

THE ENTOMOLOGICAL SOCIETY OF INDIA

New Delhi, 110 012

NOMINATION FORM FOR ESI YOUNG ENTOMOLOGIST AWARD 2021

1. Name in full (in block letters): Dr Avinash Chauhan
2. Date & Place (State, Country) of Birth: (Attach proof) 23rd August 1986 (H.P., India)
3. Nationality: Indian
4. Field of specialization: Apiculture, Toxicology
5. Present Position/Designation: Assistant Scientist

6. Address: Department of Entomology, SASRD, Nagaland University,
Medziphema- 797106 Nagaland, India

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avishimla1986@gmail.com

(Give STD code for Telephone & Mobile No.)

7. Academic career and professional attainments

(a) Degree	University/Institution	Year	Distinction, if any
Ph.D.	Dr YSP University of Horticulture & Forestry, Nauni, Solan, H.P. (India)	March 2015	Successfully reared bumble bees round the year. Pollination potential of laboratory reared bumble bee colonies was observed on cucumber under greenhouse conditions
M.Sc	-----do-----		

(b) Position held	Institution	Period of appointment
1. Assistant Scientist	SASRD, Nagaland University	14-06-2018- Continued
2. Research Associate	Dr YSPUHF, Solan, H.P.	14-08-2015-13-06-2018
3. SRF	Dr YSPUHF, Solan, H.P.	01-10-2013- 13-08-2015
4. Investigator	Dr YSPUHF, Solan, H.P.	01-01-2012- 31-01-2012

8. Special attainments of the nominee (maximum 250 words)-

1. Successful laboratory rearing of bumble bee, *Bombus haemorrhoidalis* Smith round the year.
2. Important pests of bumble bees were identified and the impact of their incidence on bumble bee rearing was reported.
3. Pollination potential of bumble bees was worked out by using the laboratory reared colonies for pollination in cucumber.
4. Stingless bee species map was drawn for Nagaland.
5. A new species of stingless bee, *Tetragonula gressitti* was reported from Nagaland and the nesting attributes and colony structure was reported for the first time in India.
6. Natural nest architecture was studied for stingless bee species viz., *Tetragonula iridipennis*, *Lepidotrigona ventralis*, *Lepidotrigona arcifera* and newly reported species, *Tetragonula gressitti* Sakagami.
7. Scientific hives were designed for stingless bee and promoted among the beekeepers for scientific management of stingless bees for better honey production, multiplication and pollination through trainings and awareness programmes.
8. Newly designed stingless bee scientific hive is under the process of patent.
9. Diversity of pollinators was studied on ashgourd, cucumber, watermelon, brinjal, tomato and citrus.
10. Pollination potential of stingless bees is observed in different horticulture crops.
11. Pests of stingless bees were observed and recorded.
12. Pests of *Xylocopa* were studied and 3 species of Conopid flies were reported. This was the first kind of study in India.
13. Eight species of wasps were identified as predators of honeybees.
14. Nesting attributes of *Apis florea* were studied for conservation.
15. Palynology studies were done and Floral calendar with more than 85 plants was prepared for *Apis cerana* and stingless bees.
16. Three species of bumble bees, *Bombus haemorrhoidalis*, *Bombus eximus* and *Bombus orientalis* were reported from Nagaland.

ACADEMIC Activities

- ✦ Teaching BSc, M.Sc and Ph. D. courses
- ✦ Co-Supervisor of one PhD and five M.Sc Students
- ✦ Incharge SRP EL on Commercial Apiculture

PROJECTS- 3 (ICAR)- PI & CO-PI

AWARDS IN CONFERENCES- 3

Workshop: Conducted- 1; Participated:- 2

Trainings: conducted- 5, participated- 6

Publications: Research papers- 35+; Manuals- 3; Books- 3; Booklets- 3; Bookchapter- 2; popular articles- 3; seminars/ symposia- 15, Abstracts- 25

Life member of Indian Journal of Entomology and reviewer for many International and National journals.

Resource person-3 national and state level

Converner of field committee during biennial workshop of AICRP Honeybees and pollinators and member of organizing committee and purchasing committee.

