

## KEYWORD INDEX

### 1

1,3-dichloropropene (1,3-D) 302

### 4

4',6-diamidino-2-phenylindole (DAPI) 244

### A

Abbott's formula 178

acibenzolar-s-methyl 110

aerial infrared photography 48

aging 314

aldicarb 58, 65

amber 129

amphid 78

*Ananas comosus* 39

*Anclostoma caninum* 465

*Anclostoma ceylanicum* 465

animal-parasitic nematode 223

antagonism 422

Aphelenchida 133

Aphelenchina 218

Aphelenchoididae 7

*Arachis glabrata* 450

*Arachis hypogaea* 115, 395, 417, 433

Araeolamida 146

arginine kinase 252

Arkansas 375, 388

*Artemisia vulgaris* 437

*Artogeia rapae* 259

Ascaridida 146

*Ascaris lumbricoides* 465

*Ascaris megalocephala* 223

*Ascaris suum* 465

### B

*Bacillus megaterium* 167

bacterial-feeding nematode 289

bactivorous nematode 187

barley 289

behavior 142

*Belonolaimus* 450

*Belonolaimus longicaudatus* 302

bermudagrass 302

*Berntsenus brachycephalus* 218

*Beta vulgaris* 35

biological control 178, 198, 271, 278

biological species concept 119

black root rot 17

botanical nematicide 437

*Brassica* hybrid 35

*Brassica juncea* 35

*Brassica napus* 35, 39

*Brassica rapa* 35

broad band reflectance 48

*Brugia malayi* 465

*Bunonema* 244

*Burkholderia cepacia* 167

*Burkholderia cepacia* complex 208, 212

*Bursaphelenchus cocophilus* 133

*Bursaphelenchus xylophilus* 7, 133

### C

cabbage looper 259

*Caenorhabditis briggsae* 465

*Caenorhabditis elegans* 244, 314, 465

canola 35

*Capsicum annuum* 430

catalase 314

cDNA 82

cell fusion 244

centriole 223

cephalob 233

Cerambycidae 7

chlorhexidine diacetate 458

chorismate mutase 82

chromosome 228

citrus 450

cladoceran 198

clover cyst nematode 289

cluster analysis 388

*Columbia lance* nematode 73

common bean 23

community structure index 294

competition 1, 178, 187, 422

compost 289

concomitant infection 422

conservation tillage 104

corn 58

cotton 48, 58, 73, 411, 422

cover crop 39

cowpea 110

crop loss 58, 73, 104

crop rotation 58

cropping system 73

*Crotalaria juncea* 39, 294

cryofixation 78

*Cucurbita pepo* 294

cultural practice 73

*Cynodon* hybrid 302

*Cynodon dactylon* 302

cyst 271, 458

cyst nematode 228, 271

cystic fibrosis 208, 212

cytogenetics 228

### D

DAPI fluorescent microscopy 244

density dependence 98

desert 157

developmental profile 82

diamondback moth 259

*Diaprepes abbreviatus* 187

*Diplogaster theritieri* 289

Diplogastrida 146

Diplogastrina 244

*Dirofilaria immitis* 465

*Distolabrellus weechi* 78

distribution 157

### E

Easter lily 443

ecological index 450

ecology 157

egg 271

egg hatch 458

electrophoresis 278, 433

ELISA 278

emigration 115

endospore 198

endosymbiont 266

entomopathogenic nematode 142, 178,

187, 259

epidemiology 208

esterase phenotype 395, 433

ethylene 306

evolution 129, 133, 142, 146, 194

expressed sequence tag (EST) 194, 465

### F

face pattern 78

*Fergusobia* 133

filaria 266

fine structure 244

foliar application 259

foraging 142

fossil 129

*Fragaria × ananassa* 17

free-living nematode 187

functional genomics 194

### G

gene expression 252

genomics 465

genomovar 208

*Globodera pallida* 465

*Globodera rostochiensis* 465

glutaraldehyde 78

*Glycine max* 1, 58, 88, 104, 110, 252

*Gossypium hirsutum* 48, 58, 73, 411, 422

groundnut 115, 395, 417, 433

growth stimulation 306

### H

*Haemonchus contortus* 465

halophyte 157

hatch inhibitor 458

hatch stimulator 458

*Helicotylenchus digonicus* 29

*Helicotylenchus pseudorobustus* 29

herbicide 88

*Heterodera betulae* 228

*Heterodera glycines* 1, 23, 88, 98, 104, 252,

271, 458, 465

*Heterodera schachtii* 35, 465

*Heterodera trifolii* 289

*Heterorhabditis* 178

hierarchical cluster analysis 388

hololectotype 218

*Hoplolaimus* 450

*Hoplolaimus columbus* 73

*Hordeum vulgare* 289

horizontal transmission 7

