

## Index

- acetyl cholinesterase levels, **E** 36, 37, 63, 71, 72, 73, 79, *see also* cholinesterase inhibition test
- Acrididae*, **B** 3
- Acridoderes* sp., **B** 3
- adults, **B** 5, 6, **S** 14, 17, 21, 32, 33, 34, 35, 36, 37, **F** 28, 29, **C** 4, 5, 30, 31, 37, 83, **A** 48, 49, 50, 51, 125, 128
- density, **S** 40, 41, **A** 52, 79
- female, **B** 9, 23, 42
- fledgling, **B** 6, 7, 12, 13, 22, 23, **S** 36, 37, **F** 25, **A** 49, 127
- groups, **B** 26, 27, 42, **S** 35, 42, 43, **F** 42, **A** 118, 127
- immature, **B** 7, 22, 23, 27, **F** 29, **C** 5
- male, **B** 9, 23, 42
- mature, **B** 7, 22, 27, **F** 29, **C** 5
- numbers, **F** 28, 29, **B** 7, 22, 27, **C** 5
- scattered, **S** 35, **C** 50, 51, 72, **A** 118, 129
- sex determination, **S** 38, 39
- solitary, **B** 22, 23, 24, 25, 26, 27, 35
- swarms, *see main entry*
- see also* phases
- affected countries, **F** 12, 13, 19, 37, 44, **O** 52
- see also* individual countries and regions
- Africa, **A** 102, 103, 104, 105
- agencies, cooperating, **E** 74, 75
- Agricultural Extension Agent, **S** 6, 7, **F** 13
- aircraft, **C** 49, 55, 67, 69, **O** 12, 13, 14, 24, 25, 27, 38, 39, 53, **A** 8
- control, **O** 38, 42, 43
- fixed wing, **S** 13, 18, 21, 55, **C** 16, 17, 66, 82, **O** 18, 19, 42, 43, **E** 5, 43, 80, 81, **A** 31, 40
- fuel, *see main entry*
- helicopter, **S** 13, 20, 21, 55, **C** 16, 17, 66, 82, **O** 18, 19, 42, 43, **E** 42, 80, 81, **A** 31, 41, 127
- hire contracts, **O** 2, 3, 13, 14, 20, 21, 31, 49
- landing strips, **O** 38, 46, 47
- large, **O** 47, 50, 81
- microlights, **O** 35
- observer seat, **O** 18, 19
- pesticide tank in, **O** 18, 19, 40, **E** 44

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

specifications, **A** 40, 41  
 spotter, **O** 24, 29, 31, 33, 34, 35, 43, 49  
 spray, **O** 24, 29, 31, 32, 33, 35, 41, 43, 47, 49  
 STOL, **O** 18, 19  
 supervision of, **O** 32, 33  
 support, **O** 38, 42, 43  
 survey, **O** 38, 43  
 target visibility in, **O** 18, 19  
 transport, **O** 18, 55  
 wing configuration, **S** 19

Algeria, **A** 96, 98, 100  
*Anacridium* spp., see Tree Locust  
 anemometer, **S** 42, 43, **C** 54, 55, **A** 16, 17, 67, 90, 125  
 anti-feedant, **C** 31, **A** 125, see also pesticides; insecticides  
 application monitor, **A** 68  
 areas, unsprayed (non-target), **E** 3, 15, 24, 25, 49  
 arthropods, **E** 72, 73  
 Asia, **A** 103, 108, 109  
 assessments, **F** 32, 33, 45, **E** 25  
   data, **F** 10, 11, 16, 17, 24, 25  
   of exposure, **E** 65  
   rapid, **E** 30, 31, 32, 33, 59  
   risk, see main entry  
   team, **C** 73

assistance  
   external, **O** 52, 53,  
   from farmers, **C** 5, 55, **O** 7, 54  
   local, **O** 53  
   requests, **F** 4, 5, 6,  
   technical, **O** 12, 13  
   see also donors, technical advice

atomization, **A** 125, see also sprayers; atomizer  
 atomizer, **C** 11, 14, 15, 41, 42  
   air-blast sprayer, **C** 63, **A** 125  
   air-shear nozzle, **C** 14, 15, 19, 82, **A** 125  
   hydraulic nozzle, **C** 14, 15, 19, 82, **A** 127  
   rotary, **C** 14, 15, 19, 82, 84, **A** 24, 28, 31, 68, 113  
   spinning cage, **C** 15  
   spinning disc, **C** 15, 41, 43, 63, **A** 19, 20, 21, 61, 113  
   see also sprayers; equipment

*Austracris guttuosa*, see Spur-throated Locust  
 Australian Plague Locust, **A** 108, 109

Baluchistan, **A** 119  
 barrier treatments, **E** 10, 15, 20, 73  
 batteries, **A** 21  
 bees, **E** 9, 20, 21, 25, 32, 66, 67, see also non-target organisms

behaviour, **S** 32, 33, 34, 35, 55, **O** 9, **A** 14, 103, 105, 107, 109, 111  
   changes, **E** 70, 71, 72, 73  
   flight, **B** 42  
   hopper, **B** 13, 14, 15, 16, 17, 18, 19  
   solitary adult, **B** 25  
   swarms, **B** 28, 29-35

bendiocarb, **C** 26, 29, 37, 40, **E** 85, **A** 79, 81, see also insecticides  
 benzoyl ureas, **E** 53, 65, 85,  
 BHC, **C** 29, see also insecticides  
 binoculars, **E** 34  
 bioassays, **E** 72, 73  
 biological agents (biopesticides), **C** 26, 33, 75, **A** 79, 81, 125, see also insecticides  
 Bombay Locust, **A** 106, 107  
 botanicals, **C** 26, 30, 31, **A** 125, see also insecticides  
 Brown Locust, **A** 104, 105  
 bucket, **C** 56, 57, **A** 64, 90  
 buffer zones, **E** 10, 11, 48, 49, 65, 67, **A** 125

calibration  
   control equipment, **C** 2, 3  
   factors, **C** 34, 38, 59, 69  
   pace length, **A** 56, 47  
   sprayer speed, **A** 58, 59  
   sprayer, **C** 38, 40, 42, 43, 45, 55, 56, 57, **O** 32, 33, **E** 5, 61, **A** 65, 125  
   settings, see sprayer, settings

*Callistamus italicus*, see Italian Locust  
 campaigns, **F** 4, 6, **C** 47, **O** 1-56, **E** 29  
   aerial, **C** 37, 38, 39, 43, 52  
   analysis (debriefing), **O** 28, 29, 35, 52, 53  
   contingency, **O** 13, 55, **E** 35  
   costs, **O** 17, 18, 23, 35, 54, **A** 69  
   debriefing, **E** 78, 79  
   decision-making, **O** 2  
   difficulties, **O** 3, 37, 52  
   equipment, **O** 48, 49, 52  
   evaluation of, **F** 4  
   execution, **E** 2  
   field base, **O** 3, 24, 25, 28, 29, 35, 49  
   field teams, **O** 26, 27, 28, 29

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- follow-up, **E** 1, 2, 3, 76, 77
- funds, **E** 13, 88
- ground control, **O** 6, 29, 36, 37, 43, 52
- ground teams, **O** 2, 5, 9, 29, 35, 43
- headquarters, **E** 59, 74, 75
- hopper, **O** 3
- length, **O** 3
- limitations, **O** 43
- officer-in charge, **F** 9, **O** 14, 15, 24, 25, 26, 27, 53, **A** 74
- planning, **O** 2, 3, 11, 12, 13, 34, 35, **E** 1, 2, 3, 13, 15, 29, 33, 35, 37, 39
- preparation, **E** 2, 3, 13-17, 26, 83
- priorities, **E** 61, *see also* campaign, planning
- strategies, **O** 4-9
- swarm, **O** 3
- SOPs, **E** 83
- see also* control
- capture methods, **S** 39
- carbamates, **C** 26, 27, 67, **E** 34, 37, 52, 53, 62, 64, 72, 85 **A** 79, *see also* insecticides
- case studies, **F** 42, 43, 46
- Central American Locust, **A** 110, 111
- Chad, **F** 45, **A** 96, 98, 100
- chemical/brand/trade name, **A** 125
- chloronicotinyls, **C** 30, 31, *see also* insecticides
- chlorpyrifos, **C** 29, **E** 85, **A** 79, 81, *see also* insecticides
- cholinesterase inhibition test, **E** 62, 63
  - field test kit, **E** 62, 63, 64, 83
  - see also* acetyl cholinesterase levels
- Chortoicetes terminifera*, *see* Australian Plague Locust
- cleaning spray equipment, **E** 49
- cleaning up, **E** 56, 57
- clipboard, **A** 90
- Codex Alimentarius*, **E** 55
- comparison with previous years, **F** 26, 27, 42, 43, **O** 12
- compass, **S** 22, 55, **F** 9, **C** 54, 55, **O** 38, **A** 7, 67, 90, 126
  - bearing, **A** 6, 7, 125
  - use of, **A** 6, 7
- computer software, knowledge of, **F** 9
- concentration, **B** 2, 4, 14, 15, **A** 126
- containers
  - breakage, **E** 40, 41
  - disposal of, **E** 56, 57, 77
  - loading, **E** 40, 41
- contamination, **A** 19, 23, 29
  - containers, **E** 5, 57
  - equipment, **E** 7, 10, 11
  - food, **E** 7
  - samples, **E** 69

