

Bio-data Prof. V. K. Singhal

1. Name	: Dr. V.K. SINGHAL
2. Designation	: PROFESSOR (Re-employed)
3. Department	: BOTANY
4. Date of Birth	: 24.3.1953
5. Address for Correspondence	: Department of Botany, Punjabi University, Patiala - 147 002 Phones : 0175-2206611 Mobile : 91-98726-46611 Fax : 91-175-304-6265. E-mail : vksinghal53@gmail.com



6 Areas of Specialisation : I. Plant Systematics II. Cytogenetics III. Forestry

7. Academic Qualifications:

Sr. no.	Degree Held	Year	Board/Univ./Inst.	% of marks	Div./Rank	Subjects Taken
1	Matric	1969	Pb. Univ. Chd.	59.1	II	Eng., Hindi, Pbi., SST., Maths, Science
2	B.Sc. (Med.)	1973	Pb. Univ. Chd.	64.8	I	Botany, Zoology, Chemistry, G.Ed. (Opt.)
3	M.Sc. (Botany)	1976	Pbi. Univ. Patiala.	66.1	I	Botany
4	Ph.D.	1983	Pbi. Univ. Patiala.			Cytogenetics of forest tree species

8. Membership of Professional Bodies/Organisations

- i) State Expert Appraisal Committee on Environment (Punjab), GOI, New Delhi
- ii) Councillor, North Zone Jour. *Tree Sci.*
- iii) Life Member, I.S.T.S., I.S.C.G., Punjab Academy Sciences.
- iv) Chairman Board of Studies in Agriculture Punjabi University, Patiala

Reviewer: a) *Journal of Medicinal Plant Research*

- b) *International Journal of Genetics and Molecular Biology*
- c) *African Journal of Plant Sciences*
- d) *Caryologia*
- e) *Turkish Journal of Biology*
- f) *African Journal of Biotechnology*
- g) *Research Journal of Punjab University Chandigarh*
- h) *Journal of Plant Studies*
- i) *Proceedings of National Academy of Sciences Biological Sciences*
- j) *National Academy Sciences Letters*
- K) *Indian Journal of Natural Products and Resources*
- l) *Protoplasma*
- m) *Plant Systematics and Evolution*

9. Scholarships and Awards:

- i) UGC Project fellowship
 - ii) WADA memorial award, 2013 by International Society of Cytologists, Japan Mendal Society, Japan

10. Details of Experience:

S. No.	Name of the Inst./Employer	Position Held	Duration	Major Job Responsibilities and Nature of Experience
1.	Pbi. Univ. Patiala.	Curator, H. & M.	Two & Half yrs.	Incharge Herbarium & Museum, Teaching M.Sc. & M. Phil.
2.	Pbi. Univ. Patiala.	Lecturer	13 yrs	Incharge Herbarium & Museum, Teaching M.Sc. & M. Phil.
3.	Pbi. Univ. Patiala.	Reader	8 yrs.	Incharge Herbarium & Museum, Teaching M.Sc. & M. Phil.
4.	Pbi. Univ. Patiala.	Professor	23.12.05 to till date	Teaching M.Sc. & M. Phil., Ph.D course work

11. Published/communicated Work:

- a. Research Papers i) National = 33
 ii) International = 94
 Total = 127

b. Conference/Seminar Presentation : **85**

- c. Books
i) Original :
ii) Edited : **Three**

Citation Indices	All	Since 2010
Citations	1028	780
h-index	18	18
i10- index	31	23
RG- Score	25.18	-

13. R & D Projects

- i) Cytogenetics of Hardwoods from the forests of Chamba and Kullu Hills of H.P. UGC
 - iii) Status of moth component in the Biodiversity of Himalayan Ecosystem. MOEF, GOI, New Delhi
 - iv) DRS-SAP Phase-I, UGC
 - v) DRS-SAP Phase-II, UGC
 - vi) DRS-ASSIST – UGC

14. Invited Talks/Articles

- i) Refresher Course on 'Recent Advances in Botany', Pbi. Univ., Patiala.
- ii) Advances in Biology, Pbi. Univ., Patiala
- iii) Summer School in Agroforestry for integrated Land use, PAU, Ludhiana.
- iv) Two articles (see article no. 84 & 100 in the publication list)
- v) Orientation Course, ASC, Patiala, 2014
- vi) Summer School, ASC, Patiala, 2015
- vii) Workshop on Research Methodology, ASC, Patiala, 2015

15. Post doctoral student/s guided/under guidance

Dr. Puneet Kumar (UGC-Dr. D.S. Kothari Post Doctoral Fellow, 2011- 2014)

