

Prof. Dr. Anwarul Hassan Gilani, S.I.

Distinguished National Professor

Chairman, Pakistan Council for Science and Technology

Shahrah-e-Jamhuriat, G-5/2, Islamabad

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Date and Place of Birth : April 4, 1955, Faisalabad (Pakistan)

Educational Background:

1985 **PhD**–Pharmacology, University of Sydney, Australia

1978 **MSc (Hon.)**–Physiology & Pharmacology, University of Agriculture, Faisalabad, Pakistan

Professional Background:

1979-86 Lecturer, Dept. Pharmacy, Bahauddin Zakariya University, Multan, Pakistan

1986-97 Senior Instructor, Assistant Professor and Associate Professor, Dept. Pharmacology, Aga Khan University Medical College (AKUMC), Karachi, Pakistan

1997-date Professor, Department of Physiology and Pharmacology, AKUMC, Karachi, Pakistan

2004-date Distinguished National Professor, Title and research grant by the Higher Education Commission of Pakistan

1995-date Adjunct Professor, Faculty of Pharmacy and HEJ Res Institute of Chemistry, University of Karachi, Pakistan

2010- Visiting Professor, King Saud University, Riyadh, Saudi Arabia

Academic leadership

2001-2003 **Deputy Chair**, Department of Biological and Biomedical Sciences (Rotatory position amongst senior faculty of the Department)

2002-date **Founding Director**, Natural Products Research Unit, DBBS

www.aku.edu/medicalcollege/bbs/natprod.htm

2008-date **Vice Chair** for Research and Graduate Studies, DBBS, AKU, Karachi

2008-date **Programme Director**, PhD in Health Sciences, AKU

2008-2009 **Interim Chair**, Board of Graduate Studies, Aga Khan University

2009-date **President**, Pakistan Chapter, International Society of Pharmacoepidemiology and Operational Research (ISPOR)

http://www.ispor.org/regional_chapters/Pakistan/index.asp

Academic Honors/Awards

- Life-time Academic Achievement Award, by the Higher Education Commission, Government of Pakistan 2011.
- Member, WHO Expert Committee on Selection & Use of Essential Medicine (2006-date).
- Member, Executive/Advisory Committee, International Society of Pharmaco-economic and Operation Research (Asia Consortium)
- Two Civil Awards by the President of Pakistan (*Pride of Performance and Sitara-i-Imtiaz*)

- Distinguished National Professor, in the area of Pharmaceutical Sciences, by the Higher Education Commission of Pakistan (2004-), Title along with grants
- Occupied 1st National ranking in the fields of Pharmaceutical Sciences (highest total of International Citations/Impact Factor as published by Pakistan Council for Science Technology)
- Invited speaker and chaired scientific sessions at several international symposia.
- Fellow, *Pakistan Academy of Sciences* (elected in 2002)
- Board member, *International Society of Ethnopharmacology* (2002-date)
- WHO Consultant on *Traditional Medicine* (2002-date)
- *Agha Hassan Abedi Medal* in Medical Sciences, Pakistan Academy of Sciences (2000)
- *National Book Foundation Research Award*: 1st prize in Medical Sciences (1998)
- *Fellow (since 1997), Secretary General (1999-2002), Scientific Secretary (2003-date) of Pakistan Academy of Medical Sciences*
- *Outstanding Teacher Award*: Aga Khan University (1996)
- *Ibn-al-Hayatham Prize in Science*, Pakistan Academy of Sciences (1993)
- *Salam Prize in Science* (Biology-1992)- TWAS, Italy.
- *Boehringer International Research Award* (1988): Boehringer Ingelheim Zentr, Germany
- *Sydney University Postgraduate Merit Scholarship*, Australia (1981-85)

Member, Editorial Board:

Fitoterapia (1999-2010), and *Journal of Ethnopharmacology* (2000-) Elsevier Science, *Journal of Natural Remedies* (2002), *Phytotherapy Research*, John Wiley, UK (2006-), *Pharmacognosy Reviews* (2007-), *The Open Bioactive Compounds Journal* (2008-); *The Open Complementary Medicine Journal* (2008-), Bentham Science Publishers, *Journal of Animal and Plant Sciences* (2000-), *Pakistan Journal of Medical Research* (2009-), *Southern Medical News* (2009-), *Journal of Basic and Applied Sciences* (2009-), *World Journal of Gastrointestinal, Pharmacology and Therapeutics* (2010-), *The Natural Products Journal*, Bentham Science Publishers (2010-), *International Journal of Agriculture and Biology* (1999-), *Evidence Based Complementary and Alternative Medicine* (2012-)

Advisor to:

Pakistan Science Foundation (1994-), Pakistan Medical Research Council (1995-), Higher Education Commission (2003-), Ministry of Health (2000-2003), Ministry of Science and Technology (2002-2005), Pakistan Council for Science and Technology (2005-), National Testing Service (2006-), Member, Selection Boards/Board of Studies at different national Universities

WHO Geneva (2000-), World Innovation Foundation (2006-), International Foundation for Sciences (2006-), South African Medical Research Council (2006-), University of Malaya,

Funding:

Aga Khan University, Pakistan Science Foundation, Higher Education Commission of Pakistan, Pakistan Medical Research Council, International Foundation for Science, Sweden.

Secured several travel grants for invited/plenary lecture/seminars at international meetings.

Supervision of Graduate and Elective Students

- 16 PhDs as main supervisor and 6 PhDs as co-supervisor (6 ongoing as sole supervisor)
- 16 Ms/M.Phil as main supervisor and 15 M.Phil as co-supervisor
- Supervise around 15 summer elective students each year from all over the country

Research

- Three patents and co-editor of two Conference Proceedings
- Co-editor of two WHO reports series on Essential medicine

- Published around 300 research papers mostly in journals of international repute with a **cumulative impact factor of over 600**.
- Published around 170 papers in last 6 years (2005-date) in 55 different ISI-indexed journals with cumulative impact factor around 300.
- Six papers of our group ranked amongst the top 25 articles (Survey by ScienceDirect)
- H-Index of 35 based on Google Scholar
- Participated in over 65 international conferences (Invited/plenary speaker at 30)
- Member, Scientific Committee and Chair/Co-Chair of Scientific sessions of several national/international symposia/conferences

Areas of research interest (see details: www.aku.edu/medicalcollege/bbs/natprod.htm)

- **Natural products research** (a wide range of biological activities, such as *antihypertensive, cardiogenic, antidyslipidemic, anti-oxidant, hepatoprotective, antiinflammatory, antidiabetic, anti-urolithic, uterotonic, laxative, prokinetic, antispasmodic, antidiarrhoeal, antiamebic, antifungal, and Anti-Alzheimer's disease* **with focus on medicinal value of food** and providing scientific basis for the presence of novel combination of activities with synergistic and/or side effects neutralizing potential in medicinal plants.
- **Complementary medicine:** with focus on modifying life style and dietary habits in line with the Sunnah of Holy prophet (prophetic medicine); delivered lectures at different forums
- **Muscarinic Receptor Subtypes** (pioneer work)
- **Public Health and Community Pharmacy**
- **Clinical Studies on herbal products**

Research Collaboration: A network of collaboration established which include at least 8 research groups at national and 6 at international level.

Teaching: Wide experience of teaching pharmacology to medical, pharmacy and nursing students at undergraduate level and designed courses for graduate students and currently heading PhD programme in Health Sciences.

