

Dr. Deepak Kumar Semwal

Assistant Professor

Department of Phytochemistry, Faculty of Biomedical Sciences,
Uttarakhand Ayurved University, Dehradun-248001, India
E-mail: dr_dks.1983@yahoo.co.in; Phone: +919876761502



Web pages: <http://scholar.google.co.in/citations?user=TFexJe4AAAAJ&hl=en>; <http://www.scopus.com/authid/detail.url?authorId=25655385600>

ACADEMIC

D.Phil. (2009) in Phytochemistry from HNB Garhwal University, Srinagar, UK, India. Advisor: Dr. U. Rawat

M.Sc. (2005) in Organic Chemistry with 70.92% from HNB Garhwal University, Srinagar, UK, India.

POSTDOCTORAL EXPERIENCE

1. UGC-Dr DS Kothari Postdoctoral Fellow (2010-2013) in the Department of Chemistry, Panjab University, Chandigarh, India. Advisor: Dr. G.J.P. Singh
2. TUT/NRF-Postdoctoral Fellow (2013-2015) in the Department of Pharmaceutical Sciences, Tshwane University of Technology, Pretoria, South Africa. Advisor: Prof. A.M. Viljoen

TEACHING & INDUSTRIAL EXPERIENCE

1. Taught Graduate and Post-graduate classes in Chemistry, Biotechnology and Pharmaceutical Chemistry departments in Garhwal University, Srinagar during 2005-2010.
2. Taught Graduate classes in the Department of Applied Sciences, G.B. Pant Govt. Engineering College, Pauri Garhwal during 2007-2008.
3. Taught graduate classes in the Department of Chemistry, Panjab University, Chandigarh during 2010-2013.
4. Supervised Undergraduate and Master Students in the Department of Pharmaceutical Sciences, Tshwane University of Technology, South Africa from 2013 to 2015.
5. Industrial experience in R&D of an India based pharmaceutical industry.

ADMINISTRATIVE EXPERIENCE

1. Officer on Special Duty (OSD) to Vice Chancellor, Uttarakhand Ayurved University, Dehradun.
2. Member secretary of Research Degree Committee (RDC) of Uttarakhand Ayurved University during 2015-2016.

GRANTS/ PROJECTS COMPLETED/ ONGOING/ ACCEPTED

S.No.	Title	Status	Duration	Role	Agency
1	Chemical examination and antidiabetic evaluation of selected Liliaceae and Fabaceae plants of Central Himalaya	Completed	2010-2013	PI	UGC, New Delhi
2	Intervention Technologies in Health Sciences: Isolating bioactive molecules	Completed	2013-2014	PI	TUT, South Africa

	from indigenous medicinal plants of South Africa				
3	Quality control and assurance of commercial medicinal and cosmetic products of plants origin	Completed	2014-2015	PI	NRF, South Africa
4	National Conference on Recent Advances in Ayurvedic Herbal Medicine: From Source to Manufacturing	Grant Sanctioned	2016	PI	NMPB, New Delhi

AWARDS/FELLOWSHIPS/RECOGNITIONS

1. Research and innovation award 2014 on alternative medicine from Tshwane University of Technology, South Africa on 01 October 2015.
2. Postdoctoral Fellowship from National Research Foundation, Govt. of South Africa for 2014-15.
3. Postdoctoral Fellowship from Tshwane University of Technology, Pretoria, South Africa for 2013-14.
4. NRF-Travel Grant for International conference in Bangkok, Thailand during 18-19 December 2014.
5. Postdoctoral Fellowship from UGC, New Delhi under Dr. D.S. Kothari PDF Scheme, for 2010-13.
6. Invited talk in Second International Conference on Holistic Medicine, held on 11-13 September, 2011 in Kerala, India
6. Young Scientist award for best oral paper presentation in 8th National Convention of Chemistry Teachers on 8-9 November 2008 at Srinagar.
7. Topped the MSc batch of 2003-2005.
8. Editorial board member and reviewer of many journals of international repute.
9. Member of Asian Council of Science Editors (ACSE), UAE, 2015. (Membership No. 91.516).
10. Member of "Discovery of Sanjeevani" committee of Govt. of Uttarakhand - 2016.
11. Organizing Secretary of National Conference on AYUSH Uttarakhand Jointly organized by Uttarakhand Ayurved University and PHD Chamber of Commerce and Industry, on 17th June 2016 at Dehradun.