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

S. No.	Name of the Student	Title of Thesis	Year of Completion
1.	Rajni Sharma	Exploration and Evaluation of Germplasm in <i>Morus alba</i> L. (Moraceae). A tree of Social Forestry	1992
2.	Atula Salwan	Reproductive Biology and Germplasm evaluation in N.W. Indian <i>Aegle marmelos</i> (Linn.) Correa. (Rutaceae)	1998
3.	Maninder Kaur	Reproductive Biology and Germplasm evaluation of 'Neem' (<i>Azadirachta indica</i> A. Juss.) from Punjab and adjoining area.	1998
4.	Amandeep Kaur	Study of Reproductive Biology and diversity of <i>Acacia nilotica</i> (Linn.) Willd. Ex Del. From North-West India.	2002
5.	Harneet Kaur	Study of pollination mechanism in some leguminous trees of Punjab	2002
6.	Puneet Kumar	Exploration of cytomorphological diversity in the members of Polypetalae from Lahaul - Spiti and adjoining areas.	2011
7.	Jaspreet Kaur	Exploration of cytomorphological diversity in woody species from Shiwalik Hills of North West India.	2012
8.	Dalvir Kaur	Cytomorphological diversity in the dicotyledonous plants of Kinnaur District (H.P.).	2012
9.	Pawan Kumar	Cytomorphological diversity in the dicotyledonous plants from Pangi valley and adjoining areas of District Chamba (H.P.).	Submitted (2015)
10.	Maninder Kaur	Cytomorphological studies in the dicotyledonous plants from the Solang Valley and its adjoining	Registered (2010)

areas of Kullu District (H.P.).

11.	Rohit Kumar	Exploration of cytomorphological diversity in the members of Polypetalae from Uttarkashi district of Uttarakhand	Registered (2012)
12.	Vandna Kumari	Exploration of cytomorphological diversity in the Grasses from Kullu district (Himachal Pradesh)	Registered (2013)
13.	Jaswant Singh	Exploration of cytomorphological diversity in Grasses from Uttarkashi district (Uttarakhand)	Registered (2015)
14.	Nissar Ahmad	Evaluation of cytomorphological diversity in plants of Polypetalae from Ladakh Division (Jammu & Kashmir)	Registered (2015)
15.	Younas Rasheed	Cytomorphological diversity in plants of Gamopetalae and Monochlamydeae from Ladakh Division (Jammu & Kashmir)	Registered (2015)

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

S. No.	Name of the Student	Title of Thesis	Year of Completion
1.	Tejinder Kaur	Biosystematics of <i>Morus alba</i> Linn. I. Morphology, reproductive biology and proteins.	1987
2.	Kirandeep Kaur	Biosystematics of <i>Murraya koenigii</i> (Linn.) Spreng. and <i>M. paniculata</i> (Linn.) Jack. Morphology, Reproductive biology and proteins.	1989
3.	Simran Sidhu	Biosystematics of <i>Punica granatum</i> Linn. Reproductive biology and proteins	1990
4.	Raminderpreet Kaur	Reproductive Biology of <i>Erythrina</i> Linn.	1993
5.	Niti	Exploration of cytomorphological diversity in the woody ornamentals.	2006
6.	Sukhjinder Kaur	Cytomorphological studies in the some flowering plants of Kinnaur District (H.P.).	2009
7.	Shubhpreet Kaur	Cytomorphological investigations in the plants of Polypetalae from Dalhousie hills and its adjoining (H.P.).	2010
8.	Ramandeep Kaur	Cytomorphological studies in some Dicots of Manali hills.	2011
9.	Puja Garg	Cytomorphological investigation in some dicotyledonous plants of Mandi District (Himachal Pradesh)	2012
10.	Vandna	Exploration of cytomorphological diversity in the Grasses of Parvati Valley in Kullu district (Himachal Pradesh)	2013

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

S. No.	Paper	Class
1.	Taxonomy of Angiosperms	M.Sc.-I & M.Sc. (Hons.)-II
2.	Plant Resource Utilization	M.Sc.-II
3.	Plant Cytogenetics	M.Sc.-I
4.	Genetics and Plant Breeding	M.Sc.-II
5.	Biodiversity and Environment	M.Sc. (Hons.)-III
6.	Advances in Botany	M. Phil & Ph.D. (CW)

19. Technical Proficiency

For the last 37 years, I am engaged in research pertaining to cytogenetics and systematics of Angiosperms. I have published 122 research papers on taxonomy, forest vegetation and cytomorphological diversity. I have guided 9 Ph.D. and 10 M.Phil. students. Six students are pursuing for their Ph.D. degree mainly on the cyto-morphological diversity, and germplasm evaluation of Grasses and Dicots.

20. Publications

LIST OF PUBLICATIONS

BOOKS

1. N.S. Atri, R.C. Gupta, M.I.S. Saggo and **V.K. Singhal** (Eds.). 2009. *Germplasm Diversity and Evaluation – Angiosperms*. Bishen Singh & Mahendra Pal Singh, Dehra Dun.
2. N.S. Atri, R.C. Gupta, M.I.S. Saggo and **V.K. Singhal** (Eds.). 2009. *Germplasm Diversity and Evaluation – Algae, Fungi and Lichens*. Bishen Singh & Mahendra Pal Singh, Dehra Dun.
3. N.S. Atri, R.C. Gupta, M.I.S. Saggo and **V.K. Singhal** (Eds.). 2012. *Biodiversity Evaluation- Botanical Perspective*. Bishen Singh & Mahendra Pal Singh, Dehra Dun.

