

BIO-DATA

1. Name : Dr Harbhajan Kaur
2. Designation : Professor (Retired)
3. Department : Zoology and Environmental Sciences
4. Date of Birth : 21.07.55
5. Address for Correspondence : Department of Zoology and Environmental Sciences
Punjabi University,
Patiala-147002, Punjab, India.



Phones : 01753046553 (O)

Mobile : 09814588788

E-mail : harbhajankaur@hotmail.com

6. Areas of Specialisation : Insect cytogenetics and molecular biology, Limnology

7. Academic Qualifications:

| Sr. no. | Degree Held | Year | Board/Univ./ Inst. | % of marks | Div./ Rank | Subjects Taken |
|---------|-------------|------|--------------------|------------|------------|----------------------------|
| 1 | B. Sc. | 1976 | Panjab Univ. | 68.3 | First | Botany, Zoology, Chemistry |
| 2 | M. Sc. | 1978 | Punjabi Univ. | 67.0 | First | Zoology |
| 3 | M. Phil. | 1980 | Punjabi Univ. | | 'A' grade | Zoology |
| 4 | Ph. D. | 1986 | Punjabi Univ. | | | Zoology |

8. Administrative positions held:

1. Head of Department (Nov. to Dec., 2015)
2. Chairperson of Cell for Prevention of Sexual Harassment of Women at Workplace (July, 2009 to March, 2017)

9. Membership of Professional Bodies/Organisations

- i. Life member of Society of Cytologists and Geneticists, India
- ii. Life member of Society of Life Sciences.
- iii. Member of National Institute of Ecology (NIE), New Delhi.
- iv. Life member of Punjab Academy of Sciences.

- v. **Founder Executive member, Association of Entomologists.**

10. Member Editorial Board:

- i. **Associate Editor of Indian Journal of Environment and Ecoplanning, Dumka**
- ii. **Member of Editorial Advisory Board of Journal of Environmental Science, Jaipur.**
- iii. **Member of Editorial Advisory Board of National Journal of Life Sciences, Satna (MP).**
- iv. **Member, Editorial Board of “Halteres”, an International Research Journal in Entomology.**

11. Medals/Awards/Honours/Received

- i. **Honorary Fellow of Society of Environmental Science (F.S.E.Sc.)**
- ii. **Honorary member of the Professional Women Advisory Board 1999, 2000. American Biographical Institute.**
- iii. **Professor J S Datta Munshi Gold Medal (2009) by International Society of Ecological Communication.**
- iv. **Best Publication Award 2012 by Society of for Advancement of Human and Nature (SADHNA).**
- v. **Honorary Fellowship by Bihar Biological Research Society (F.B.B.S.), 2013**

12. Scholarships: Aailed Merit Scholarship during M.Sc.

13. Details of Teaching Experience:

| S. No. | Name of the Inst./Employer | Position Held | Duration | Major Job Responsibilities and Nature of Experience |
|---------------|-----------------------------------|----------------------|--------------------------|--|
| 1. | Punjabi University, Patiala | Lecturer | 23.08.1989 to 22.08.1998 | Teaching of M. Sc. Classes. Guiding research work of M.Sc., M. Phil. and Ph. D. students |
| 2. | Punjabi University, Patiala | Reader | 23.08.1998 to 22.08.2006 | As above |
| 3. | Punjabi University, Patiala | Professor | 23.08.2006 to 31.12.2015 | As above |

| | | | | |
|-----------|--------------------------------|----------------------------|--------------------------|----------|
| 4. | Punjabi University, Patiala | Professor (Re-employed) | 01.01.2016 continuing | As above |
|-----------|--------------------------------|----------------------------|--------------------------|----------|

14. Published Work (Please specify numbers only):

a. Research Papers: 132

i) National = 98

ii) International = 34

b. Conference/Seminar Presentation : Presented: 12, contributed: 40

c. Books : One (Edited)

d. Articles in Punjabi: 7

15. R & D Projects

i) Analytical Studies on Aquatic Ecosystem of Punjab by Punjab State Council for Science and Technology, Chandigarh. Completed

ii) Studies on the Toxic Effects of Industrial Effluents on Chironomid Larvae (Diptera:Chironomidae) by UGC (minor). Completed

iii) Cytological and Morphotaxonomic studies on terrestrial Heteropteran fauna (Heteroptera:Hemiptera; Insecta) of Punjab. Completed

16. Invited Talks/Articles:

i). Invited lecture on “Use of cytogenetic techniques in insect taxonomy” at “Research Interface Workshop on Insect Diversity with emphasis on Microlepidoptera”, March, 24-25, 2007, Patiala.

ii). Present ecological status of Satluj river in Punjab at Refresher Course in Environmental Sciences held in 2011 and 2012

iii).Development of cytotechniques: heteropteran cytogenetics in 21st century in refresher course held in 2022.

iv).Lectures and demonstrations of cytogenetic techniques in colleges.

