

CURRICULUM VITAE OF DR. N. NAGARAJA

1. Name	Dr. N. NAGARAJA
2. Designation	Assistant Professor/ Assistant Director
3. Date of Birth	1 st July 1969
4. Sex	Male
5. University	Bangalore University
6. Department/ College	UGC-Human Resource Development Centre (HRDC) Jnana Bharathi Campus Bangalore-560 056, India

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7. ACADEMIC RECORD

Degree	Year of Passing	University	Subjects	Class
Ph.D.	2000	Bangalore	Zoology/ Apiculture	Awarded
M.Sc.	1994	Bangalore	Zoology	First

8. EMPLOYMENT RECORD

Designation	Name of the Employer	Place of Work	Years
Lecturer/ Assistant Professor	Registrar, Bangalore University	UGC- Human Resource Development Centre (HRDC) Bangalore University, Bangalore-560 056	2004 to till date
Research Associate	Director General, CSIR, New Delhi	Department of Apiculture, University of Agricultural Sciences, Bangalore	2000-2004
Lecturer	Principal	The National College, Bangalore	1998-2000
Research Fellow	Principal Investigator	Department of Zoology Bangalore University Bangalore-560 056	1996-1998
Research Fellow	Principal Investigator	Department of Entomology, University of Agricultural Sciences, Bangalore	1995

9. ACADEMIC EXPERIENCE

- | | |
|---------------------|-----------------------|
| 1. Teaching | 12 years |
| 2. Research | 15 years |
| 3. Area of Research | Beekeeping/Apiculture |

10. POST DOCTORAL RESEARCH

Conducted post doctoral research on the topic “Attraction of drone bees of *Apis mellifera carnica* to synthetic pheromones in the field” at the University of Bremen, Bremen, Germany during June and July 2006.

11. MAJOR RESEARCH PROJECTS

1. Operated a project on “ Management of Thai sac brood disease in Indian honeybee, *Apis cerana indica* through breeding: as Co-Principal Investigator at the Department of Zoology, Bangalore University, Bangalore with an outlay of Rs. 7.5 Lakhs sanctioned by University Grants Commission, New Delhi during 2007-2010.
2. Operating a project on “Conservation of giant honeybee, *Apis dorsata* F. for honey production in plains of Karnataka” at UGC Academic Staff College, Bangalore University, Bangalore with an outlay of Rs. 11.35 Lakhs sanctioned by University Grants Commission, New Delhi (2013-2016).

12. MEMBERSHIP IN PROFESSIONAL BODIES

1. Life Member, Honeybee Research Association, Bangalore
2. Life Member, Bangalore Beekeepers Association, Bangalore
3. Life Member, All India Beekeepers Association, Pune
4. Founder Member, Centre for Rural Development and Applied Research, Bangalore.

13. PUBLICATIONS

a) BOOKS

1. Rajagopal, D. and Nagaraja, N. 2013. Honeybees and Crop Production (In Kannada), Department of Kannada Studies, University of Agricultural Sciences, Bangalore, India, p.91. (winner of letter of appreciation by UAS, Bangalore-2014)
2. Nagaraja, N. and Rajagopal, D. 2009. *Diseases, Parasites, Pests, Predators and their Management*, MJP Publishers, Chennai, India, p.210.
3. Rajagopal, D. and Nagaraja, N. 2004. *Apiculture* (In Kannada), Department of Kannada Studies, University of Agricultural Sciences, Bangalore, India, p 178.

b) CHAPTERS IN BOOKS

1. Nagaraja, N. 2012. Asian honeybees: Biology, threats and their conservation. In: *Biology, threats and colonies* (Eds. Richard M. Florio, Nova Publishers Inc., USA, pp 99-123.