RESEARCH FIELDS OF INTEREST

- 1 Discovery and development of Herbal Medicines
- 2 Concepts of Diabetes, Inflammation and aging in Ayurveda
- 3 Natural Products synthesis
- 4 Drug Delivery

PUBLICATIONS

1. Chauhan A, **Semwal DK**, Mishra SP, Semwal RB. Ayurvedic concept of Shatkriyakala: traditional knowledge of cancer pathogenesis and therapy. ***Journal of Integrative Medicine***. **2016** (In press)
2. Chauhan A, **Semwal DK**, Semwal RB, Mishra SP. Speckle-type POZ protein acts as a predictive biomarker for mTOR target therapy in renal cell carcinoma. ***Current Science***. **2016** (In press).

3. Arjun P, **Semwal DK**, Semwal RB, Malaisamy M, Sivaraj C, Vijayakumar S. Total phenolic content, volatile constituents and antioxidative effect of *Coriandrum sativum*, *Murraya koenigii* and *Mentha arvensis*. **The Natural Products Journal**. 2016 (In press).
4. **Semwal DK**, Semwal RB, Combrinck S, Viljoen A. Myricetin: A Dietary Molecule with Diverse Biological Activities. **Nutrients**. 2016; 8 (2), 90.
5. Chauhan A, **Semwal DK**, Mishra SP, Semwal RB. Combination of mTOR and MAPK Inhibitors—A Potential Way to Treat Renal Cell Carcinoma. **Medical Sciences**. 2016, 4(4), 16.
6. **Semwal DK**, Chauhan A, Mishra SP, Semwal RB. Recent Development in Yoga: A Scientific Perspective. **Journal of AYUSH: Ayurveda, Yoga, Unani, Siddha and Homeopathy**. 2016; 5 (1), 14-20.
7. **Semwal DK**, Semwal RB, Chauhan A, Mishra SP. Treatment of type 2 diabetes with Ayurveda: A case report. **Pharmacologia**. 2016; 7 (4), 239-242.
8. Chauhan A, **Semwal DK**, Mishra SP, Semwal RB. Ayurvedic research and methodology: Present status and future strategies. **Ayu**. 2015; 36 (4), 364-9.
9. **Semwal DK**, Semwal RB. Discovery of natural SGLT2-inhibitors for type 2 diabetes – Possible way to reduce side effects. **Journal of Natural Remedies**. 2015; 15 (2), 86-87.
10. Semwal RB, **Semwal DK**, Combrinck S, Viljoen A. Gingerols and shogaols: Important nutraceutical principles from ginger. **Phytochemistry**. 2015; 117, 554–568.
11. Semwal RB, **Semwal DK**, Vermaak I, Viljoen A. A comprehensive scientific overview of *Garcinia cambogia*. **Fitoterapia**. 2015; 102 (1), 134-148.
12. **Semwal DK**, Mishra SP, Chauhan A, Semwal RB. Adverse health effects of tobacco and role of Ayurveda in their reduction. **Journal of Medical Sciences**. 2015, 15 (3), 139-146.
13. Semwal RB, **Semwal DK**, Combrinck S, Viljoen A. Butein: From ancient traditional remedy to modern nutraceutical. **Phytochemistry Letters**. 2015; 11 (1), 188-201.
14. Chandel S, Bagai U, Semwal RB, **Semwal DK**. Antiplasmodial activity of aqueous extract of *Berberis aristata* roots against *Plasmodium berghei* infected BALB/c mice. **Pharmaceutical Biology**. 2015; 53 (12), 1735-1740.
15. Semwal RB, **Semwal DK**, Mishra SP, Semwal R. Chemical composition and antibacterial potential of essential oils from *Artemisia capillaris*, *Artemisia nilagirica*, *Citrus limon*, *Cymbopogon flexuosus*, *Hedychium spicatum* and *Ocimum tenuiflorum*. **The Natural Products Journal**. 2015, 5 (3), 199-205.
16. **Semwal DK**, Semwal RB. Efficacy and safety of *Stephania glabra*: An alkaloid-rich traditional medicinal plant. **Natural Product Research**. 2015; 29 (5), 396-410.
17. Arjun P, **Semwal DK**, Semwal RB, Mishra SP, Vijayan AB, Krishnamoorthy M. Quality Retention and Shelf-Life Improvement of Fresh-cut Apple, Papaya, Carrot and Cucumber by Chitosan-Soy Based Edible Coating. **Current Nutrition and Food Science**. 2015, 11 (4), 282-291.
18. Mishra SP, **Semwal DK**, Chauhan A. Scenario of Ayurveda Education in India: Some recommendations for development. **University News- Association of Indian Universities**. 2015;53(42):3-8.
19. **Semwal DK**, Semwal RB, Ahmad A, Kamatou GP, Viljoen AM. Inhibitory effects of extracts and isolates from *Kigelia africana* fruits against pathogenic bacteria and yeasts. **International Journal of Biological, Veterinary, Agricultural and Food Engineering**. 2014; 8(12): 1123-1128.
20. **Semwal DK**, Semwal RB, Singh G. Benzoquinone derivative and sarsasapogenin glycoside from *Asparagus curillus*. **Chemistry of Natural Compounds**. 2014;50(5):865-867.