17. Ph.D. Students guided/under guidance (Details):

| S. No. | Name of the Student | Title of Thesis | Year of Completion |
|--------|-------------------------------|---|--------------------|
| 1. | Dr Kulbir Bath | Limnological studies on the Harike Wetland Ecosystem | 1997 |
| 2. | Dr Joydeep Syal | Present Ecological Status of River Satluj in the region of Punjab | 1999 |
| 3. | Dr Kanwal Sajeev | Analytical Studies on Ecosystem of the Ropar Headworks Reservoir | 2003 |
| 4. | Dr. Mubashir Jeelani | Impact of environmental features on two urban lakes of Kashmir | 2005 |
| 5 | Dr. Sapna | Mitochondrial DNA typing for identification of some species of blow flies (Diptera : Calliphoridae) | 2007 |
| 6. | Dr. Vikas Suman | Cytological studies on superfamily Lygaeoidea (Hemiptera :Heteroptera) | 2010 |
| 7. | Ms. Sakshi Jasuja | Evaluation of heavy metal accumulation in some tissues of the edible fish from the river Satluj in Punjab | 2011 |
| 8. | Mr. Bezuayehu Kerisiew | Cytogenetic investigations on some species of the family Pentatomidae (Insecta: Hemiptera:Heteroptera) | 2011 |
| 9. | Ms. Rashmi | Taxonomic studies on Families Coreidae and Lygaeidae (Hemiptera: Heteroptera) from North India supplemented with RAPD markers | 2012 |
| 10. | Ms. Nidhi Bansal | Cytogenetic investigations on some members of family Coreidae (Insecta: Hemiptera:Heteroptera) | 2013 |
| 11. | Ms. Rajdeep Kaur | Cytogenetic investigations on some species of the family Reduviidae (Insecta; Hemiptera: Heteroptera) from North India | 2013 |
| 12. | Ms. Ravneet Kaur | Taxonomic studies on Pentatomidae (Hemiptera: Heteroptera) from North India supplemented with RAPD markers | 2013 |
| 13. | Ms. Harleen Kaur | Studies on the incidence of genetic variations among Panton Valentine Leukocidin genes in clinical isolates of <i>Staphylococcus aureus</i> and antimicrobial effect of some herbal formulations | 2013 |
| 14. | Ms. Jaspreet Kaur | Molecular and cytogenetic studies on some species of family Libellulidae (Insecta: Odonata) | 2016 |
| 15. | Ms. Kalchana | Molecular and cytogenetic studies on some species of superfamily Pyrrhocoroidae (Insecta: Hemiptera:Heteroptera) | 2017 |

| | | | |
|-----|---------------------------------|---|-------------|
| 16. | Ms. Kanu | Molecular and cytogenetic studies on some species of family Pentatomidae (Insecta: Hemiptera:Heteroptera) | 2017 |
| 17. | Ms. Navpreet Kaur Sekhon | Molecular and cytogenetic studies on some species of families Rhopalidae and Alydidae (Insecta: Hemiptera:Heteroptera) | 2019 |
| 18. | Ms. Nisha Patial | Comparative cytological study of meiosis in monocentric and holocentric chromosomes of insects. | 2022 |

18. M. Phil./M.Tech Students guided :

| S. No. | Name of the Student | Title of Thesis | Year of Completion |
|---------------|----------------------------|---|---------------------------|
| 1. | Ms. Ruchika Kumar | Cytochemical and cytogenetical studies on oogenesis of <i>Earias vitella</i> (Fabr.) | 1992 |
| 2. | Ms. Navkiran Kaur | Analytical studies on aquatic ecosystem existing in and around Patiala | 1994 |
| 3 | Ms. Rajdeep kaur | Cytological studies on some species of Reduviidae and Coreidae (Insecta:Hemiptera:Heteroptera) | 2009 |
| 4 | Ms. Jaspreet Kaur | Cytogenetic studies on some Dragonflies of the family Libellulidae(Anisoptera:Odonata) | 2010 |
| 5 | Ms. Nisha Patial | Male reproductive organs and Karyotypes of some species of Heteroptera (Insecta:Hemiptera) and their phylogenetic considerations | 2011 |
| 6 | Mr. Rohit | Genotoxic effects of industrial effluents on Fish | 2012 |

19. List of Papers/Courses taught at P.G. and U.G. Level

| S. No. | Paper | Class |
|---------------|---|------------------------------|
| 1. | Molecular Biology | M. Sc. I Zoology |
| 2. | Genome and Genomics | M. Sc. II Zoology |
| 3. | Human and medical Genetics | M. Sc. II Zoology |
| 4. | Aquatic Environment | M. Sc. I Environment Science |
| 5. | Cell Division, Differentiation and Cellular Interaction | M. Sc. II Zoology |

20. Technical Proficiency

| |
|---|
| 1. Techniques in histological and histochemical studies |
| 2. Techniques in cytogenetical studies of insects |
| 3. Techniques in limnological studies |
| 4. Techniques in molecular studies |

21. Publications:

A. Papers Published

1983

1. Malhotra, R. K. and Kaur, H. (1983). Chemosterilization of red cotton bug using a new pyrimidine compound. **J. Ani. Morph. Phy.** 30 (2): 196-200.

1984

2. Dhillon, S. S., Sandhu, R. and Kaur, H. (1984). Bioassay of three chemosterilants. **The Indian Zoologist** 8 (122): 99-104.
3. Sandhu, R. Kaur, D. J. and Kaur, H. (1984). Biological effects of substituted thiourea compounds in *Dysdercus koenigii*. **Zoologica Orientalis** 1(1) : 43-44.

1985

4. Dhillon, S. S., Sandhu, R. and Kaur, H. (1985). Effects of 1-Phenyl-4,4,6-Trimethyl-1H,4H-Pyrimidine-2-Thiol on the karyotype of *Dysdercus koenigii*. **Biologia** (1): 25-29.

