

Curriculum Vitae

1. **Name (Block letter) : Dr Joni Kumar**
2. **Designation :** Assistant Professor
3. **Department :** Agri. Entomology
4. **Date of joining :** 09.01.2020
5. **Employee Code :** 1184354
6. **E-mail id :** jonikumar68@gmail.com
7. **Mobile No. :** +91 9821476010
8. **Research area :** Integrated pest management,
Apiculture, Biological control,
Chemical ecology of insects



Academic Qualifications

S. No	Degree	Year	Subject	University
1	PhD	2018	Agri. Entomology	ICAR-IARI New Delhi
2	M.Sc	2013	Agri. Entomology	G.B.P.U.A.&T. Pantnagar-UK
3	NET	2013	Agri. Entomology	ICAR New Delhi
4	JRF	2011	Agri. Entomology	ICAR New Delhi
5	B.Sc	2011	Agriculture	GMV Rampur Maniharan

PhD Research Work: Effect of semiochemicals on natural enemies of *Lipaphis erysimi* (Kaltenbach) and *Myzus persicae* (Sulzer) occurring in Mustard

M.Sc Research work: Stock improvement and royal jelly production through better performing colonies of *Apis mellifera* L.

Technical experience

1. Chromatography techniques: TLC, GC-MS, HPLC, Column, ion- exchange,
2. Electroantennography: Volatiles
3. Queen rearing & Royal jelly production: Honey bee, *Apis mellifera*
4. Molecular techniques: Electrophoresis-GEL/SDS-PAGE, Hybridization-Northern & Southern, PCR
5. Layout of experimental designs
6. Data analysis of experimental designs like CRD, RBD, LSD, some other test viz., DMRT, Fisher' LSD, Tukey test, Student test, and Chi square test.

Mass rearing and toxicity evaluation experience

1. **Mass rearing and toxicity evaluation of Lepidopteran insects under laboratory condition:** Gram pod borer, *Helicoverpa armigera*, Tobacco caterpillar, *Spodoptera litura*, Diamondback moth, *Plutella xylostella*,
2. **Mass rearing and toxicity evaluation of Hemiptera insects under laboratory condition:** cotton whitefly, Bemasia tabaci, Brown plant hopper, *Nilaparvata lugens*, Aphids, *Lipaphis erysimi*, *Myzus persicae*, *Brevicoryne brassicae*, cotton mealy bug, *Phenacoccus solenopsis*
3. Laboratory rearing and toxicity evaluation of thrips and Mites
4. Laboratory rearing and toxicity evaluation of beneficial insects: Predators- (*Coccinella septempunctata*, *Chrysoperla carnea*) and Parasitoids (*Aphidius colemani*, *Diaeretiella rapae*).
4. Laboratory rearing and toxicity evaluation of *Apis mellifera*

Role and responsibility in college

1. Coordinator of Beekeeping unit of college
2. Academic counselor of Certificate in Beekeeping course (2020 to till date)
3. NSS Programme Officer of unit-III
4. NSS District coordinator (2022)
5. District coordinator 'Har ghar tiranga programme' (Nominated by VC of MSU)
6. Member of Research & Development cell of college
7. Member of E-learning cell of college

8. Member of activity club of college
9. Member of international student cell of college
10. Member of disabled cell of college
11. Member of Sc/St cell of college
12. Member of Cultural committee cell of college

Awards and Fellowships

1. ICAR-JRF (Agricultural Entomology) - 2011
2. ICAR-IARI fellowship - 2013
3. UGC-JRF fellowship - 2013
4. UGC-SRF fellowship - 2016
5. Sikshak Samman by Govt. of UP - 2021

Professional Recognition

1. Society for Conservation of Nature (Life Member)
2. Society of plant protection science (Life member)
3. G20 Ambassador Govt. of UP (2023)
4. Programme Officer, National Service Scheme (N.S.S.) from Oct 2020 to Till date

Scientific Publication

A. Research Paper

1. **Joni Kumar and Bishwajeet Paul (2023)**. Electrophysiological and behavioral response of *Mallada basalis* (Walker) to volatiles of host plant and its prey. *Journal of Entomological Research*. 47: 94-99.
1. **Joni Kumar** and Bishwajeet Paul (2022). Effects of plant volatiles on electrophysiology of *Bracon brevicornis* (Wesmael)(Hymenoptera: Braconidae). *Journal of Entomological Research*. 46: 60-66.
2. Yogandar Sain, Rajendra Singh, **Joni Kumar**, and Dushyant Kumar (2022). Evaluation of the efficacy of novel insecticides and biopesticides against cabbage diamondback moth, *Plutella xylostella* (L.). *Journal of experimental zoology India*. 24: 1709-1715.
3. **Joni Kumar**, Bishwajeet Paul and Suresh M Nebapure (2021). Electroantennogram responses of *Earias vittella* (fabricius) to volatiles of cotton plants. *Journal of*

experimental zoology India. 25: 481-485.