PAPERS

1. Gill. B. S., Bir, S. S. and **Singhal, V.K.** 1979 In IOPB Chromosome number reports LXIV - *Taxon* **28**: 391-408. (**IF=2.7**)
2. Gill. B. S., Bir, S. S. and **Singhal, V.K.** 1979 In IOPB Chromosome number reports LXIV - *Taxon* **28**: 627-637. (**IF=2.7**)
3. Gill. B. S., Bir, S. S., **Singhal, V.K.** and Bedi, Y. S. 1980 Cytological studies in some grasses from Pachmarhi forests (Central India). *J. Cytol. Genet.* **15**: 51-57.
4. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1980 In IOPB Chromosome number reports LXIX - *Taxon* **29**: 347-367. (**IF=2.7**)

5. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1980 In Chromosome number reports LXIX - *Taxon* **29**: 703-730. (IF=2.7)
6. Gill, B. S., Bir, S. S. and **Singhal, V.K.** 1981 In Chromosome number reports LXXI *Taxon* **30**: 508-519. (IF=2.7)
7. Gill, B. S., Bir, S. S. and **Singhal, V.K.** 1981 Cytological studies in north Indian Pomegranate (*Punica granatum* Linn.) *J. Cytol. Genet.* **16**: 35-45.
8. Gill, B. S., **Singhal, V.K.**, Bedi, Y. S. and Bir, S. S. 1981 Accessory chromosomes in woody taxa. In P. K. Khosla (Ed.) *Advances in Forest Genetics* Ambica Publishers, New Delhi, pp. 157-166.
9. **Singhal, V.K.** and Gill, B. S. 1981 Structural heterozygosity in *Citrus jambhiri* Lush. (Rutaceae). *Cell Chromosome News Letter* **4**: 58-60.
10. Gill, B. S., Bir, S. S. and **Singhal, V.K.** 1982 Cytological studies in some western Himalayan woody species II. Polypetalae. In G. S. Paliwal (Ed.) *The Vegetational Wealth of Himalayas*. Puja Publishers, New Delhi, pp 497-515.
11. Gill, B. S., Bir, S. S. and **Singhal, V.K.** 1982 Cytogenetics of some timber species of *Teminalia* Linn. (Combretaceae). *Indian Nat. Sci. Acad.* **48B**: 779-790.
12. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1982 Cytology of some Indian species of *Grewia* Linn. (Tiliaceae). *J. Tree Sci.* **1**: 88-97.
13. Bir, S. S., Gill, B. S., Bedi, Y. S. and **Singhal, V.K.** 1982 Evolutionary status of the woody taxa of Garhwal Himalayas. In P. K. Khosla (Ed.) *Improvement of Forest Biomass* ISTS Publishers, Solan, pp. 81-98.
14. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1983 Natural triploidy in *Eugenia uniflora* Linn. *Sci. Cult.* **49**: 132-133.
15. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1983 Cytopalynology of some members of Rutaceae. *Proc. Ind. Acad. Sci.* **92**: 381-385.
16. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1983 Cytology of some species of Flacourtiaceae. *J. Cytol. Genet.* **18**: 20-25.
17. Gill, B. S., Bir, S. S., Sidhu, M. S. and **Singhal, V.K.** 1984 In Chromosome number reports. *Taxon* **33**: 536-539. (IF=2.7)
18. **Singhal, V.K.** and Gill, B. S. 1984 Cytology of *Buchanania lanzae* Spreng. *J. Tree Sci.* **3**: 126-127.
19. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1985 Cytological studies in some members of Malpighiaceae. *Cytologia* **50**: 1-8. (IF=0.31)
20. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1985 Intraspecific polyploidy in *Annona squamosa* Linn. *Sci. Cult.* **51**: 100-101.
21. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1985 Cytology of woody species. *Proc. Ind. Acad. Sci.* **94**: 607-618.
22. **Singhal, V.K.**, Gill, B. S. and Bir, S. S. 1985 Cytopalynological studies in some woody species (Polypetalae) II. *J. Palynol.* **21**: 56-67.
23. **Singhal, V.K.** and Gill, B. S. 1985 In SOCGI Plant Chromosome number reports II. *J. Cytol. Genet.* **19**: 111-117.