1986

5. Dhillon, S. S., Sandhu, R. and Kaur, H. (1986). Effects of Isobutyl-4,4,6-Trimethyl-1H,4H-Pyrimidine-2-Thiol on the ovarian development of red cotton bug. **J. Sci. Res.** 8 (1):49-56.

1987

6. Kaur, H., Dhillon, S. S. and Sandhu, R. (1987). A newly discovered antifertility agent: 3NTPT. II. Cytogenetic effects on male gonad cells. **Cytobios (UK)** 49 : 169-173.

IF:0.24

7. Kaur, H., Dhillon, S. S. and Sandhu, R. (1987). A newly discovered antifertility agent: 3NTPT. III. Cytopathological and chromosomal alterations in the male gonad cells. **Folia Morphologica (Czech Republic)** 35 (3): 312-315. **IF:0.47**

1988

8. Kaur, H., Dhillon, S. S. and Sandhu, R. (1988). 3NTPT: A newly discovered group of antifertility agent. IV. Tumour like growth in the ovary of *D. koenigii*. **Folia Morphologica (Czech Republic)** 36 (2):248-249. **IF:0.47**
9. Kaur, D, J., Sandhu, R. and Kaur, H. (1988). Histological and cytochemical effects of two substituted thiourea compounds on the fat bodies of red cotton bug, *D. koenigii*. **Folia Morphologica (Czech Republic)** 36 (2): 221-222. **IF:0.47**
10. Kaur, H., Sandhu, R. and Dhillon S. S. (1988). Sex chromosomes of *Dysdercus koenigii* at meiosis I. **Chromosome Information Service (Japan)** 44: 15-16.

1989

11. Sandhu, R., Kaur, H. and Kaur, I. (1989). A study on the chromosomes of *Oxycarenus laetus* Kirby (Hemiptera: Lygaeidae). **Perspectives in Cytology and Genetics** 6: 437-440.
12. Sandhu, R., Kaur, H and Batish S. D. (1989). Effects of 2-Thiouracil on the karyotype of male *D. koenigii*. (Fabr.) Hemiptera:Pyrrhocoridae). **Perspectives in Cytology and Genetics** 6: 441-444.
13. Sandhu, R. and Kaur, H. (1989). Karyological studies on *Myllocerus undecimpunctata* male and cytogenetic effects of 2-Thiopyrimidine on the male gonad cells. **Bionature** 9(2): 53-56.
14. Sandhu, R., Kaur D. J. and Kaur, H. (1989). Histopathological and histochemical effects of N-(P-Anisyl)- Thiourea on the ovaries of *D. koenigii* (Fabr.) (Heteroptera:Pyrrhocoridae). **Research Bulletin** 40 (III &IV): 207-213.
15. Sood, V., Kaur, H. and Sandhu, R. (1989). Effects of Pyrimidine-2-Thiol on the ovarian histology of *Epilachna vigintioctopunctata* (Fabr.)

1990

16. Sandhu, R., Batish, S. D. and Kaur, H. (1989-1990). Cytogenetic effects of 2-Thiouracil on female gonad cells of *D. koenigii*. **Zoologica Orientalis** 6&7: 33-34.
17. Kaur, H., Sandhu, R. and Dhillon, S. S. (1990). Effects of 4,4,6-Trimethyl-1H,4H-Pyrimidine-2-Thiol on the karyotype of *D. koenigii*. **Chromosome Dynamics** 1: 123-126.
18. Kaur, H., Sandhu, R. and Dhillon, S. S. (1990). 3NTPT: A newly discovered antifertility agent. I. Cytogenetic effects on female gonad cells. **Chromosome Information Service (Japan)** 49: 15-16.

1991

19. Kaur, H., Sandhu, R. and Dhillon, S. S. (1991). Effects of TPT on ovariole of red cotton bug. A histopathological and histochemical study. **Annals of Biology** 7 (1): 25-30.

1992

20. Sandhu, R., Kaur, H., Kaur, I. and Kaur, B. (1992). Effects of 2-Mercaptopyrimidine on the bionomics of *Oxycarenus laetus*, a pest of cotton. **Annales of Entomology** 10 (1): 1-4.
21. Kaur, H., Dhillon, S. S. and Sandhu, R. (1992). 3NTPT: A newly discovered antifertility agent: VI. Cytochemical alterations in nucleic acids during vitellogenesis of red cotton bug. **Bionature** 2 (1&2): 57-64.
22. Kaur, H., Sandhu, R. and Dhillon, S. S. (1992). 3NTPT: A newly discovered antifertility agent: V. ovarian dysfunction in *D. koenigii*. **Cytobios (UK)** 69: 75-87. **IF:0.24**

1993

23. Dhillon, S. S., Kaur, H., Bath, K. and Syal, J. (1993). The impact of effluence on the zooplankton population of Beas river. **J. Ecotoxicol. Environ. Monit.** 3(2):117-120.
24. Kaur, H., Dhillon, S. S. and Sandhu, R. (1993). 3NTPT : A newly discovered antifertility agent: VII. Histochemical effects on the vitellogenesis in *D. koenigii*. **J.Ecotoxicol.Environ. Monit.** 3(1): 31-34.