9. List 20 most important research publications in chronological order. For each publication, give name(s) of the author(s), indicate the corresponding author by '*' after his/her name, year of publication, full title of the paper, name of the journal, volume No. and page Nos. and NAAS rating during the 2021 for ESI Young Entomologist award

Sl. No.	Details of Publications in the format given above	NAAS Journal ID and (Score)	Number of Citations
1.	Chauhan Avinash* and Singh H K. 2021. Nest architecture of stingless bee, <i>Tetragonula gressitti</i> Sakagami from Nagaland, India. <i>International Journal of Tropical Science</i> . 10.1007/s42690-021-00503-w	O021 (6.33)	
2.	Chauhan Avinash* and Singh H.K. 2021. Biology and seasonal incidence of <i>Physocephala</i> (Diptera: Conopidae) on Carpenter Bees (Hymenoptera: Apidae). <i>Oriental Insects</i> . 10.1080/00305316.2021.1943558	I355 (6.54)	
3.	Chauhan Avinash* and Singh H K. 2021. Impact of stingless bee, <i>Tetragonula iridipennis</i> Smith pollination in water melon. <i>Indian Journal of Entomology</i> . 83(3): 321-325.	I059 (5.08)	
4.	Chauhan Avinash* and Singh H K. 2021. Stingless bee <i>Tetragonula iridipennis</i> and honey bee <i>Apis cerana</i> pollination in cucumber. <i>Indian Journal of Entomology</i> . Online published. DoI.: 10.5958/0974-8172.2021.00148.6	I059 (5.08)	
5.	Parameswara Reddy, Chauhan Avinash * and Singh H K. 2021. Impact of bee pollination in brinjal. <i>Indian Journal of Entomology</i> . Online published- DoI.: 10.5958/IJE.2021.15	I059 (5.08)	
6.	Chauhan Avinash* and Singh H K. 2020. A new record of stingless bee <i>Tetragonula gressitti</i> Sakagami (Hymenoptera:Apidae:Meliponini) from Nagaland, India. <i>International Journal of Farm Sciences</i> . 10 (3/4): 83-89	I241 (4.29)	
7.	Chauhan Avinash*, Singh H.K. and Kumaranag K M. 2019. Pollination potential of stingless bee <i>Tetragonula iridipennis</i> Smith in ash gourd. <i>Indian Journal of Entomology</i> . 81(4):854-859	I059 (5.08)	
8.	Chauhan Avinash* and Singh H K. 2019. Nest architecture studies of stingless bees, <i>Tetragonula iridipennis</i> and <i>Lepidotrigona ventralis</i> in Nagaland. <i>Indian Journal of Entomology</i> . 81(1):158-164.	I059 (5.08)	
9.	Kaushik E, Dubey J K*, Patyal S K, Katna Sapna, Chauhan Avinash and Devi Nisha. 2019.Persistence of tetraniliprole and reduction in its residues by various culinary practices in tomato in India. <i>Environmental Science and Pollution Research</i> . https://doi.org/10.1007/s11356-019-04738-6	E096(9.06)	
10.	Sharma D, Katna Sapna*, Sharma R, Rana B S, Sharma H K, Bhardwaj Vinay and Chauhan Avinash. 2019. First detection of <i>Nosema ceranae</i> infecting <i>Apis mellifera</i> in India	J057 (6.78)	
11.	Katna Sapna, *Dubey J K, Patyal S K, Devi Nisha, Chauhan Avinash and Sharma Ajay.2018. Residue dynamics and risk assessment of Luna Experience® (fluopyram + tebuconazole) and chlorpyrifos on French beans (<i>Phaseolus vulgaris</i> L.). <i>Environmental Science and Pollution Research</i> . https://doi.org/10.1007/s11356-018-2733-4	E096(9.06)	
12.	SK Patyal*, JK Dubey, Sapna Katna, Avinash Chauhan, Nisha Devi and Alam Ashraf Wani. 2018. Residue and risk assessment of Spirotetramat in/on Apple. <i>Pesticide Research Journal</i> 30(1):51-58	P042 (5.49)	
13.	Sharma HK, Chauhan Avinash, Katna Sapna, Rana Kiran, *Rana B S and Thakur Meena. 2017. Nesting attributes of dwarf bee, <i>Apis florea</i> Fabricius in Himachal Pradesh. . <i>International Journal of Farm Sciences</i>	I241 (4.29)	