Innovating Teaching: Designed a teaching course for the undergraduate medical students of the Aga Khan University Medical College (Teaching rational prescribing to medical students through critical evaluation of drug promotional materials), which is a self learning exercise with focus on efficacy, safety, patient compliance and cost-effective treatment.

Invited/Plenary Speaker at International Forums in recent years (2006-date)

- **International Symposium on Agriculture in the 21st century**, Centenary Celebrations, University of Agriculture, Faisalabad, March 16-17, 2006.
Title - *Medicinal value of foods and dietary supplements*
- **9th International Congress of Ethnopharmacology**, Nanning, China, August 22-26, 2006 (Plenary Speaker, member of Scientific Committee and chaired a scientific session),
Title- *Novel combinations in medicinal plants with synergistic and side-effects neutralizing potential*
- **12th Asian Symposium on Medicinal Plants and Spice**, Nov 13-18, 2006, Padang, Indonesia.
Title *Novel developments in natural products research* (Invited speaker; chaired two scientific sessions)
- **2nd International Symposium on Cardiovascular risk factors: Pathophysiological aspects and phytopharmacological approaches.** University Sidi Mohamed Ben Abdallah Faculty of Sciences, Fez, Morocco, November 23-25, 2006 (member of Organizing Committee)
Title - *Role of Ethnopharmacology in Modern Medicine* (Plenary speaker)
Title (*lecture # 2*) *Medicinal value of food and dietary supplements in cardiovascular diseases*

- **World Health Updates**, January 26-28, 2007 Expo Centre, Karachi;
Title: *Integration of traditional and modern medicine for better healthcare in developing countries (plenary lecture)*
- **12th Diabetes & Endocrine Conference**, March 1-4, 2007, Dhaka, Bangladesh.
Title-*Medicinal value of food and dietary supplements (Plenary Lecture)*
- **Attended 15th meeting of the WHO Expert Committee on the Selection and Use of Essential Medicine**, March 18-23, WHO Office, Geneva (Finalized the WHO Essential list of Medicine)
- **3rd International Congress on Traditional Medicine and Materia Medica**, July 17-20, Kuala Lumpur, Malaysia Title: *Novel developments in natural products (Plenary lecture)*.
- **1st Regional Conference on Traditional Arabic and Islamic Medicine**, August 8-10, Amman, Jordan Title: *Novel developments in medicinal plant research (plenary speaker)*;
- **18th Iranian congress of physiology and pharmacology**, August 26-30, 2007, Mashhad, Iran.
Title: *Role of ethnopharmacology in modern medicine (plenary lecture)*
- **International Conference on Traditional Medicine and Medicinal Plants**, September 7-9, 2007 Surabaya, Indonesia. (Plenary speaker) Title: *Obesity control with traditional diet and life style (Plenary lecture)*
- **16th Meeting of the WHO Expert Committee on the Selection and Use of Essential Medicine**, October 24-25, 2007, WHO Office, Geneva
- **7th Annual Conference of the Society of Pharmacovigilance**, 23-25 Nov, 2007 Jaipur, India (SoPI) Title: *Safety issues of herbal products.*
- **International Conference of Plant Scientists**, University of Agriculture, Faisalabad, Pakistan April 21-24, 2008, Plenary speaker and Chaired a Plenary session
Titles- *Role of ethnobotany in the development of modern medicine*
- **Joint meeting of 10th International Congress of Ethnopharmacology and 20th Symposium of Medicinal Plants of Brazil**, São Paulo, Brazil, Sept 16-19, 2008
Topic- Controlling obesity and metabolic disorders with traditional diet and life style
- **Scientific Research Outlook and Technology Development in the Arab World**, Fez, Morocco 27-31 October, 2008
Titles: *Integration of traditional and modern medicine for better healthcare (keynote lecture) Novel developments in natural products pharmacology*
- **International Family Medicine Conference**, Karachi, October 30-November 02, 2008
Title: *Healing power of our food and dietary supplements*
- **Joint meeting of the 1st SAARC Conference on Physiological Societies and 11th Biennial Conference of Pakistan Physiological Society**, Nov 10-12, Islamabad
Title- *Controlling obesity and restoring health with life style and dietary modifications*
- **Scientific Research Outlook and Technology Development in the Arab World**, Fez, Morocco 27-31 October, 2008 Title: *Integration of traditional and modern medicine for better healthcare Novel developments in natural products pharmacology*
- **International Symposium on Modernization of Traditional Chinese Medicine: Acupuncture and herbal medicine research**, May 14-16, 2009, Graz, Austria.
Title: *Synergistic and/or side-effects neutralizing combinations in herbal medicine*
- **1st World Conference on Pharmacology of Natural and Traditional Medicine**, Hangzhou, China. Sept 9-12, 2009. Topic: *New leads towards drug discovery from natural products*
- **Workshop on Vital role of preclinical studies in Safety and effectiveness of drugs**, Oct 25-29, 2009, King Fahad Medical Research Center , King Abdul-Aziz University, Jeddah, Saudi Arabia
Titles: *Global Trends in the Use of Traditional Medicine and WHO Traditional Medicine Strategy Role of natural products in modern medicine*
Prophetic medicine: a way towards a healthy life and prosperous society
Controlling obesity and metabolic disorders with dietary and life style modifications

- **Seminar on Clinical Trials and Pharmacovigilance Awareness and Current Trends in Pakistan**, Jointly organized by the Ministry of Health and Dow University of Health Sciences, Karachi, May 24, 2010
Title: Safety issues (Pharmacovigilance) in using medicinal products
- **Pakistan Academy of Sciences, Islamabad, June 14, 2010**
Title: Preventing illness and maintaining health with life style changes and natural foods
- **6th World Congress of Basic and Clinical Pharmacology**, Copenhagen, 17-23 July, 2010, organized by the International Union of Pharmacologists. <http://www.worldpharma2010.org/>.
Title: Novel synergistic and/or side-effects neutralizing combinations in natural products
- **The 12th International Symposium on Natural Products Chemistry (ISNPC-12)**, November 22- 25, 2010, Karachi (also chaired a session)
Title: Novel development in natural products research
- **3rd International Symposium-cum Training Course on Molecular Medicine and Drug Research, January 2-6, 2011, Karachi (Prof. Sheikh Arshad Saeed memorial plenary lecture)**
Title: Trends in Ethnopharmacology
- **16th Annual meeting of the International Society of Pharmacoeconomics and Outcome Research, May 21-25, Hilton Baltimore, US** (Travel grant \$ 2,500/= as an invited speaker). www.ispor.org
Title: Lead detoxifying effect of vitamin c in traffic police subjects
Progress and activities of Pakistan Chapter (Action meeting)
- **The 12th International Symposium on Natural Products Chemistry (ISNPC-12), November 22 - 25, 2010, Karachi** (also Chaired a session)
Title: Novel development in natural products research
- **3rd International Symposium-cum Training Course on Molecular Medicine and Drug Research, January 2-6, 2011, Karachi** (plenary speaker)
Title: Trends in Ethnopharmacology
- **King Saud University, College of Pharmacy, Riyadh, Saudi Arabia, March 3-16, 2011**
Title: Controlling obesity and cardiovascular diseases with life style and dietary modification
- **Pakistan Council for Science and Technology, Islamabad, January 12, 2010**
Title: Controlling blood pressure and other cardiovascular diseases with nutrition and life style approaches
- **Distinguished lecture series, Department of Biochemistry, University of Karachi, March 1st, 2012**, Title: *Controlling obesity and restoring good health with life style and dietary modifications*
- **26th Meeting of Malaysian Society of Pharmacology and Physiology, May 18-20, Penang, Malaysia.** Title: *Controlling obesity and restoring physiological functions with life style and dietary modifications*

RECENT RESEARCH PUBLICATIONS (2005-2012)

Research articles: over 160 in 50 different journals with Cumulative Impact factor around 300
Review articles: 08, *Book Chapters:* 07, *WHO Reports series:* 02

WHO Expert Committee Reports Series

1. Bero L, Cranswick N, Fernandopulle R, **Gilani AH**, et al. (2007). The selection and use of essential medicines: 15th model list of essential medicines. **World Health Organization Technical Report Series.** (946): back cover, v-162.
2. Al-Fannah JMA, Coelho H, Cranswick N, **Gilani AH**, et al. (2008). The selection and use of essential medicines: model list of essential medicines for children. **World Health Organization Technical Report Series.** (950): back cover, vii-174.