- vehicles, **E** 7, 57
- water, **E** 7, 9, 49, 56, 57
  - see also* exposure to insecticide, poisoning
- control, **S** 3, 56, **F** 34, 35, **C** 1-85, **O** 52, **E** 48, **A** 52, 53
  - aerial, **O** 28, 29, 37, 38, 39, 56, **E** 14, 15, 21
  - application platform, **C** 2
  - area size, **S** 11, **F** 11, 32, 33, **C** 18, **O** 53
  - baiting, **C** 6, 7, **O** 5, **A** 53, 125
  - biological, **E** 24, 25
  - calibration, **C** 2, 3
  - capacity, **E** 12
  - dusting, **C** 6, 7, **A** 126
  - effectiveness, **F** 32, 33, **C** 2, 3, 72, 73, **O** 25, **E** 58, 59, **A** 90, 91
  - equipment, **C** 2, 3, 5, 14-19, 54, 55, **O** 12, 13, 24, 25, 26, 27, 49
  - ground, **E** 14, 15, 21
  - maintenance, **C** 2, 3, 19
  - mechanical, **C** 6, 7, **A** 128
  - methods, **S** 5, 11, **C** 2, 3, 5, 6, 7, 8, 9, **O** 5, **A** 53, 125, 126, 128
  - necessity for, **C** 3, 5
  - operations, **B** 39, 40, **S** 10, 23, 45, **F** 3, 5, 10, 11, 13, 21, 22, 23, 25, 27, 28, 29, 32, 33, 35, **C** 3, **E** 1, 3
  - planning, **F** 3, 4, 5, 6, 8, 9, 16, 17, 25, 28, 29
  - priorities, **S** 32, 33
  - process, **C** 2-3
  - reports, **F** 19, **C** 2
  - requirements, **S** 11, **F** 7, 32, 33, 35
  - results, **F** 27, 42, 43
  - safety, **C** 2, 3, **A** 114, 115
  - spraying, **C** 6, 7, 8, 9, **O** 5
  - staff, **O** 24, 25, 28, 29, **E** 3, 4, 5, 11, 12, 19, 21, 28, 38, 39, 46, 47, 48, 49, 54, 55, 59, *see also* control, teams
  - strategy, **E** 3, 12, 13
  - survivors, **F** 32, 33, **C** 73, 85
  - targets, **F** 7, 33, **C** 2, 3, 5, 24, 48, 49, 50, 51, **O** 9, 28, 32, 33, 54
    - identifying, **S** 4, 5, 10, 11, 13, **O** 30, 31, 35
  - teams, **C** 49, **E** 36, 37, 65, 74, 75, **A** 8
  - timing, **C** 5, **E** 15
  - work rate, **C** 5, 9, 18, 25, 38, **O** 43, **A** 37, 114, 115
  - see also* campaigns

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

convection, **B** 29, **C** 52, 53, 65, 67, 83, **A** 69, 126, *see* weather, temperature  
 conversion tables, **A** 116, 117  
 costs, campaign, **O** 17, 18, 23, 35, 54, **A** 69  
 costs  
   insecticides, **C** 27  
   spray equipment, **A** 114, 115  
 crops, **S** 45, **F** 35, **C** 5, **O** 54  
   damage, **S** 44, **F** 5, 32, 33, 35, **C** 7, 27, **O** 54  
   protection, **F** 32, 33, **O** 5, 37  
 data, **F** 1, 6, 7  
   analysis, **F** 2, 3, 8, 9, 15, 16, 17, 24, 25, 27  
   archives, **F** 8, 9, 40, 41, **E** 59, *see also* data, storage  
   assessment, **F** 10, 11, 16, 17, 24, 25  
   checking, **F** 20, 21  
   collection, **S** 1, 15, 26, 27, 44, 56, **E** 31  
   control, **S** 26, **F** 10, 11, 17, 24, 25  
   correction, **F** 9, 16, 17, 21  
   date, **F** 10, 11, 20, 21, 22, 23  
   ecological, **F** 3, 11, 17, 22, 23, 25  
   entry, **F** 8, 9  
   environmental, **F** 3, 9, 10, **E** 35  
   GPS, **A** 67  
   habitat, **F** 6, 7, 17, 46  
   historical, **F** 6, 17, 44, **O** 12  
   identification codes, **F** 18, 19  
   location, **S** 26, 27, **F** 10, 11, 20, 21, 25, **E** 59  
   locust, **S** 15, 26, 27, 32, 33, **F** 3, 6, 7, 9, 10, 11, 12, 13, 17, 20, 21, 22, 23, 24, 25, 34, 35, 46  
   management, **F** 4  
   meteorological, **S** 9, 15, **F** 3, 14, 15, 17, 25, 26, 27, 44, 45  
   other sources, **F** 15  
   plotting, **F** 16, 17, 22, 23  
   post-spray monitoring, **E** 72  
   pre-spray monitoring, **E** 70, 71, 73  
   rain, **S** 26, 27, **F** 10, 11, 13, 24, 25, 44, **O** 12  
   registration, **F** 2, 3, 8, 9, 16, 17, 18, 19  
   remote sensing, **S** 9, 51, **F** 9, 11, 24, 25  
   reporting, **S** 1, 41, 46, 47, **F** 3, 8, 9  
   retrieval, **F** 2, 3  
   satellite, **A** 42, 43, *see also* remote sensing data  
   soil, **S** 15, 26, 27  
   storage, **F** 8, 9, 16, 17, 40, 41, 46  
     media, **F** 40, 41, 46  
   transmission, **F** 38  
   unconfirmed, **F** 13

weather, **F** 17, 25  
*see also* information, reports  
 DDT, **C** 29, *see also* insecticides  
 declines, **B** 37, 40, 41, **F** 24, 26, 42, **A** 126, *see also* plagues, outbreaks, invasions, upsurges, recessions, infestations  
 deltamethrin, **C** 29, **E** 85, **A** 79, 81, *see also* insecticides  
 density, **A** 126  
   adult, **S** 40, 41, **A** 52, **A** 79  
   hopper, **B** 17, **S** 40, 41, **A** 48, 49, 79  
   locust, **B** 3, 4, **S** 32, 33, 40, 41, **F** 32, 33, **C** 5, 75, 77, **A** 118, 119  
   swarm, **B** 29, **S** 41, **C** 5, **A** 51  
   vegetation, **S** 15, 19, 28, 29, **F** 10, 11, 14, 15, 24, 25, 26, 28, 29, 35, 43  
 Desert Locust, **S** 20  
   adults, *see main entry*  
   appearance, **A** 103, 105, 107, 109, 111  
   behaviour, **S** 15, 32, 33, **A** 51  
   biology and behaviour, **B** 1-43  
   breeding, **S** 35, **F** 4, 25, 27, 28, 29, 30, 31, 32, 33, 35, **C** 5, **O** 3, **A** 51, 125  
     areas, **F** 11, 34, 35, 42, 43, **A** 119  
     seasons, **B** 32, **A** 119  
   colour, **B** 26, 27, 42, **S** 15, 32, 33, 37, *see also* phases, gregaricolour; solitaricolour  
   concentration, **B** 4, 39, **F** 25, 28, 29, 32, 33  
   copulation, **S** 34, 35, **F** 29, **A** 51, 126  
   density, **B** 3, 4, **S** 32, 33, 40, 41, **F** 32, 33, **C** 5, 75, 77, **A** 118, 119, *see also main entry*  
   distribution, **F** 27, 35, **A** 103, 105, 107, 109, 111  
   development, **F** 26, 27, **S** 36, 37  
   effect of environment, **B** 2  
   eggs, *see main entry*  
   fledging, **F** 28, 29, 32, 33, **O** 3, **A** 94, 95, 98-101, 127, *see also* fledgling  
   hatching, **B** 13, **S** 34, 35, **F** 25, 28, 29, 42, **O** 3, **A** 94-97, 100, 101  
   hoppers, *see main entry*  
   life cycle, **B** 6-31, **A** 103, 105, 107, 109, 111  
   maturation, **B** 7, 23, **A** 128  
   maturity, **S** 23, 32, 33, **F** 26, 28, 29, **C** 5, **A** 128  
   measurement, **A** 72, 73  
   migration, *see main entry*