2. Rajagopal, D. and Nagaraja, N. 2003. Potentiality of honeybees in increasing crop production. *Potentials of Living Resources* (Eds: Thripathi, G. and Kumar, A.), Discovery Publishing House, New Delhi, pp 105-158.

c) **RESEARCH PAPERS**

1. Nagaraja, N. 2014. Olfactory learning and memory in drones of *Apis cerana* Fab. and *Apis florea* Fab. towards queen mandibular pheromone odorants. *Journal of Entomological Research* **38**(3): 165-168.
2. Streinzer, M., Brockmann, A., Nagaraja, N. and Spaethe, J. 2013. Sex and caste specific variation in compound eye morphology of five honeybee species. *PLoS ONE* **8**(2): e57702. doi:10.1371/journal.pone.0057702.
3. Nagaraja, N. and Dorothea Bruckner 2013. Olfactory learning and memory recall in drones of hive honeybee species. *Journal of Entomological Research*, **37** (1): 29-32.
4. Sawaya, C.H.F., Abdelnur, P.V., Eberlin, M.N., Cuhna, I.B.S., Kumazawa, S., Ahn, M.R. Bang, K.S., Nagaraja, N., Bankova, V.S. and Afrouzan, H. 2010. Easy ambient sonic-spray ionization-Mass spectroscopy finger printing of Propolis. *TALANTA* 81: 100-108.
5. Nagaraja, N. and Brockmann, A. 2009. Drones of red dwarf honeybee, *Apis florea* are attracted by two components from the mandibular gland, 10-HDA and 9-ODA. *Journal of Chemical Ecology* 35: 653-655.
6. Nagaraja, N. and Brockmann, A. 2009. Drone congregation areas of red dwarf honeybee, *Apis florea*. *Nature Precedings*, <http://hdl.handle.net/npre.2009.3955.1>
7. Nagaraja, N. 2009. Does open-nesting honeybee species exhibit differential pollen collection? *Advances in Pollen Spore Research* **27**: 35-42.
8. Nagaraja, N. and Reddy, M.S. 2009. Effects of pollen stores on pollen foraging behavior of Indian hive bee, *Apis cerana* F. *Journal of Palynology* **45**: 53-57.
9. Chowde Gowda, Y.N. Reddy, C.C. and Nagaraja, N. 2009. Studies on pollen gathering activity in relation to honey storage in the colonies of *Apis cerana* F. *Advances in Pollen Spore Research* **27**:115-121
10. Chowde Gowda, Y.N., Reddy, C.C. and Nagaraja, N. 2008. Pollen foraging behaviour of Indian honeybee, *Apis cerana* in diversified floral conditions. *Advances in Pollen Spore Research* **26**: 65-72.
11. Woyke, J., Wilde, J., Wilde, M., Sivaram, V., Cervancia, C., Nagaraja, N. and Reddy, M.S. 2008. Comparison of defense body movements of *Apis laboriosa*, *Apis dorsata dorsata* and *Apis dorsata breviligula* honeybees. *Journal of Insect Behavior*, **21**: 481-494.
12. Woyke, J., Wilde, J., Wilde, M., Reddy, M.S., Nagaraja, N. and Sivaram, V. 2007. Presence or absence of drones in 'drone' dusk mass flights performed by *Apis dorsata breviligula* worker bees. *Journal of Apicultural Research*, **46**(1): 40-49.