Research Papers

3. Choudhary MI, Nawaz SA, Zaheer-ul-Haq, Azim MK, Ghayur MN, Lodhi MA, Jalil S, Khalid A, Ahmed A, Rode , Atta-ur-Rahman, **Gilani AH**, Ahmad VU (2005). Juliflorine: a potent natural peripheral anionic-site- binding inhibitor of acetylcholinesterase with calcium-channel blocking potential, **a leading candidate for Alzheimer's disease therapy**. *Biochemical and Biophysical Research Communications* 332: 1171-1179.
4. **Gilani AH**, Shah AJ, Ghayur MN, Majeed K (2005). Pharmacological basis for the use of turmeric in gastrointestinal and respiratory disorders. *Life Sciences* 76: 3089-3105.
5. Ghayur MN and **Gilani AH** (2005) Pharmacological basis for the medicinal use of Ginger in gastrointestinal disorders. *Digestive Diseases and Sciences* 50: 1889-1897.
6. Choudhary MI, Nawaz SA, Zaheer-ul-Haq, Lodhi MA, **Ghayur MN**, Jalil S, Riaz N, Yousuf S, Malik □A, Rode BM..... **Gilani AH**, Atta-ur-Rahman (2005). Withanolides, a new class of natural cholinesterase inhibitors with calcium antagonistic properties. *Biochemical and Biophysical Research Communications* 334: 276-287.
7. Ghayur, MN, **Gilani, AH** (2005) Ginger lowers blood pressure through blockade of voltage-dependent calcium channels. *Journal of Cardiovascular Pharmacology* 45, 74-80.
8. **Gilani AH**, Khan A, Subhan F, Khan M. (2005) Antispasmodic and bronchodilator activities of St. John's Wort are putatively mediated through dual inhibition of calcium influx and phosphodiesterase. *Fundamental and Clinical Pharmacology* 19: 695-705.
9. Rohra DK, Sharif H, Zuberi H, Ghayur MN, **Gilani AH** (2005) Acidosis-induced relaxation of human mammary artery is due to activation of ATP-sensitive potassium channels. *European Journal of Pharmacology* 514: 175-181
10. Ghayur MN, **Gilani AH**, Houghton P (2005) Species differences in the gut stimulatory effects of radish seeds. *J Pharmacy and Pharmacology* 57: 1493-1501.
11. **Gilani, AH**, Khan A, Shah AJ, Connor J and Jabeen Q (2005) Blood pressure lowering effect of olives is mediated through calcium channel blockade. *International Journal of Food Sciences and Nutrition* 56: 613-620.
12. Butt ZA, **Gilani, AH**, Nanan, D, Sheikh AL, White, F (2005). Quality of Pharmacies in Pakistan: A Cross-sectional Survey. *Int Journal for Quality in Health Care* 17:307-313
13. Ghayur MN, **Gilani AH**, Afridi MB, Houghton PJ (2005). Cardiovascular effects of ginger aqueous extract and its phenolic constituents are mediated through multiple pathways. *Vascular Pharmacology* 43(4): 234-241.
14. **Gilani AH**, Bashir S, Janbaz KH, & Khan, A. (2005) Pharmacological basis for the use of *Fumaria indica* in constipation and diarrhea. *Journal of Ethnopharmacology* 96: 585-589.
15. **Gilani AH**, Ghayur, MN, Khalid, A, Zaheer-ul-Haq, Choudhary, MI, Atta-ur-Rahman 2005. Presence of antispasmodic, antidiarrhoeal, antisecretory, calcium antagonist and acetylcholinesterase inhibitory steroidal alkaloids in *Sarcococca saligna*. *Planta Medica* 71: 120-125.
16. **Gilani, AH**, Khan A, Shah AJ, Jabeen Q, Subhan, F. and Ghafar, R Q (2005). Antispasmodic and blood pressure lowering effects of *Valeriana wallichii* are mediated through K⁺ channel activation. *Journal of Ethnopharmacology* 100(3): 347-352.
17. **Gilani, A.H.**, Jabeen Q, Ghayur, M.N. Janbaz, K.H, Akhtar, M.S. (2005) Studies on the antihypertensive, antispasmodic, bronchodilator and hepatoprotective activities of the *Carum copticum* seed extract. *Journal of Ethnopharmacology* 98:127-135.
18. **Gilani, AH** (2005). Role of ethnopharmacology in the development of modern medicine. In: Shinwar ZK, Watanabe T, Ali M, Anwar R (Eds.) Proceedings of the *International Symposium on Medicinal Plants: Linkages beyond national boundaries*. Al-Aziz Communications, Peshawar, pp. 192-197.
19. **Gilani AH** (2005). Role of medicinal plants in modern medicine. *Malaysian Journal of Science* 24: 1-5 (review article).