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- morphometrics, **A** 72
- mortality, **C** 72-79, 84, **A** 128
  - assessment, **C** 72-79
  - cage, **C** 73, 78, 79
  - due to cage stress, **C** 78
  - field, **C** 73, 74-77
  - predation, **C** 78, 79
- moulting, **B** 7, **C** 31, **A** 128
- multiplication, **B** 4, 9, 28, 29, 39
- nymphs, *see* hoppers
- overwintering, **B** 42, **F** 28
- oviposition (egg-laying), **B** 8, 9, **S** 35, **F** 14, 28, 29, 42, **C** 46, **O** 3, **A** 51, 94-99
  - site, **B** 5, 8, 29, 42, **F** 25, **O** 7
  - see also* eggs
- phases, *see main entry*
- roosting, **S** 34, 35, **A** 129
- swarms, *see main entry*
- taxonomy, **B** 3
- terminology, **A** 118, 119
- dieldrin, **C** 29, *see also* insecticides
- diflubenzuron, **C** 30, 31, **E** 85, **A** 79, *see also* insecticides
- dissecting kit, **S** 22
- dissociation, **A** 126, *see also* locust phases, dissociens
- Djibouti, **A** 96, 98, 100
- Doclostaurus maroccanus*, *see* Moroccan Locust
- Donor Steering Committee, **F** 6, 17, 29, 35, **O** 14, 15, 52, 54
- donors, **F** 5, 6, 7, **O** 14, 15, 16, 17, 21, 25, **E** 13
  - bilateral, **E** 17
  - multilateral, **E** 17
  - supported pesticide bank, **E** 23
- drivers, **C** 81, **E** 4, 5, **A** 78
- driving techniques
  - in the sand, **A** 38, 39
  - in convoy, **A** 39
- droplet, **C** 82
  - controlled droplet application, (CDA), **A** 126, 128, *see also* sprayer settings
  - counting, **A** 62, 63
  - deposition, **A** 126
    - factors, **C** 9, 20, 21, 24, 25
    - profile, **C** 20, 21, 24, **A** 14, 62, 126
  - effect of wind on, **C** 10, 11
  - impaction, **A** 127
  - measuring, **C** 13
  - sedimentation, **A** 130
  - size, **C** 10, 11, 18, 22, 23, 34, 35, **A** 21, 25, 27, 29, 36, 113, 114, 115, 126 (VMD), **C** 21, 59, 67

- spectrum, **C** 13, 21, 23, **A** 21, 33, 34, 35, 37, 114, 115, 126
- uniform total deposit, **C** 24, 25, 69, **A** 130
- drum crusher, **E** 76, 77
- East Africa, **B** 32, **C** 65,
- ecological conditions, **S** 3, 26, 27, **F** 32, 33, 34, 35, 44, **C** 5, **A** 46, 47
  - data, **F** 3, 11, 17, 22, 23, 25
  - see also* temperature, vegetation, rain, habitat
- ecologically sensitive areas, **C** 3, **E** 24, **A** 11, 130
- effectiveness, control, **F** 32, 33, **C** 2, 3, 72, 73, **O** 25, **E** 58, 59, **A** 90, 91
- efficiency, **A** 127
- egg-laying, *see* oviposition
- eggs, **B** 6, 7, 9, 11, 22
  - development, **B** 10, 11, 23, 39, **F** 14, 25, **A** 94, 97
  - egg pod, **B** 8, 9, **A** 127
  - egg pod foam, **B** 5, 9
  - mortality, **B** 10, 11
  - parameters, **B** 12
- Egypt, **F** 45, **A** 96, 98, 100
- e-mail, **F** 36, 37, 38, 39, 45, **A** 55
- emergency funds, **O** 12, *see also* donors
- emission height, **C** 22, 23, 34, 35, 55, 59, 67, **O** 33, **A** 22, 25, 29, 113, 127, *see also* sprayer settings
- emission rate, **C** 67, **O** 33
- endrin, **C** 29, *see also* insecticides
- engineers, **C** 81, **A** 69, 75
- environment
  - ecologically sensitive, **C** 3, **E** 24, **A** 11, 130
  - damage to, **A** 69, 130
  - effect on control decisions, **C** 5
  - effect on egg mortality, **B** 10
  - effect on locust behaviour, **B** 2
- environmental data, **F** 3, 9, 10
- environmental impact, **A** 127
- equipment, **C** 2, 3, 5, 14-19, 54, 55, **O** 49, **E** 25, 27, 28, 29
  - campaign (control), **O** 48, 49, 52
  - control, **O** 12, 13, 24, 25, 26, 27
    - calibration, **C** 2, 3
    - maintenance, **C** 2, 3
  - maintenance, **C** 2, 3, 19

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- plotting, **F** 23
- product manufacturers and, **A** 121-123
- spray, **C** 56, 57, 81, **O** 32, 33, **A** 67, 68, 90
  - costs, **A** 114, 115
- storage, **C** 80, 81
- survey, **S** 3, 4, 5, 19, 22, 23, 55
- traps, **E** 75
  - see also monitoring, sprayers, sprayer models
- Eritrea, **B** 32, **A** 96, 98, 100
- esfenvalerate, **C** 29
- Ethiopia, **B** 32, **A** 96, 98, 100
- Europe, **A** 106, 107
- evaluation, environmental, **E** 75
- exposure, effect on egg development, **B** 10
- exposure to insecticide, **E** 5, 46, 47
  - bystanders, **E** 48, 49
  - habitations, **E** 21, 49
  - water, **E** 48, 49, 56
  - see also insecticides, poisoning
- FAO Atlas of Desert Locust Habitats, **S** 9
- FAO Desert Locust Survey and Control Form, **S** 20, 27, 29, 31, 33, 44, 46, 47, **F** 13, 25, 34, 35, 39, **C** 71, **A** 46, 55, 88, 89, 90
- FAO General Monitoring Checklist, **E** 82, 83
- FAO Guidelines on Pesticide Stores, **E** 43
- FAO Guidelines on Tender Procedures, **E** 22
- FAO Manual: Pesticide Storage and Stock Control, **C** 81
- FAO Pesticide Referee Group (PRG), **E** 16, 17, 19, 20, 21
- FAO Poisoning Incident Form, **E** 65, 83, 84, 85
- FAO Regional Locust Commission, **A** 54, 55
- FAO Spray Monitoring Form, **S** 45, **F** 13, **C** 56, 57, 85, **E** 49, 61, 83, 85, **A** 91, see also monitoring, spraying
- FAO, **F** 5, 8, 9, 12, 13, 16, 17, 19, 23, 24, 25, 29, **C** 32, **O** 13, 14, 15, 21, 24, 25, 52, **A** 120
  - Bulletin, **F** 13, 16, 17, 23, 37, 44, **O** 11
  - Desert Locust Information Service (DLIS), **S** 55, **F** 3, 5, 6, 7, 31, 36, 37, 38, 39, 43, 44, 45, **O** 26, 27, 54, **A** 42, 43, 55, 89
  - Headquarters, **S** 47, **F** 1, 6, 7, **C** 3
  - reports
    - from, **F** 17
    - to, **F** 36, 37, 39
    - see also reporting
  - SWARMS, **F** 39
- farmers, **C** 5, 55, **O** 7, **O** 54, **E** 54
- fax, **S** 47, **F** 13, 37, 38, 39, 45 **A** 54, 55
- fenitrothion, **C** 26, 29, **E** 17, 85, **A** 53, 79, 81, 125, 126, see also insecticides
- ferry range, **A** 40, 41
- ferry time, **C** 38, **A** 127

- field base, **O** 3, 24, 25, 28, 29, 35
- field bases, **O** 49
- Field supervisor, **A** 75
- field/survey staff, **S** 1, 3
- fipronil, **C** 26, 30, 31, **E** 85, **A** 79, 81, see also insecticides
- first aid
  - artificial respiration, **A** 84
  - kit, **O** 38, 49, **E** 34, **A** 68
- fisheries, **E** 24, 25
- flagmen, **C** 68, **O** 33, **A** 68, 67, 127
- flags, **C** 54, 55, 59, **A** 67
- floods and droughts, effect on egg development, **B** 10
- flow meter **C** 43, **A** 68
- forecasts, **F** 2, 3, 4, 5, 8, 9, 10, 15, 16, 17, 25, 28, 29, 34, 35, 44
  - accuracy, **F** 31, 45
  - based on similar (analogous) situations, **F** 30, 31
  - breeding, **F** 4, 5, 9, 44
  - long-term, **F** 6, 7, **O** 10, 15
  - medium-term, **F** 6, 7, **O** 10
  - migration, **F** 4, 5, 9, 14, 44
  - short-term, **F** 6,7
  - use in planning, **F** 32, 33
  - use of case studies, **F** 43, 46
- forward speed, **C** 38, 39, 41, 83, **A** 114, 115, see also sprayer settings
- fuel, **S** 55, **O** 24, 25, 27, 28, 29, 37, 38, 39, 44, 45, 48, 49
  - availability, **O** 18, 21, 49
  - AVGAS, **S** 55, **O** 18, 19, 38, 45, **E** 43
  - JET-A1, **S** 55, **O** 18, 19, 38, 45, **E** 43
  - positioning, **O** 46, 47
  - pumps, **S** 55, **O** 38, 49
  - storage, **E** 42, 43
- funnel, **A** 90
- global positioning system (GPS), **S** 15, 22 **F** 9, 11, 45, **C** 49, 51, 54, 55, 67, 68, 69, **O** 38, 39, 48, 49, **A** 8, 9, 10, 11, 12, 13, 67, 68, 90
  - accuracy, **A** 8
  - aircraft-mounted, **A** 9, 10, 11, 68
  - differential geographic positioning system (DGPS), **O** 31, 33, 35, 38, 49, 55, **A** 9, 11, 68

