

CURRICULUM VITAE

DR. KAOMUD TYAGI

Scientist C

Zoological Survey of India

Centre for DNA Taxonomy (CDT), Molecular Systematics Division (MSD),

Zoological Survey of India

Ministry of Environment Forest and Climate Change (MoEF&CC), Govt. of India,

M-Block, New Alipore, Kolkata-700 053, West Bengal, India

kumud.tyagi5@gmail.com



Research interests: Systematics, DNA barcoding

Specialization: Thysanoptera Taxonomy

Current projects: Morphological and Molecular systematics of Thysanoptera of Odisha & Gujarat

Academic Qualifications:

- 2004 Ph.D., Zoology, University of Delhi, Delhi, India.
Thesis Title: Taxonomic Studies on Thysanoptera-Tubulifera of Delhi.
Advisor: Prof. J. S. Bhatti.
- 2001 M.Sc., Zoology (Entomology), C. C. S. University, Meerut, U.P. India
- 1998 B.Sc., Zoology, Botany, Chemistry, C. C. S. University, Meerut, U.P. India

Professional Experiences:

- 7/4/2017 to continuing: **Scientist C**, Centre for DNA Taxonomy, Molecular Systematics Division, Zoological Survey of India, Kolkata-700053
- 1/1/2016 to 6/4/2017 **Postdoctoral fellow** at Centre for DNA Taxonomy, Molecular Systematics Division, Zoological Survey of India, Kolkata-700053 on Molecular systematics and phylogeny of thrips from India
- 1/1/2013 to 31/12/2015 **DST Young Scientist** on Molecular systematics and phylogeny of economically important thrips of India at Centre for DNA Taxonomy, Molecular Systematics Division, Zoological Survey of India, Kolkata-700053.
- 2/4/2012 to 31/12/2012 **Research Associate** at Zoological Survey of India, Kolkata-700053 on District-wise Faunal Diversity of Chhattisgarh (CAMP, MoEF&CC)
- 2/11/2005 to 1/4/2012 **Research Associate** on Network project on Insect Biosystematics (ICAR) at National Bureau of Agriculturally Important Resources (NBAIR), Bengaluru
- 13/1/2004 to 1/11/2005 **Honorary Research Fellow** at Delhi University, Delhi

Achievements:

Research grant of 28 lakh under fast-track DST Young Scientist Scheme funded by Science & Engineering Research Board (SERB), New Delhi to carry out a project “Molecular systematics and phylogeny of economically important thrips of India”

Training, Workshops and Symposium attended:

- Attended training in “**Advances in Wildlife Research and conservation**” on 10-14th August 2017 at Wildlife Institute of India, Dehradun.
- Attended as **resource person in Workshop on DNA barcoding** on 7-8th March 2016 at Zoological Survey of India, Kolkata.

- Delivered Lecture on Biosystematics of Thysanoptera in **Winter School of Biosystematics of Insects, mites and Spiders at National Bureau of Agriculturally Important Insects**, 14-23 Nov. 2011.
- Attended symposium in **National symposium of Frontier areas of entomological research** held in IARI, Delhi, Delhi 5-7 Nov, 2003.
- Attended **Open Access to Academic Knowledge at Indian Institute of Science**, 2 Nov. 2011.