20. Amor EC, Villaseñora IM, Ghayur MN, **Gilani AH**, Choudhary MI (2005). Spasmolytic flavonoids from *Syzygium samarangense* (Blume) Merr. & L.M. Perry. *Zeitschrift für Naturforschung c* 60: 67-71.
21. **Gilani AH**, Bukhari I, Khan, RA, Farman-ullah Ahmad VU (2005) Cholinomimetic and calcium channel blocking activities of *Carthamus oxycanth*. *Phytotherapy Research* 19:679-683.
22. **Gilani AH**, Bashir S, Janbaz KH, Shah AJ (2005). Presence of cholinergic and calcium channel blocking activities explains the traditional use of *Hibiscus rosasinensis* in constipation and diarrhea. *Journal of Ethnopharmacology* 102: 289-294.
23. Ghayur MN, **Gilani AH** (2005) Gastrointestinal stimulatory and uterotonic activities of dietary radish leaves extract are mediated through multiple pathways. *Phytotherapy Res* 19:750-75
24. **Gilani, AH**, Yaeesh, S, Jamal, Q, Ghayur MN (2005) Hepatoprotective activity of aqueous-methanol extract of *Artemisia vulgaris*. *Phytotherapy Research* 19: 170-172
25. **Gilani AH**, Khan A, Ghayur MN, Herzig JW (2006) Antispasmodic effects of Rooibos tea (*Aspalathus linearis*) are mediated predominantly through potassium channel activation. *Basic and Clinical Pharmacology and Toxicology* (formerly *Pharmacol. Toxicol*) 99:365-373.
26. Khan A, **Gilani AH** (2006). Selective bronchodilatory effect of Rooibos tea (*Aspalathus linearis*) and its flavonoid, chrysoeriol. *European Journal of Nutrition* 45: 463-469
27. Taqvi SIH, Ghayur MN, **Gilani AH**, Saify ZS, Aftab MT (2006). Synthesis and smooth muscle-selective relaxant activity of a piperidine analogue: 1-(4'-fluorophenacyl)-4-hydroxy-4-phenylpiperidinium chloride. *Archives of Pharmacal Research* 29: 34-39.
28. Iqbal Z, Lateef M, Jabbar A, Ghayur, MN, and **Gilani AH** (2006) In vitro and in vivo anthelmintic activity of *Nicotiana tabacum* L. leaves against gastrointestinal nematodes of sheep. *Phytotherapy Research* 20: 46-48.
29. Sabira Begum, Syed Imran Hassan[†], Bina S. Siddiqui[†], Rehana Ifzal, Sobiya Perwaiz, Tahira Kiran, Farhana Shaheen, M. Nabeel Ghayur and **Gilani AH** (2006) Preparation, Structure and Spasmolytic Activity of Some Derivatives of Harmine Series of Alkaloids. *Natural Products Research* 20: 213-227.
30. Ghayur MN, **Gilani AH** (2006). Radish seed extract mediates its cardiovascular inhibitory effects via muscarinic receptor activation. *Fundamental and Clinical Pharmacology* 20:57-63
31. **Gilani AH**, Ghayur MN, Houghton PJ, Jabeen Q, Kazim SF, Jumani MI, Saeed SA (2006). Studies on the hypotensive, cardio-suppressant, vasodilator and antiplatelet activities of betel nut crude extract and its constituents. *International Journal of Pharmacology* 2:33-41
32. Ghayur MN, **Gilani AH**, Khan A, Amor EC, Villaseñor IM, Choudhary MI (2006). Presence of calcium antagonist activity explains the use of *Syzygium samarangense* in diarrhea. *Phytotherapy Research* 20: 49-52.
33. Taqvi SIH, Aftab MT, Ghayur MN, **Gilani AH**, Saify ZS (2006). Synthesis and biological evaluation of 1-(2', 4'-dimethoxyphenacyl)-4-acetyl-4-phenylpiperidinium bromide in intestinal and cardiovascular tissues. *Journal of Pharmacology and Toxicology* 1: 126-133.
34. Rohra DK, **Gilani AH**, Memon IK, Perven G, Khan MT, Zafar H, Ahuja RK (2006) Critical evaluation of the claims made by pharmaceutical companies in drug promotional material in Pakistan. *Journal of Pharmacy and Pharmaceutical Sciences* 9: 50-59.
35. Taqvi SIH, Aftab MT, Ghayur MN, **Gilani AH**, Saify ZS (2006). Synthesis and pharmacological screening of 1-(2', 4'-dimethoxyphenacyl)-4-hydroxy-4-phenylpiperidinium bromide. *International Journal of Pharmacology* 2: 146-151.
36. Taqvi SIH, Ghayur MN, **Gilani AH**, Aftab MT, Saify ZS (2006). Synthesis, spasmolytic, cardio-suppressant, vasodilator and Ca⁺⁺ antagonist activities of 1-[4'-methylphenacyl]-4-acetyl-4-phenylpiperidinium bromide. *Pakistan Journal of Biological Sciences* 9: 60-66.
37. Iqbal Z, Lateef M, Jabbar A, Ghayur, MN, and **Gilani AH** (2006) In vivo anthelmintic activity of *Butea monosperma* against trichostrongylid nematodes in sheep. *Fitoterapia* 77: 137-140.
38. Iqbal Z, Lateef M, Akhtar MS, Ghayur MN, **Gilani AH** (2006) In vivo anthelmintic activity of ginger against gastrointestinal nematodes of sheep. *Journal of Ethnopharmacology* 106:285-287

39. **Gilani, AH**, Khan A, Ghayur, MN (2006) Calcium antagonist and cholinomimetic activities explains the medicinal uses of olives in gut disorders. *Nutrition Research* 26: 277-283.
40. Yaeesh S, Jamal Q, Khan A, **Gilani AH** (2006) Studies on hepatoprotective, antispasmodic and calcium antagonist activities of the aqueous-methanol extract of *Achillea millefolium*. *Phytotherapy Research* 20: 546-551.
41. Ghayur, MN, **Gilani AH** (2006). Species differences in the prokinetic effects of ginger. *International Journal of Food Sciences and Nutrition* 57: 65-73.
42. Bashir S, Janbaz KH, Jabeen Q and **Gilani AH** (2006) Studies on spasmogenic and spasmolytic activities of *Calendula officinalis* flowers. *Phytotherapy Research* 20: 906-910.
43. Lateef M, Iqbal Z, Iqbal Z, Jabbar A, Akhtar MS, MN Khan, **Gilani AH** (2006) Preliminary screening of *Trachyspermum ammi* (L.) seed for anthelmintic activity in sheep. *Tropical Animal Health and Production* 38: 491-96.
44. Ghayur MN, **Gilani AH** 2006. Studies on cardio-suppressant, vasodilator and tracheal relaxant effects of *Sarcococca saligna*. *Archives of Pharmacol Research* 29: 990-2006.
45. **Gilani AH**, Shah AJ, Manzoor Ahmad M, Shaheen F, (2006.) Antispasmodic effect of *Acorus calamus* is mediated through calcium channel blockade. *Phytotherapy Res* 20: 1080-1084.
46. Atta-ur-Rahman, Khalid A, Sultana N, Ghayur M N, Mesaik M A, Khan M R, **Gilani AH** Choudhary M I 2006. New Natural Cholinesterase Inhibiting and Calcium Channels Blocking Quinoline Alkaloids, *Journal of Enzyme Inhibition and Medicinal Chemistry* 21: 703-710.
47. Khan H, Ghayur MN, **Gilani AH**. (2006). *In vitro* studies on antispasmodic and vasodilator activities of (+)-Catechin, a commonly occurring flavonoid. *European Journal of Medical Research* 11(Supplement II): 125-126.
48. Ghayur MN, **Gilani AH** (2007) Inhibitory activity of ginger rhizome on airway and uterine smooth muscle preparations *European Food Research and Technology* 224: 477-481.
49. Mustafa MR, Ajay M, Chai HJ, Mustafa AM, **Gilani AH**. 2007. Mechanisms of the anti-hypertensive effect of *Hibiscus sabdariffa* L. calyces *Journal of Ethnopharmacology* 109:388-393
50. Ghayur MN, **Gilani AH** (2007) Cardio-selective inhibitory effect of the betel nut extract: possible explanation. *Pharmazie* 62: 67-71.
51. Subhan F, Khan M, **Gilani AH** 2007. Antagonism of antinociceptive effect of hydro-ethanolic extract of *Hypericum perforatum* Linn. by a non-selective opioids receptor antagonist, naloxone. *Pakistan Journal of Biological Sciences* 10: 792-796
52. Ghayur, MN, **Gilani AH** 2007. α -adrenoceptor mediated hypertensive and vasoconstrictor effects of dietary radish leaves extract. *Journal of Health Sciences* 53: 151-155.
53. Jabeen Q, Aziz N, **Gilani AH**, (2007). The spasmogenic and spasmolytic activities of *Lavandula stoechas* are mediated through muscarinic receptor stimulation and calcium channel blockade. *International Journal of Pharmacology* 3: 61-67.
54. Bukhari IA, Khan RA, **Gilani AH**, Shah AJ, Hussain J, Ahmad VU. 2007. The analgesic, anti-inflammatory and calcium antagonist potential of *Tanacetum artemisioides*. *Archives of Pharmacol Research* 30: 303-312.
55. Ali A, **Gilani AH** (2007) Medicinal value of ginger with focus on its use in nausea and vomiting of pregnancy. *International Journal of Food Properties* 10: 269-278 (review).
56. Ghayur MN, Khan AH, **Gilani AH**. 2007. Ginger facilitates cholinergic activity possibly due to blockade of muscarinic autoreceptors in rat stomach fundus. *Pakistan Journal of Pharmaceutical Sciences* 20(3):231-5.
57. **Gilani AH**, Shah AJ, Yaeesh S. (2007) Presence of cholinergic and calcium antagonist constituents in *Saussurea lappa* explains its use in constipation and spasm. *Phytotherapy Research* 21: 541-544.
58. Nisar M, Adzu B, Inamullah K, Bashir A, Ihsan A, **Gilani AH** (2007) Antinociceptive and antipyretic activities of the *Zizyphus oxyphylla* Edgew. Leaves *Phytotherapy Res* 21: 693-695.
59. Ghayur MN, Khan H, **Gilani AH** (2007) Antispasmodic, Bronchodilator and Vasodilator Activities of (+)-Catechin, a Naturally Occurring Flavonoid. *Arch Pharmacol Res* 30:970-975.