25. Sandhu, R., Kaur, H. and Batish, S. D. (1993). Antifertility effects of 2-Thiouracil in *D. koenigii* (Fabr.). **Annals of Biology** 9(2): 279-284.
26. Kaur, H. and Kumar, R. (1993). Female meiosis in *Earias vitella*. **Bionature** 13(1): 55-58.
27. Kaur, H. and Kumar, R. (1993). Occurrence of two types of cocoons and their relation to sex in *Earias vitella*. **Annales of Entomology** 11(1): 53-54.
28. Dhillon, S. S., Kaur, H. and Bath, K. S. (1993). Zooplankton fauna of Beas river. **Env. & Eco.** 11 (4): 916-919.
29. Kaur, H., Sandhu, R. and Dhillon, S. S. (1993). Substituted Pyrimidine-2-Thiol: A newly discovered group of antifertility agents against red cotton bug. **Indian Journal of Entomology** 55 (3): 396-403.

1994

30. Kaur, H., Dhillon, S. S. and Sandhu, R. (1994). Histopathological effects of 4,4,6-Trimethyl-1H,4H-Pyrimidine-2-Thiol on the testes of *D. koenigii*. **Annals of Entomology** 12(1) : 25-27.
31. Dhillon, S. S., Kaur, H. and Kaur, I. (1994). Primary productivity and Schirmacher food web. **Env. & Eco.** 12(3): 706-709.

1995

32. Dhillon, S. S., Kaur, H. and Kaur, I. (1995). Biotic factors of Schirmacher Ecosystem . **Env. & Eco.** 13(1) : 219-226.
33. Kaur, H., Dhillon, S. S., Bath, K. S. and Kaur, N. (1995). Invertebrate fauna of fresh water bodies existing in and around Patiala. **J. Env. & Poll.** 2(4): 163-167.
34. Sandhu, R., Kaur, H. and Sood V. (1995). Histopathological effects of N-Phenyl Thiourea on the ovaries of *Epilachna vigintioctopunctata* (Fabr.). **Bionature** 15(2): 85-90.
35. Kaur, H., Dhillon, S. S. and Kaur, N. (1995). Physicochemical characteristics of fresh water ecosystem prevailing in and around Patiala. **Env. & Eco.** 13(3): 523-528.

1996

36. Dhillon, S. S. and Kaur, H. (1996). Analytical studies on aquatic ecosystem of Punjab. Final Technical report, Punjabi University, Patiala..

37. Dhillon, S. S., Kaur, H. and Bath, K. S. (1996). Aquatic animal diversity and its conservation in Harike Wetland. **Env. & Eco.** 14(3): 619-623.
38. Dhillon, S. S., Kaur, H., Bath, K. S. and Goldie (1996). Physicochemical and biological characteristics of water bodies infested with water hyacinth. **Some Facets of Biodiversity**. SES & PSCST Publ. Chd. 83-90.
39. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1996). Analysis of elements polluting river Ghaggar in the region of Punjab. **J. Env. & Poll.** 3(2): 65-68.
40. Sandhu, R., Kaur, B. and Kaur, H. (1996). Female reproductive system in *Oxycarenus laetus*. **Bionature** 16(1&2) :1-8.
41. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1996). Abiotic and biotic components of a fresh water pond of Patiala. **Poll. Res.** 15(3): 253-256.
42. Sandhu, R., Kaur, B. and Kaur, H. (1996). Histomorphology of the male reproductive system of the dusky cotton bug, *Oxycarenus laetus* Kirby (Heteroptera, Lygaeidae) with special reference to ejaculatory duct. **Ann. Entomol.** 14(1): 1-7.

1997

43. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1997). A statistical approach to inter-relationship between protozoans and physicochemical factors at Harike reservoir (Punjab-India). **Indian J. Environ. Sci.** 1(1): 47-50.
44. Kaur, H., Sandhu, R and Dhillon, S. S. (1997). Ovarian atrophy: a major consequence of 1-Allyl-4,4,6-Trimethyl-1H,4H-Pyrimidine-2-Thiol treatment to the red cotton bug. **Bionature** 17(1): 25-30.
45. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1997). Inter-relationships between physicochemical factors at Harike wetland. **J. Env. & Poll.** 4(3): 237-240.
46. Bath, K. S., Kaur, H. and Dhillon, S. S. (1997). Crustacean population in relation to physicochemical factors at Harike reservoir. **Env. & Eco.** 15(4) : 954-957.
47. Bath, K. S. and Kaur, H. (1997). Aquatic insects as bioindicators at Harike reservoir in Punjab-India. **Indian J. Environ. Sci.** 2(1): 133-138.

1998

48. Bath, K. S. and Kaur, H. (1998). Seasonal distribution and population dynamics of aquatic insects in Harike reservoir. **J. Ecobiol.** 10(1): 43-46.
49. Bath, K. S., Kaur, H., Jerath, N. and Dhillon, S. S. (1998). Aquatic plant diversity of Harike reservoir. **Env. & Eco.** 16(3): 665-668.
50. Bath, K. S., Kaur, H. and Dhillon, S. S. (1998). Seasonal distribution and population dynamics of rotifers in Harike reservoir. **J. Env. & Poll.** 5(4): 249-252.