PUBLICATIONS

1. Chatterjee, S., Caleb, J.T.D., **Tyagi, K.**, Kundu, S., Kumar, V. (2018) First report of *Hyptiotes affinis* Bosenberg & Strand, 1906 (Araneae: Uloboridae) from India. *Munis Entomology and Zoology*, 13(1): 211-213.
2. Chatterjee, S., Caleb, J.T.D., **Tyagi, K.**, Kundu, S., Kumar, V. (2017) First report of *Menemerus nigli* (Araneae: Salticidae) from India. *Halteres*, 8: 109-111.
3. **Tyagi, K.**, Chakraborty, R., Singha, D., and Kumar, V. (2017) A new species of *Trichromothrips* (Thysanoptera) from India with four new records. *Zootaxa* 4363 (1): 145–150.
4. Chatterjee, S., Caleb, J.T.D., **Tyagi, K.**, Kundu, S., & Kumar, V. (2017) Two new species of jumping spiders of the genus *Epocilla* Thorell and *Mogrus* Simon (Araneae: Salticidae) from India. *Arthropoda Selecta*, 26(4):321-326.
5. **Tyagi, K.**, Kumar, V., Singha, D., Chandra, K., Laskar, B.A., Kundu, S., Chakraborty, R., Chatterjee, S. (2017) DNA Barcoding studies on Thrips in India: Cryptic species, Species complexes. *Scientific Reports*, 4898, 7:1-14. Doi:10.1038/s41598-017-05112-7
6. **Tyagi, K.** & Kumar, V. 2017. Thrips of Economic Importance in India: An identification Guide. : 1-96. Published by the Director, Zoological Survey of India.
7. Kumar, V., Chandra, K., **Tyagi, K.**, Kundu, S., Laskar, B. A., Singha, D., Chatterjee, S. and Chakraborty, R. (2017) Barcoding fauna of India: an initiative by Zoological Survey of India. *Genomics*, 60(11):957. In. 7th International Barcode of Life Conference, 20-24 November 2017, South Africa: <https://doi.org/10.1139/gen-2017-0209>
8. Reena, **Tyagi, K.**, Sinha, B.K., Rai, P.K. and Jamwal, S. (2017) Gall thrips infesting *Terminalia chebula* – one of the most important medicinal plants of Jammu and Kashmir, India. *Ecology Environment and conservation*. 23(1): 395-397
9. Singha, D., **Tyagi, K.**, & Kumar, V. 2017. First record of *Podothrips erami* (Thysanoptera: Tubulifera) from India. *Halteres*, 8: 30-32.
10. **Tyagi, K.**, Singha, D. & Kumar, V. 2017. *Danothrips litseae* sp.n. (Thysanoptera, Thripidae) from India on leaves of *Litsea*. *Zootaxa*, 4269(1); 137-140.
11. Tyagi, K., Mound, L.A. & Kumar, V. 2016. A new species of *Chirothripoides* (Thysanoptera: Tubulifera) from India and Malaysia. *Zootaxa*, 4200: 30-35.
12. **Singha, D.** Tyagi, K. & Kumar, V. 2016. New Distributional records from Odisha state of India. *Records of Zoological Survey of India*, 116(2): 191-195.
13. **Tyagi, K.**, Kumar, V. Bhuyan, M., Shandilya, S. & Chanda, S. K. 2016. *Chaetanaphothrips kiyosumianus* (Thysanoptera, Thripidae) new to India with first record of the male. *Zootaxa*, 4147(5), 593-596.
14. **Tyagi, K.** & Kumar, V. 2016. The Sericothripinae genus *Neohydatothrips* (Thysanoptera, Thripidae) in India with description of two new species. *Zootaxa*, 4132(3), 438-444.