60. **Gilani AH**, Shah AJ, Janbaz KH, Ahmed SP, Ghayur MN (2007) Studies on antihypertensive and antispasmodic activities of *Andropogon muricatus* Nash. *Canadian Journal of Physiology and Pharmacology* 85 (9): 911-917.
61. **Gilani AH**, Bashir S, Khan A (2007) Pharmacological basis for the use of *Borago officinalis* in gastrointestinal, respiratory and cardiovascular disorders. *J Ethnopharmacology* 114: 393-399.
62. Ullah F, Hussain H, Hussain J, Bukhari IA, Khan MT, Choudhary MI, **Gilani AH**, Ahmad VU (2007) Tyrosinase inhibitory pentacyclic triterpenes and analgesic and spasmolytic activities of methanol extracts of *Rhododendron collettianum*. *Phytotherapy Research*. 21:1076-1081.
63. **Gilani AH**, Khan A, Raof M, Jabeen Q, Ghayur MN, Siddiqui BS, Vohra W (2008) Antispasmodic, bronchodilator and urinary bladder relaxant effects of *Hyoscyamus niger* are mediated through dual blockade of muscarinic receptors and Ca⁺⁺ influx. *Fundamental and Clinical Pharmacology* 22: 87-99.
64. Ghayur MN, **Gilani AH**, Ahmed T, Khalid A, Nawaz SA, Agbedahunsi JM, Choudhary MI, Houghton PJ (2008) Muscarinic, Ca⁺⁺ antagonist and specific butyrylcholinesterase inhibitory activity of dried ginger extract might explain its use in dementia. *Journal of Pharmacy and Pharmacology* 60: 1375-1383.
65. Taqvi SIH, Shah AJ, **Gilani AH** (2008). Blood pressure lowering and vasomodulator effects of piperine. *Journal of Cardiovascular Pharmacology* 52(5):452-458.
66. **Gilani AH**, Jabeen Q, Khan A, Shah J (2008) Gut modulatory, blood pressure lowering, diuretic and sedative activities of cardamom. *Journal of Ethnopharmacology* 115: 463-472.
67. Al-Fannah JMA, Coelho H, Cranswick N, **Gilani AH**, et al. (2008). The selection and use of essential medicines: model list of essential medicines for children. *World Health Organization Technical Report Series*. (950): back cover, vii-174.
68. Nisar M, Inamullah K, Simjee SU, **Gilani AH**, Obaidullah Perveen H (2008) Anticonvulsant, analgesic and antipyretic activities of *Taxus wallichiana* Zucc. *Journal of Ethnopharmacology* 116: 490-494.
69. Ghayur MN, **Gilani AH**, Janssen LJ (2008). Ginger attenuates acetylcholine-induced contraction and Ca²⁺ signaling in murine airway smooth muscle cells. *Canadian Journal of Physiology and Pharmacology* 86(5): 264-271.
70. **Gilani AH**, Khan A, Ali T, Ajmal S (2008). Mechanisms underlying the antispasmodic and bronchodilatory properties of *Terminalia bellerica* fruit. *J Ethnopharmacology* 116: 528-538.
71. Khan A, **Gilani AH** (2008). Pharmacodynamic evaluation of *Terminalia bellerica* for its antihypertensive effect. *Journal of Food and Drug Analysis* 16: 6-14.
72. **Gilani AH**, Mehmood A, Khan MH, Janbaz KH, Saeed SA (2008) Ethnopharmacological studies on antispasmodic and antiplatelet activities of *Ficus carica*. *Journal of Ethnopharmacology* 119:1-5.
73. Khan A, **Gilani AH** (2008) Cardiovascular inhibitory effects of *Hyoscyamus niger*. *Methods and Findings in Experimental and Clinical Pharmacology* 30: 295-300.
74. Cherkaoui-Tangi K, Lachkar M, Wibo M, Morel N, **Gilani AH**, Lyoussi B (2008). Pharmacological studies on hypotensive, diuretic and vasodilator activities of chrysin glucoside from *Calycotome villosa* in rats. *Phytotherapy Research* 22: 356-361
75. Ghayur MN, **Gilani AH**, Rasheed H, Khan A, Iqbal Z, Ismail M, Saeed, SA, Janssen LJ (2008). Cardiovascular and airway relaxant activities of peony root extract. *Canadian Journal of Physiology and Pharmacology* 86: 793-803.
76. Shahid M, Tayyab M, Naz F, Jamil A, Ashraf M, **Gilani AH** (2008) Activity-guided isolation of a novel protein from *Croton tiglium* with antifungal and antibacterial activities. *Phytotherapy Research* 22(12):1646-1649.
77. Bashir S, **Gilani AH** (2008) Studies on the antioxidant and analgesic activities of *Aztec marigold* (*Tagetes erecta*) flowers. *Phytotherapy Research* 22(12):1692-1694.
78. Ahmed T, **Gilani AH** (2009). Inhibitory effect of curcuminoids on acetylcholinesterase activity and attenuation of scopolamine-induced amnesia may explain medicinal use of turmeric in Alzheimer's disease. *Pharmacology, Biochemistry and Behaviour* 91: 554-559.