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- height above sea level (hsl), **A** 9
- map displays, **A** 9
- waypoint, **A** 9
- see also latitude and longitude
- gloves, see protective clothing
- gregarization, **B** 4, 9, 38, 39, 42, **F** 24, 27, 28, 29, **C** 31, **O** 51, **E** 13, 15, **A** 127, see also phases, gregarious
- ground facilities, **S** 55
- habitat data, **F** 6, 7, 17, 46
- habitat, **S** 1, 3, 5, 11, 14, 29, 54, **F** 11, 26, 27, 42
  - FAO Atlas of Desert Locust Habitats, **S** 9
  - favourable, **S** 8, 11, 24, 25, 26, 27
  - survey timing and, **S** 8, 9
  - see also temperature, vegetation, rain, ecological conditions
- hand lens, **S** 22, **C** 56, 57
- hand tally counter, **S** 15, 22
- hand-held computer, **S** 15, 27, 46, 47, **O** 49
- health
  - human, **E** 4
  - local population risk, **E** 4, 5, 6, 57
  - medical examinations, pre-campaign **E** 36, 37
  - occupational risk to, **E** 4, 5, 14, 15, 31, 88, 89
- HF radio modem, **S** 46, 47, **F** 13, **O** 13, 49, **A** 54, 55
- Hieroglyphus* sp., **B** 3
- hopper movement, **B** 17
- hoppers, **B** 3, 6, 7, **S** 14, 17, 32, 33, 41, **F** 28, 29, **C** 4, 5, 7, **A** 94-101, 129
  - bands, **B** 3, 4, 15, 16, 17, 34, 42, **S** 12, 13, 17, 28, 19, 21, 37, 42, 43, 49, **F** 27, 35, 42, **C** 5, 7, 27, 31, 40, 46, 47, 48, 49, 60, 62, 65, 77, **O** 3, 5, 39, 41, 43, 54, 56, **E** 7, 15, 24, **A** 48, 49, 67, 118, 119, 125
  - behaviour, **B** 13, 14, 15, 16, 17, 18, 19
  - blocks of, **C** 58, 59, 62, **A** 125
  - cannibalism, **B** 13
  - daily displacement, **B** 19, 21
  - density, **B** 17, **S** 40, 41, **A** 48, 49, 79
  - development, **B** 12, 13, **F** 14, 25
  - early-instar, **B** 5, 17, **S** 19, **C** 37, 83
  - effect of time of day, **B** 18, 19
  - effects of vegetation, **B** 18, 19, 20, 21
  - groups, **B** 14, 15, 42, **S** 35, 42, 43
  - instars, **B** 13, **S** 15, 36, 37, **C** 4, **A** 128
  - late-instar, **B** 5, 17, **S** 19, **C** 37, 83
  - parameters, **B** 12, 16
  - scattered, **S** 35, **A** 129
  - solitary, **S** 35, **A** 48, 118
  - survival, **B** 13, **F** 35

- imidachlopid, **C** 30, 31, **A** 81, see also insecticides
- India, **O** 56, **A** 35, 96, 98, 100, 119
- infestations, **S** 54, **F** 35, **C** 3, **O** 7, 12
  - area **F** 26, 27, 32, 33, 43, **C** 5
  - development, **F** 40 41
  - extent and size, **S** 3, 7, 10, 11, 13, **C** 5, 8
  - origin, **F** 40 41
  - previous, **S** 8
  - reports, **S** 21, 48, 49
  - see also plagues, outbreaks, upsurges, declines, recessions, invasions
- information, **F** 1-46
  - additional, **E** 81
  - computerized data base, **F** 16, 17, 18, 19, 22, 23
  - emergency, **E** 39
  - environment, **E** 75
  - exchange, **E** 74, 75
  - health, **E** 39, 75
  - local people
    - from, **S** 5, 6, 7, 9, 12, 15, 29, 48, 49, 56, **F** 11, 13
    - to, **C** 2, 3, **E** 38, 39
  - importance, **F** 4, 5
  - management system, **F** 3, 8, 9, 21, 23, 37, 39, 41, 46
  - organization of, **F** 34, 35
  - presentation, **F** 35
  - process, **F** 2, 3
  - RAMSES, **F** 21, 37, 39
  - registration, **F** 2, 3
  - survey, **S** 3, 4, 5, 9, 15, 18, 21, 22, 26, 27, **F** 5
  - SWARMS, **F** 39
  - transmission, **F** 38, 39
  - see also case studies, data, forecasting
- insect growth regulators (IGRs), **C** 26, 30, 30, 31, 63, 75, **A** 127, see also insecticides
- insecticide tank, **C** 19, **A** 21, 22, 26, 27, 31
- insecticide, **C** 3, 35, 61, **A** 64
  - active ingredient, **C** 26, 27, 29, **E** 17, 23
  - application parameters, **E** 59
  - availability, **C** 27
  - broad-spectrum, **C** 27, 29, 30, 31, **E** 9, **A** 125
  - characteristics, **C** 26, 27

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

choice of, **E** 3, 5, 18, 19, 20, 21  
 cocktails, **C** 28, 29, **A** 126  
 contact action, **C** 27, 30, **A** 126  
 conventional, **C** 26, 27, 28, 29  
 cost, **C** 27  
 dose, **C** 34, 35, 40, 41, 59, 63, 83, **E** 11, 17, **A** 59, 126  
   dermal, **C** 26, **A** 83  
   oral, **C** 26, **A** 83  
   overdose/underdose, **C** 23, 37, 43, **A** 70, 129  
 effect on  
   fish, **E** 8, 9, 20, 32  
   invertebrates, **E** 8, 9, 20, 21  
   livestock, **E** 8, 9, 44  
   pollination, **E** 8, 9  
 efficacy, **C** 27, 32, 33, 70, 71, **E** 16, 31, 71, **A** 126  
 emulsifiable concentrate (EC), **C** 9, **O** 38, **A** 21, 53  
 environmental impact, **C** 9, 26, 27, 29, 36, 37, 47 **O** 53, **E** 8, 9, 20, 21, 31, **A** 53, 69, 127  
 exposure to, **E** 3-7, 10, 11  
   bees **E** 49  
   nature reserves, **E** 49  
   first aid for, **E** 52, 53  
   crops, **E** 21, 54, 55  
   external, **E** 62, 63  
   internal **E** 63  
   local population, **E** 65  
   *see also* insecticides, pesticides  
 formulation, **E** 29  
 inputs, **E** 8-9, 33  
 knock-down effects, **C** 29, **A** 128  
 labeling, **E** 22, 33,  
 LD50, **E** 78,  
 left-over, **E** 76, 77  
 loading **E** 44, 45  
 new (alternative), **C** 27, 30, 31  
 ordering, **E** 22, 23  
 packaging, **E** 22, 23  
 persistence, **C** 27, 29, 30, 31, 47, **E** 11, **A** 129  
 poisoning by, **E** 3, 32, 33, 38  
 quality control, **E** 22, 23  
 registered, **E** 16, 17  
 Registration Authority, **E** 16  
 route of entry, **C** 27, **A** 129  
 shelf-life, **C** 27, **A** 130  
 specifications, **E** 22, 23  
 specificity, **C** 27  
 speed of action, **C** 27, 83, **A** 130

spills, **E** 56, 57  
 stock records, **C** 80, 81, **O** 26, 27  
 stomach action, **C** 27, 30, 31, **A** 126, 130  
 storage, **C** 80, 81, **E** 27, 38 42, 43, 77  
 toxicity classification, **E** 20, 21  
 toxicity, **C** 26, 27, 30, 31, 32, 33, **E** 10, 11, 27  
   LD50, **C** 26, 27, **A** 83, 128  
   mammalian, **C** 26, 27, 28, 29, 30, 31, 36, **A** 128  
 treatments, **E** 61  
   individual band, **E** 15  
   block band, **E** 15  
 trials, **C** 32, 33, 83  
 triangulation, **E** 76, 77  
 ULV, **E** 27, 28, 29, 50-51  
 wettable granules (WG), **A** 131  
 wettable powder (WP), **C** 9  
   *see also* individual entries; pesticides  
 International Air Transport Association (IATA), **E** 22  
 International Maritime Organization (IMO), **E** 22  
 international survey units, role of, **F** 6, 7  
 internet, **F** 39, 44  
 invasions, **F** 25, 27, 29, **O** 3, **E** 17, **A** 128  
   advance warning, **O** 11, 54  
   *see also* plagues, outbreaks, upsurges, declines, recessions, infestations  
 Iran, **B** 32, **A** 35, 96, 98, 100  
 Italian Locust, **A** 106, 107  
  