host race 433

host resistance 115

host search 142

host suitability 23

host-plant tolerance 73

human infection 212

hypersensitive reaction (HR) 115

### I

immunoblot 278

immunofluorescence 278

immunogold labeling 278

imported cabbageworm 259

induced resistance 306

interaction 17, 88, 167

intercropping 39

Israel 157

### K

key 233

### L

lesion nematode 1, 17, 29, 289, 443

life span 314

*Lilium longiflorum* 443

lip sector 78

*Litomosoides sigmodontis* 465

*Longidorus grandis* n. sp. 375

*Longidorus paralongicaudatus* n. sp. 375

*Longidorus paravineacola* n. sp. 388

*Longidorus vineacola* 388  
low temperature SEM 78

## M

maize 58  
malate dehydrogenase phenotype 395, 433  
management 39, 58, 73, 104, 302, 411  
manure 289  
MAPK activation 306  
marigold 39  
meiosis 223, 228  
*Meloidogyne arenaria* 29, 115, 198, 278, 404, 417, 433, 465  
*Meloidogyne chitwoodi* 465  
*Meloidogyne hapla* 289, 404, 417, 465  
*Meloidogyne haplanaria* n. sp. 395  
*Meloidogyne incognita* 1, 29, 48, 294, 404, 411, 422, 465  
*Meloidogyne javanica* 29, 39, 82, 110, 404, 417, 430, 433, 465  
*Meloidogyne megadora* 437  
*Meloidogyne paranaensis* 465  
mercuric chloride 458  
Mermithida 146  
*Mesocriconema* 450  
*Mesocriconema xenoplax* 29  
messenger RNA (mRNA) 82  
microbial degradation 65  
microbivorous nematode 187  
mitogen-activated protein kinase (MAPK) 306  
*Mj-ba-1* 82  
*Mj-cm-1* 82  
molecular barcode 119  
Mollusca 146  
*Monacrosporium haptotylum* 194  
*Monochamus alternatus* 7  
monoclonal antibody 278  
morphology 119, 233, 375, 388  
morphospecies 119  
mugwort 437  
multi-spectral reflectance 48  
multiple infection 7  
multiplication rate 98

## N

natural control 178  
*Necator americanus* 465  
Negev 157  
nematicide 58, 65, 302, 437, 443  
nematode community 450  
nematode-trapping fungus 39, 194  
nematophagous fungus 271  
new species 233, 375, 388, 395  
*Nippostrongylus brasiliensis* 465  
no-till 104  
nonfilariid nematode 266  
*Nothacrobates* 233  
nucleus 244

## O

*Olea europaea* 29  
*Onchocerca ochengi* 465  
*Onchocerca volvulus* 465  
organic amendment 294  
*Ostertagia ostertagi* 465  
overwinter survival 98  
oxidative stress 314

## P

paleontology 129  
*Panagrolaimus* 119  
paralectotype 218

parasite 129  
parasitism 146, 194  
parasitism gene 82  
*Parastrengloides trichosuri* 465  
*Pasteuria penetrans* 198, 278  
*Pasteuria ramosa* 198  
pathogenic variability 430  
peanut 115, 395, 417, 433  
*Pelliidotis* 187

penetration 115  
pepper 430  
perennial peanut 450  
*Phaseolus vulgaris* 23  
phylogeny 194, 198, 404  
phytopathogenic nematode 198  
*Phytophthora nicotianae* 167  
plant parasitism 133  
plant-parasitic nematode 198, 450  
planting date 73  
*Plutella xylostella* 259  
polycomplex 223  
polymerase chain reaction (PCR) 82  
population dynamics 104  
potato 289  
*Pratylenchus fallax* 29  
*Pratylenchus penetrans* 1, 17, 29, 289, 443, 465  
*Pratylenchus teres* 78  
*Pratylenchus thornei* 29  
*Pratylenchus vulnus* 29  
*Pratylenchus zeae* 78  
*Pristionchus pacificus* 465

## Q

Quebec 259

## R

race 23, 430  
rapeseed 35, 39  
real-time quantitative RT-PCR 82  
recombinant inbred 314  
recombination nodule 223, 228  
remote sensing 48  
reniform nematode 39, 58, 65, 110, 422  
replacement 1  
reproduction 29, 88, 417  
reproductive mode 404  
resistance 23, 411, 417  
resistance screening 35  
reverse transcriptase PCR (RT-PCR) 82  
rhabditid 266  
Rhabditida 78, 146  
*Rhizoctonia fragariae* 17  
rhizosphere microorganism 167  
ribosomal DNA (rDNA) 404  
ribosomal RNA (rRNA) 119  
ring nematode 29  
RNA 82, 119  
root-knot nematode 1, 29, 39, 48, 82, 110, 115, 278, 289, 404, 411, 417, 422, 430, 433, 437  
root-lesion nematode 1, 17, 29, 289  
*Rotylenchulus reniformis* 39, 58, 65, 110, 422