79. Aziz N, Mahmood MH, Mandukhal SR, Bashir S, Raof S, **Gilani AH** (2009). Antihypertensive, antioxidant, antidyslipidemic and endothelial modulating activities of a poly-herbal formulation (POL-10). *Vascular Pharmacology* 50: 57-64.
80. **Gilani AH**, Shah AJ, Zubair A, Khalid S, Kiani J, Ahmed A, Rasheed M, Ahmed VU (2009) Chemical composition and mechanisms underlying the spasmolytic and bronchodilatory properties of the essential oil of *Nepeta cataria* L. *J Ethnopharmacology* 121:405-411.
81. Qidwai W, Hamza HB, Qureshi R, **Gilani AH** (2009). Effectiveness, safety and tolerability of *Nigella sativa* (Kalonji) seed extract on lipid levels, blood sugar, blood pressure and body weight in adults: Results of a randomized double blind controlled trial. *Journal of Alternative and Complementary Medicine* 15(6):639-44. doi:10.1089/acm.2008.0367.
82. Bashir S, **Gilani AH** (2009) Antiurolithic effect of *Bergenia ligulata* rhizome: an explanation of the underlying mechanisms. *Journal of Ethnopharmacology* 122: 106-116.
83. **Gilani AH**, Bukhari IA, Rafeeq A. Khan RA, Shah AJ, Ahmad I, Malik A (2009) Presence of blood pressure lowering and spasmolytic constituents in *Buddleja crispa*. *Phytotherapy Research* 23(4); 492-497.
84. Shah AJ and Gilani AH (2009). Blood pressure lowering and vascular modulator effects of *Acorus calamus* extract are mediated through multiple pathways. *Journal of Cardiovascular Pharmacology* 54(1):38-46.
85. Jabeen Q, Bashir S, Lyoussi B, **Gilani AH** (2009) Coriander fruit extract exhibits gut modulatory, blood pressure lowering activities. *Journal of Ethnopharmacology* 122:123-130.
86. Taqvi, SIH, Shah AJ, **Gilani AH** (2009). Insight into the possible mechanism of antidiarrheal and antispasmodic activities of piperine. *Pharmaceutical Biology* 47 (8): 660-664.
87. Bachaya HA, Iqbal Z, Khan MN, Jabbar A, **Gilani AH**, Islam-uddin (2009). In vitro and in vivo anthelmintic activity of *Terminalia arjuna* bark. *Int J Agric Biology* 11: 273-278.
88. **Gilani AH**, Mehmood MH, Khan A Janbaz KH, Saeed SA (2009) Gut modulatory and antiplatelet activities of *Viscum cruciatum* *Pharmaceutical Biology* 47: 955-961.
89. Khan A, **Gilani AH** (2009). Antidiarrheal, antisecretory, and bronchodilatory activities of *Hypericum perforatum*. *Pharmaceutical Biology* 47: 962-967.
90. Khan A, **Gilani AH** (2009) Antispasmodic and bronchodilator activities of *Artemisia vulgaris* are mediated through dual blockade of muscarinic receptors and calcium influx. *Journal of Ethnopharmacology* 126:480-486. doi:10.1016/j.jep.2009.09.010
91. **Gilani AH** (2009) Novel synergistic and/or side-effects neutralizing combinations in natural medicine. *Chinese Journal of Pharmacology and Toxicology* 23: 241.
92. Aziz N, Mahmood MH, Siddiqi HS, Mandukhal SR, Saqib F, Maan W, **Gilani AH** (2009). Antihypertensive, antidyslipidemic and endothelial modulating activities of *Orchis mascula*. *Hypertension Research* 32(11): 997-1003.
93. Ahmed T, Enam SA, **Gilani AH** (2010). Curcuminoids enhance memory in amyloid infused model of Alzheimer's disease. *Neuroscience* 169: 1296-1306
94. Iqbal Z, Lateef M, Jabbar A, **Gilani AH** (2010). *In vivo* anthelmintic activity of *Azadirachta indica* A. Juss seeds against gastrointestinal nematodes of sheep. *Veterinary Parasitology* 168: 342-345.
95. Shah AJ, **Gilani AH** (2010) Bronchodilatory effect of *Acorus calamus* (Linn.) is mediated through multiple pathways. *Journal of Ethnopharmacology* 131:471-477.
96. Shah AJ, Gowani SA, Zuberi, AJ, Ghayur MN, **Gilani AH** (2010). Antidiarrhoeal and Spasmolytic Effects of the Methanolic Crude Extract of *Alstonia scholaris* L. is mediated through Calcium Channel Blockade. *Phytotherapy Research* 24:28-32.
97. Khan H, Saeed M, **Gilani AU**, Khan MA, Dar A, Khan I. (2010). The antinociceptive activity of *Polygonatum verticillatum* rhizomes in pain models. *J Ethnopharmacology* 127:521-527.
98. Jafar, TH, Islam M, Hatcher J, Hashmi S, Bux R, Khan A, Poulter N, Badruddin S, Chaturvedi N, Jafary F, Hameed A, Khan A, **Gilani A**, Zaidi S, Syed N, Jessani S, Qadri Z, Cosgrove P (2010). Community based lifestyle intervention for blood pressure reduction in children and young adults in

- developing country: cluster randomized controlled trial. *British Medical Journal* 340:c2641; doi:10.1136/bmj.c2641
99. Gilani SN, Khan AU, **Gilani AH** (2010). Pharmacological basis for the medicinal use of *Zanthoxylum armatum* in gut, airways and cardiovascular disorders *Phytotherapy Research* 24:553-558. DOI: 10.1002/ptr.2979
 100. Subhan F, Karim N, **Gilani AH**, Sewell RDE, (2010). Terpenoid content of *Valeriana wallichii* extracts and antidepressant-like response profiles. *Phytotherapy Research* 24: 686-691.
 101. Hussain AI, Anwar F, Nigam PS, Ashraf M, **Gilani AH** (2010). Seasonal variation in content, chemical composition and antimicrobial and cytotoxic activities of essential oils from four *Mentha* species. *Journal of the Science of Food and Agriculture* 90(11):1827-1836.
 102. Khan A, **Gilani AH** (2010). Antisecretory and analgesic activities of *Terminalia bellerica*. *African Journal of Biotechnology* 9: 2717-2719.
 103. Bashir S, **Gilani AH**, Siddiqui AA, Pervez S, Khan SR, Sarfaraz NJ, Shah AJ (2010). *Berberis vulgaris* root bark extract prevents hyperoxaluria-induced urolithiasis in rats. *Phytotherapy Research* 24(8):1250-5.
 104. **Gilani AH**, Mandukhal SR, Iqbal J, Yasinzai M, Khatri NA, Khan A, Khattak NUR (2010). Antispasmodic and vasodilator activities of *Morinda citrifolia* root extract are mediated through blockade of voltage dependent calcium channels. *BMC Complementary and Alternative Medicine* 10(1):2-10.
 105. Yaeesh S, Jamal Q, Shah AJ, **Gilani AH** (2010) Antihepatotoxic activity of *Saussurea lappa* extract on D-galactosamine and lipopolysaccharide-induced hepatitis in mice. *Phytotherapy Research* 24: S229-S232.
 106. Khan AU, **Gilani AH** (2010). In vivo studies on the bronchodilatory and analgesic activities of *Hyoscyamus niger* and *Aspalathus linearis*. *Latin American J Pharmacy* 29 (5): 777-82.
 107. Khan A, Khan M, Subhan F, **Gilani AH** (2010). Antispasmodic, bronchodilator and blood pressure lowering properties of *Hypericum oblongifolium*-possible mechanism of action. *Phytotherapy Research* 24(7):1027-32.
 108. Mandukhail SUR, Aziz N, **Gilani AH** (2010). Studies on antidyslipidemic effects of *Morinda citrifolia* (Noni) fruit, leaves and root extracts. *Lipids in Health and Disease* 9(1):88; PMID: 20727145.
 109. Bukhari IA, Khan RA, **Gilani AH**, Ahmed S, Saeed SA (2010). Analgesic, anti-inflammatory and anti-platelet activities of the methanolic extract of *Acacia modesta* leaves. *Inflammopharmacology* 18(4):187-96.
 110. Shah AJ, Bhulani NN, Khan SH, Rehman NU, **Gilani AH** (2010). Calcium channel blocking activity of *Mentha longifolia* L. explains its medicinal use in diarrhoea and gut spasm. *Phytotherapy Research* 24(9):1392-7.
 111. Mahmood MH, **Gilani AH** (2010). Pharmacological basis for the medicinal use of black pepper and piperine in gastrointestinal disorders. *Journal of Medicinal Foods* 13: 1086-1096.
 112. **Gilani AH**, Khan A, Khan AU, Bashir S, Rehman N, Mandukhail S (2010). Pharmacological basis for the medicinal use of *Holarrhena antidysenterica* in gut motility disorders. *Pharmaceutical Biology* 48(11):1240-6.
 113. Khan AU, **Gilani AH** (2010). Airways and cardiovascular inhibitory effects of *Olea europea* and *Terminalia bellerica* aqueous fractions. *Farmacologia*. 58: 758-763.
 114. Ahmed T, **Gilani AH** (2011). Comparative study on curcuminoids for their effect on inflammatory and apoptotic gene expression in rat model of Alzheimer's disease. *Brain Research* 1400:1-18.
 115. Mahmood H, Aziz N, Ghayyur MN, **Gilani AH** (2011). Pharmacological basis for the medicinal use of Psyllium husk (Ispaghula) in constipation and diarrhea. *Digestive Diseases and Sciences* 56:1460-1471; DOI 10.1007/s10620-010-1466-0).
 116. Bashir S, **Gilani AH** (2011) Antiurolithic effect of berberine is mediated through multiple pathways. *European Journal of Pharmacology* 651: 168-175; doi:10.1016/j.ejphar.2010.10.076

