CONTENTS

Vol. 48 No. 1, June 2018

Effect of chlorpyrifos on survival and virulence of native entomopathogenic nematodeRajkumar, Jagadeesh Patil, Kesavan Subharan and Sujithra M.	 1
Potential of the natural biopolymers, chitin and chitosan in root-knot nematode <i>Meloidogyne incognita</i> (Kofoid and White) chitwood managementN.H. Archana and O.P. Reji Rani	 6
Application of green synthesis in nano particles preparation: Ficus mucoso extracts in the management of Meloidogyne incognita infecting groundnut Arachis hypogeaO.A. Fabiyi and G.A. Olatunji	 13
Minimum inhibitory concentration (MIC) and inhibitory concentration 50 (IC ₅₀) of the endophytic <i>Bacillus</i> weihenstephanensis effective against <i>Meloidogyne incognita</i> Tamalika Sarangi, S. Ramakrishnan, S. Nakkeeran and P. Marimuthu	 18
Morphological and morphometrical characterization of <i>Meloidogyne arenaria</i> from different host plants in Thrissur district of Kerala, IndiaChinchu P. Babu and R. Narayana	 23
Management of <i>Meloidogyne incognita</i> and <i>Rhizoctonia solani</i> disease complex with fungal antagonist in tea seedlingA. Borah, A. Baruah and D. Gogoi	 30
Effect of neem and Bacillus thuringiensis on egg hatching of Meloidogyne incognitaH. Kaur, H. Kaur and P. Rishi	 36
Control of root-knot nematode, <i>Meloidogyne incognita</i> (Kofoid and White) chitwood on tomato plant with some plant extractsBidyut Nandi	 42
Potentiality of ashes against root-knot nematode (<i>Meloidogyne incognita</i>) in cucumber Th. Sunita Devi and Debanand Das	 46
Management of root-knot nematode <i>Meloidogyne incognita</i> infecting black pepperR. <i>Narayana, Sunu Thomas</i> and <i>M.S. Sheela</i>	 51
Environment friendly management of root-knot nematode, <i>Meloidogyne incognita</i> infecting cluster bean (<i>Cyamopsis tetragonoloba</i> L.) B.L. Baheti, P.K. Yadav, C.P. Nama and S.K. Khandelwal	 56
Chemical inducers: A tool for management of root-knot nematode, <i>Meloidogyne incognita</i> infecting okra (<i>Abelmoschus esculentus</i> L.) under field conditionsB.L. Baheti, C.P. Nama, S.S. Bhati and S.K. Khandelwal	 62
Biochemical changes in susceptible and resistant gladiolus cultivars induced by root-knot nematode, <i>Meloidogyne incognita</i> Ritu Kumari Pandey, D.K. Nayak and Rudra P. Mohalik	 68

Nematodes and biological activity status of declining apple orchards in Shimla and Sirmaur districts of Himanchal Pradesh-A survey	 73
Niranjan Singh, D.P. Sharma and Sudarshna Kumari	
In vivo and in vitro inhibition of three plants water extracts on Meloidogyne incognita (Meloidogynidae)S.B. Gad, A.G. El-Sherif, M.S. Saadoon and S.A. Gabar	 77
Isolation, cloning and characterization of cuticle collagen genes, Mi-dpy-10 and Mi-dpy-31, in Meloidogyne incognitaDeshika Kohli, Anil Sirohi, Ramamurthy Srinivasan, Navneeta Bharadvaja and Pradeep K. Jain	 84
Incidence of root-knot nematode (<i>Meloidogyne</i> species) on various hosts in different agro-climatic ranges of Himachal Pradesh, India	 96
Kanwar Pallavi Singh, Anju S Khanna and Sunil Kumar	
Occurrence and status of virus vector nematodes in apple ecosystem of Kashmir, IndiaG.M. Lone, F.A. Zaki and Ali Anwar	 103
$\label{lem:management} \mbox{Management of root-knot nematode } (\mbox{\it Meloidogyne incognita}) \mbox{ in poly house on cucumber } (\mbox{\it Cucumis sativus L.}) \mbox{ as seed soaking treatment}$	 108
Devprakash Gocher, M.K. Sharma and H.R. Gurjar	
Short communications	
Interaction of <i>Meloidogyne incognita</i> and <i>Rhizoctonia solani</i> on french beanD. <i>Gogoi, B. Mahanta</i> and <i>A.K. Saikia</i>	 113
Occurrence and distribution of plant parasitic nematodes in different khasi mandarin (<i>Citrus reticulata</i> , Blanco) orchards of Tinsukia district of Assam B. Mahanta, B.N. Choudhury and Tabaruk Hussain	 115
Root-knot nematode, Meloidogyne incognita infecting PartheniumRavindra, H., Mukesh Sehgal, Bommalinga, S., Narasimhamurthy, H.B. and Jayalakshmi, K.	 118
Assessment of yield losses due to <i>Meloidogyne incognita</i> on ivy gourd (<i>Coccinea indica</i> L.)Binita Basumatary, B. Mahanta, A. Borah and P. Dutta	 119
Screening of blackgram (<i>Vigna mungo</i>) germplasms for resistance against root-knot nematode, <i>Meloidogyne incognita</i> race 2B. Bhagawati, B.N. Choudhury, Debanand Das and P. Das	 121
Nematode inoculation to the carrot discs with glass capillaries for sub-culturing <i>Pratylenchus</i> Gautam Chawla and H.K. Sharma	 123
Nematode infestation hampers farmers' innovativeness in Mewat, HaryanaPankaj, Gautam Chawla, H.K. Sharma, Anjani Kumar, Bharat Singh and Pargat Singh	 124
Performance of some selected tomato cultivars for their resistance and susceptibility behaviour against root-knot nematode, Meloidogyne incognita	 125
Mohd. Asif, Faheem Ahmad, Taruba Ansari, Amir Khan, Faryad Khan, Moh. Tariq and Mansoor A. Siddiqu	
A new report on co-parasitization of tomato and brinjal roots by root-knot nematode and broomrape R.S. Kanwar	 128