## S

salicylic acid 306  
sawdust 289  
scanning electron microscopy (SEM) 78, 119, 233, 244, 375, 388, 395  
*Schistonchus* 133  
SDS-PAGE 278  
seasonality 178  
sequential infection 422  
shikimate pathway 82  
sodium hypochlorite 458

soil amendment 289  
soil fumigation 302  
*Solanum tuberosum* 289  
southern root-knot nematode 411  
soybean 58, 88, 104, 110, 252  
soybean cyst nematode 1, 23, 88, 98, 104, 252, 271, 458  
soybean root diffusate 458  
Spain 29, 233  
speciation 404  
spiral nematode 29  
*Spirurida* 146  
squash 294  
*Steinerinema* 142, 178  
*Steinerinema carpopcapsae* 259  
*Steinerinema diaurrepsi* 187  
*Steinerinema feltiae* 259  
*Steinerinema riobrave* 187, 259  
Steiner nematid nematode 259  
Steiner nematidae 187  
sting nematode 302  
strain typing 208  
strawberry 17  
streptomycin sulfate 458  
Strongylida 146  
*Strongyloides ratti* 465  
*Strongyloides stercoralis* 465  
sugarbeet 35  
sugarbeet cyst nematode 35  
sunn hemp 39, 294  
surface disinfestation 458  
susceptibility 35  
synaptonemal complex 223, 228  
systemic acquired resistance (SAR) 110

## T

*Tagetes erecta* 39  
Taqman assay 82  
*Taxocara canis* 465  
taxonomy 78, 119, 218, 233, 375, 388, 395  
*Teladorsagia circumcincta* 465  
*Teratorhabditis palmarum* 244  
Texas 395  
tolerance 306, 411  
toxicity 437  
transcript 82  
transmission electron microscopy (TEM) 244  
*Trichinella spiralis* 465  
*Trichoplusia ni* 259  
*Trichuris muris* 465  
*Trichuris vulpis* 465  
tritrophic association 133  
turf 302  
*Tylenchida* 78, 133  
*Tylenchulus semipenetrans* 167

## V

vector 7  
virulence 7

## W

weed 39  
weevil 187  
*Wolbachia* 266  
*Wuchereria bancrofti* 465

## Y

yield 289

## Z

*Zea mays* 58  
*Zeldia* 233  
*Zeldia punctata* 465  
*Zygotylenchus guevarai* 29

## AUTHOR INDEX

**A**

- Abolafia, J. 233  
 Adams, B. J. 146  
 Ahren, D. 194  
 Aldrich, H. C. 278  
 Anderson, A. J. 306  
 Anderson, C. A. 443  
 Anderson, J. 314  
 Anderson, W. F. 417  
 Anwar, S. A. 306  
 Arakawa, Y. 7

**B**

- Bague, G. 187  
 Baldwin, J. G. 244  
 Baltensperger, D. D. 35  
 Barker, K. R. 73  
 Belair, G. 259  
 Belmont, P. 314  
 Bendezu, I. F. 115  
 Bernard, E. C. 395  
 Bird, D. McK. 465  
 Blaxter, M. 119  
 Bordenstein, S. R. 266  
 Bradley, C. A. 88  
 Brito, J. A. 198, 278, 433

**C**

- Campbell, J. F. 142  
 Carta, L. K. 78  
 Castillo, P. 29  
 Cetintas, R. 433  
 Charlson, D. V. 458  
 Chen, F. J. 271  
 Chen, P. 404  
 Chen, S. Y. 271  
 Chinnasri, B. 110  
 Clifton, S. W. 465  
 Costa, S. dos S. da R. 437  
 Crow, W. T. 302  
 Cummings, T. D. 58

**D**

- Darso, J. 443  
 Dauphinain, N. 259  
 Davies, K. A. 133  
 Davis, R. F. 58, 411  
 Dey, J. 1  
 Dickson, D. W. 198, 278, 433  
 Dickstein, E. 167  
 Diez, A. 422  
 Dolinski, C. M. 244  
 Duncan, L. W. 167, 178, 187, 450  
 Dunn, D. C. 178, 187