13. Woyke, J., Wilde, J., Reddy, C.C. and Nagaraja, N. 2005. Periodic mass flights of giant honeybee, *Apis dorsata* performed in successive days at two environmental conditions. *Journal of Apicultural Research*, **44**(4): 180-189.
14. Chowde Gowda, Y.N., Reddy, C.C. and Nagaraja, N. 2005. Forging and hive profiles of *Apis cerana* F. (Hymenoptera: Apidae), *Journal of Entomological Research* **29**(3): 219-222.
15. Nagaraja, N., Sivaram, V. and Anita, M. 2004. Bee flora and floral calendar of European honeybee, *Apis mellifera* L. (Hymenoptera: Apidae) in Karnataka. *Asian Bee Journal* **6**(1-2): 66-71.
16. Reddy, M.S., Jayaram, G.N. and Nagaraja, N. 2004. Behavioural resistance of the Indian hive bee, *Apis cerana indica* against Thai sac brood disease to rejuvenate sustainable beekeeping in Karnataka, India. *Proceedings of 7th Asian Apicultural Association International Conference and 10th Bee Net Symposium and Technofora*, Philippines, pp 209-212.
17. Nagaraja, N., Rajagopal, D. and Gavi Gowda, 2003. Resistance mechanism of honeybee (*Apis mellifera*) against brood mite, *Tropilaelaps clareae*. *Proceedings of XXXVIII th International Apicultural Congress*, Ljubljana, Slovenia (6 pages in CD).
18. Nagaraja, N. and Rajagopal, D. 2003. Effect of neem oil and sugar dusting in management of brood mite, *Tropilaelaps clareae* Delf. & Baker in *Apis mellifera* L. colonies. *Indian Bee Journal* **65**(1-2): 18-23.
19. Nagaraja, N. and Rajagopal, D. 2003. Pests, predators and parasites of European honeybee, *Apis mellifera ligustica* Spin. In Karnataka. *Indian Bee Journal* **65**(3-4): 120-127.
20. Nagaraja, N. 2002. Colony index of European honeybee, *Apis mellifera* L. (Hymenoptera: Apidae). *Asian Bee Journal* **5**(1-2): 43-47.
21. Nagaraja, N. 2002. Observations on foraging index of European honeybee, *Apis mellifera* L. (Hymenoptera: Apidae). *Journal of Entomological Research* **26**(3): 185-192.
22. Nagaraja, N. and Reddy, C.C. 2002. Influence of bee pollinators on the quality of seed production in sunflower (*Helianthus annuus*) and coconut (*Cocos nucifera*). *Asian Bee Journal* **4**(1-2): 1-5.
23. Nagaraja, N. and Rajagopal, D. 2001. Biology of brood mite, *Tropilaelaps clareae* in the brood of *Apis mellifera* L. (Hymenoptera: Apidae). *Asian Bee Journal*, **3**(1-2): 20-26.
24. Nagaraja, N. 2000. Studies on annual foraging cycle of *Apis mellifera* L. *Indian Bee Journal* **62**(1-2): 11-17.
25. Nagaraja, N. 2002. Impact of ecto-parasitic brood mites, *Tropilaelaps clareae* and *Varroa jacobsoni* on *Apis mellifera* beekeeping in Karnataka. *Journal of Ecotoxicology and Environmental Monitoring*, **10**(3): 205-210.

26. Nagaraja, N. and Rajagopal, D. 2000. Foraging and brood rearing activity of rock bee, *Apis dorsata* F. (Hymenoptera: Apidae), *Journal of Entomological Research* **24**(3): 243-248.
27. Rajagopal, D., Veeresh, G.K., Chikkadevaiah, Nagaraja, N. and Kencharaddi, R.N. 1999. Potentiality of honeybees in hybrid seed production of sunflower (*Helianthus annuus* L.). *Indian Journal of Agricultural Science*, **69**(1); 40-43.
28. Nagaraja, N. and Reddy, C.C. 1999. Invasion and infestation of brood parasitic mites, *Varroa jacobsoni* and *Tropilaelaps clareae* in hive honeybee species. *Indian Bee Journal* **61**(1-4): 37-41.
29. Nagaraja, N. and Rajagopal, D. 1999. Colony establishment, nesting and foraging activity of little honeybee, *Apis florea* F. (Hymenoptera: Apidae), *Journal of Entomological Research* **23**(4): 331-338.
30. Rajagopal, D. and Nagaraja, N. 1999. Beekeeping status in Karnataka. *Asian Bee Journal* **1**(1): 50-59.
31. Nagaraja, N. 1998. Rate of invasion and infestation of *Tropilaelaps clareae* in sulphur treated and untreated colonies of *Apis mellifera*. *Himalayan Journal of Environmental Zoology*, **12**: 131-136.
32. Nagaraja, N. and Reddy, C.C. 1996. Hive and foraging index of honeybee species. *Proceedings of the National Symposium on Animal Behaviour*, Karnatak University, Dharwad, India, pp 7-16.
33. Nagaraja, N. and Reddy, C.C. 1996. Occurrence and distribution of phoretic mite, *Neocypholaelaps clareae indica* in the colonies of hive honeybee species. *Proceedings of the National Symposium on Animal Behaviour*, Karnatak University, Dharwad, India, pp 22-28.