21. Semwal RB, **Semwal DK**, Badoni PP, Kapoor P. Dyeing performance of aqueous extract and flavanone glycosides from the flowers of *Butea monosperma* (Lam.) Kuntze. **Records of Natural Products**. 2014;8(1):66-70.
22. Semwal R, Semwal RB, **Semwal DK**. A gastroretentive drug delivery system of lisinopril imbibed on isabgol-husk. **Current Drug Delivery**. 2014;11(3):371-9.
23. **Semwal DK**, Semwal RB, Vermaak I, Viljoen A. From arrow poison to herbal medicine - The ethnobotanical, phytochemical and pharmacological significance of *Cissampelos* (Menispermaceae). **Journal of Ethnopharmacology**. 2014;155(2):1011-28.
24. Semwal RB, **Semwal DK**, Combrinck S, Cartwright-Jones C, Viljoen A. *Lawsonia inermis* L. (henna): Ethnobotanical, phytochemical and pharmacological aspects. **Journal of Ethnopharmacology**. 2014; 155(1):80-103.
25. **Semwal DK**, Semwal RB, Singh G. Androstane-type steroidal glycoside from the roots of *Asparagus curillus* buch.- ham. ex roxb. **Helvetica Chimica Acta**. 2013;96(3):520-4.
26. **Semwal DK**, Semwal RB. Ethnobotany, pharmacology and phytochemistry of the genus *Phoebe* (Lauraceae). **Mini-Reviews in Organic Chemistry**. 2013;10(1):12-26.
27. Sharma A, Sati SC, Sati OP, Sati MD, Kothiyal SK, **Semwal DK**, Mehta A. A new triterpenoid saponin and antimicrobial activity of ethanolic extract from *Sapindus mukorossi* gaertn. **Journal of Chemistry**. 2013; Article ID 218510.
28. Satheesh Madhav NV, Semwal R, **Semwal DK**, Semwal RB. Recent trends in oral transmucosal drug delivery systems: An emphasis on the soft palatal route. **Expert Opinion on Drug Delivery**. 2012;9(6):629-47.
29. **Semwal DK**, Semwal RB, Semwal R. Antibacterial activity of 8-(4'-methoxybenzyl)-xylopinine from *Stephania glabra* tubers. **Pharmacologia**. 2012;3(10):539-41.
30. Semwal RB, **Semwal DK**. Analgesic and anti-inflammatory activities of extracts and fatty acids from *Celtis australis* L. **The Natural Products Journal**. 2012;2(4):323-27.
31. Kothiyal SK, Sati SC, Rawat MSM, Sati MD, **Semwal DK**, Semwal RB, Sharma A, Rawat B, Kumar A. Chemical constituents and biological significance of the genus *Ilex* (Aquifoliaceae). **The Natural Products Journal**. 2012;2(3):212-24.
32. Semwal RB, **Semwal DK**, Kapoor P. Dyeing properties of *Berberis aristata* DC with natural and synthetic mordants. **Trends in Applied Sciences Research**. 2012;7(5):392-99.
33. Badoni R, **Semwal DK**. Dyeing performance of *Symplocos paniculata* and *Celtis australis*. **Asian Dyer**. 2011;8(6):51-8.
34. **Semwal DK**, Semwal RB, Semwal R, Jacob V, Singh G. Analgesic and antipyretic activities of gindarudine, a morphine alkaloid from *Stephania glabra*. **Current Bioactive Compounds**. 2011;7(3):214-7.
35. Semwal RB, **Semwal DK**, Semwal R, Singh R, Rawat MSM. Chemical constituents from the stem bark of *Symplocos paniculata* thunb. with antimicrobial, analgesic and anti-inflammatory activities. **Journal of Ethnopharmacology**. 2011;135(1):78-87.
36. Badoni R, **Semwal DK**, Rawat U, Rawat MSM. Chemical constituents from fruits and stem bark of *Celtis australis* L. **Helvetica Chimica Acta**. 2011;94(3):464-73.
37. Badoni R, **Semwal DK**, Badoni PP, Kothiyal SK, Rawat U. A novel bacterioplanoid from *Celtis australis* L. bark. **Chinese Chemical Letters**. 2011;22(1):81-4.
38. Rawat U, Joshi V, **Semwal DK**, Bamola A, Semwal S, Badoni R, Sati OP. Triterpenoidal saponin and phenolic glycosides of *Rhododendron barbatum* flowers. **Medicinal Plants**. 2011;3(1):73-76.