1999

51. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1999). Aquatic invertebrate diversity of Kanjli lake. **Indian J. Environ. & Ecoplan.** 2(1): 37-41.
52. Dhillon, S. S., Kaur, H. and Bath, K. S. (1999). Correlation of rotifers with physicochemical factors at Harike reservoir. In. **Fresh Water Ecosystem of India.** Daya Publ. House., New Delhi. 187-192.
53. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1999). Zooplankton fauna as indicator of pollution in Buddha Nallah. **Poll. Res.** 2.
54. Kaur, H., Dhillon, S. S., Bath, K. S. and Mander, G. (1999). Physicochemical characteristics of water of Buddha Nallah. **Indian J. Environ Sci.** 3(1) : 27-30.
55. Bath, K. S., Kaur, H. and Dhillon, S. S. (1999). Correlation of molluscs with physicochemical factors at Harike reservoir. **Indian J. Environ Sci.** 3(2) : 159-163.

2000

56. Kaur, H., Bath, K. S. and Dhillon, S. S. (2000). Present ecological status of Harike reservoir- Causes of concern and management strategies. In. **Industry, Environment & Pollution** 186-199.

2001

57. Kaur, H., Syal, J. and Dhillon, S. S. (2001). Water quality index of the river Satluj. **Poll. Res.** 20(2): 199-204.
58. Kaur, H., Jerath, N., Sajeev, K. and Bath, K. S. (2001). Aquatic plant diversity of Ropar Wetland. **Indian J. Environ. Sci.** 6(1): 23-26.

2002

59. Kaur, H., Syal, J. and Dhillon, S. S. (2002). Study of bioindicators in Satluj river in the region Punjab. In. **Eco-degradation, Biodiversity and Health**. Daya Publ. House. 244-250.
60. Kaur, H., Syal, J. and Dhillon, S. S. (2002). Distribution of phytoplanktons in the river Satluj. In. **Ecology and conservation of lakes, reservoirs and rivers**. ABD Publ. Jaipur.
61. Kaur, H., Syal, J. and Dhillon, S. S. (2002). Impact of fertilizer factory wastes on physicochemical features of Satluj river. In. **Ecology of polluted waters (2)**. APH Publ. Cor.: 681-692.

2004

62. Jeelani, M., Kaur, H. and Sarwar, S. G. (2004). Population dynamics of rotifers in the Anchar lake, Kashmir (India). **Indian J. Environ. and Ecoplan.** 8(2): 315-318.
63. Kaur, H. (2004). Effect of distillery wastes on Chironomus larvae (Diptera: Chironomidae). **National J. Life Sciences** 1(1): 157-160.

2005

64. Jeelani, M., Kaur, H. and Sarwar, S. G. (2005). Distribution of rotifers in the Dal lake, Kashmir, India. **Poll. Res.** 24(1): 79-82.
65. Jeelani, M., Kaur, H. and Sarwar, S. G. (2005). Distribution and ecology of phytoplankton in the Dal lake, Kashmir (India). In. **Ecology of Planktons**. Daya Publ. House. pp 41-54

2006

66. Kaur, H., Shina Chhabra, Vikas Suman and Manisha Gupta (2006). Chromosomes and their meiotic behavior in two families of sub-order Heteroptera. **Cytologia (Japan)** 71(2): 111-118 **IF: 0.913**
67. Jeelani, M., Kaur, H. and Sarwar, S. G. (2006). Distribution and ecology of zoobenthos in the Anchar lake of Kashmir. **Indian J. Environ. and Ecoplan.** 12(3): 585-590.

2007

68. Jeelani, M., Kaur, H. and Sarwar, S. G. (2007). Studies on the ecology of crustaceans in the Dal lake of Kashmir. **Poll. Res.** 26 (2). 107-112.

69. Kaur, H., Suman V. and Sapna (2007). Silver staining analysis of nucleolar organizer activity in *Coccinella septempunctata* Linn. and *C. transversalis* Fabr. (Coleoptera: Coccinellidae: Coccinellinae). **J. Cytol. Genet.** 8: 13-16.

2008

70. Jeelani, M., Kaur, H. and Kumar, R. (2008). Impact of climate warming on the biodiversity of freshwater ecosystem of Kashmir, India. Proc. Taal. 2007. World Lake Conference: 1103-1109.
71. Kaur, H., Sayal, J. Jasuja, S and Dhillon, S.S. (2008) Distribution of insects in relation to pollution in the Satluj river (Punjab-India). In. **Ecobiology of Aquatic Insects** (2008) Ed. A. Kumar and H. Kaur. Daya Publ. House. pp 100-106.
72. Kaur, H; Sajeev, K; Jasuja, S. and Dhillon, S.S. (2008). Insect fauna of Ropar reservoir (Punjab: India). In. **Ecobiology of Aquatic Insects** (2008) Ed. A. Kumar and H. Kaur. Daya Publ. House. pp 91-99.

2009

73. Kaur, H. and Suman, V. (2009). Chromosomes and their meiotic behaviour in two species of *Dieuches* Dorn 1860 (Heteroptera, Lygaeidae, Rhyparochrominae). **Comparative Cytogenetics (Russia)** 3 (1): 43-50.

IF:1.21

74. Kaur, H., Kaur, R. and Suman, V. (2009). Chromosomes and their meiotic behavior in two species of Stenopodainae (Heteroptera: Reduviidae). **Cytologia (Japan)** 74 (2): 147-152.

IF: 0.913

2010

75. Kaur, H., Suman, V. and Kaur, R. (2010). A first report on C- banding and Fluorescent banding in species of *Dieuches* (Rhyparochrominae: Lygaeidae: Heteroptera). **Entomological Research (Korea)** 40: 1-7.

