THE ENTOMOLOGICAL SOCIETY OF INDIA

New Delhi, 110 012

NOMINATION FORM FOR ESI SENIOR ENTOMOLOGIST AWARD 2021

1.	**Name in full** (in block letters)**:**	**DAVID KARAMANKODU JACOB**		
2.	**Date & Place** (State, Country) **of Birth: (Attach proof)**	**10-06-1979** **Kerala, India**		
3.	**Nationality:**	**Indian**		
4.	**Field of specialization:**	**Agricultural Entomology**		
5.	**Present Position/Designation:**	**Scientist**		
6.	**Address:**	**ICAR-National Bureau of Agricultural Insect Resources**		
		P.B. No. 2491, H.A. Farm Post, Bellary Road, Hebbal		
		Bangalore-560024		
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(Give STD code for Telephone & Mobile No.)

7. Academic career and professional attainments

(a)Degree	University/Institution	Year	Distinction, if any
B Sc (Agriculture)	Kerala Agricultural University	2002	8.8/10.00
MSc (Agricultural Entomology)	University of Agricultural Sciences, Bangalore	2005	9.2/10.00
PhD (Agricultural Entomology)	University of Agricultural Sciences, Bangalore	2016	9.4/10.00

(b) Position held	Institution	Period of appointment
Scientist	ICAR-National Academy of Agricultural Research Management, Hyderabad	21 April 2009 to 18 August 2009
Scientist	ICAR-Central Citrus Research Institute, Nagpur	19 August 2009 to 19 December 2011
Scientist	ICAR-National Bureau of Agricultural Insect Resources	20 December 2011 to 20 April 2014
Scientist (SS)	ICAR-National Bureau of Agricultural Insect Resources	21 April 2014 to till now

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

- Described **a new genus** of fruit fly, *Gibbifronta* David, Hancock & Han in tribe Acidoxanthini from India
- Described **32 species** of fruit flies **new to science** infesting various fruit trees/ medicinal plants/bamboo
- **21** species and **six** genera of fruit flies were recorded for the first time from India
- Barcodes were generated for **40 species** of fruit flies
- Post abdominal structures of males fruit flies of tribe Dacini, particularly patterning in glans of phallus have not been explored so far as a diagnostic tool for the classification. David & Ramani (2019) for the first time employed the same for revising tribe Dacini along with other characters on immatures (III instar larvae) and host plant association which could bring out the synapomorphies supporting the monophyly of genus *Bactrocera*, *Dacus* and *Zeugodacus*. This study could unravel the synapomorphies supporting the elevation of *Zeugodacus* to genus level.
- Prepared the digital distribution maps of 14 species of *Bactrocera* Macquart in Kerala with special reference to Western Ghats, one of the unexplored biodiversity hotspots of India.
- Cephalopharyngeal skeleton, anterior and posterior spiracles of III instar larvae of *Euphranta* and *Coelotrypes* were studied and published.
- Updated keys for the identification of all subgenera of *Bactrocera* Macquart, species of *Acidoxantha* Hendel, *Acroceratitis* Hendel, *Campiglossa* Rondani, *Euphranta* Loew, *Elaphromyia* Bigot, *Hemilea* Loew, *Philophylla* Rondani, *Dacus* Fabricius, *Ceratitella* Malloch and *Magnimyiolia* Shiraki were published
- Received Jawaharlal Nehru Award for P.G. Outstanding Doctoral Thesis Research in Agricultural and Allied Sciences-2017 for Crop Protection.