39. Kothiyal SK, Sati SC, Sati MD, Rawat B, Sharma A, **Semwal DK**, Badoni R, Rawat MSM. The Alkaloids: Genus *Daphniphyllum* (*Daphniphyllaceae*). **International Research Journal of Pharmacy**. 2011;2(2):13-21.
40. Badoni R, **Semwal DK**, Kothiyal SK, Rawat U. Chemical constituents and biological applications of the genus *Symplocos*. **Journal of Asian Natural Products Research**. 2010;12(12):1069-80.
41. Semwal R, **Semwal DK**, Badoni R. Chewing gum: A novel approach for drug delivery. **Journal of Applied Research**. 2010;10(3):115-23.
42. **Semwal DK**, Badoni R, Semwal R, Kothiyal SK, Singh GJP, Rawat U. The genus *Stephania* (*Menispermaceae*): Chemical and pharmacological perspectives. **Journal of Ethnopharmacology**. 2010;132(2):369-83.
43. Semwal R, **Semwal DK**, Badoni R, Gupta S, Madan AK. Targeted drug nanoparticles: An emphasis on self-assembled polymeric system. **Journal of Medical Sciences**. 2010;10(5):130-7.
44. Badoni R, **Semwal DK**, Rawat U, Singh GJP. Celtisanin, a novel sulphonated phenolic from *Celtis australis* L. fruits. **Natural Product Research**. 2010;24(13):1282-6.
45. **Semwal DK**, Rawat U, Badoni R, Semwal R, Singh R. Anti-hyperglycemic effect of *Stephania glabra* tubers in alloxan induced diabetic mice. **Journal of Medicine**. 2010;11(1):17-9.
46. **Semwal DK**, Rawat U, Semwal R, Singh R, Singh GJP. Anti-hyperglycemic effect of 11-hydroxypalmatine, a palmatine derivative from *Stephania glabra* tubers. **Journal of Asian Natural Products Research**. 2010;12(2):99-105.
47. Badoni R, **Semwal DK**, Rawat U. Fatty acid composition and antimicrobial activity of *Celtis australis* L. fruits. **Journal of Scientific Research**. 2010;2(2):397-402.
48. Kothiyal SK, **Semwal DK**, Badoni R, Rawat U. GC-MS analysis of fatty acid and antimicrobial activity of *Ilex dipyrrena* Wallich leaves. **Asian Journal of Traditional Medicine**. 2010;5(4):153-57.
49. Badoni R, **Semwal DK**, Rawat U. Composition variation in essential oils of *Artemisia nilagirica* and *Artemisia capillaris*, growing in India. **Journal of Applied and Natural Science**. 2010;2(1):30-33.
50. Semwal R, **Semwal DK**, Madan AK, Paul P, Mujaffer F, Badoni R. Dendrimers: A novel approach for drug targeting. **Journal of Pharmacy Research**. 2010;3(9):2238-47.
51. Kothiyal SK, **Semwal DK**, Badoni R, Rawat U, Sati SC, Rawat MSM. Seasonal variation in the essential oil composition from *Morina longifolia* Wallich. **International Journal of Essential Oil Therapeutics**. 2009;3(4):171-4.
52. Badoni R, **Semwal DK**, Rawat U. Altitudinal variation in the volatile constituents of *Artemisia nilagirica*. **International Journal of Essential Oil Therapeutics**. 2009;3(2-3):66-68.
53. **Semwal DK**, Rawat U, Semwal R, Singh R, Krishan P, Singh M, Singh GJP. Chemical constituents from the leaves of *Boehmeria rugulosa* with antidiabetic and antimicrobial activities. **Journal of Asian Natural Products Research**. 2009;11(12):1045-55.
54. Rawat U, Semwal S, **Semwal DK**, Badoni R, Bamola A. A new flavonoid glycoside from *Salix denticulata* aerial parts. **Molbank**. 2009;2009(3):1-5.
55. Badoni R, **Semwal DK**, Sati SC, Rawat U. Optimization of dyeing procedure on wool yarn with *Pistacia integerrima* dye using synthetic and natural mordants. **Colourage**. 2009;56(9):67-70.
56. **Semwal DK**, Rawat U. Gindarudine, a novel morphine alkaloid from *Stephania glabra*. **Chinese Chemical Letters**. 2009;20(7):823-6.