 Kazakhstan, **E** 89  
  
 lambda-cyhalothrin, **C** 29, **E** 85, **A** 79, 81, *see also* insecticides  
 laptop computer, **O** 49  
 latitude and longitude, **S** 14, 15, **F** 11, 45, **O** 31, **A** 4, 5  
   computer mapping, **O** 3  
   concepts, **A** 2, 3, 9  
   coordinates, **S** 14, 15, 23, **F** 10, 11, 20, 21, 45, **O** 35, **A** 2, 3, 9  
   International date line, **A** 3  
   Prime meridian, **A** 3  
 Libyan Arab Jamahiriya, **F** 45, **A** 96, 98, 100  
 livestock, **E** 48, 49, 54, 55

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*



- loading, insecticides, **E** 44, 45  
 local guide, **S** 25  
 local people, **O** 23, **E** 4, 5, 6-7, 19, 32, 34, 38, 39, 43, 48, 54, 55, 56, 60, 74  
   bystanders, **E** 6, 7, 19, 21, 44, 65, 81  
   consumers, **E** 6, 7, 21,  
   shepherds, **E** 54  
   *see also* farmers  
 Locust, Australian Plague, Bombay, Brown, Central American, Desert, Italian,  
 Migratory, Moroccan, Red, South American, Spur-throated, Tree, *see main*  
*entries*  
 locust cages, **C** 56, 57, 78, 79  
 Locust Control staff, **C** 5, 55, **O** 2, 3, 12, 13, 22, 26, 27, **A** 74, 75  
 Locust Field Officer, **S** 3, 6, 7, 13, 15, 21, 23, 24, 25, 27, 35, 37, 39, 41, 43, 47, 49, 54,  
 55, 56, **F** 9, 11, 13, 21, 24, 25, 39, **C** 25, 54, 55, 70, 71, 73, 83, **O** 27, 28, 29,  
 32, 33, 37, 43, 49, **A** 69, 74, 75  
 Locust Information Officer, **S** 55, **F** 1, 2, 3, 8, 9, 21, 25, 33, 35, 43, 44, 45, **O** 14, 15,  
 26, 27, 47, **A** 74, *see also* information; forecasting  
 Locust Unit Head, **F** 2, 3, 5, 6, 9, 17, 35, **C** 71, **A** 74  
 Locust Unit Headquarters, **S** 3, 7, 41, 46, 47, 56, **F** 2, 3, 13, 15, 17, 38, 39, 41, **C** 71,  
**O** 23, 24, 25, 28, 29, 35, **A** 54, 55, 69  
   role of, **F** 6, 7, **C** 3, **O** 5, 6, 7, 21  
*Locusta migratoria* and subspecies, *see* Migratory Locust  
*Locustana pardalina*, *see* Brown Locust  
 locusts, effect of other grasshopper spp. on gregarization, **B** 15, 27  
 Madagascar, **A** 10, **E** 89  
 maintenance  
   of aircraft, **O** 47  
   of spray equipment, **C** 19, **O** 12  
 malathion, **C** 29, **E** 85, **A** 53, 79, 81, *see also* insecticides  
 Mali, **A** 96, 98, 100  
 maps, **S** 22, **F** 9, 11, 17, 21, 22, 23, 34, 35, 45, **C** 54, 55, **O** 26, 27, 28, 29, 31, 35, 38,  
**A** 5, 12, 13  
   airfield, **O** 47  
   legends, **A** 5  
   scale, **A** 5  
 Material Safety Data sheets, **E** 40, *see also* safety  
 Mauritania, **O** 9, 56, **E** 89, **A** 96, 98, 100  
 measuring cylinder, **C** 56, 57, **A** 64  
*Metarhizium anisopilae*, **E** 9, 88  
 meteorological data, **S** 9, 15, **F** 3, 14, 15, 17, 25, 26, 27, 44, 45  
 methods  
   control, **C** 2, 3, 5, 6, 7, **A** 12  
   survey, **S** 13  
 migration, **B** 39, 40, 41, **F** 4, 25, 27, 28, 29, 30, 31, 32, 33, 35, 42, 43, **C** 5  
   solitary adults, **B** 23, 35  
   southern circuit, **B** 35  
   swarms, **B** 31, 33, 34, 35, **F** 14, 15, 30, 31, **O** 54, 56

- Migratory Locust, **B** 23, **C** 31, **A** 102, 103, 107, 108, 109  
 Ministry of Defence, **O** 13, 21  
 mirrors, **C** 55, **A** 67  
 monitoring, **S** 1, 3, 54, **E** 2, 5, 30, 31, 88, 89, **A** 128  
   abundances, **E** 70, 71  
   analysis of, **E** 78  
   behavioural change, **E** 70, 71  
   chain of command, **E** 35  
   control operations, **S** 45, **C** 2, 3, 70, 71, **O** 25, **E** 1, 30, 31, 59, **A** 71, 90  
   data, **E** 31, 74, 75  
   dedicated operational, **E** 30, 31, 32, 33, 34, 35, 59, 60, 61, 75, 83  
   ecological, **A** 43, **E** 71, 72, 73, 79  
   efficacy, **E** 31, 32, 33, 34, 59, 60, 61  
   environmental, **E** 13, 14, 31, 61, 66, 69, 79, 88  
   equipment, **E** 33, 34, 35  
   FAO Spray Monitoring Form, *see main entry*  
   general checklist, **E** 34  
   habitat, **S** 11  
   health, **E** 13, 14, 31, 36, 37, 61, 62, 63, 79  
   in-depth, **E** 30, 31, 35  
     residues, **E** 3, 32, 60, 66, 67, 68, 69  
   long-term, **E** 79  
   non-target organisms, **E** 31, 32, 33, 35, 59, 70, 71  
   populations, **S** 7, 11, **O** 13  
   rapid assessments, **E** 30, 31, 32, 33, 59  
   reporting of, **E** 78, 79  
   sampling methods, **E** 35  
   specialist staff, **E** 35  
   spray, **E** 88, 89  
   teams, **E** 3, 4, 32, 33, 34, 59, 60, 61, 74, 75, 83, 88  
   transport, **E** 33  
   *see also* residues  
 Moroccan Locust, **A** 106, 107  
 Morocco, **O** 56, **E** 89, **A** 96, 98, 100  
 mortality, egg, **B** 10, 11, *see also* Desert Locust, mortality  
 multiplication, **A** 128  
 mycopesticides, **E** 9

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

national and international organizations, **A** 120-121, *see also* individual entries  
 National Meteorological Service, **F** 1, 3, 6, 9, 11, 12, 13, 15, 25, **O** 24, 25, **A** 43  
   stations, **F** 15  
 national parks, **E** 24, 25  
 National Survey Department, **F** 23  
 neem, **C** 30, 31, *see also* insecticides  
 Niger, **A** 96, 98, 100  
 nitrile rubber, **A** 128  
*Nomadacris septemfasciata*, *see* Red Locust  
*Nomadacris succinata*, *see* Bombay Locust  
 non-governmental organizations (NGOs), **E** 77  
 North-west Africa, **B** 32, 33, **A** 106, 107, 119  
 notebook and pen, **S** 22, **C** 56, 57, **E** 32, 34, **A** 64, 90  
 number median diameter (NMD), **C** 12, 13, **A** 129, *see also* droplet size  
 nymphs, *see* hoppers

odometer, **S** 16, **C**69, **A** 129  
*Oedaleus senegalensis*, **B** 3  
 officer-in-charge  
   campaign, **F** 9, **O** 14, 15, 24, 25, 26, 27, 53, **A** 74  
   field base, **O** 25, 28, 29, 35, **A** 74  
 oil-sensitive paper, **C** 56, 57, 70, 84, **A** 61, 63  
 Oman, **O** 56, **A** 97, 99, 100  
 operator (sprayer), **C** 16, 17, 36, 39, 43, 60, 62, 63, **E** 4, 5, 16, 23, 28, **A** 59, 129  
 organochlorides, **C** 26, 27, 28, 29, *see also* insecticides  
 organophosphates, **C** 26, 27, 28, 29, 67, **E** 34, 37, 52, 53, 62, 63, 72, 85, **A** 79, *see also* insecticides  
 outbreaks, **B** 37, 38, 39, 41, 43, **F** 19, 24, 25, 26, 27, 33, **O** 4, 5, **E** 7, 12, 13, 23, 73, **A** 129, *see also* plagues, recessions, upsurges, declines, infestations, invasions  
 over-spraying, **E** 88  
 ovipositors, **S** 38, 39, *see also* Desert Locust, oviposition

Pakistan, **B** 32, **O** 56, **A** 97, 99, 101, 119  
 parasites  
   effects on egg development, **B** 10  
   effects on hopper survival, **B** 13  
 personal protective equipment (PPE), **E** 10, 11, 16, 17, 26, 27, 28, 29, 32, 34, 38, 40, 45, 47, 49, 50, 51, 57  
   operational life, **E** 27  
 personnel, **O** 52, **E** 21  
   assessment, **C** 73  
   control, **O** 24, 25, 28, 29, **E** 3, 4, 5, 36, 37, 62, 63, 79  
     ground teams, **O** 2, 5, 9, 29, 35, 43  
   drivers, **E** 4, 5  
   environmental scientists, **E** 3, 12, 33  
   flagman, **E** 4, 5, 27, 28, 38, 39

head of control unit, **E** 37  
 medical, **E** 3, 12, 22, 33  
 pesticide operators, **E** 33, 49  
 pilots, **E** 4, 5, 49, 81  
 public communication experts, **E** 3, 12  
 residue chemists, **E** 12, 33, 35  
 seconded, **O** 22, 23, 55  
 spray, **C** 60, **A** 66, 67, **A** 74, 75  
 survey, **S** 1, 3, 4, 5, 6, 7, 11, 25, **A** 5, 8  
 training, **F** 9, **O** 2, 3, 5, 12, 13, 14, 23, **E** 4  
 transportation, **E** 4, 5  
   *see also* individual entries, staff