IF:0.33

76. Kaur, H. and Semahagn, B.K. (2010). Meiosis in three species of Heteroptera from Ethiopia (East Africa). **Cytologia (Japan)** 75 (2): 141-147.

IF: 0.913

77. Kaur, H. and Semahagn, B.K. (2010). Meiosis in three predator species of the family Pentatomidae (Insecta: Heteroptera). **Comparative Cytogenetics (Russia)** 4 (2): 133-139. **IF:1.21**
78. Kaur, H., Jasuja, S and Bhatia, A. (2010). Metal concentration in tissues of *Labeo rohita* (Ham.) caught from river Satluj (Punjab: India). **Journal of Haematology and Ecotoxicology** 5(2): 9-19.
79. Kaur, H. and Singh, D. (2010). Cytological and morphotaxonomic studies on terrestrial Heteropteran fauna (Insecta: Hemiptera: Heteroptera) of Punjab, India. Final Project Report. DST, New Delhi. pp.152
80. Walia, G.K., Kaur, H. and Kaur, J. (2010). Cytogenetical studies on five species of the family Libellulidae (Anisoptera: Odonata). **Hislopia** 3(2): 111-119.
81. Kaur, R., Singh, D., Kaur, H. and Gupta, R. (2010). Family Lygaeidae (Schilling, 1829)(Hemiptera:Heteroptera) of North India: A survey report. **Journal Punjab Academy of Sciences** 6-7 (1&2): 49-51.
82. Gupta, R., Singh, D., Kaur, H. and Kaur, R. (2010). Pentatomidae (Hemiptera:Heteroptera) fauna from Northern India: An exhaustive survey. **Journal Punjab Academy of Sciences** 6-7 (1&2): 65-69.

2011

83. Walia, G. K., Kaur, H. and Kaur, J. (2011). Karyotypic variations in the chromosome complement of *Pantala flavescens* Fabr. of the family Libellulidae (Anisoptera: Odonata). **Cytologia (Japan)** 76 (3): 301-307.
84. Kaur, H., Jasuja, S. and Bhatia, A. (2011). Assessment of metal pollution in surface water of the river Satluj in Punjab, India. **Indian Journal of Environmental Sciences** 15(2): 135-138.
85. Sajeev, K., Kaur, H. and Dhillon, S.S. (2011). Annelid and molluscan fauna of Ropar Headworks Reservoir, Ropar (Punjab). **National Journal of Life Sciences** 8(2):143-144.

2012

86. Kaur, H. and Bansal, N. (2012). First cytogenetic report on seven species of Coreidae (Heteroptera) with a bibliographic review of chromosomal data. **Journal of Biological Research, Thessaloniki (Greece)** 18: 235 – 248. **IF: 0.71**

87. Kaur, H. Singh, D. and Suman, V. (2012). Faunal Diversity of Terrestrial Heteroptera (Insecta: Hemiptera) of Punjab, India. **Journal of Entomological Research** 36 (2): 177-181.
88. Kaur, H., Kaur, R. and Patial, N. (2012). Studies on internal male reproductive organs and course of meiosis in a predator species *Repipta taurus* (Fabricius,1803) (Heteroptera:Reduviidae:Harpactorinae). **Journal of Entomological Research** 36 (3): 247-250.
89. Suman, V. and Kaur, H. (2012). Meiotic studies in seven Heteropteran species. **Cytologia (Japan)** 77 (3): 311–322. **IF: 0.913**
90. Kaur, H. and Patial, N. (2012). Internal male reproductive organs of ten species of Heteroptera (Insecta: Hemiptera)'. **Indian Journal of Fundamental and Applied Life Sciences** 2 (1): 317-324 (Online) 2012/02/01/017).
91. Jeelani, M. and Kaur, H. (2012). Ecological understanding of Anchar Lake 2012. **Bionano Frontier, spl. Issue, 2nd World Congress for Man & Nature**, 3-5 Nov. 2012
92. Kaur, H. and Bansal, N. (2012). Meiotic Behavior of Chromosomes in Two Species of Coreinae (Coreidae: Heteroptera). **Cytologia (Japan)**, 77 (3) : 373–379. **IF: 0.913**
93. Kaur, H., Kaur R. and Suman, V. (2012). C- heterochromatin and its base composition in holokinetic chromosomes of two species of Heteroptera (Insecta: Hemiptera). **Nucleus** 55 (3): 163-166.
94. Kaur, H., Purwar, S., Saini, A., Kaur H., Karadesai, S. G., Sanjiva D Kholkute and Roy, S. (2012). Status of Methicillin Resistant *Staphylococcus aureus* infections and evaluation of PVL producing strains in Belgaum, South India. **Journal of Krishna Institute of Medical Sciences University** 1 (2): 43-51.
95. Kaur, H, Saini, A., Purwar, S., Kaur H, Karadesai, S.G., Sanjiva D Kholkute and Roy, S. (2012). Susceptibility testing and resistance phenotypic detection in *Staphylococcus aureus* by conventional and molecular methods: importance of automated (vitek 2 compact) system'. **International Journal of Engineering Research and Development** 3 (10): 68-74.