24. **Singhal, V.K.** and Gill, B. S. 1985 Cytomixis in some woody species. *Biologica* **2**: 168-175.
25. **Singhal, V.K.** and Gill, B. S. 1987 Cytological Studies of woody members of Sterculiaceae. *J. Cytol. Genet.* **22**: 96-101.
26. Bir, S. S., Bedi, Y. S., Gill, B.S. and **Singhal, V.K.** 1987 Forest vegetational characteristics of the Garhwal Himalayas. *Bull. Bot. Surv. India* **29**: 292-318.
27. **Singhal, V.K.** and Sharma, M. 1988. *Oenothera laciniata* Hill from India. *Indian J. Bot.* **11**: 195-197.
28. Sharma, M., **Singhal, V.K.** and Kaur, P. 1988 *Geranium carolinianum* Linn. - An addition to the Indian Flora from Patiala district, Punjab. *J. Bombay Nat. Hist. Soc.* **85**: 247-250.
29. Gill, B. S., **Singhal, V.K.** and Kaur, A. 1989 Genetic variability in trees of social forestry I. *Eugenia jambolana* Lamk. In M. L. Trivedi, B. S. Gill and S. S. Saini (Eds.) *Aspects of Plant Sciences XI*. Today & Tomorrow's Publishers, New Delhi, pp. 279-284.
30. **Singhal, V.K.** and Kaur, K. 1989. Reproductive biology of *Murraya paniculata* (L.) Jack. In Trivedi, M. L., Gill, B. S. and Saini, S. S. (Eds.) *Aspects of Plant Sciences XI*. Today & Tomorrow's Publishers, New Delhi, pp. 447-458.
31. Gupta, R. C. and **Singhal, V.K.** 1989 Induced autotetraploidy in *Coreopsis maritima* Hook. *J. Cytol. Genet.* **24**: 167-168.
32. **Singhal, V.K.** and Gill, B. S. 1989 Cytological evolution in the woody taxa of Polypetalae from India. *J. Tree sci.* **8**: 1-9.
33. **Singhal, V.K.**, Gill, B.S. and Sidhu, M.S. 1990 Cytology of some woody members of Rosaceae from Indian forests. *Proc. Indian Acad. Sci.* **100**: 17-21.
34. **Singhal, V.K.** and Gill, B.S. 1990 Chromosomal studies in some members of Anacardiaceae *J. Cytol. Genet.* **25**: 36-42.
35. **Singhal, V.K.**, Gill, B.S. and Sidhu, M.S. 1990 Cytological explorations of Indian woody legumes. *Proc. Indian Acad. Sci.* **100**: 319-331.
36. Gill, B.S., **Singhal, V.K.**, Bedi, Y.S. and Bir, S.S. 1990 Cytological evolution in the woody taxa of Pachmarhi Hills. *J. Cytol. Genet.* **25**: 308-320.
37. Gill, B. S. and **Singhal, V.K.** 1990. Germplasm evaluation in *Syzygium cumini* for agroforestry. XIX IUFRO World Forestry Congr. Montreal, Canada.
38. Gill, B. S. and **Singhal, V.K.** 1990 Intraspecific variability in *Syzygium cumini*. *J. Tree Sci.* **10**: 23-26.
39. **Singhal, V.K.**, Kirandeep Kaur, Gupta, R. C. and Gill, B. S. 1991 Breeding systems in *Murraya koenigii* and *M. Paniculata*. *J. Tree Sci.* **10**: 1-8.
40. Gill, B. S., **Singhal, V.K.** and Sharma, R. 1991 Intraspecific variability in *Syzygium cumini* (L.) Skeels - a tree of social foretsry. *J. Tree Sci.* **10**: 62-65.
41. Gill, B. S. and **Singhal, V.K.** 1992 Strategies for germplasms evaluation and conservation of west Himalayan trees. In P. K. Khosla (Ed.) *Status of Indian Forestry: Problems and Prospectives*. ISTS Publishers, Solan, pp. 261-274.

42. **Singhal, V.K.**, Kirandeep Kaur and Atula Salwan 1994. Reproductive Biology of *Murraya koenigii* (Rutaceae). In: Sarma, T. A., Saini, S. S., Trivedi M. L. and Sharma, M. (Eds.) *Current Researches in Plant Sciences*. Bishen Singh Mahendra Pal Singh, Dehra Dun, pp. 237-243.
43. **Singhal, V.K.**, Gill, B. S. and Sharma, R. 1995 Germplasm evaluation in *Morus alba* for fruit. *J. Tree Sci.* **14**: 15-17.
44. Gill, B. S. and **Singhal, V.K.** 1996 Cytogenetical status of North West Indian ornamental hardwoods. In P. K. Khosla (Ed.) *Ecofriendly Trees for Urban Beautification* ISTS Publishers, Solan, pp. 143-151.
45. Gill, B. S. and **Singhal, V.K.** 1997 Strategies for conservation of genetic diversity in Indian Forest Trees. XI World Forestry Congress Turkey Abs. 220 (http://www.fao.org/forestry/docrep/wfcxi/publi/PDF/V2E_T8.PDF).
46. Gill, B. S. and **Singhal, V.K.** 1998 Chromosomes, chromosomal techniques and chromosomal evaluation in trees. In A. K. Mandal and G. L. Gibson (Eds.) *Forest Genetics and Tree Breeding* CBS Publ. & Dist, New Delhi pp. 167-183.
47. Gill, B. S. and **Singhal, V.K.** 1998 Chromosomal systems of Indian Hardwoods In P. Kachroo (Ed.) *Advances in Cytogenetics*. Bishen Singh Mahendra Pal Singh, Dehra Dun pp 239-265.
48. **Singhal, V.K.** and Atula Salwan 1998 'Bael' - 'Ek Bahupyogi Phal' Jeevantii **16**: 37-43.
49. Gill, B. S., **Singhal, V.K.** and Maninder Kaur 1999. North West Indian Neem - A status report. *JPAS* **1**: 115-125.
50. Gill, B. S. and **Singhal, V.K.** 2000 Morphogenetic diversity in Indian forest based fruit resources. In R. K. Kohli, H. P. Singh, S. P. Vij, K. K. Dhir, D. R. Batish and D. K. Khurana (Eds.) *Man and Forests* ISTS, Solan pp. 9-21.
51. Gill, B. S. and **Singhal, V.K.** 2002 Status of Genetic diversity in Indian hardwoods. In S. P. Vij, K. Kanda, M. L. Sharma, and Ashish Gupta (Eds.) *Plant Genetic Diversity, Exploration, Evaluation and Conservation*. Affiliation East West Press Pvt. Ltd., New Delhi pp. 167-179.
52. Gill, B. S., **Singhal, V.K.** and Kaur, M. 2002 Studies on seed biology of North West Indian Neem. *JPAS* **2**: 38-41.
53. **Singhal, V.K.**, Kaur, A. and Gupta, R.C. 2003. Floral biology, pollination mechanism and breeding system in *Acacia nilotica*. *J. Tree Sci.* **22**: 1-8.
54. **Singhal, V.K.** and Kaur, A. 2004. Germplasm evaluation for bark tannins in *Acacia nilotica* from North West India. *J. Tree Sci.* **23**: 41-46.
55. **Singhal, V.K.** and Kaur, A. 2004 Intervarietal and provenance variation in pod and seed characters and seed viability in *Acacia nilotica* (Linn.) Willd., ex Del. In J. S. Dargan and T. A. Sarma, (Eds.) *Plant Biodiversity and its Conservation* Bishen Singh Mahendra Pal Singh Dehra Dun. pp.169-176.
56. Gill, B. S., Ranote, P. S. and **Singhal, V.K.** 2004 Polyploid complex of Jamun - Fruit Diversity in North West Indian taxa. *JPAS* **1**: 25-28.
57. **Singhal, V.K.**, Gill, B. S., Dhaliwal, R. S. and Sidhu, S. 2004. Morphogenetic diversity in pomegranate through isoperoxidase profile. *Bionature* **24**: 89-94.
58. **Singhal, V.K.** and Kaur, A. 2004. Germplasm evaluation for gum in *Acacia nilotica* - a tree of agroforestry. In Chauhan, S.K., Gill, S.S., Salrma, S.C. and Chauhan, R. (Eds.) Proc. National