**E**

- Edmisten, K. L. 73  
 Eisenback, J. D. 395  
 El-Borai, F. E. 167  
 Erbe, E. F. 78  
 Etter, S. 443  
 Eyualem, A. 119

**F**

- Fitch, D. H. A. 266  
 Fournier, Y. 259

**G**

- Gallaher, R. N. 294  
 Gallant, C. E. 289  
 Gaska, J. M. 88  
 Giblin-Davis, R. M. 133, 198, 278, 302

- Giraud, D. 443  
 Goldstein, A. 223, 228  
 Goldstein, P. 223, 228  
 Graham, J. H. 167, 178  
 Grau, C. R. 88  
 Grewal, P. S. 146  
 Grewal, S. K. 146

**H**

- Hartman, G. L. 88  
 Hartman, P. 314  
 Henry, R. 289  
 Holbrook, C. C. 417  
 Hyman, B. C. 404

**I**

- Ishii, N. 314

**J**

- Jimenez-Diaz, R. M. 29

**K**

- Kaisa, T. R. 218  
 Kaufman, H. W. 48  
 Kaya, H. K. 142  
 Kemerait, R. C. 58  
 Kerr, E. D. 35  
 Khan, A. A. 430  
 Khan, B. 430  
 Khan, M. R. 430  
 Kimpinski, J. 289  
 Koenning, S. R. 58, 73  
 Kurtzweil, N. C. 88

**L**

- Lambert, K. N. 82  
 LaMondia, J. A. 17  
 Lawrence, G. W. 65, 422  
 Lawrence, K. S. 422  
 Lee, T. A., Jr. 395  
 Lewis, E. E. 142  
 Lickfeldt, D. W. 302  
 Lima, R. D. 433  
 LiPuma, J. J. 212  
 Long, J. H., Jr. 98

**M**

- Macchia, E. T. 450  
 MacDonald, M. H. 252  
 MacGuidwin, A. E. 88  
 MacLeod, J. A. 289  
 Mahenthiralingam, E. 208  
 Maruniak, J. E. 198  
 Matthews, B. F. 252  
 May, O. L. 411  
 McCarter, J. P. 465  
 McCoy, C. W. 178  
 McKenry, M. V. 306  
 McLean, K. S. 65  
 McSorley, R. 294, 450  
 Melakeberhan, H. 1  
 Mendes, M. L. 433  
 Merlin, J. 223, 228  
 Metcalf, A. E. 404

- Mitreva, M. 465  
 Morris, K. 133  
 Morrison, D. E. 73  
 Murphy, C. A. 78

**N**

- Nadler, S. 142  
 Nguyen, K. 178, 187

- Nico, A. I. 29  
 Nielsen, E. L. 35  
 Noel, G. R. 88, 104  
 Nong, G. 198

**O**

- Oakley, T. R. 98

**P**

- Painter, J. E. 82  
 Pedersen, W. L. 88  
 Pen-Mouratov, S. 157  
 Pena-Santiago, R. 233  
 Poinar, G. O., Jr. 129  
 Preston, J. F. 198, 278

**R**

- Radewald, J. D. 443  
 Rakhibaev, M. 157  
 Rice, J. D. 278  
 Riddle, L. J. 443  
 Rife, C. L. 35  
 Robbins, R. T. 375, 388  
 Roberts, P. A. 404  
 Ryan, M. F. 437

**S**

- Sanderson, J. B. 289  
 Santos, M. S. N. de A. 437  
 Schmidt, L. M. 198  
 Schmitt, D. P. 39, 110  
 Shurley, W. D. 58  
 Sipes, B. S. 39, 110  
 Smith, J. R. 23  
 Starr, J. L. 115, 395  
 Steinberger, Y. 157  
 Stock, S. P. 142  
 Sturz, A. V. 289  
 Syvertsen, J. 450

**T**

- Tan, L. 146  
 Thai, V. K. 252  
 Thomas, W. K. 133  
 Timper, P. 417  
 Todd, T. C. 98  
 Togashi, K. 7  
 Tomaszewski, E. K. 395  
 Tucker, M. L. 252  
 Tunlid, A. 194  
 Tylka, G. L. 458

**V**

- Vandamme, P. 208

**W**

- Wang, K.-H. 39, 294  
 Waterston, R. H. 465  
 Wax, L. M. 88, 104  
 Wergin, W. P. 78  
 Werren, J. H. 266  
 Westerdahl, B. B. 443  
 Wheeler, T. A. 48  
 Williams, D. S. 278

**Y**

- Yang, K.-Y. 306  
 Ye, W. 375, 388  
 Young, L. D. 23

**Z**

- Zellers, J. 178  
 Zuber, S. 314