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 senior scientist award

Sl. No.	Details of Publications in the format given above	NAAS Journal ID and (Score)	Number of Citations
1.	David, K.J.*, Kumar, A.R.V. and Ramani, S. 2008. Distribution of *Bactrocera* Macquart (Diptera: Tephritidae) in Kerala with special reference to the Western Ghats. *Journal of the Entomological Research Society* 10(2): 55−69.	J567 6.33	6
2.	David K.J.* and Ramani, S. 2011. An illustrated key to fruit flies (Diptera: Tephritidae) from Peninsular India and Andaman & Nicobar Islands. *Zootaxa*, 3021 (1): 1−31.	Z013 6.99 (JCR)	69
3.	David, K. J.*, Hancock, D. L., Freidberg, A. and Goodger, K. F. M. 2013. New species and records of *Euphranta* Loew and other Adramini (Diptera: Tephritidae: Trypetinae) from south and southeast Asia. *Zootaxa*, 3635 (4): 439−458.	Z013 6.99 (JCR)	11
4.	David, K.J.*, Hancock, D. L. and Ramani, S. 2014. Two new species of *Acroceratitis* Hendel (Diptera: Tephritidae) and an updated key for the species from India. *Zootaxa*, 3895 (3): 411−418.	Z013 6.99 (JCR)	6
5.	David, K. J*, Ramani, S. and Singh, S. K. 2014. New species and records of Trypetinae. *Zootaxa*, 3795 (2): 126−134.	Z013 6.99 (JCR)	3
6.	David, K. J.* and Singh, S.K. 2015. Two new species of *Euphranta* Loew (Diptera: Tephritidae: Trypetinae) and an updated key for the species from India. *Zootaxa*, 3914 (1): 64−70.	Z013 6.99 (JCR)	8
7.	David, K. J.*, Ramani, S., Whitmore, D. and Ranganath, H. R. 2016. Two new species and a new record of *Bactrocera* Macquart (Diptera: Tephritidae: Dacinae: Dacini) from India. *Zootaxa,* 4103 (1): 25−34.	Z013 6.99 (JCR)	8
8.	David, K. J.*, Hancock, D. L., Singh, S. K., Ramani, S., Behere, G.T. and Salini, S. 2016. New species, new records and updated subgeneric key of *Bactrocera* Macquart (Diptera: Tephritidae: Dacinae: Dacini) from India. *Zootaxa*, 4272(3): 386−400.	Z013 6.99 (JCR)	12
9.	David, K.J.*, Ramani, S., Prasanth Mohanraj. 2016. Postabdominal structures, a new facet in tephritid taxonomic research: A case study of the genus Dacus Fabricius (Diptera: Tephritidae: Dacinae: Dacini). *Mysore Journal of Agricultural Sciences*, 50 (2): 218−222.	T047 4.64	1
10.	David, K.J.* and Hancock, D.L. 2017. A new species of *Gastrozona* Bezzi (Diptera: Tephritidae: Dacinae: Gastrozonini) with an updated key to species from India. Zootaxa, 4216(1):55−64.	Z013 6.99 (JCR)	5
11.	David, K. J.* and Ramani, S. 2019. New species, redescriptions and phylogenetic revision of tribe Dacini (Diptera: Tephritidae: Dacini) from India based on morphological characters. *Zootaxa*, 4551(2): 101−146.	Z013 6.99 (JCR)	3
12.	David, K.J.* and Hancock, D.L. 2019. Taxonomic notes on genus *Coelotrypes* Bezzi (Diptera: Tephritidae: Trypetinae) with description of two new species. *Zootaxa*, 4563: 584−594.	Z013 6.99 (JCR)	1

13.	David, K.J. *, Sachin, K. and Hancock, D. L. 2020. A new species of *Acrotaeniostola* Hendel and new records of Gastrozonini and Ceratitidini (Diptera: Tephritidae) from India. *Zootaxa,* 4731 (3): 425–432.	Z013 6.99 (JCR)	-
14.	David, K. J.*, Hancock, D. L., Salini, S., Gracy, R.G. and Sachin, K. 2020. Taxonomic notes on the genus *Campiglossa* Rondani (Diptera: Tephritidae: Tephritinae: Tephritini) in India with description of three new species. *ZooKeys*, 977: 75−100.	Z006 7.14	1
15.	David, K. J.*, Hancock, D. L., Sankararaman, H. Sachin, K. and Singh, S. 2020. A new species of *Euphranta* Loew (Diptera: Tephritidae: Trypetinae: Adramini) from India. *Zootaxa,* 4868 (4): 584–590.	Z013 6.99 (JCR)	1
16.	David, K. J.*, Hancock, D. L., Sachin, K. and Sankararaman, H. 2020. A new species of *Hemilea* Loew and two new records of Trypetini (Diptera: Tephritidae: Trypetinae) from India. *Zootaxa,* 4896 (4): 571–576.	Z013 6.99 (JCR)	1
17.	David, K.J.*, Hancock, D.L., Han, H.-Y.,Gracy, R.G., Sachin, K. and Swathi, R.S. 2021. A new genus in the tribe Acidoxanthini (Diptera: Tephritidae: Trypetinae) from India with a discussion of its phylogenetic relationships. *Journal of Asia-Pacific Entomology*. https://doi.org/10.1016/j.aspen.2021.06.010	J087 7.10	-
18.	David, K.J.*, Hancock, D.L., Sachin, K., Ramya, R.S. and S.Ramani, 2021.Taxonomic notes on the genus *Elaphromyia* Bigot (Diptera: Tephritidae: Tephritinae: Pliomelaenini) in India, with description of a new species. *Zootaxa* 5023 (2): 251–262.	Z013 6.99 (JCR)	-
19.	David, K.J.*, Hancock, D.L., Sachin, K. and Mahendiran, G. 2021.A new species, new postabdominal descriptions and a new synonymy in Euphranta Loew (Diptera: Tephritidae: Trypetinae: Adramini). *Zootaxa* 5057 (1): 087–098.	Z013 6.99 (JCR)	-
20.	Subaharan, K., Senthoorraja, R., Manjunath, S., Thimmegowda, G.G., Pragadeesh, V.S., Bakthavatsalam, N., Mohan, M.G., Senthil-Nathan, S., David, K.J.*, Basavarajappa, S., Ballal, C.R. 2021. Toxicity, behavioural and biochemical effect of Piper betle L. essential oil and its constituents against housefly, Musca domestica, L. Pesticide Biochemistry and Physiology. https://doi.org/10.1016/j.pestbp.2021.104804.	P041 8.75	2