117. Ahmed T, **Gilani AH**, Hosseinmardi N, Semnianian S, Enam SA, Fathollahi Y. (2011) Curcuminoids rescue LTP impaired by amyloid peptide in rat hippocampal slices. *Synapse* 65:572–582 (DOI:10.1002/syn.20876).
118. Khan A, **Gilani AH**, Khan SR. Expression of Matrix Gla Protein in MDCK cells exposed to Oxalates, Calcium Oxalate Monohydrate and Hydroxyapatite crystals. *European Urology Supplements* 10 (2011): 466-467.
119. Rehman NU, Mehmood MH, Alkharfy KM, **Gilani AH** (2011). Prokinetic and laxative activities of *Lepidium sativum* seed extract with species and tissue selective gut stimulatory actions. *Journal of Ethnopharmacology* 134:878-883; DOI: 10.1016/j.jep.2011.01.047
120. Khan, S., Mehmood, M.H., Akbarali, A.N., Ahmed, F.S., Dar, A., **Gilani, A.H.**, 2011. Studies on anti-inflammatory and analgesic activities of Betel nut in rodents. *Journal of Ethnopharmacology* 135(3):654-61.
121. Mahmood MH, Siddiqi HS, **Gilani AH** (2011). The antidiarrheal and spasmolytic activities of *Phyllanthus emblica* Linn. are mediated through dual blockade of muscarinic receptors and Ca²⁺ channels. *Journal of Ethnopharmacology* 133 (2):856-65.
122. Khan HU, Ali I, Khan AU, Naz R, **Gilani AH** (2011) Antibacterial, antifungal, antispasmodic and Ca⁺⁺ antagonist effects of *Caesalpinia bonducella*. *Natural Products Research* 25(4): 444-9.
123. Khan A, **Gilani AH**, Rahman N (2011). Pharmacological studies on *Hypericum perforatum* fractions and constituents *Pharmaceutical Biology* 49(1):46-56.
124. Bashir S, Memon R, **Gilani AH** (2011). Antispasmodic and antidiarrheal activities of *Valeriana hardwickii* rhizome are putatively mediated through calcium channel blockade. *Evidence Based Complementary and Alternative Medicine* 2011:2011:304960. Epub 2011 March 3; DOI:10.1155/2011/304960.
125. Shah AJ, **Gilani AH**, Abbas K, Rasheed M, Ahmed A, Ahmad VU (2011) Studies on chemical composition and possible mechanisms underlying the antispasmodic and bronchodilatory activities of the essential oil of *Artemisia maritima* L. *Archives of Pharmacal Research* 34(8):1227-38.
126. Khan AU, **Gilani AH** (2011) Blood Pressure Lowering, Cardiovascular Inhibitory and Bronchodilatory Actions of *Achillea millefolium*. *Phytotherapy Research* 25: 577–583 (DOI: 10.1002/ptr.3303).
127. Khan AU, Ali F, Khan D, **Gilani AH** (2011). Gut modulatory effects of *Daphne oleoides* are mediated through cholinergic and Ca⁺⁺ antagonist mechanisms. *Pharmaceutical Biology* 49(8):821-5; doi:10.3109/13880209.2010.550056.
128. Ali F, Ali I, Khan HU, Khan AU, **Gilani AH** (2011) Antibacterial, antifungal and Ca⁺⁺ antagonist activities of *Buddleja asiatic*. *African Journal of Biotechnology* 10(39): 7679-7683.
129. Ghayur MN, Kazima SF, Khalid A, Rasheed H, Jumania MI, Saeed SA, Choudhary MI, **Gilani AH** (2011). Further Studies into identification of antiplatelet and acetylcholinesterase inhibitory constituents in Betel nut. *Chinese Journal of Integrative Medicine* 9(6):619-25.
130. Khan AU, Khan QJ, **Gilani AH** (2011). Pharmacological basis for the medicinal use of cardamom in asthma. *Bangladesh Journal of Pharmacology* 6 (1): 34-37.
131. Shah AJ, Zaidi MA, Sajjad H, Hamidullah, **Gilani AH** (2011). Antidiarrheal and antispasmodic activities of *Vincetoxicum stocksii* are mediated through calcium channel blockade *Bangladesh Journal of Pharmacology* 6 (1): 46-50.
132. Khan A, Bashir S, Khan SR, **Gilani AH** (2011). An in vitro and in vivo evaluation of *Origanum vulgare* for its antiurolithic effect. *BMC Complementary and Alternative Medicine* 2011 Oct 17;11(1):96.
133. Shah AJ, **Gilani AH** (2011). Blood pressure lowering effect of the extract of aerial parts of *Capparis aphylla* is mediated through endothelium-dependent and independent mechanisms. *Clinical and Experimental Hypertension* 33(7):470–477; DOI: 10.3109/10641963.2010.549273.
134. Shah AJ, Begum S, Hassan SI, Ali SN, Siddiqui BS, Gilani AH (2011). Pharmacological basis for the medicinal use of *Psidium guajava* leave in hyperactive gut disorders. *Bangladesh Journal of Pharmacology* 6 (2) 100-106.