Symposium on 'Agro forestry' in 21st. Century PAU, Ludhiana Agrotech. Publ. Acad. Udaipur. pp. 282-285.

59. **Singhal, V.K.** and Kaur, A. 2004. Germplasm evaluation for fodder characteristics in babul from North West India. *JPAS* **1**:113.117.
60. **Singhal, V.K.**, Sidhu, M.K. and Kaur, J. 2005. First chromosome report for the genus *Helinus* Meyer (Rhamnaceae). *JPAS* **2**: 99-100.
61. **Singhal, V.K.**, Kaur, H. and Dhaliwal, R. S. 2005. Floral biology, pollination mechanism and breeding system in *Bauhinia variegata* Linn. *Bionature* **25**: 83-88.
62. Gill, B.S., **Singhal, V.K.** and Dhaliwal, R. S. 2006. Status of cytogenetical diversity in North West Indian Jamun. *J. Cytol. Genet.* **7** (NS): 87-90.
63. **Singhal, V.K.**, Kaur, H., Dhaliwal, R. S. and Kumar, P. 2006. Phenology, pollination mechanism and breeding system in *Butea monosperma* (Lam.) Taub. *Bionature* **26**: 21-32.
64. **Singhal, V.K.**, Kaur, A. and Dhaliwal, R.S. 2007. Evaluation of morphogenetic diversity in *Acacia nilotica* from North West India. *J. Tree. Sci.* **26**: 32-41.
65. Kumar, P., **Singhal V.K.**, Sidhu, M. K., Kaur, J. and Jyotsna. 2007. Cytological investigations in some members of Monochlamydeae from northern India. *JPAS* **4**:75-81.
66. **Singhal, V.K.**, Gill, B.S. and Dhaliwal, R.S. 2007. Status of chromosomal diversity in the hardwood tree species of Punjab state. *J. Cytol. Genet.* **8**(NS): 67-83.
67. **Singhal, V.K.**, and Kumar, P. 2008. Impact of cytomixis on meiosis, pollen viability and pollen size in wild populations of Himalayan poppy (*Meconopsis aculeata* Royle). *J. Biosci.* **33**: 371-380. (IF=1.759)
68. Kumar, P. and **Singhal, V.K.** 2008. Cytology of *Caltha palustris* L.(Ranunculaceae) from cold regions of Western Himalayas. *Cytologia* **73**: 137-147. (IF=0.31)
69. **Singhal, V.K.** Kaur, D and Kumar, P. 2008. Effect of cytomixis on the pollen size in 'Seabuckthorn' (*Hippophae rhamnoides* L. Elaeagnaceae). *Cytologia* **73**: 167-172. (IF=0.31)
70. Kumar, P., **Singhal, V.K.** and Kaur, J. 2008. Cytomixis induced meiotic abnormalities in pollen mother cells of *Clematis flammula* L. (Ranunculaceae). *Cytologia* **73**: 381-385. (IF=0.31)
71. Kumar, P., **Singhal, V. K.** and Kaur, D. 2008. Meiotic studies in species from the cold deserts of Lahaul-Spiti and adjoining areas (northwest Himalaya). *Cytologia* **73**: 463-470. (IF=0.31)
72. **Singhal, V. K.** and Kumar, P. 2008. Cytomixis during microsporogenesis in the diploid and tetraploid cytotypes of *Withania somnifera* (L.) Dun. (Solanaceae). *Comp. Cytogenet.* **2**:85-92. (IF=0.755)
73. Gupta,R.C., **Singhal, V.K.**, Dhaliwal, R.S and Kaur, H. 2008. Population cytogenetics II. Chromosome studies on *Tridex procumbens* Linn. from north west India. *Bionature* **28**:25-32.
74. **Singhal, V.K.**, Kaur, A. And Saggoo, M.I.S. 2008. Reproductive biology and germplasm evaluation of *Acacia nilotica* (Linn.) Willd. ex Del. From north India. *Muelleria* **26**: 86-94.
75. **Singhal, V.K.**, Gill, B.S. and Kumar, P. 2009. Recent developments in tree cytogenetics in India. In: Atri, N.S., Gupta, R.C., Saggoo, M.I.S. and Singhal, V.K. (eds.) *Germplasm Diversity and Evaluation – Angiosperms*. Bishen Singh & Mahendra Pal Singh, Dehra Dun, pp.173-228.