14. COURSES ATTENDED

1. Orientation Programme, 14th July to 11th August 2014, UGC Academic Staff College, Bangalore University, Bangalore.
2. Refresher Course in Life Sciences (ID), 21st March to 11th April, 2014, UGC Academic Staff College, Bangalore University, Bangalore.
3. DST Sponsored SERB School on Chemical Ecology, 17th to 28th February 2014, National Centre for Biological Sciences (TIFR), Bangalore.
5. National Workshop on Methods in Animal Behaviour, 17-29th December 2001, Indian Institute of Science, Bangalore.

15. CONFERENCES/SEMINARS ATTENDED AND PAPERS PRESENTED

1. Indian Science Congress, 3rd to 7th, January 2015, University of Mumbai, Mumbai.
2. International Workshop on Technology Transfer in Beekeeping, Melliponiculture and honey Festival, 24th February to 2nd March 2014, Bangalore University, Bangalore.

3. One day Evolution Symposium: Celebration Wallace, 7th November 2013, National Centre for Biological Sciences (TIFR), Bangalore.
4. International Conference on Insect Science, 14-17, February 2013, University of Agricultural Sciences, Bangalore.
5. International Workshop on Beekeeping, 17-19, November, 2012, Madikeri
6. 5th Karnataka Science Congress, 15-17, September, 2009, Mangalore University, Mangalore.
7. Seminar on Beekeeping Awareness and Technology Transfer, 27-29, March 2008, Bangalore University, Bangalore.
8. National Seminar of Beekeeping Awareness, Transfer of Technology and honey festival, 18-20, January 2008, University of Agricultural Sciences, Bangalore.
9. International Conference on Zoology, 19-23, November 2006, Bangalore University, Bangalore.
10. International Beekeeping Congress, 13-18, November 2005, Century Foundation, Bangalore.
11. International Workshop on Sustainable Beekeeping and World AOIEXPO-2003, 13-18, October 2003, Bangalore University, Bangalore.
12. XXXVIII Apimondia International Beekeeping Congress, 24-29, August 2003, Ljubljana, Slovenia.
13. 6th International Conference of Asian Apicultural Association, 24th February to 1st March 2002, Century Foundation, Bangalore.
14. 13th National Conference on Parasitology, 22-25, February 1999, Bangalore University, Bangalore.
15. 3rd International/15th National Conference on recent trends in Life Sciences, 11-13, February 1999, Bangalore University, Bangalore.
16. FAO Workshop on Sustainable Beekeeping Development and All India Honey Festival, 1-5, August 1998, Dharwad.
17. National Workshop on Bio-diversity, Biotechnology and Environmental Monitoring, 6-9, February 1998, Gurukul Kangri University, Haridwar, Urraranchal.
18. National Smposium on recen trends in Life Sciences, 23-25, October 1997, Punjab University, Patiala, Punjab.
19. National Conference on Apiculture and First Karnataka Honey Festival, 6-8, January 1997, Bangalore University, Bangalore.

20. National Conference on Bees and their Environment, Century Foundation, 19-21, December 1996, Bangalore
21. National Symposium on Animal Behaviour, 4-6, January 1996, Karnatak University, Dharwad.
22. National Symposium on Acarology, 19-21, September 1995, University of Agricultural Sciences, Bangalore.
23. National Seminar-cum-Workshop on Honeybee diseases, their diagnosis and management, 6-9, December 1994, University of Agricultural Sciences, Bangalore.

16. SPECIAL LECTURES DELIVERED

1. The Fascinating World of Honeybees, Bangalore Science Forum, Bangalore, 5th September 2007.
2. Mite pests of honeybees and their management, National Seminar on Beekeeping Awareness, Transfer of Technology and Honey Festival, University of Agricultural Sciences, Bangalore, 18-20, January 2008.
3. Natural Enemies of Honeybees and their management, Seminar on Beekeeping Awareness and Technology Transfer, 27-29, March 2008, Bangalore University, Bangalore
4. Delivered Radio talks on management of bee diseases and beekeeping practices in Karnataka organized by All India Radio, Bangalore.
5. Delivered a lecture on “Biodiversity of Honeybees” on Science day celebrations at Government College for Boys, Kolar on 26th March 2010.
6. Delivered a series of lectures on Honeybees and Beekeeping to the teacher participants of Orientation Programme/Refresher Courses at UGC Academic Staff College, Bangalore University, Bangalore since 2004.

(N.NAGARAJA)