4. Dushyant Kumar, Ved Ratan, Arun Kumar, Krishna Pal, SK Singh, **Joni Kumar**, Yogandar Sain (2021). Effect of Seedlings Treatment with Different Bioagents and Fungicides along with Soil Amendments on the Incidence of Wilt Disease in Tomato Crop In Vivo Conditions. *Agrica*. 10: 160-164.
5. Dushyant Kumar, Ved Ratan, Arun Kumar, Sachin Kumar Jain, **Joni Kumar**, Krishan Pal and Maneesh Kumar (2021). Pathogenicity tests and antagonistic effect of bioagents on *Fusarium oxysporum* f. Sp. *Lycopersici*. *The Pharma Innovation Journal*. 10: 1887-1891.
6. Yogandar Sain, Rajendra Singh, **Joni Kumar**, Joginder Singh and Dushyant Kumar (2021). Seasonal incidence of cabbage butterfly, *P. brassicae* (L.) on cabbage crop in Meerut region of Uttar Pradesh. *International Journal of Agricultural Invention*. 6: 172-175.
7. Arun Kumar, Dushyant Kumar, **Joni Kumar**, SK Singh, Krishan Pal, Yogandar Sain and Maneesh Kumar (2021). Evaluation of different botanicals and chemical fungicides against *Alternaria lini* in In-vitro condition. *The Pharma Innovation Journal*. 10: 1901-1904.
8. Yogandar Sain, Rajendra Singh, Gaje Singh, DV Singh, Kamal Khilari, Vivek, Alice Singh, Sushil Kumar, **Joni Kumar** and MP Gautam (2020). Seasonal profile of different insect-pests of black gram in the western region of Uttar Pradesh. *Journal of Entomology and Zoology Studies*. 8: 771-773.
9. Yogendra Sain, Rajendra Singh, Gaje Singh, DV Singh, Kamal Khilari, MP Gautam, **Joni Kumar**, and Sushil Kumar (2020). Seasonal profile of different insect-pests of black gram in the western region of Uttar Pradesh. *Journal of Entomology and Zoology Studies*. 8: 771-773.
10. **Joni Kumar**, Bishwajeet Paul, and Suresh M Nebapure (2019). Electrophysiological response of *Dysdercus cingulatus* (Hemiptera: Pyrrhocoridae) to cotton plant extracts and host related compounds. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*
11. **Joni Kumar** and Bishwajeet Paul (2018). Response of *Pieris brassicae* (Linnaeus) (Lepidoptera: Pieridae) to Brassica extracts. *Journal of Entomology and Zoology Studies*. 6: 1226-1228.

12. Shivashankara, R. M. Srivastava, ARNS Subbanna, **Joni Kumar**, Sandip P. More (2018). Diversity of insect pollinators and foraging behavior of native honey bees on Coriander. *Environment and Ecology*. 34: 1315-1319.
13. Sandeep K. Malyan, Om Kumar, Rumesh Ranjan and **Joni Kumar** (2018). Understanding units of measurement in agricultural and environmental sciences. A threat to sustainable management of water. *International journal of environmental rehabilitation and conservation*. 2: 25-51.
14. Vipin Kumar, Sandeep kaur, **Joni Kumar**, Yachna gupta and Harjot pal (2018). Development of white butterfly, *Peris brassicae* L. in the cabbage ecosystem. *Journal of Entomology and Zoology Studies*. 6: 1270-1273.
15. Suman Parre, RS Raje, NK Singh, and **Joni Kumar** (2018). Genetic variability and association analysis for morphological and biochemical traits related to pod borer (*Helicoverpa armigera*) resistance in Pigeonpea [*Cajanus cajan* (L) Millspaugh] among recombinant inbred lines. *Journal of Entomology and Zoology Studies*. 6: 1570-1575.
16. Shivashankara, AK Karnataka, ARNS Subbanna and **Joni Kumar** (2018). Study on population dynamics of early shoot borer in sugarcane ecosystem at Pantnagar. *Journal of Pharmacognosy and Phytochemistry*. 5: 20-25.
17. **Joni Kumar**, Bishwajeet Paul, Shivashankara and Sweetee Kumari (2017). Differential electroantennogram response of male and female of *Dysdercus cingulatus* to okra plant volatiles. *Journal of Entomology and Zoology Studies*.5: 197-201.
18. **Joni Kumar**, Bishwajeet Paul, Suresh M Nebapure, and Sharda Singh (2017). Comparative GC-MS Analysis of two *Brassica rapa* L. Varieties for Identification of Volatile Compounds. *Chemical Science Review Letters*. 6: 884-889.
19. **Joni Kumar** and Bishwajeet Paul (2017). Population dynamics of aphid, *Myzus persicae* (Sulzer) (Hemiptera: Aphididae) on different Brassica species. *Agricultural Science Digest*. 37: 64-67.
20. **Joni Kumar** and Pramod Mall (2017). Hygienic behavioral response of *Apis mellifera* Ligustica against pin-killed and infectious broods. *Journal of Entomology and Zoology Studies*. 5: 913-915.
21. **Joni Kumar** and Pramod Mall (2016). Assessment of colony performance through