96. Suman V., Kaur, H, Singh, D. and Kaur, R. (2012). Species-specific sex chromosome behaviour and banding patterns in three Largid species (Heteroptera). *Chromosome Science (Japan)* 15: 31-37.
97. Walia G. K, Handa, D., Kaur, H. and Kalotra, R. (2012). Behavioral and morphological changes in a freshwater fish, *Labeo rohita* exposed to tannery industry effluent. *International Journal of Scientific Research* 2(8):514-516

2013

98. Kaur, R., Singh, D. and Kaur, H. (2013). Taxonomic significance of external genitalia in differentiating four species of genus *Carbula* stal (Heteroptera:Pentatomidae) from North India. *Journal of Entomology and Zoology Studies* 1(3): 1-11.
99. Kaur, R., Singh, D. and Kaur, H. (2013). New records of Pentatomidae bugs (Heteroptera) from North India. *Bionotes* 15(2): 47-48.
100. Kaur, R. and Kaur, H. (2013). Chromosomes and their meiotic behavior in twelve species of the subfamily Harpactorinae (Hemiptera: Heteroptera: Reduviidae) from north India. *Zootaxa (USA)* 3694 (4): 358–366. **IF: 1.06**
101. Kaur, H., Kalotra, R., Walia, G. K. and Handa, D. (2013). Genotoxic effects of dyeing industry effluent on a freshwater fish, *Cirrhinus mrigala* by chromosomal aberration test. *International journal of pharmacy and biological Sciences (IJPBS)* 3(1): 423-431. **IF: 0.67**
102. Walia G. K, Handa, D., Kaur, H. and Kalotra, R. (2013). Erythrocyte abnormalities in a freshwater fish, *labeo rohita* exposed to tannery industry effluent . *International journal of pharmacy and biological Sciences (IJPBS)* 3(1): 287-295. **IF: 0.67**
103. Walia G. K, Handa, D., Kaur, H. and Kalotra, R. (2013). Evaluation of genotoxic potential of tannery industry effluent in a fresh water fish *Labeo rohita* via chromosomal aberration test. *Indian Journal of Applied Research* 3(12): 557-559. **IF: 0.8215**
104. Kaur, H., Kalotra, R., Walia, G. K. and Handa, D. (2013). Dyeing industry effluent induced behavioral and morphological changes in the

- fish, *cirrhinus mrigal*. **International Journal of Zoology and Research (IJZR) 3 (3): 13-20. IF: 1.9758**
105. Suman, V. and Kaur, H. (2013). First report on C-banding, fluorochrome staining and NOR location in holocentric chromosomes of *Elasmolomus (Aphanus) sordidus* Fabricius, 1787 (Heteroptera, Rhyparochromidae). **ZooKeys (USA) 319: 283–291 (2013) doi: 10.3897/zookeys.319.4265. IF: 0.92**
106. Bansal, N. and Kaur, H. (2013) Karyological and meiotic studies in seven species of Coreinae (Hemiptera: Heteroptera: Coreidae) from North India. **Zootaxa(USA) 3641 (5): 577–586. IF: 1.06**
107. Kaur, H., Kalotra, R., Walia, G. K. and Handa, D. (2013). Studies on induction of erythrocyte abnormalities in *Cirrhinus mrigala* exposed to dyeing industry effluent. **International Journal of Pharmacy and Bio Sciences 4(4): (B) 414 – 420. IF: 0.67**
108. Gupta, R., Singh, D. Kaur, H. (2013). New records of some heteropteran bugs from North India. **Bionotes 15(3): 80-81.**
109. Kaur, H., Kalotra, R., Walia, G. K. and Handa, D. (2013). Genotoxicity in a freshwater fish, *Cirrhinus Mrigala* exposed to dyeing industry effluent by using Micronucleus Test. **International Journal of Recent Scientific Research, 4(8): 1210- 1213. IF: 3.908**
110. Kaur, R. and Kaur,H. (2013) Cytogenetical Studies of Four Species in Subfamily Peiratinae from North India (Heteroptera: Reduviidae). **Cytologia (Japan) 78 (4): 1–5. DOI: 10.1508/cytologia.78.1 IF: 0.913**
111. Walia G. K, Handa, D., Kaur, H. and Kalotra, R. (2013). Behavioral and morphological changes in a freshwater fish, *Labeo rohita* exposed to tannery industry effluent. **-International journal of scientific research 2(8):514-516. IF: 0.3371**
112. Kaur, H., Suman, V., Semahagn, B. K., Bansal, N. and Kaur, R. (2013). Chromosome complements of forty four species of Heteroptera from North India. **Biojournal 8(1) : 35-43.**

2014

113. Jeelani, M. and Kaur, H. (2014). Comparative Studies on Zooplankton in Dal Lake, Kashmir, India. **Journal of Academia and Industrial Research (JAIR)** 2 (9): 534-537
114. Kaur, H. and Kaur, H. (2014). Clindamycin Resistance in PVL Positive Isolates of *Staphylococcus aureus*, Belgaum, North Karnataka (India). **IOSR Journal of Engineering** 4(3): 31-37.