Vol. 48 No. 2, December 2018

 $\hbox{\it --B. Bhagawati, B.N. Choudhury and Satyandra Singh}$

Nematode community structure and efficacy of the free-living nematode <i>Metarhabditis andrassyana</i> as a toxicological assay organism Shikha Ahalavat and Ashok K. Chaubey	 131
Induction of defence enzymes using bio-agents in tomato infected with root-knot nematode, <i>Meloidogyne incognita</i> B.S. Chandrawat, A.U. Siddiqui, S.S. Bhati and Vinod Saharan	 139
Ecofriendly management of wilt complex in black pepper (<i>Piper nigrum</i> L.)N. Umashankar Kumar, N.G. Ravichandra and A. Nataraja	 146
Effect of age on pharyngeal pumping in two species of free-living nematodesWajih Jamal, Hiba Fatima and Irfan Ahmad	 156
Survey of major bitter gourd growing areas of Punjab to determine the incidence and prevalence of root-knot nematodeRenu Sharma, Sukhjeet Kaur and N.K. Dhillon	 162
New distributional record of <i>Steinernema hermaphroditum</i> (Rhabditida: Steinernematidae) from Kerala, IndiaAnes K.M., Merin Babu, Jina Sivadasan and Joseph Rajkumar A.	 169
Efficacy of fungal bioagents for the management of <i>Meloidogyne graminicola</i> infecting paddyBhabesh Bhagawati and Bhupendra Nath Choudhury	 178
Descriptions of a new and a known species of the genus <i>Chronogaster</i> Cobb, 1913 (Chromadorea:Plectida: Chronogasteridae) from IndiaNadia Sufyan and M. Mahamood	 183
Bio-efficacy of phytotherapeutic substances against <i>Meloidogyne incognita</i> and <i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> affecting cucumber in polyhouse under protected cultivationJaydeep Patil, Anil Kumar, Saroj Yadav, S.R. Goel and A.K. Bhatia	 190
Incidence and population density of plant parasitic nematodes infecting vegetable crops and associated yield losses in Eastern Uttar PradeshSatyendra Singh, C. Sellaperumal, A.P. Singh and Pankaj	 198
Nematicidal potential of some botanical products against <i>Meloidogyne incognita</i> infecting eggplantR.A. Bakr and H.A. Ketta	 203
The study on life span of the nematode, Teratorhabditis palmarumWajih Jamal, Tijo Cherian and Puneet Kumar	 212
Morphological and biochemical host response of fifteen Indian rice cultivars to rice root-knot nematode, <i>Meloidogyne graminicola</i> Ziaul Haque and Mujeebur Rahman Khan	 218
Short communications	
Bio-management of disease–complex caused by <i>Meloidogyne incognita</i> Race-2 and <i>Ralstonia solanacearum</i> in jute, <i>Corchoru solitorius</i> L.	 227

Management of reniform nematode, Rotylenchulus reniformis infecting mung bean (Vigna radiata L.) by using bio-agentsMadhu Bala and H.K. Sharma	 230
Control of root-knot nematode pest of okra using Ocimum gratissimum compostS.A. Abolusoro, N.B. Izuogu, P.F. Abolusoro, L.G. Oluwafunso, A. Iges, S.A. Hinmikanye, O.T.V. Adebiyi and J.F. Ogunremi	 231
Evaluation of ridgegourd varieties/cultivars against root-knot nematode, <i>Meloidogyne incognitaRitu Kumari Pandey</i> and <i>D.K. Nayak</i>	 234
Effect of Trichoderma spp. against Meloidogyne incognita on tomatoMumpi Ering and Sobita Simon	 236
Incidence of plant parasitic nematodes associated with capsicum (Capsicum annuum L.) in Himachal PradeshNeelam Thakur, Karamveer Kaur and Preety	 237
First report of weed-disease complex of Meloidogyne incognita and Orobanche cernua in brinjalGulwaiz Akhter and Tabreiz Ahmad Khan	 240
Effect of brassicca cultivar on biofumigation for management of plant-parasitic nematodesAnju Kamra	 241
Management of root-knot nematodes (<i>Meloidogyne</i> spp.) using different chemicals in tomato nurseryNilam D. Patel and Ashok D. Patel	 243
Nematodes of protected areas of Uttarakhand, India: New recordsVinita Sharma	 245