brood and honey measurement in *Apis mellifera* Ligustica. Journal of Experimental Zoology, India. 9: 1355-1358.

22. **Joni Kumar** and Pramod Mall (2016). Effect of life stages and colony on live weight of newly emerged queen *Apis mellifera* Ligustica. Journal of Experimental Zoology, India. 19: 1379-1383.

B. Paper published in conference

1. **Joni Kumar** (2017). Infochemicals: An effective and environment friendly management of insect pests for sustainable agriculture. National Conference organized by Janta Vedic college Baraut, Baghpat.
2. Sandeep K. Malyan, Arti Bhatia, Renu Singh, Smita S. Kumar, Om Kumar, **Joni Kumar**, Rumesh Ranjan, Ritu Tomer (2017). Impact of Azolla application on nitrous oxide emission from rice soils. International Conference on Advances in Agricultural & Applied Sciences for Promoting Food Security. Hotel Mirage Lord Inn, Battishputli, Kathmandu, Nepal
3. **Joni Kumar** (2015). Impact of harvesting time on royal jelly in *Apis mellifera* L. National Conference on Innovative Approaches for Sustainable Agriculture, Livelihood and Environment Security. Department of Plant Pathology Gochar Mahavidyalaya, Rampur Maniharan, Saharanpur [U.P.]

C. Chapters Published in Book

1. **Joni Kumar**, Dushyant Kumar, Yogandar Sain, Sunil Kumar Singh and Arun Kumar (2023). Insect pests of cole crops and their management. Daya Publishing house.
2. Dushyant Kumar, **Joni Kumar**, Arun Kumar and Krishan Pal (2023). Disease management of Tomato crop in organic farming. Daya Publishing house.
3. **Joni Kumar**, Yogandar Sain, M.P. Gautam, Sushil Kumar and Sachin Kumar (2020) Toxic Effects of Insecticides on Beneficial Insects. Green initiative and sustainable development.
4. M.P. Gautam, **Joni Kumar**, Yogandar Sain, S. N. Singh, Sushil Kumar and Sandeep (2020). Impact of Agrochemicals on the Environment and Human Being. Green initiative and sustainable development.
5. **Joni Kumar** and Bishwajeet Paul (2017). Seasonal parasitization of aphids by *Diaeretiella rapae* (M'Intosh) in the Brassica ecosystem. Advances in Agricultural

and Biodiversity.

D. Paper/Poster presented in conferences/Seminars/Symposium

1. **Poster presentation** in International conferences on “Advance in Plant and Microbial Biotechnology” held on 2-4 February, 2017 at Jaypee Institute of Information, Technology, India.
2. **Paper presentation** in National Symposium on “Agrochemicals for food and environment safety” held on 28-30, January, 2015, at ICAR-IARI, India.
3. **Poster presentation** in national symposium on “Population dynamics of aphids on different Brassica species” held on 1-2 December, 2016 at Center for Environment Science and Climate Resilient Agriculture, IARI New Delhi-110012.
4. **Paper presentation** in national seminar on “Impact of harvesting time on royal jelly production in *Apis mellifera* L” held on 7, November, 2015, at GMV Rampur Maniharan, Saharanpur (U.P)- 247451.
5. **Presented paper** in international conference on “Effect of abiotic factors on seasonal abundance of aphid, *Lipaphis erysimi* (Kalt.) on different Mustard species” held on 16-18, February, 2017, at Guru Jambheshwar University of Science & Technology, Hisar-125001, Haryana, India.
6. **Presented paper** in national conference on “Electroantennography: a tool for screening volatile compounds involving in insect-plant interactions” on 10 March, 2017, at GMV Rampur Maniharan, Saharanpur (U.P)-247451.
7. **Presented paper** in international conference on “ Impact of Azolla application of nitrous oxide emission from rice soil” held on 13-15, May, 2017 at Hotel Mirage Lord Inn, Battishputli, Kathmandu, Nepal.