15. **Tyagi, K.** & Kumar, V. 2016. Thrips (Insecta: Thysanoptera) of India- An Updated Checklist. *Halteres*, 7: 64-98.
16. **Tyagi, K.** & Kumar, V. 2016. A new record of Holarctic genus *Odontothrips* (Thysanoptera, Thripidae) from India with a new species. *Zootaxa*, 4067 (4): 484–488.
17. Kundu S, Kumar V, Laskar BA, Chandra K, **Tyagi K** (2016) Mitochondrial DNA effectively detects non-native Testudines: Invisible wildlife trade in northeast India. *GENE Reports*. doi:10.1016/j.genrep.2016.02.002.
18. Laskar BA, Kumar V, Kundu S, **Tyagi K**, Singha D, Chakraborty R, Chatterjee S, Saha S (2016) DNA barcoding of Gobiid fishes (Perciformes: Gobiidae) from eastern and northeastern India with new record of a Gobionellinae species for the region. *Mitochondrial DNA*. doi: 10.3109/24701394.2016.1143470.
19. **Tyagi, K.**, Kumar, V. & Chauhan, N. 2015. A new species of the genus *Tameothrips* Bhatti (Thysanoptera: Thripidae) with four new records of thrips from India. *Zootaxa*, 4007(2), 283-289.
20. **Tyagi, K.** & Kumar, V. 2015. New Record of *Moundinothrips robustus* (Thysanoptera: Thripidae) from Himachal Pradesh State of India. *Records of Zoological Survey of India*, 115(1), 97-99.
21. Chandershekhar, K. N., Raj Kumar, R., Kumar, V., Banerjee, D., Kundu, S., Ghosh, B., **Tyagi, K.** 2015. DNA Barcoding reveals host associated genetic diversity of ‘tea Mosquito Bug’ *Helopeltis theivora* (Miridae: Heteroptera) from India. *Asia Pacific Entomology*, 18(3), 541-545.
22. **Tyagi, K.**, Kumar, V., Singha D. and Chakraborty, R. 2015. Morphological and DNA Barcoding Evidence for Invasive Pest thrips, *Thrips parvispinus* (Thripidae: Thysanoptera), newly recorded from India. *Journal of Insect Science*, 15(1): 1-4. DOI: 10.1093/jisesa/iev087
23. Banerjee, D., Kumar, V., Maity, A., Ghosh, B., **Tyagi, K.**, Singha, D., Kundu, S., Laskar, B. A., Naskar, A. and Rath, S. 2015. Identification through DNA barcoding of Tabanidae (Diptera) vectors of surra disease in India. *Acta Tropica*, 150: 52-58.
24. **Tyagi, K.** & Kumar, V. 2015. The *Thrips formosanus* group from Asia and Australia with a new species of the genus *Thrips* (Thysanoptera: Thripidae) from India. *Zootaxa*, 3947 (2): 296–300.
25. **Tyagi, K.** & Kumar, V., 2015. First report of Western Flower Thrips, *Frankliniella occidentalis* (Pergande) (Thripidae: Thysanoptera) from India – A Potential havoc to Indian agriculture, *Halteres*, 6: 1-3.
26. **Tyagi, K.** and Kumar, V. 2015. *Thrips arorai* Bhatti (Thysanoptera, Thripidae): first description of the male. *Zootaxa*, 3904 (1): 144-146.
27. **Tyagi, K.** and Kumar, V. 2014. New records of Thrips (Thysanoptera, Terebrantia, Thripidae) from Himachal Pradesh, India. *Records of Zoological Survey of India*, 114(4): 591-598.
28. Singha, D., **Tyagi, K.** & Kumar, V. 2014. New record of Thrips (Insecta: Thysanoptera) from West Bengal, India. *Records of Zoological Survey of India*, 114(4): 599-602.
29. Kumar, V., **Tyagi, K.**, Ghosh, B. and Singha D. 2014. A new species of *Taeniothrips* (Thysanoptera: Thripidae) from India. *Zootaxa*, 3884 (2): 197-200.
30. **Tyagi, K.**, Ghosh, B. and Kumar, V. 2014. The genus *Ctenothrips* from India (Thysanoptera: Thripidae) with description of one new species and one new record. *Zootaxa*, 3821(3): 273-279.