76. **Singhal, V.K.**, Kaur, S., Kaur, D. and Kumar, P. 2009. New detection of haploid chromosomes, pollen size and sterility in *Lychnis indica* Benth. Var. *fimbriata* Wall. *Chromosome Bot.* **4**:53-56.
77. **Singhal, V.K.**, Kumar, P., Kaur, D. and Rana, P.K. 2009 Chromatin transfer during male meiosis resulted into heterogeneous sized pollen grains in *Anemone rivularis* Buch.- Ham. ex DC. from Indian cold deserts. *Cytologia* **74**: 229-234. (**IF=0.31**)
78. **Singhal, V.K.**, and Kaur, D. 2009. Spontaneous occurrence of meiotic spindle abnormalities in 'Long Headed Poppy' (*Papaver dubium* L.) from Indian cold regions. *Cytologia* **74**: 385-389. (**IF=0.31**)
79. **Singhal, V.K.**, Kaur, R.P., Kumar, P. and Rana, P. K. 2008-2009. Phenology, floral biology and pollination mechanism in an exotic *Erythrina blackei* Host ex. Baker. *JPAS* **5-6**:122-125.
80. Kaur, D. and **Singhal, V.K.** 2010. Chromosome number, meiosis and pollen fertility in *Vicia rigidula* Royle and *V. tenera* Grah. from cold desert regions of India. *Cytologia* **75**: 9-14. (**IF=0.31**)
81. Kumar, P, **Singhal, V.K.**, Kaur, D. and Kaur, S. 2010. Cytomixis and associated meiotic abnormalities affecting pollen fertility in *Clematis orientalis*. *Biol. Plantarum* **54**: 181-184. (**IF=1.692**)
82. **Singhal, V.K.**, Kaur, S., and Kumar, P. 2010. Aberrant male meiosis, pollen sterility and variable sized pollen grains in *Clematis montana* Buch. Ham. ex DC. from Dalhousie hills, Himachal Pradesh. *Cytologia* **75**:31-36. (**IF=0.31**)
83. Gupta, R.C., Himshikha., Rana, P.K., Kumar, P. and **Singhal, V.K.** 2010. First report of structural heterozygosity in *Artemisia parviflora* (Asteraceae) from Parvati Valley in Kullu District (Himachal Pradesh). *Bot. Serbica* **34**:63-66.
84. **Singhal, V.K.** and Kumar, P. 2010. Variable sized pollen grains due to impaired male meiosis in the cold desert plants of Western Himalayas (India), pp. 101-126. In: Benjamin J. Kaiser (ed.) Pollen: Structure Types and Effects. Nova Science Publishers, Hauppauge, NY, USA. (**Invited article**)
85. Kaur, D. and **Singhal, V.K.** 2010. IAPT/IOPB Chromosome data 9. *Taxon* **59**: 1298-1302. (**IF=2.7**)
86. Kaur, S., **Singhal, V.K.** and Kumar, P. 2010. Male meiotic studies in some plants of Polypetalae from Dalhousie hills (Himachal Pradesh). *Cytologia* **75**: 289-297(**IF=0.31**).
87. Himshikha., Kumar, P., Gupta, R. C., Kumari, S. and **Singhal, V.K.** 2010. Impact of chromatin transfer and spindle abnormalities on pollen fertility and pollen size in *Plantago lanceolata* L. *Cytologia* **75**: 421-426. (**IF=0.31**)
88. Kaur, D., **Singhal, V.K.** and Gupta, R.C. 2010. Male meiosis, Microsporogenesis and Pollen Grain study in *Inula cuspidata* C.B. Clarke (Asteraceae). *Cytologia* **75**: 363-368. (**IF=0.31**)
89. **Singhal, V.K.**, Salwan, A., Kumar, P. and Kaur, J. 2011. Phenology, Pollination, Breeding system of *Aegle marmelos* (Linn.) Correa. (Rutaceae) from India. *New Forests* **42**: 85-100. (**IF=1.636**)
90. **Singhal, V.K.**, Rana, P. K., Kumar, P. and Kaur, D. 2011. Persistent occurrence of meiotic abnormalities in a new hexaploid cytotype of *Thalictrum foetidum* L. from Indian cold desert. *Biologia* **66**: 458-464. (**IF=0.506**)