E. Abstracts published in conference/seminar/symposium

1. **Joni Kumar**, 2015. Measurement of the broods and bee population of *Apis mellifera* L. in Pantnagar area. UGC sponsored a national seminar on innovative approaches for sustainable agriculture, livelihood and environment security held on 7 October 2015.
2. **Joni Kumar**, 2015. Evaluation of hygienic behavioral response of *Apis mellifera* L. colonies through pi killed method. UGC sponsored a national seminar on

innovative approaches for sustainable agriculture, livelihood and environment security held on 7 October 2015.

3. **Joni Kumar**, 2015. Insect epigenetics. UGC sponsored a national seminar on innovative approaches for sustainable agriculture, livelihood and environment security held on 7 October 2015.
4. **Joni Kumar**, 2015. Investigation on tritrophic interaction among okra crop, shoot and fruit borer and its natural enemies. UGC sponsored a national seminar on innovative approaches for sustainable agriculture, livelihood and environment security held on 7 October 2015.
5. **Joni Kumar**, 2015. Proteomic application in entomology. UGC sponsored a national seminar on innovative approaches for sustainable agriculture, livelihood and environment security held on 7 October 2015.
6. **Joni Kumar**, Sandeep k. Malyan, Rumesb Ranjan, Yogendra Sain and Sushil Kumar. 2017. RNA interference: a new strategy for sucking pest management. National conference on agriculture renewal for evergreen revolution: concept & approaches held on 10th March, 2017.
7. **Joni Kumar**, Bishwajeet Paul, Sandeep k. Malyan, Rumesb Ranjan, Yogendra Sain and Sushil Kumar. 2017. Electroantennography: a tool for screening volatile compounds involving in insect- plant interactions. National conference on agriculture renewal for evergreen revolution: concept & approaches held on 10th March, 2017.
8. Sushil Kumar, D.V. Singh, Yogandar Sain and **Joni Kumar**, 2017. Insect pest management for stored grain. National conference on agriculture renewal for evergreen revolution: concept & approaches held on 10th March, 2017.
9. Yogandar Sain, Rajendra Singh, Sushil Kumar and **Joni Kumar**. 2017. Mango fruit fly, *Bactrocera* Spp. And their management in western plain zone of Uttar Pradesh. National conference on agriculture renewal for evergreen revolution: concept & approaches held on 10th March, 2017.
10. **Joni Kumar** and Yogandar sain (2020) Toxic effect of pesticides on natural enemies of insect-pests. National conference on Replacement of Petrochemicals by bio-based chemicals for a safe environment.
11. **Joni Kumar** and Yogandar sain (2020) Plant volatiles: Significance in herbivore

plant interactions. National conference on Replacement of Petrochemicals by bio based chemicals for a safe environment.

F. Patents published

S. No	Title of patent	International/National	Publication Date	Publication Number
1.	Fused heterocyclic compounds and their use as pest control agents	International	25.02.2021	WO/2021/033141

Invited lectures /Resource Person in seminars/Conferences/Proceedings

S. No	Title of Invited lecture	Title of conference/seminar	Organized by	Sponsored by
1.	Beekeeping	Skill development training	KVK, Bhangra, MZN	Govt. of UP
2.	G20 Summit 2023 & Climate change	G20 Awareness Campaign	Govt. of UP	Govt. of UP

Training programme/FDP/workshop attended

S. No	Title of training/FDP/Workshop	Organized by	Date
1.	Induction/Orientation (FDP)	Ramanujan College, Delhi University	22 June 2022 to 19 July 2023
2.	G20 Conclave	Govt. of UP	24 January 2023
3.	Empanelled Training institute (NSS Training)	Mahatma Jyotiba Phule Rohilkhand University, Bareilly UP	10 March 2022 to 16 March 2022
4.	Research Methodology (Refresher)	Ramanujan College, Delhi University	21 September to 05 October 2021
5.	Crop pests diagnosis	CABI, UK	May 2020
6.	Apiculture (Workshop)	GBPUAT, Pantnagar, UK	19 June 2013 to 20 June 2013

Participated/attended International/National conference/seminar

S. No.	Conference/seminar/symposium	Total No. of Conference/seminar/symposium
1.	International	11
2.	National	21