2015

115. Walia,G.K., Kaur, H. and Kaur, J. (2015). Karyomorphological variations in the chromosome complement of *Orthetrum taeniolatum* of family Libellulidae (Odonata: Anisoptera). **Cytologia (Japan)** 80 (1): 95-99.
IF: 0.913
116. Kaur, H. and Sharma, K. (2015). First report on meiotic behavior of chromosomes in three species of subfamily Pentatominae (Pentatomidae: Heteroptera). **Zootaxa (USA)** 3920 (2): 393-400 .
IF:1.06
117. Kaur, H. and Gaba, K. (2015). First report on Triplicity of X Chromosome and Population Variations in Frequency of Ring Bivalents in Pyrrhocoridae (Heteroptera:Hemiptera). **European Journal of Entomology (Czech Republic)** 112(3): 419–425. **IF: 1.076**
118. Walia, G.K.,Handa, D., Kaur, H. and Rohit Kalotra (2015). Ecotoxicological studies on fish, *Labeo rohita* exposed to tannery industry effluent by using micronucleus test. **Nucleus** 58(2): 111–116. DOI 10.1007/s13237-015-0140-5
119. Kaur, H., Sajeev, K. and Jasuja, S. (2015). Role of Aquatic Insects in Nutrient Flow in the Ropar Headworks Reservoir Ecosystem, Punjab, India. **Biojournal** 10(1): 88 - 91
120. Kaur, H. (2015) Impact of Environmental Stress on Insect Fauna of Polluted Fresh Water Bodies. **Biojournal** 10(1): 5 – 12
121. Gupta, R., Singh, D. and Kaur, H. (2015). Male Genitalia of five species of *Cletus* Stal (Hemiptera: Coreidae) from India. **Indian Journal of Entomology** 77(2):101. DOI: 10.5958/0974-8172.2015.00022.X

122. Bansal N. and Kaur H. (2015). C-heterochromatin distribution and its base composition in four species of Mictini (Heteroptera, Coreidae, Coreinae). **Cytologia (Japan) 80 (4): 405-413.** **IF: 0.913**

2016

123. Kaur, H. and Sharma, K. (2016): COI-based DNA barcoding of some species of Pentatomidae from North India (Hemiptera: Heteroptera). **Mitochondrial DNA Part A (USA), DOI: 10.1080/24701394.2016.1180513.** **IF: 1.709**
124. Kaur, H. and Patial, N. (2016). Internal Male Reproductive Organs In Five Species of Heteroptera (Insecta: Hemiptera). **Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231– 6345 (Online) 6 (3): 30-35.**
125. Kaur, R., Singh, D. and Kaur, H. (2016). Studies on Indian species of *Sciocoris* Fallen (Heteroptera: Pentatomidae). **International Journal of Entomology Research 1(7): 54-56.** ISSN: 2455-4758

2017

126. Kaur, H. and Sekhon, N. K. (2017). DNA Barcoding of six species of Family Rhopalidae (Insecta: Hemiptera: Heteroptera) from India. **International Journal of Life Sciences 5(4): 517-526 ISSN: 2320-7817| eISSN: 2320-964X**
127. Kaur, H. and Patial, N. (2017). Male meiotic behaviour and linear characterization of holocentric chromosomes of two species of Acanthosomatidae (Hemiptera : Heteroptera). **International Journal of Entomology Research 2(6): 102-107 ISSN: 2455-4758**
128. Kaur, H. and Sekhon, N. K. (2017). First cytogenetic report on *Leptocoris abdominalis blotei* Gross, 1960 (Heteroptera :Rhopalidae : Serinethinae). **Journal Punjab Academy of Sciences, 16-17 (1&2): 30-33.**
129. Kaur, R., Singh, D. and Kaur, H. (2017). Morphotaxonomy and external genitalia of three species of genus *Tolumnia* Stål (Heteroptera: Pentatomidae) from North India. **Journal of Entomology and Zoology Studies 5(1):1-6**

2018

130. Kaur, H. and Gaba, K. (2018). Cytogenetic Characterization of three species of *Antilochus* (Hemiptera : Heteroptera : Pyrrhocoridae). **Nucleus** 61(1):75-81. DOI: 10.1007/s13237-018-0228-9.
131. M. Jeelani, H. Kaur, Syeed Mudasir, Behjat Huma, Afeefa Qayoom Sheikh, S. G. Sarwar (2018). Use of protozoa as biological indicators of water quality and pollution. **International Journal of Advance Research in Science and Engineering** 7(4): 2021-2030.
132. Kaur, H. and Jasuja, S. (2018). Heavy metal pollution and anthropogenic contribution towards metal enrichment of the Satluj river sediment in Punjab (India). **Biojournal** 13(1): 11-23.

B. Articles in Punjabi: Published 6 Articles in Punjabi Language:

1. Harbhajan Kaur (April, 1989). Jeevan wich Sikhyak Vihar. **Vigyan de Naksh**. Pbi. Univ. Patiala.
2. Harbhajan Kaur (Sep., 1996). Geena de jor tor raahi roga da ilaj. **Jyot**, PSCST, Chandigarh.
3. Harbhajan Kaur (March, 1997). Roga naal larde hoe Interferons . **Jyot**, PSCST, Chandigarh.
4. Harbhajan Kaur (June, 1997). Cancer da kaaran bande ansh. **Jyot**, PSCST, Chandigarh.
5. Harbhajan Kaur (1999). Samgotri viyah da genetic pakh. **Nirantar Soch**, PSCST, Chandigarh.
6. Harbhajan Kaur and Ishwinder Kaur (2000). DNA finger printing. **Nirantar Soch**, PSCST, Chandigarh.
7. Harbhajan Kaur (2007) Rasainic Aphalta nal Hanikarak kerian di roktham. **Vigyan de Naksh** 43 .

C. Books/monographs:

1. Ecobiology of Aquatic Insects (2008) Ed. A. Kumar & H. Kaur, Daya Publ. House. New Delhi.

July, 2022