57. **Semwal DK**, Rawat U, Semwal R, Singh K, Singh R, Saini B, Krishnan P, Singh M. Hypoglycemic effect of *Phoebe lanceolata* on alloxan-induced diabetic mice. **Pharmacologyonline**. 2009;1:1021-6.
58. Bamola A, **Semwal DK**, Semwal S, Rawat U. Flavonoid glycosides from *Myrica esculenta* leaves. **Journal of the Indian Chemical Society**. 2009;86(5):535-6.
59. **Semwal DK**, Rawat U. Antimicrobial hasubanalactam alkaloid from *Stephania glabra*. **Planta Medica**. 2009;75(4):378-80.
60. **Semwal DK**, Rawat U, Bamola A, Semwal R. Antimicrobial activity of *Phoebe lanceolata* and *Stephania glabra*; preliminary screening studies. **Journal of Scientific Research**. 2009;1(3),662-66.
61. **Semwal DK**, Rawat U, Singh GJP. Further aporphine alkaloids from *Phoebe lanceolata*. **Molbank**. 2008;2008(3) 1-5.
62. **Semwal DK**, Rawat U. Nordelphorphine alkaloid from bark of *Phoebe lanceolata*. **Oriental Journal of Chemistry**. 2007;23(2):771-72.
63. **Semwal DK**, Rawat U. Physico-chemical examination of drinking water sample in and near Srinagar city (Uttarakhand). **Acta Ciencia Indica**. 2007;33C(3):231-32.
64. Kandwal D, Bamola A, Semwal S, **Semwal DK**, Rawat U. Phytochemicals from *Rhamnus triqueter*. **Acta Ciencia Indica**. 2007;33C(4):389-90.
65. **Semwal DK**, Bamola A, Rawat U. Chemical constituents from some antidiabetic plants. **Universities' Journal of Phytochemistry and Ayurvedic Heights**. 2007;2(3):40-48.

BOOKS/BOOK CHAPTERS

1. **Semwal DK**, Semwal RB. *Triterpenoids: an important bioactive class of natural products*. ISBN: 9783-8465-9574-9; Lambert Academic Publishing, Germany, 2011.
2. Semwal RB, **Semwal DK**. *Naturally occurring alkaloids and iridoids: Chemistry and biological importance*. ISBN: 978-3-8484-1444-4; Lambert Academic Publishing, Germany, 2012.
3. Bamola A, Semwal S, **Semwal D**, Rawat U. *Application and Optimization of Natural Mordants in Modern Dyeing* (Chapter 61) In: *Phytochemicals: a therapeutant for critical disease management*. D.R. Khanna, A.K. Chopra, G. Prasad, D.S. Malik, R. Bhutiani Edited. ISBN: 9788-1703-55496 (Daya Publishing House, India), pp. 357-361, 2008.
4. Semwal R, Semwal RB, **Semwal DK**. *Drug Delivery Systems: Selection Criteria and Use*. In: *Encyclopedia of biomedical polymers and polymeric biomaterial*. Mishra M. Edited. ISBN: 1439-898-790 (Taylor & Francis Group, New York). Vol. 4, p. 2938-2949, 2015.