91. Kumar, P., **Singhal, V.K.**, Rana, P. K., Kaur, S. and Kaur, D. 2011. Cytology of *Ranunculus laetus* Wall. ex Royle from cold desert regions and adjoining hills of North-west Himalayas. *Caryologia* **64**: 25-32. (**IF=0.632**)
92. Kumar, P. and **Singhal, V.K.** 2011. Chromosome number, male meiosis and pollen fertility in selected angiosperms of the cold deserts of Lahaul-Spiti and adjoining areas (Himachal Pradesh, India). *Plant Syst. Evol.* **297**: 271-297. (**IF=1.312**)
93. **Singhal, V.K.**, Rana, P. K. and Kumar, P. 2011. Syncytes during male meiosis resulting into '2n' pollen grains formation in *Lindelofia longiflora* var. *falconeri*. *J. Syst. Evol.* **49**: 406-410. (**IF=1.851**)
94. Kumar, P. and **Singhal, V.K.** 2011. Male meiosis, morphometric analysis and distribution pattern of 2x and 4x cytotypes of *Ranunculus hirtellus* Royle (Ranunculaceae) from the cold regions of northwest Himalayas (India). *Comp. Cytogenet.* **5**:143-161(**IF=0.755**)
95. **Singhal, V.K.**, and Kaur, D. 2011. Cytomixis inducing meiotic irregularities and pollen malformation in *Clematis graveolens* Lindley from the cold deserts of Kinnaur districts of Himachal Pradesh, India. *Cytologia* **76**:319-327. (**IF=0.31**)
96. **Singhal, V.K.** and Kaur, D. 2011. Cytomixis and associated abnormalities during male meiosis in a new tetraploid cytotype of *Vicia pallida* Turcz. Fabaceae. *Cytologia* **76**: 387-393. (**IF=0.31**)
97. Bir, S.S., Bedi, Y.S., **Singhal, V.K.** and Gill, B.S. 2011. Forest vegetation characteristics of Pachmarhi hills, Central India. *Proc. Nat. Acad. Sci. India Sect. B*, **81**: 317-340.
98. Bir, S.S., Bedi, Y.S., **Singhal, V.K.** and Gill, B.S. 2012. Further analysis of the forest vegetation of central India Mountains of Madhya Pradesh. *Indian Journal of Forestry* **35**: 9-14.
99. Kumar, P., **Singhal, V.K.** and Kaur, D. 2012. Impaired male meiosis due to irregular synapsis coupled with cytomixis in a new diploid cytotype of *Dianthus angulatus* R (Caryophyllaceae) from Indian cold deserts. *Folia Geobotanica*. **47**: 59-68. (**IF=1.565**)
100. Kumar, P. and **Singhal, V.K.** 2012. Erratic male meiosis resulting in 2n pollen grain formation in a 4x cytotype (2n=28) of *Ranunculus laetus* Wall ex Royle. The *Scientific World Journal* Article ID 691545, 9 pages, doi:10.1100/2012/691545 (**Invited article**). (**IF=1.730**)
101. Kumar, P. and **Singhal, V. K.** 2012. Meiotic aberrations and chromosomal variation in the plants of Lahaul-Spiti and adjoining high hills in Himachal Pradesh. pp. 147-170. In: N.S.Atri, R.C.Gupta, M.I.S.Saggo and **V.K. Singhal** (eds.) *Biodiversity Evaluation- Botanical Perspective*. Bishen Singh and Mahendra Pal Singh, Dehra Dun.
102. Kaur, D. and **Singhal, V.K.** 2012. Phenomenon of cytomixis and intraspecific polyploidy (2x, 4x) in *Spergularia diandra* (Guss.) Heldr. & Sart. in the cold desert regions of Kinnaur district (Himachal Pradesh). *Cytologia* **77**:163-171. (**IF=0.31**)
103. Kaur, D. and **Singhal, V.K.** 2012. IAPT/IOPB Chromosome data 13. *Taxon* **61**: 6-7. (**IF=2.7**)
104. Rana, P.K., Himshikha, Kumar, P., **Singhal, V.K.** and Gupta, R.C. 2012. Impact of reciprocal translocations and non-synchronous disjunction of chromosomes on pollen fertility in *Astragalus chlorostachys* from northwest Himalayas (India). *Cytologia* **77**:173-179. (**IF=0.31**)
105. **Singhal, V.K.**, Kaur, M., Himshikha, Kumar, P. and Gupta, R. C. 2012. High pollen sterility and 2n pollen grains in an asynaptic 4x cytotype (2n=48) of *Solanum nigrum* L. *Cytologia* **77**: 333-342. (**IF=0.31**)