Pesticide Referee Group, **C** 32, 33, 35, 83  
 pesticides, **S** 49, **F** 10, 11, 35, **C** 2, 7, 70, 71, **O** 6, 7, 8, 33, 36, 37, 38, 39, 40, 41, 48, 53, **A** 21  
   application method, **F** 1, **C** 2, **O** 32, 33, **A** 69  
   bank, **O** 16, 17, 54, **E** 23  
   disposal, **C** 81, **O** 17  
   distribution of, **O** 16, 17, 52  
   dose rates, **A** 79  
   *FAO Manual: Pesticide Storage and Stock Control*, **C** 81  
   percentage kill, **F** 11  
   poisoning, **A** 84, 85  
   positioning, **O** 46, 47, 49  
   pump, **C** 42, 43, 59, **O** 13, 38, 39, 49, **E** 44, 45, **A** 27, 31, 65, 68  
   stocks, **O** 5, 29, **E** 22, 23  
   storage, **C** 80, 81, **O** 16, 17, **E** 43  
   supply, **O** 2, 12, 13, 14, 15, 16, 17, 24, 25  
   tank, **E** 44  
   *see also* insecticide

phases, **B** 2, 4, 5, **S** 35, **F** 26, 27, 43  
   behavioural changes, **B** 4, 5, **S** 33  
   congregans, **B** 4, 5  
   dissociens, **B** 4, 5  
   effect of density on, **B** 4, 5, **A** 73  
   female influence on, **B** 5  
   gregaricolour, **B** 4, 5  
   gregariform, **B** 5, **A** 73  
   gregarious, **B** 2, 4, 5, 7, 8, 11, 14, 15, 16, 26, 27, 39, 42, **S** 10, 32, 33, 35, 37,

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- 56, **F** 32, 33, **C** 4, 5, 46, **O** 7, **A** 49, 51, 73, 103, 105, 127  
 morphological changes, **B** 4, 5, **S** 33  
 solaricolour, **B** 4, 5, **A** 73  
 solariform, **B** 5, **A** 43  
 solitary (solitary), **B** 2, 4, 5, 7, 8, 11, 14, 15, 22, 23, 24, 25, 26, 27, 42, **S** 10, 32, 33, 35, 56, **C** 4, 5, **A** 49, 51, 73, 103, 105, 118, 130  
 transformation, **B** 4  
 transiens, **B** 4, 14, 37, 32, 33, 39, **C** 4, 5, **A** 49, 51, 130  
*see also* gregarization
- phenyl pyrazoles, **C**30, 31, 63, **E** 53, 65, 85, **A** 79, *see also* insecticides
- pheromones, *see* semiochemicals
- pilot, **S** 19, 20, **C** 55, 65, 67, 68, 69, **O** 32, 33, 35, **A** 66, 67, 69, 75
- plagues, **B** 36, 37, 38, 39, 40, 41, 43, **S** 23, **F** 19, 24, 25, 26, 27, 30, 31, 33, **O** 4, 5, 8, 9, 36, 37, 55, **E** 7, 12, 13, 15, 21, 33, 73, **A** 47, 129  
 in 1900s, **B** 41  
*see also* declines, outbreaks, invasions, upsurges, recessions, infestations
- planning, **F** 3, 4, 5, 6, 8, 9, 16, 17, 25, 28, 29  
 campaign, **O** 2, 3, 11, 12, 13, 34, 35  
 contingency, **O** 5, 12  
 forecast use in, **F** 32, 33  
 surveys, **F** 3, 4, 5, 6, 7, 8, 9, 16, 17, 28, 29
- Plant Protection Department (PPD), **O** 6, 7, 13, 21, 45, 47, 53, 55  
 Directors, **F** 5, 7, **O** 14, 15, 24, 25, **A** 69, 70
- plastic bags, **A** 64
- plotting data, **F** 16, 17, 22, 23  
 equipment, **F** 23
- poisoning, **E** 32, 33, 34, 36, 37  
 antidotes, **E** 52  
 cholinesterase test kit, **E** 34, 36, 37, *see also* cholinesterase, test kit  
 data sheets, **E** 56, 57  
 FAO Poisoning Incident form, *see* main entry  
 general population, **E** 59, 65  
 incident form, **E** 32, 34, 83, 84, 85  
 National Centre, **E** 35, 36, 37  
 occupational, **E** 32, 33, 58, 59, 65, *see also* risk, occupational  
 symptoms, **E** 52, 63, 85  
 treatment for, **E** 52, 53  
*see also* exposure to insecticides
- precautions, **E** 38, 47, 48, 49
- predators, **A** 129  
 effects on egg development, **B** 10  
 effects on hopper survival, **B** 13
- pre-harvest intervals, **E** 17, 21, 39, 54, 55, *see also* monitoring, campaign, control
- pressure (barometric), **F** 11, 14, 15
- protective clothing, **C** 45, 56, 57, 59, 61, 71, 77, 81, **A** 85, 90, 129, *see also* personal protective equipment
- public awareness, **E** 39

- pyrethroids, **C** 26, 27, 28, 29, 60, 67, 76, **E** 53, 65, 85, **A** 79, *see also* insecticides
- quadrat, **A** 129
- radio, **S** 46, 47, **F** 13, 39, **C** 54, 55, **O** 25, 26, 27, 28, 29, 32, 33, 38, 39, 48, 49, **E** 34, 39, **A** 67, 68
- rain, **B** 39, **S** 11, 15, 28, 29, 48, 49, **F** 14, 15, 22, 26, 27, 28, 29, 34, 35, 42, 43, 44, **A** 119  
 seasonal failure, **B** 37, 39, 40  
 spraying and, **C** 52, 53  
 surveying after, **S** 8, 19  
*see also* temperature, vegetation, ecological conditions, habitat, weather
- recessions, **B** 36, 37, 39, 43, **S** 3, **F** 24, 25, 26, 27, 30, 31, 33, **O** 5, 6, 7, **E** 13, 15, 73, **A** 47, 129  
*see also* plagues, outbreaks, upsurges, declines, infestations, invasions
- records, insecticide stocks, **C** 80, 81, **O** 26, 27
- Red Locust, **A** 104, 105
- Red Sea, **B** 32, 33, 34, **A** 119
- re-entry period, **E** 54, 55, *see also* monitoring, campaign, control
- regional organizations, **F** 6, 7, 13, 15
- relative humidity, **S** 27, 44, 45, **F** 14, 15, **C** 52, **A** 14, 15
- remission, **A** 129
- remote sensing (satellite) data, **S** 9, 51, **F** 9  
 SPOT-VEG, **S** 50  
*see also* data
- reporting, **F** 34, 35, 45, **O** 26, 27, 52, 53, **A** 71  
 national, **F** 34, 35  
 summaries, **F** 34, 35
- reports  
 control, **F** 19, **C** 2, **A** 63  
 field, **F** 16, 17, 18, 19  
 infestation, **S** 21, 48  
 survey, **F** 11, 19, 32, 33
- residue laboratory, **E** 75
- Residue Sampling Form, **E** 83
- residues, **E** 8, 31, 59, 72, 73  
 analysis of, **E** 3, 35, 65, 67, 78  
 design of studies, **E** 68, 69  
 maximum residue limits (MRLs), **E** 55  
 monitoring of, **E** 67, 68, 69, 79