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.	*Ortalotrypeta isshikii* Matsumura belonging to subfamily Tachiniscinae in Tephritidae was recorded for the first time from Sikkim, India.	*Australian Entomologist*, 2013, 40(3): 131−135	I	Developer

2.	Database on Indian Tabanidae was hosted in ICAR-NBAIR website. https://taxonomywebsitetool.nbair.res.in/Home.php?DBTitleId=10	ICAR-NBAIR website	I	Developer
3.	A new species of *Dacus*; *Dacus jacobi* David & Sachin was described from Western Ghats, Kerala. Flies were trapped in Zingerone male attractant.	*Zootaxa* 4743 (4): 553–560	I	Developer
4.	A new species of *Dacus, Dacus viraktamathi* David & Hancock was described from Shimla, Himachal Pradesh, India.	*Zootaxa* 4743 (4): 553–560	I	Developer
5.	*Dacus maculipterus* White was recorded for the first time from India. Flies were collected in Zingerone traps from Meghalaya	*Zootaxa* 4743 (4): 553–560	I	Developer

* *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.

1. DST-SERB Project entitled " Systematic studies on fruit flies of subfamily Tephritinae (Diptera: Tephritidae) from south India with special reference to Western Ghats" (CRG/2018/003247) as **PI** since 30.03.2019 (2 years completed)

2. DST SERB Project entitled "Systematic studies on Pentatominae (Hemiptera: Heteroptera: Pentatomidae) from North East India" (CRG/2019/001619) as **Co-PI** since 14.01.2020 (1 year completed).

3. ICAR-CABI Project entitled " Insect biodiversity documentation in Sikkim region including research into the potential for biological control of *Hedychium* species using Indian natural enemies" as a **Co-PI** since 2018 (3 years completed)

12. Involvement in Teaching/Extension Activities

A. Teaching

Teaching aids developed: Training manuals

1. Pusphalatha, E., **David, K. J.,** Shibu Vardhanan, Y., Manogem, E. M., Kanholi, S., 2020. Handbook on Taxonomy of Diptera. Department of Zoology, University of Calicut. 258 pp.

2. SampathKumar, M., **David, K. J**., Patil, J. Om Prakash Navik, Ramanujam, B and Ballal, C.R. 2019. Training manual on "Biological Control and compatible pest management modules for the management of major pests in NEH region with emphasis on FAW-Batch III (14-19 October 2019), ICAR-NBAIR training manual No. 1/2019.112pp.

3. Nasser, E.M. & **David, K. J.** (2019). Insect Taxonomy and Field Sampling Skills. University of Calicut. 114pp.

4. **David, K. J.** & Ramani, S. (2017). Taxonomy of fruit flies (Diptera: Tephritidae). UAS Bangalore. 78 pp.

B. Extension

Exhibitions

Participated in the following events as a resource person to showcase research activities and technologies to farmers, students, extension workers etc.

1. "Krishi Unnati Mela-2017", Indian Agricultural Research Institute, New Delhi, 5–7 March 2017.
2. Exhibition organised as a part of 13th Agricultural Science Congress organised by University of Agricultural Science, Bengaluru and National Academy of Sciences, New Delhi during 21–24 February 2017.
3. Kisan Mela, University of Agricultural Sciences, Bengaluru, 16–19 November 2017
4. Farmer's conclave, ICAR-NAINP, Adugodi, Bangalore, 16–17 February 2018
5. Kisan Mela, University of Agricultural Sciences, Bengaluru, 15–18 November 2018

Extension teaching aids developed:

Extension folders: 3

1. **David, K.J.,** Verghese, A., Salini, S. and Bakthavatsalam, N. 2020. Identification of fruit fly pests of cucurbits in India and its management. ICAR-NBAIR Publication: 17/2020.
2. **David, K.J.,** Verghese, A., Salini, S. and Bakthavatsalam, N. 2020. Identification of fruit fly pests of fruit crops in India and its management. ICAR-NBAIR Publication: 16/2020.
3. Salini, S., **David, K. J.** and Rabbani, M.K. 2020. Beneficial fauna of stink bugs of India. ICAR-NBAIR Publication: 18/2020

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

27/10/21

Date: 27-10-2021 **Signature of Nominee**

Particulars of Nominator		**Remarks about the suitability of the nominee**
Signature of the Nominator:		Dr David has described a new genera and more than 50 species of fruit flies. several fruit flies of economic importance were recorded for the first from India. distribution maps and keys to several genera and species from the world and India. He is one of the leading taxonomist of this economically important group of insects from India. Hence I nominate him for this award.
Name and Designation:	Dr. Sunil Joshi, Principal Scientist and Head, Division of Germplasm Collection & Characterisation	
Address:	ICAR-National Bureau of Agricultural Insect Resources, P.B. No. 2491, H.A. Farm Post, Bellary Road, Hebbal, Bangalore-560024	
Date:	27-10-2021	

Head
Division of Germplasm, Collection & Characterization

Dr. Sunil Joshi
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