SEMINARS

1. **D. K. Semwal**. Natural antibiotics – A step toward healthy world. National Conference on AYUSH, Uttarakhand organized by PHD Chamber of Commerce and Industry, and Uttarakhand Ayurved University, Dehradun on 17 June, 2016.
2. **D. K. Semwal**, R. B. Semwal, A. Ahmad, G. P. Kamatou, A. M. Viljoen. Inhibitory effects of extracts and isolates from *Kigelia africana* fruits against pathogenic bacteria and yeasts. World Academy of Science, Engineering and Technology, Bangkok, Thailand, 18-19 Dec, 2014.
3. **D. K. Semwal**, R. B. Semwal. Effect of crude extracts and fatty acids from *Celtis australis* on pain and inflammation. Global Challenges: New frontiers in Chemical sciences. Kurukshetra Univ. Kurukshetra (Haryana, India). 22-23 Sep 2012.
4. **D. K. Semwal**, R. B. Semwal, G. Singh, P. Kapoor. Benzoquinone derivative and

sarsasapogenin glycoside from *Asparagus curillus* (Buch.-Ham.) ex roxb. (Liliaceae). Recent advances in Chemical sciences. Panjab University, Chandigarh. 20 Sep 2012.

5. **D. K. Semwal**, R. B. Semwal. Pharmacological validation of traditional uses of *Stephania glabra* (Roxb.) Miers. IInd International conference on Holistic Medicine. Inst. for Holistic Medical Sciences, Kottayam (Kerala). 11-13 Sep 2011.
6. R. Badoni, **D. K. Semwal**. Chemical constituents and pharmacological evaluation of *Celtis australis* L. Chandigarh Science Congress. Panjab University Chandigarh. 26-28 Feb 2011.
7. **D. K. Semwal**, R. Badoni, R. Semwal, G.J.P. Singh, M.S.M. Rawat. Analgesic and antipyretic activities of Gindarudine, A morphine derivative from *Stephania glabra*. Indian Council of Chemists. Panjab University Chandigarh. 19-21 Dec 2010.
8. S. Kumar, **D. K. Semwal**, R. Badoni, U. Rawat. Seasonal variation in the essential oil composition from *Morina longifolia* Wallich. 2nd Rashtriya Yuva Vaigyanik sammelan. Dun Univ. Dehradun. 6-7 Feb 2010.
9. **D. K. Semwal**, R. Badoni, R. Semwal, G.J.P. Singh. Family Liliaceae: A source of novel antidiabetic drugs. Multidisciplinary approaches to diabetes research and health. University of Rajasthan, Jaipur. 14-16 Nov 2010.
10. **D. K. Semwal**, U. Rawat. Phytochemistry and pharmacological importance of *Phoebe lanceolata* Wall. 4th Uttarakhand science congress. GBPUAT Pantnagar. 10-12 Nov 2009.
11. **D. K. Semwal**, R. Badoni, S. C. Sati, S. Kothiyal, U. Rawat. Gindarudin, a novel alkaloid from *Stephania glabra* with analgesic and antipyretic activities. 46th annual convention of Indian chemical Society. Vellore Institute of Tech. Univ. Tamil Nadu. 2-6 Dec 2009.
12. **D. K. Semwal**, U. Rawat. A survey on drinking water samples of Srinagar city. Application of RS & GIS in the natural resources management. HNB Garhwal University Srinagar. 11-13 Sep 2008.
13. **D. K. Semwal**, U. Rawat. Bioactive alkaloids from *Stephania glabra*. 8th National Convention of Chemistry Teachers. HNB Garhwal Univ. & IACT Mumbai. 8-9 Nov 2008.
14. **D. K. Semwal**, U. Rawat. Characterization and hypoglycemic activity of 11-hydroxypalmatine from *Stephania glabra* tuber. 45th annual convention of *Indian Chemical society*. Karnataka University, Dharwad. Nov 2008.
15. **D. K. Semwal**, U. Rawat. Evaluation of Phytochemistry, antidiabetic and antimicrobial activity of *Boehmeria rugulosa* leaves. 3rd Uttarakhand science congress. IIT Roorkee. 10-11 Nov 2008.
16. A. Bamola, **D. K. Semwal**, S. Semwal, U. Rawat. Applications and optimization of natural mordants in mordern dyeing. Medicinal plants conservation, cultivation and utilization. Gurukul Kangri University Haridwar. 9-11 Mar 2007.
17. **D. K. Semwal**, A. Bamola, S. Semwal, V. Joshi, A. Bhandari, U. Rawat. Antidiabetic activity of some medicinal plants. International seminar on Biogeography and Biodiversity. HNB Garhwal University, Srinagar. 3-5 May 2007.
18. A. Bamola, **D. K. Semwal**, U. Rawat. Optimisation of dying properties of *Myrica esculenta*. 2nd Uttarakhand science congress. Kumaun University, Nainital. 15-17.