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- quality assurance measurements, **E** 68
- sampling, **E** 60, 65, 66, 67, 68, 69
  - best practice, **E** 69
  - substrates, **E** 68
  - responsibility for, **E** 81
- resources, **F** 6
  - control, **C** 3, 5, **O** 3, 5, 15 24, 25, 36, 37, 53
  - inefficient use of, **F** 5
  - mapping of, **A** 43
  - survey, **S** 3, 25
  - see also equipment, personnel, sprayers
- results
  - control, **F** 27, 42, 43
  - survey, **S** 3, 46, 47, **F** 3, 24, 25, 26, 27
  - transmission of, **S** 3, 46, 47
- risk, **S** 2, 3, 5, **C** 57, **A** 81
  - agriculture, **E** 8, 12
  - assessment, **E** 34, 60, 75
  - determinants of **E** 10, 11
  - environmental, **E** 1, 3, 10, 11, 12, 13, 17, 38, 44, 45, 57, 60, 61, 79
  - estimating, **S** 11
  - fire, **E** 42, 43
  - human health, **E** 1, 3, 10, 11, 12, 13, 17, 18, 21, 38, 44, 60, 61, 79, see also health, reduction of, **E** 3-13, 38, 39
  - livestock, **C** 83, **E** 8, 9, 48, 49
  - non-target organisms, **E** 8, 35, see also non-target organisms
  - occupational, **E** 19, 21, 38, 60, 62, 63
  - see also WHO hazard classes
- safety, **C** 27, **O** 25, **E** 1-88
  - environmental, **A** 114, 115
  - equipment, **S** 55
  - of control operations, **C** 2, 3, **A** 69, 114, 115
  - operator, **C** 3, 7, 18, 19, 26, 27, 30, **A** 114, 115
  - pesticide, **C** 30, 31, 61, **A** 83, 84, 85
  - see also risk, first aid
- Sahel, **B** 32, 33, **E** 15, **A** 119
- sample boxes, **S** 22
- sampling techniques
  - average distance between individuals, (ADI), **S** 53
  - distance moyenne inter-individuelle or inter-touffe, (DMI), **S** 53
  - mean distance, **S** 52, 53
  - quadrat counts, **S** 52, 53, **A** 130
  - see also survey, foot, stops, techniques/methods, vehicle
- satellites, **A** 8, 9, 10, 11, 42, 43
  - Meteosat, **A** 42, 43
  - Modis, **A** 42, 43

- normalized difference vegetation index (NDVI), **A** 42, 43
  - Spot-VGT, **A** 42, 42
- Saudi Arabia, **O** 56, **A** 97, 99, 101, 119
- Schistocerca cancellata*, see South American Locust
- Schistocerca gregaria*, see Desert Locust
- Schistocerca piceifrons*, see Central American Locust
- scout, **S** 3, 6, 7, **F** 13
- search efficiency, **S** 19
- security officer, **S** 25, 48, 49
- semiochemicals, **C** 26, 30, 31, **A** 129, see also insecticides
- Senegal, **F** 45, **C** 32, **E** 89, **A** 97, 99, 101
- simulated exercise, **O** 13
- situation, current, **F** 4, 5, 9, 17, 26, 27, 34, 35, 44
  - summaries, **F** 16, 17, 34, 35
- soap and water, **C** 56, 57, **A** 64
- soil
  - information, **S** 15
  - moisture, **S** 15, 29, 30, 31, 55, 56, **F** 10, 11, 29, 32, 33
- Somalia, **B** 32, **A** 97, 99, 101
- South America, **A** 103, 110, 111
- South American Locust, **A** 110, 111
- specificity (insecticide) **A** 130
- spray booms, **C** 15
- spray equipment, **E** 5, 38
  - cleaning, **E** 49, 57
  - monitoring, **E** 88, 89
- spray platforms, **C** 16, 17, 35, 41, 71
- spray target, **C** 9, 41, 46, 47, 59, 70, 71, 75, 77, 82, **A** 67, 69
- sprayer models
  - Berthoud C5, **A** 21
  - Berthoud Cannon Sprayer, **A** 32, 33, 114, 115
  - Berthoud nozzle sprayer, **A** 36, 37, 113
  - Francome MkII ENS, **A** 114
  - Goizper, **A** 21
  - Jacto P50, **A** 25, 115
  - Micro Ulvamast Mk II, **A** 26, 27, 113, 114
  - Miconair AU 8115, **A** 28, 29
  - Miconair AU0110, **A** 114
  - Miconair AU4000, **A** 31, 70
  - Miconair AU5000, **A** 30, 31, 68, 70

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- Micronair AU7000, **A** 31
- Micronair AU8000, **A** 24, 25, 115
- Micronair, AU7010, **A** 26, 27
- Micronair, AU8110, **A** 28, 29, 114
- Micro-Ulva, **E** 48, **A** 21, 115
- self-contained spray pod, **A** 30, 113
- Solo 423, **A** 25
- Tifa 100E, **A** 114
- Ulvamast V 3, **A** 26, 27
- Ulvaplus, **A** 21, 22, 115
- sprayer, **C** 25, 35, 41, 63, 70, 81, **O** 53, **A** 64
  - active spray systems, **A** 11
  - airblast, **A** 129,
  - aircraft-mounted, **C** 16, 17, 18, 19, 35, 41, 47, 64, 65, 68, 69, 71, **A** 36, 37, 61, 113, 125
  - atomizer, **C** 11, 14, 15, **A** 19, 21, 26, 27, 68, 129
  - calibration, *see main entry*
  - choice of, **C** 18, 19, **A** 20-37
  - collection technique, **C** 43, 44, 45, **A** 23, 65
  - exhaust-nozzle, (ENS), **C** 15, 44, **A** 34, 35
  - ferry and fill time, **A** 37
  - flow rate, **C** 18, 19, 39, 40, 42,43, **A** 20, 21, 23, 25, 27, 29, 35, 64, 65, 70, 113
  - ground, **A** 114, 115
  - hand-held, **E** 45
  - insecticide tank, *see main entry*
  - knapsack, **C** 14, 15, 71, **A** 24, 25, 32, 33, 113, 115
  - loss technique, **C** 43, 45, **A** 23, 65
  - maintenance, **O** 25, **E** 46, 47
  - passive drift, **A** 129
  - portable (handheld), **C** 16, 17, 18, 19, 35, 36, 47, 68, 69, 71, **O** 6, 7, 36, 37, **A** 33, 59, 61, 69, 114, 115 129
  - settings, **C** 55, 63, 70, **O** 33, **A** 69, 70, 113
  - ULV, **C** 11, 84, **A** 33, 69, 130
  - variable restrictor unit (VRU), **A** 29, 31
  - vehicle-mounted, **C** 16, 17, 19, 35, 40, 41, 47, 63, 68, 69, 71, **O** 6, 7, 36, 37, **E** 45, 47, **A** 19, 26, 27, 29, 33, 59, 61, 69, 113, 114, 115, 131
- spraying, **C** 46, 47, **A** 130
  - accuracy, **C** 46
  - aerial, **C** 69, **O** 8, 9, **E** 49, **A** 66, 67, 68, 69, 70, 125
  - air-to-air, **C** 65
  - and rain, **C** 52, 53
  - and wind, **C** 10, 20, 21, 22, 23, 52, 53
  - barrier, **C** 23, 26, 31, 35, 46, 47, 62, 63, 79, **O** 19, 41, **A** 79, 125
  - blanket, **E** 15
  - conditions, **C** 25, 52, 53, 55
  - full coverage (blanket), **C** 23, 58, 59, **A** 79, 125, 127

- ground targets, **C** 58, 59, 69, 84, **O** 6, 7, **E** 49
- ground teams, **C** 60, **A** 66, 67
- incremental, **A** 128
- information **C** 62, 63, **A** 127
- repeat, **C** 73
- spot treatment, **C** 46, 47
- ULV, **C** 8, 9, 10-16, 55, **O** 5, **E** 27
- VLV, **A** 21
- water-based, **C** 9, **A** 131
- see also* sprayers; equipment
- Spur-throated Locust, **A** 108, 109
- staff
  - communication and information, **E** 39
  - extension, **E** 39
  - field, **E** 4
  - medical, **E** 38, 39, 53, 75
  - monitoring teams, **E** 38, 39
  - storekeeper, **E** 38, 39
  - see also* personnel
- standard operating procedures (SOPs), **E** 83
- stopwatch, **C** 56, 57, **A** 64, 90
- storage
  - building, **O** 46, 47
  - equipment, **C** 80, 81
  - of pesticides, **C** 80, 81, **E** 43, 77
  - samples, **E** 69
- storekeeper, **C** 80, 81
- Sudan, **B** 32, 33, 38, **O** 56, **A** 97, 99, 101, 119
- Sumition, **C** 29, **A** 125, 126, *see also* insecticides
- survey
  - accuracy, **S** 13, 54, **B** 39, **S** 1-56
  - aerial, **S** 3, 4, 5, 12, 13, 18, 19, 50, 55
  - agricultural area, **S** 9, 54
  - area, **F** 11, 25, 35
  - assessment, **S** 2, 3, 4, 5, 9, 10, 11, 13
  - base camps, **S** 24, 25
  - basic principles, **S** 1
  - equipment, **S** 3, 4, 5, 19, 22, 23, 55
  - FAO Desert Locust Survey and Control Form, see main entry*
  - FAO Spray Monitoring Form, see main entry*