31. Kumar, V. and **Tyagi, K.** 2014. The Poaceae-associated genus *Bamboosiella* (Thysanoptera, Plaeothripidae) from India with one new species. *Zootaxa*, 3795(1): 079-084. New Zealand.
32. Duraimurugan, P. and **Tyagi, K.** 2014. Pest spectra, succession and its yield losses in Mungbean and Urd bean under climate change scenario. *Legume Research*, 37(2): 212-222.
33. Chandra, K. Kushwaha, S. and **Tyagi, K.** 2014. First record of four colour Morphs of the southern green stink Bug, *Nezara Viridula* (L.) (Heteroptera: Pentatomidae), from Madhya Pradesh, India. *Munis Entomology & Zoology*, 9(1): 254-257.
34. **Tyagi, K.** and Kumar, V. 2013. The genus *Rhamphothrips* in India (Thysanoptera: Thripidae) with description of a new species. *Zootaxa*, 3745 (4): 491-495. New Zealand.
35. Asokan, R.; Rebijith, K. B.; Krishna, V.; Krishna Kumar, N. K.; Jacob, T. K.; Devasahayam, S. D.; **Tyagi, K.** and Sujeesh, E. S. 2013. Molecular diversity of cardamom thrips *Sciothrips cardamomi* Ramkrishna (Thripidae: Thysanoptera). *Oriental Insects*, 47:1, 55-64.
36. **Tyagi, K.** and Kumar, V. 2013. Thysanoptera Fauna of Chhattisgarh India. *Records of Zoological Survey of India*. 113(4): 133-138.
37. **Tyagi, K.** and Kumar, V. 2013. New records of thrips (Thysanoptera: Phlaeothripidae) from Karnataka, India. *Check List*, 9(5): 1117-1118.
38. Jayalaxmi Narayan Hegde, Chakravarthy, A.K., Jayanthi, R., **Tyagi, K.**, C. T. Ashok kumar, N. G. Kumar and N. E. Thyagaraj 2013. Thrips damaging rose, *Rosa* spp. in field and protected conditions. International Conference of Insect Science, pg. 35. 13th workshop of the IOBC global working group on mass rearing and quality assurance- Emerging Opportunities for the Mass Production & Quality Assurance of Invertebrates, Bangalore; 11/2013
39. **Tyagi, K.** and Kumar, V. 2012. A new species of *Psephenothrips* Reyes (Thysanoptera: Phlaeothripidae) from India. *Oriental Insects*, 46(3-4): 281-287.
40. **Tyagi, K.** 2012. New records of Tubulifera (Thysanoptera, Phlaeothripidae) from Karnataka state of India, *Journal of Threatened Taxa*, 4(5): 2596-2602.
41. **Tyagi, K.** and Kumar, V. 2011. A new record of Pest species *Pseudodendrothrips bhattii* Kudô (Thysanoptera: Thripidae: Dendrothripinae) from India. *Indian Journal of Entomology*, 73(4): 296-297.
42. **Tyagi, K.** 2011. A new species of *Asprothrips* J.C. Crawford (Thysanoptera, Thripidae, Dendrothripinae) from India. *Entomological News*, 122(2): 182-186. Philadelphia, USA.
43. **Tyagi, K.** and Kumar, V. 2011. The Indian species of *Liophloeothrips* Priesner (Thysanoptera, Phlaeothripidae) with one new species. *Zootaxa*, 2803: 21-31. New Zealand.
44. Asokan, R, Krishna Kumar, N.K., Rebijith, K. B., Devasahayam, S., Jacob, T. K., **Tyagi, K.** and Sujeesh, E. S. (2011). Molecular Identification & diversity of cardamom thrips, *Sciothrips cardamomi* (Ramk.) (Thripidae: Thysanoptera). **IIHR technical bulletin number**, pp. 1-20. August 2011
45. Asokan, R, Krishna Kumar, N.K., Ranganath, H. R., Joshi, S., **Tyagi, K.** et al. 2010. Molecular identification of species and biotypes of important sucking pests of horticultural crops. **IIHR technical bulletin number**, pp. 1-37. May 2010.
46. **Tyagi, K.**, Kumar, V. and Mound, L.A. 2008. Sexual dimorphism among Thysanoptera Terebrantia, with a new species from Malaysia and remarkable species from India in Aeolothripidae and Thripidae. *Insect Systematics & Evolution*, 39(2): 155-170. **Denmark**.
47. **Tyagi, K.** and Kumar, V. 2008. Two new species of *Stenchaetothrips* (Thysanoptera: Insecta) from India. *Zootaxa*, 1851: 58-64. New Zealand.