106. Kaur, D., Kumar, P. and **Singhal, V.K.** 2013. Chromosome counts and cytomixis in two species of *Trigonella* L. *Cytologia* **78**:235-241. (**IF=0.31**)
107. Kumar, P. and **Singhal, V.K.** 2013. Chromosome number and secondary chromosome associations in wild populations of *Geranium pratense* L. from the cold deserts of Lahaul-Spiti (India). *Cytology and Genetics* **47**:107-114. (**IF=0.294**)
108. Kumar, P. and **Singhal, V.K.** 2013. Reduction in chiasma frequency and pollen fertility due to multiple chromosomal associations and univalents in *Saxifraga diversifolia* from alpine regions of northwest Himalaya (India). *Caryologia* **66**: 120-127. (**IF=0.632**)
109. Kumar, P. and **Singhal, V.K.** 2013. Ethnobotany and ethnomedicinal uses, chromosomal status and natural propagation of some plants of Lahaul-Spiti and adjoining hills. *Journal of Botany*. Volume 2013 (2013) Article ID 248943, 14 pages.
110. Rana P.K., Kumar, P. and **Singhal, V.K.** 2013. Spindle irregularities, chromatin transfer and chromatin stickiness on male meiosis and pollen grain formation in *Anemone tetrasepala*. *Turkish Journal of Botany* **37**:167-176. (**IF=1.6**)
111. **Singhal, V.K.**, Garg, P. and Kumar, P. 2013. Cytological studies of some Dicots from the hills of Mandi district (Himachal Pradesh) in northwest Indian Himalayas. *Cytologia*. **78**: 55-68. (**IF=0.31**)
112. Kumar, P, Rana, P.K, Himshikha, **Singhal, V.K.** and Gupta RC. 2014. Cytogeography and pheneomenon of cytomixis in *Silene vulgaris* from cold regions of northwest Himalayas (India). *Plant Systematics and Evolution*. **300**:1477-1486. (**IF=01.312**)
113. Kumar, P., Rana, P.K, Himshikha, **Singhal, V.K.** and Gupta, RC. 2014. Chromosome numbers, characterization of chromosomal pairing during meiosis, origin and natural propagation in polyploid cytotypes (4x, 5x and 6x) of *Agrimonia eupatoria* L. (Rosaceae) in northwest Himalayas (India). *Protoplasma*. **251**:781-795. (**IF=2.855**)
114. Kumar, P, Rana, P.K, and **Singhal, V.K.** 2014. Male meiosis, morphometric analysis and natural propagation in the 2x and 3x cytotypes of *Tordyliopsis brunonis* (Apiaceae) from northwest Himalayas (India). *Plant Systematics and Evolution*. **300**:1477-1486. (**IF=1.312**)
115. **Singhal, V.K.**, Kumari, V., Kumar, P. 2014. Cytomorphological diversity in some selected members of Poaceae from Parvati Valley in Kullu district of Himachal Pradesh, India. *Plant Systematics and Evolution* **300**:1385-1408. (**IF=1.312**)
116. Rana, P.K., Kumar, P. and **Singhal, V.K.** 2014. Uses of local plant biodiversity among the tribal communities of Pangi Valley of district Chamba in cold desert Himalaya, India. *The Scientific World Journal*. MS Number. 753289. Article ID 753289, 15 pages <http://dx.doi.org/10.1155/2014/753289>. (**IF=1.731**)
117. **Singhal, V.K.**, Kaur, D., Kaur, M., Himshikha, Rana, P.K., Kumar, P. and Gupta, R.C. 2014. Multiple associations due to structural heterozygosity in the wild plants of *Achillea millefolium* L. from northwest Himalayas (India). *Cytologia* **79** (2): 151-159. (**IF=0.31**)
118. Kaur, M. and **Singhal, V.K.** 2014. First report of cytomixis and meiotic abnormalities in *Nepeta govaniana* from Solang Valley, Kullu District, Himachal Pradesh. *Cytologia*. **79**(2): 227-233. (**IF=0.31**)

119. Rana, P.K., Kumar, P. and **Singhal V.K.** 2014 Cytomixis and associated abnormalities during male meiosis in *Lindelofia longiflora* var. *falconeri* (Boraginaceae) *Cytologia* **79**(4): 535-540. (**IF=0.31**)
120. Kumar, R., Rana, P.K., Himshikha, Kaur, D., Kaur, M., **Singhal V.K.**, Gupta, R.C. and Kumar, P. 2015. Structural heterozygosity and cytomixis driven pollen sterility in *Anemone rivularis* Buch.-Ham. ex DC. from Western Himalayas (India). *Caryologia* **68**: 246-253. DOI:10.1080/00087114.2015.1032615 (**IF=0.849**)
121. Kaur, M, **Singhal, V.K.** 2015. Cytomorphological diversity in some members of family Asteraceae from the ecologically disturbed habitats of Solang Valley, Kullu District, Himachal Pradesh. *Cytologia* **80**: 203-222. (**IF=0.31**)
122. Rana, P.K., Kumar, P. and **Singhal, V.K.** 2015. Chromosome counts, chromosomal pairing and pollen fertility in thirty eight species of Asteraceae from Pangi valley in district Chamba of Himachal Pradesh (India). *Brazilian Journal of Botany*. DOI 10.1007/S40415-015-0182-6 (**IF: 1.385**)
123. Kumar, R., Rana, P.K. and **Singhal, V.K.** 2015. Chromatin stickiness and abnormal spindle resulting into meiotic irregularities and pollen sterility in *Meconopsis aculeata* Royle from Northwest Himalayas. *Cytologia* (Communicated).
124. Kaur, M., **Singhal, V.K.** 2015. Occurrence of syncytes: A possible mechanism owing to the origin of polyploid cytotypes in *Achillea millefolium* L. within Indian Himalayas. *Caryologia* (Communicated).
125. Kaur, M., **Singhal, V.K.** 2015. Male meiotic study in a newly detected triploid cytotype of *Tussilago farfara* L. (Asteraceae). *Cytologia* (Communicated)
126. **Singhal, V.K.**, Singh, J., Kaur, S. and Kumar, R. 2015. Chromosome counts through male meiosis in some dicots from the hills around Shimla, Himachal Pradesh. *Cytologia* (Communicated).
127. **Singhal, V.K.**, Kumar, R., Himshikha, Kumar, P., Kaur, D., Kaur, M., Rana, P.K. and Gupta, R.C. 2015. A profile of male meiosis, chromosome counts and chromosomal variations in *Impatiens* from North-West Himalayas in India. *Protoplasma* (Communicated).*

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