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- field, **F** 12, 13, 16, 17, 44  
 foot, **S** 3, 12, 13, 14, 15, 21, 54  
 forms, **S** 3, 15, **A** 87-91  
 ground, **S** 3, 5, 9, 19, 51, 56, **O** 6, 7  
 itinerary/route, **S** 9  
 location, **S** 3, 4, 5, 8, 9, **F** 17, 32, 33  
 operations, **F** 13, **O** 52  
 organization of, **S** 24, 25  
 planning, **F** 3, 4, 5, 6, 7, 8, 9, 16, 17, 28, 29  
 process, **S** 2, 3  
 purpose, **S** 4, 5  
 remote-sensing, **S** 50  
 report, **F** 11, 19, 32, 33  
 results, **S** 3, 46, 47, **F** 3, 24, 25, 26, 27  
 sampling techniques, **S** 52, 53, **A** 130  
 search, **S** 2, 3, 4, 5, 10, 11, 13, **F** 7  
 size of site, **S** 29  
 stops, **S** 3, 13, 17, 27, **A** 47  
 teams, **S** 11, **A** 8  
 techniques/methods, **S** 1, 12, 13-21, 24, 25, 50, 51  
 timing, **S** 3, 4, 5, 8, 9, 15, 19, 43, **F** 17, 32, 33  
 type, **S** 3, 10, 11, **F** 7, *see also* survey, assessment; survey, search  
 vehicle, **S** 3, 12, 13, 16, 17, 25, 54  
 work rate, **S** 12, 13
- surveying  
 adults, **S** 14, 17, 18, 19  
 after rain, **S** 8, 19  
 and wind, **S** 16, 17  
 hoppers, **S** 14, 17, 18, 19  
 swarms, **S** 19  
 vegetation, **S** 8, 9, 15, 18, 19
- suspension concentrate, **A** 130
- swarms, **B** 3, 4, 9, 23, 28-35, 39, 42, **S** 17, 18, 19, 37, 42, 43, **F** 25, 27, 35, 42, **C** 7, 31, 48, 49, 72, 73, 75, **O** 3, 5, 27, 29, 30, 31, 43, **E** 3, 15, 24, **A** 7, 50, 51, 67, 118, 119, 130  
 adult movement, **B** 31, 34  
 cumuliform, **B** 28, 29, **C** 64, 65, 66, 67, **A** 113, 126  
 density, **B** 29, **S** 41, **C** 5, **A** 51  
 displacement, **B** 31, **F** 26, 27  
 flight, **B** 30, 31, 43  
 flying, **S** 12, 19, 35, 42, 43, **C** 27, 35, 46, 47, 64, 65, **O** 31, **A** 119  
 formation, **B** 29, **O** 3  
 landing, **B** 30, 31  
 migration, **B** 31, 33, 34, 35, **F** 14, 15, 30, 31, **O** 54, 56  
 milling, **S** 34, 35, **C** 35, 60, 65, 67, **A** 113, 119, 128  
 numbers, **S** 23, 32, 33, **C** 5  
 random, **B** 29, **S** 17

- seasonal distribution, **B** 32, 33  
 settled, **B** 12, 17, 21, 35, 42, 43, **C** 7, 46, 47, 60, **O** 35, **A** 33, 119, 129  
 size, **S** 32, 33, **A** 118  
 southern circuit, **E** 75  
 stratiform, **B** 28, 29, 31, **C** 66, 67, **A** 113, 126  
 structure, **B** 29  
 swarmlet, **A** 130  
 take-off, **B** 30, 31
- swath width, **C** 22, 23, 24, 25, 38, 39, **A** 29, 60, 63, 130, *see also* sprayer settings  
 sweep net, **S** 22, 39, **C** 56, 57, 78, 79, **E** 34
- tape measure, **C** 56, 57, **A** 90  
 technical advice, **F** 3, 24, 25  
 technical assistance, **O** 12, 13  
 teflubenzuron, **C** 30, 31, **E** 85, **A** 79, 81, *see also* insecticides  
 telephone, **F** 36, 37, 45, **O** 49, **A** 55  
 television, **E** 39  
 temperature, **S** 16, 41, 44, 45, **F** 11, 14, 15, 26, 28, 29  
 air, **B** 11, **A** 14, 15  
 daily range, **F** 35  
 effect on hopper development, **B** 12, 13  
 flight limitation by, **B** 25, 31  
 soil, **B** 10, 11  
 survey timing and, **S** 9  
*see also* ecological conditions, vegetation, rain, habitat, weather
- tendering requirements, **E** 17  
 threshold number, **C** 5, **A** 130  
 tool kit, **C** 56, 57  
 topography, **S** 29  
 track spacing, **S** 19, **C** 24, 25, 38, 39, 41, 69, 83, **O** 33, 49, **A** 8, 29, 33, 37, 57, 70, 113, 114, 115, 130, *see also* sprayer settings  
 traditional areas, **S** 8, 9, *see also* recession areas  
 training, **E** 38, 39  
 spray application, **E** 47  
 staff, **E** 3, 38, 39  
 subjects, **E** 39
- transects, **S** 15, 35, 40, 41, 54, **A** 130
- transmission  
 by fax, **A** 54, 55  
 by radio, **O** 13, **A** 38, 39, 54, 55

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

- information, **F** 38, 39  
of data, **F** 38
- transport  
monitoring team, **E** 33  
pesticide, **E** 5, 38, 40, 41
- traps, **E** 34  
Tree Locust, **B** 23, **A** 102, 103  
trials, of insecticide, **C** 32, 33, 83  
triangulation, *see* Insecticides, triangulation  
triflumuron, **C** 31, **E** 85, **A** 79, 81, *see also* insecticides  
Tunisia, **A** 34, 97, 99, 101  
turbulence, **C** 20, 21, 23, **A** 130, *see also* wind, temperature
- ULV formulation, **E** 57, 89  
United Kingdom, **A** 35  
United Nations Development Programme (UNDP), **O** 15  
United Nations Recommendations on the Transport of Dangerous Goods, **E** 22  
upsurges, **B** 5, 37, 38, 39, 41, 43, **F** 19, 24, 25, 26, 27, 33, **O** 4, 5, 8, 9, 37, **E** 12, 13, 15, 21, 33, 58, **A** 47, 131, *see also* plagues, outbreaks, invasions, declines, recessions, infestations
- UV tracer dye, **E** 34
- variable restrictor unit (VRU), **A** 29, 31
- vegetation, **S** 14, 20, 21, 24, 25, 41, 48, 49, **E** 49  
density, **S** 15, 19, 28, 29, **F** 10, 11, 14, 15, 24, 25, 26, 28, 29, 35, 43  
effects on hoppers, **B** 18, 19, 20, 21  
greenness, **S** 15, 19, 28, 29, **F** 11, 32, 33  
*Heliotropium* sp., **B** 15  
*Panicum* sp., **B** 15  
surveying, **S** 8, 9, 15, 18, 19
- vehicle transects, **S** 3, 16, 27, 43, *see also* transects
- vehicles, **C** 49, **O** 24, 25, 38, 39, 49, 53, **E** 5, 33, **A** 67  
survey, **S** 3, 24, 25, **O** 38  
supply, **O** 26, 27, 36, 37, 39, 48, 49
- vernier caliper, **A** 72  
vibrating tachometer, **C** 56, 57, **A** 18, 19, 21, 68, 90  
VMD-NMD ratio (R), **C** 13, 15, **A** 131, *see also* droplet size  
volume application rate (VAR), **C** 19, 36, 37, 39, 40, 41, 43, **A** 21, 59, 71, 131  
volume median diameter (VMD), **C** 12, 13, 18, 21, 34, 35, **A** 113, 131, *see also* droplet size
- weather, **F** 29, 34, 35, 44, **O** 11, **A** 69  
control and, **C** 2, 3, 52, 53, 59, 83, **O** 33, **E** 49, 59  
data, **F** 17, 25  
effect on hopper band behaviour, **B** 17  
effect on maturation, **B** 23  
effect on swarm flight, **B** 31

- survey timing and, **S** 9  
*see also* temperature, rain, pressure
- West Africa, **B** 32, 33, 34, 35, **E** 15, **A** 119
- whirling hygrometer, **S** 45, **C** 54, 55, **A** 14, 15, 67, 90, 131
- WHO hazard classes, **E** 19, 27, 51, **A** 81, 82, 83
- wind, **B** 35, **S** 14, 15, **F** 11, 25, 28, 29, **C** 38, 41, 58, **A** 23, 126, 131  
direction, **S** 44, 45, **F** 14, 15, **C** 58, 59, 60, 61, **O** 30, 31, **E** 5, 46, 47, **A** 7, 17, 67, 126  
effect on egg development, **B** 10  
effect on spraying, **C** 10, 20, 21, 22, 23, 52, 53, **E** 46, 47  
effect on surveying, **S** 16, 17  
headwind, **A** 127  
locust movement in, **B** 17, 31, 34  
speed, **S** 44, 45, **F** 14, 15, **C** 35, **E** 46, 49, **A** 17, 23  
tailwind, **A** 130  
*see also* weather
- withholding period, **E** 17, 39, 54, 55, 65, 67, *see also* monitoring, campaign, control
- World Health Organization (WHO), **A** 121  
Hazard Classification, **C** 28, 29, **E** 19, 27, 51, **A** 127  
*see also* insecticide, toxicity; pesticides
- Yemen, **B** 38, **O** 56, **A** 35, 97, 99, 101

*Tip: the letters in bold (with page numbers after them) refer to the individual guidelines as follows: **B** = Biology and Behaviour, **S** = Survey, **F** = Information and Forecasting, **C** = Control, **O** = Campaign Organization and Execution, **E** = Safety and Environmental Precautions, **A** = Appendixes. For example **B** 3, 5 means pages three and five in the Biology and Behaviour guideline.*