48. **Tyagi, K.** and Kumar, V. 2008. Checklist of Terebrantia (Thysanopter) Recorded from Karnataka, India. *Biosystematica*, 2(1): 41-48. India.
49. Kumar, V., **Tyagi, K.** and Bhatti, J.S. 2007. Annotated checklist of Terebrantia (Thysanoptera: Insecta) of Delhi. *Zoo's Print*, 22(6):2714-2718 India.
50. Kumar, V., **Tyagi, K.** and Bhatti, J.S. 2007. On the discovery of new thrips related to the genus *Haplothrips*, Amyot & Surville from Delhi. *Journal of Bombay Natural History Society*, 104(1): 68-71.
51. Kumar, V. and **Tyagi, K.** 2007. A remarkable new Phlaeothripid (Tubulifera: Thysanoptera) related to *Haplothrips* from India. *Journal of Experimental Zoology*, 9(2): 337-340. India.
52. Kumar, V.; **Tyagi, K.**, Krishna Kumar, N. K. and Ranganath, H. R. 2007. Biosystematics of Phytophagous and predatory thrips. Pp. 117-138. In: Ramaraju, K; Gunthailagaraj, K; Suresh, S; Jeyarani, S; Kuttalam, S (eds.) Proceeding of Winter School training on Biosystematics of Agriculturally Important Insect and Mite Biodiversity, 8-28 November, Coimbatore.
53. Bhatti, J. S., Kumar, V., **Tyagi, K.** 2006. Order Thysanoptera. Pp. 515–534. In: Jerath, Puja, & Chadha (eds), **Biodiversity in the Shivalik Ecosystem of Punjab**. xxxii + 898 pp. Bishen Singh Mahendra Pal Singh, Dehra Dun.
54. Kumar, V., **Tyagi, K.** and Bhatti, J.S. 2005. On Some New Records of Thysanoptera (Insecta) from India. *Entomon*, 30(3): 249-254. India
55. Bhatti, J. S., Telmadarraiy, Z., Kumar. V., and **Tyagi, K.** 2003. Species of *Eremiothrips* in Iran (Terebrantia: Thripidae). **Thysanoptera** 2003 (Thrips No. 2): 49–110. Delhi. India.

Abstracts:

56. Chatterjee. S., Caleb. T. D., Tyagi. K., Chandra. K., and Kumar. V., Morphological and molecular identification of Spider (Arachnida: Araneae) from India (2017) In. “International Conference in Zoological Sciences with a special symposium on Ants” 26-28 October 2017 Dept. Of Zoology and environmental science Punjabi University, Patiala, Abstract No. 106, p95.
57. Chakraborty. R, Tyagi. K., Kundu, S., Chandra. K., and Kumar. V., First mitochondrial genome of Marigold pest thrips, *Neohydatothrips samayunkur* (Thysanoptera: Sericothripinae) (2017) In. “International Conference in Zoological Sciences with a special symposium on Ants” 26-28 October 2017 Dept. Of Zoology and environmental science Punjabi University, Patiala, Abstract No. 105, P-94.
58. Singha. D, Chakraborty. R, Chandra. K., Kumar. V and Tyagi. K., Morphological and Molecular identification of an invasive species *Scirtothrips malayensis* (Thysanoptera: Insecta) new to India (2017) In. “International Conference in Zoological Sciences with a special symposium on Ants” 26-28 October 2017 Dept. Of Zoology and environmental science Punjabi University, Patiala, Abstract No. 130, P-113.
59. Kundu. S, Tyagi. K., Chandra. K., and Kumar. V., Environmental DNA (EDNA) corroborate the footmarks of threatened testudines from anonymous habitats in Northeast India (2017) In. “International Conference in Zoological Sciences with a special symposium on Ants” 26-28 October 2017 Dept. Of Zoology and environmental science Punjabi University, Patiala, Abstract No. 186, P-157.
60. Bhatti, J. S., Kumar. V., and **Tyagi, K.** 2003. Identification of the Oriental Rice Thrips, *Stenchaetothrips biformis* (Bagnall) (Terebrantia: Thripidae). pp. 664–665. In. Subrahmanyam B & Ramamurthy VV (eds), Proc. Natnl. Symp. Frontier Areas Ent. Res., 5–7 Nov. 2003, New Delhi.
61. Bhatti, J. S., R. Varatharajan, Shimray Chochong Vareichung, Kumar. V., and **Tyagi, K.** 2003. The exotic species *Neohydatothrips samayunkur* (Kudo 1995) (Terebrantia: Sericothripidae) is

now discovered from 6 states in India. pp. 666–667. In. Subrahmanyam B & Ramamurthy VV (eds), Proc. Natnl. Symp. Frontier Areas Ent. Res., 5–7 Nov. 2003, New Delhi.

62. Bhatti, J. S., **Tyagi, K.** and Kumar. V. 2003. Variation and population structure in the common thrips *Plicothrips apicalis* (Bagnall) living on *Cynodon dactylon* (Tubulifera: Phlaeothripidae). pp. 672–673. In. Subrahmanyam B & Ramamurthy VV (eds), Proc. Natnl. Symp. Frontier Areas Ent. Res., 5–7 Nov. 2003, New Delhi.

KAOMUD TYAGI