	7(2):22-24		
14.	*Katna Sapna, Patyal S K, Dubey J K, Banshtu T, Chauhan Avinash, Devi Nisha, and Sharma Ajay. 2017. Dissipation and risk assessment of combi product of mancozeb and carbendazim on apple at different locations in North India. <i>Pesticide Research Journal</i> 29 (1):48-54.	P042 (5.49)	
15.	Chauhan Avinash*, Rana B S, Thakur M and Katna S. 2017. RAPD-PCR studies of bumble bee (<i>Bombus haemorrhoidalis</i> and <i>Bombus rufofasciatus</i>) and their important pests (<i>Physocephala tibialis</i> and <i>Aphomyia sociella</i>). <i>Ecology, Environment and Conservation</i> . 23 (4):364-368	E025 (5.41)	
16.	Chauhan Avinash*, Rana B S, Sharma K C and Katna Sapna. 2016. Seasonal incidence and biology of conopid fly, <i>Physocephala tibialis</i> in bumble bee, <i>Bombus haemorrhoidalis</i> Smith in India. <i>Ecology, Environment and Conservation</i> . 22 (2):819-823	E025 (5.41)	
17.	Chauhan Avinash *, Rana B. S. Katna Sapna and Rana Kiran. 2016. Morphometric studies on bumble bee, <i>Bombus haemorrhoidalis</i> Smith. <i>International Journal of Farm Sciences</i> . 6(1): 74-78.	I241 (4.29)	
18.	Chauhan Avinash*, B.S. Rana and Shruti Kumari. 2015. Karyological studies on bumble bee, <i>Bombus haemorrhoidalis</i> Smith in Himachal Pradesh. <i>International Journal of Farm Sciences</i> 5 (2): 129-139	I241 (4.29)	
19.	Chauhan Avinash *, B S Rana and Sapna Katna. 2015. Different castes in bumble bee, <i>Bombus haemorrhoidalis</i> Smith. <i>Ecology, Environment and Conservation</i> 22 (1): 297-306	E025 (5.41)	
20.	Chauhan Avinash and Thakur R K. 2014. Nest architecture and pollination potential of bumble bee, <i>Bombus haemorrhoidalis</i> . <i>Indian Journal of Ecology</i> . 41(1):158-164.	I056 (5.79)	

10. List of 5 most important Products/Technologies/Discoveries/Patents by the nominee

(Please see item 1 (b) in the Guidelines for Evaluation and list the products, technologies and software in the order scoring maximum to minimum score)

Sl. No	Details of Product/Technology/Discoveries/Software * (Also write in one bullet point its impact in terms of adoption, commercialization and revenue generated)	Patent No./Country of patent Release/ notification details Commercialization	List according to category (I,II) as given in 2 of the guidelines for evaluation	Whether Nominee is a Developer, Co-developer or Associate
1.	<i>Tetragonula gressitti</i> a new species of stingless bee is reported for the first time from Nagaland.			First author
2.	The nest architecture of newly discovered stingless bee, <i>Tetragonula gressitti</i> Sakagami is studied and reported for the first time since its discovery in Veitnam in 1978.			First author
3.	First report to rear the bumble bees throughout the year			First author
4.	First report of detection of <i>Sphaerularia bombi</i> from bumble bees in H.P.			First author
5.	First detection of <i>Nosema ceranae</i> from <i>Apis mellifera</i> in India			Co-author

* Marks shall be awarded only for the claims duly substantiated

11. Externally Funded Projects

Projects funded by ICAR, CSIR, DST, DBT, other government and private agencies.

Project on Gut microbiome- Co-PI

AICRP on Honeybees & Pollinators- Co-PI

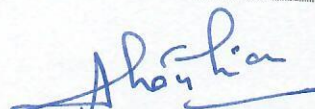
Impact of Neonicotinoids on honeybees & Pollinators- Co-PI

12. Involvement in Teaching/Extension Activities

1. Teaching BSC, MSC and PHD Courses
2. Co-Supervisor of 1 PhD and 5 Msc students
3. Incharge SRP EL on commercial Apiculture
4. Conducted 5 trainings on Scientific beekeeping with honeybees & stingless bees
5. Course manual for BSC Students
6. Training manuals- 2 for farmers/ beekeepers
7. Training booklets – 3 bilingual for farmers/ beekeepers
8. Convenor- field visit committee during biennial workshop of AICRP HB&P
9. Member of organizing committee and purchase committee during biennial workshop of AICRP HB&P

I certify that the information given in the form is correct.

Date: 30/10/2021


Signature of Nominee

Particulars of Nominator

Signature of the Nominator:

Name and Designation: Prof. Aleminda AO
Pro Vice Chancellor

Address: M. SASRD, Nagaland University,
SASRD, Medziphema

Dimapur, Nagaland

Date: 01.11.2021

Remarks about the suitability of the nominee

Dr Avinash Chauhan is working on stingless bees, honeybees and bumble bees. From last 13 years he is working with bees and pollinators. He had also worked on Pesticide residue analysis in NABL accredited laboratory. His knowledge and efforts in the field of Entomology resulting in new discovery of species of stingless bees and the novel hive designed by him is under the process of patent through AICRP HB&P, IARI New Delhi. I nominate him as a candidate for ESI Young Entomologist Award 2021.