoes, 184
 Toxicology pesticide regulations, 11
 TRANSPORT, 38
 Triboelectric effect, 42
 Turbidity, 42
 Turfgrass, 236

V

Viscosity, 93
 Vision, 93
 Volatility, 93
 Vortices, 142

W

Wind velocity, 226