135. Khan A, Rehman NU, AlKharfy KM, Gilani A (2011). Antidiarrheal and antispasmodic activities of *Salvia officinalis* are mediated through activation of K⁺ channels. ***Bangladesh Journal of Pharmacology*** 6 (2) 110-116.
136. Khan, A., **Gilani AH** (2011). Antidiarrheal and bronchodilator potential of olive extract. ***Latin American Journal of Pharmacy*** 30 (1): 5-9.
137. Khan, A., **Gilani, A.H.** 2011. Pharmacological basis for the use of *Valeriana wallichii* in constipation. ***Latin American Journal of Pharmacy*** 30: 186-8.
138. Khan A., **Gilani AH**, Khan M, Subhan F (2011). Pharmacological explanation for medicinal use of St. John's Wart in the hypo-motility disorder of gut. ***Latin American Journal of Pharmacy*** 30 (3): 580-583.
139. Hussain AJ, Ullah1 R, Khan AU, Mabood F, Shah MR, Al-Harrasi A, and **Gilani AH** (2011). Antispasmodic and Ca⁺⁺ antagonist potential of marrubiin, a labdane type diterpene from *Phlomis bracteosa*. ***Journal of Pharmacy Research*** 4(1):178-180.
140. Khan AU, **Gilani AH** (2011) Antidiarrheal and bronchodilatory potential of *Valeriana wallichii*. ***Natural Products Research*** DOI: 10.1080/14786419.2010.551754.
141. Khan AU, Rahim A, Iqbal Z, **Gilani AH** (2012). Insights into mechanisms underlying the gut and airways modulatory effects of *Swertia chirata*. ***J Nat Med*** 66 (1): 40-48; DOI 10.1007/s11418-011-0566-2
142. Khan M, Khan AU, **Gilani AH** (2012). Cardiovascular effects of *Juniperus excelsa* are mediated through multiple pathways. ***Clinical and Experimental Hypertension*** 2012;34(3):209-16. Epub 2012 Apr 2. DOI: 10.3109/10641963.2011.631651.
143. Sajid ZI, Anwar F, Shabir G, Rasul G, **Gilani AH**, Alkharfy KM (2012). Effect of Extraction Solvents on the Antioxidant and Antimicrobial Properties and Phenolic Acids of Extracts from Bark, Leaves and Seeds of *Pongamia pinnata* (L.) Pierre. ***Molecule*** 2012, 17, 3917–3932; doi:10.3390/molecules17043917
144. Rehman NU, Khan A, AlKharfy KM, **Gilani AH** (2012). Pharmacological basis for the medicinal use of *Lepidium sativum* in airways disorders. ***Evidence Based Complementary and Alternative Medicine*** 2012;2012:596524. Epub 2012 Jan 15; doi:10.1155/2012/596524.
145. Shah AJ, **Gilani AH.** (2012). Aqueous-methanolic extract of sweet flag (*Acorus calamus*) possesses cardiac depressant and endothelial-derived hyperpolarizing factor-mediated coronary vasodilator effects. ***Journal of Natural Medicine*** 66 (1): 119-126; DOI: 10.1007/s11418-011-0561-7.
146. Ahmad I, Khan AU, Chaudhary BA, Janbaz KH, Uzair M, Akhtar M, **Gilani AH** (2012). Antifungal and Antispasmodic activities of *Euphorbia granulata* Forssk. ***Journal of Medicinal Plant Research*** 6(1): 19-23; DOI: 10.5897/JMPR10.794
147. Rehman NU, Mehmood HM, Al-Rehaily AJ, Mothana RAA, Gilani AH (2012) Species and tissue-specificity of prokinetic, laxative and spasmodic effects of *Fumaria parviflora*. ***BMC Complementary and Alternative Medicine*** 2012, 12:16 doi:10.1186/1472-6882-12-16
148. Siddiqi HS, Mehmood MH, Rehman NU, **Gilani AH** (2012). Studies on the antihypertensive and antidyslipidemic activities of *Viola odorata* leaves extract. ***Lipids in Health and Disease*** 10;11(1):6.
149. Ghayur MN, Gilani AH (2012). Contractile Effect of Radish and Betel Nut Extracts on Rabbit Gallbladder. ***Journal of Complementary and Integrative Medicine*** 9 (1): 1-11; doi: 10.1515/1553-3840.1587; <http://www.bepress.com/jcim/>.
150. Rehman NU, Mehmood MH, Alkharfy KM, **Gilani AH** (2012). Studies on antidiarrheal and antispasmodic activities of *Lepidium sativum* crude extract in rats. ***Phytotherapy Research*** 26: 136-141. DOI: 10.1002/ptr.3642.
151. Khan M, Khan AU, **Gilani AH** (2012). Pharmacological explanation for the use of *Juniperus excelsa* in hyperactive gastrointestinal and respiratory disorders. ***Journal of Natural Medicines*** 66 (2); 292-301. DOI: 10.1007/s11418-011-0605-z.
152. Khan A, Bashir S, **Gilani AH** (2012) Studies on the diuretic activity of *Holarrhena antidysentrica*. ***Afr J Pharm Pharmacol*** 6(7): 454-458; DOI: 10.5897/AJPP11.395

153. Abbaskhan A, Choudhary MI, Ghayur MN, Parween Z, Shaheen F, Gilani AH, Maruyama T, Iqbal K, Tsuda Y, (2012). Biological Activities of Indian Celery, *Seseli diffusum* (Roxb. ex Sm.) Sant. & Wagh. ***Phytotherapy Research*** 26(5):783-6. doi: 10.1002/ptr.3600. Epub 2011 Nov 14.
154. Abbas S, Bashir S, Khan A, Mehmood MH, **Gilani AH**, (2012). Studies on laxative and prokinetic activities of *Urginea indica* Kunth. and involvement of muscarinic receptors. ***Phytotherapy Research*** 26(5):704-8. doi: 10.1002/ptr.3634. Epub 2011 Oct 18.
155. Zaidi SF, Muhammad JS, Shahryar S, Usmanhane K, **Gilani AH**, Jafri W, Sugiyama T (2012) Anti-inflammatory and cytoprotective effects of selected Pakistani medicinal plants in *Helicobacter pylori*-infected gastric epithelial cells. ***Journal of Ethnopharmacology*** 141(1):403-10; doi:10.1016/j.jep.2012.03.001; <http://www.sciencedirect.com/science/article/pii/S0378874112001493>).
156. Khan M, Khan AU, **Gilani AH** (2012) Gut and airways relaxant effects of *Carum roxburghianum*. ***Journal of Ethnopharmacology*** 141: 938-946; doi: 10.1016/j.jep.2012.03.039
157. Khan H, Saeed M, **Gilani AU**, Khan MA, Khan I, Ashraf N (2012). Antinociceptive Activity of Aerial Parts of *Polygonatum verticillatum*: Attenuation of Both Peripheral and Central Pain Mediators. ***Phytotherapy Research***. doi: 10.1002/ptr.3369.
158. Shah AJ, **Gilani AH**. (2012). The calcium channel blocking and phosphodiesterase inhibitory activities of the extract of *Andropogon muricatus* explain its medicinal use in airways disorders. ***Phytotherapy Research*** DOI: 10.1002/ptr.3687
159. Khan A, Khan SR, **Gilani AH** (2012) Studies on the in vitro and in vivo antiurolithic activity of *Holarrhena antidysenterica*. ***Urological Research*** DOI 10.1007/s00240-012-0483-1
160. Khan H, Saeed M, Gilani AH, Muhammad N, Haq IU, Ashraf N, Rehman NU, Haleemi A. Antipyretic and Anticonvulsant Activity of *Polygonatum verticillatum*: Comparison of Rhizomes and Aerial Parts. ***Phytotherapy Research*** 2012 doi: 10.1002/ptr.4721.
161. Rahman HMA, Bashir S, **Gilani AH** (2012) Calcium channel blocking activity in *Desmostachya bipinnata* (L.) explains its use in gut and airways disorders. ***Phytotherapy Research*** doi: 10.1002/ptr.4761
162. Mehmood H, Rehman NU, Gilani AH. Studies on prokinetic, laxative and spasmodic activities of *Phyllanthus emblica* in experimental animals. ***Phytotherapy Research*** doi: 10.1002/ptr.4821
163. **Gilani AH**, Rehman NU, Mehmood H, AlKharfy KM (2012). Species differences in the antidiarrheal and antispasmodic activities of *Lepidium sativum* and insight into underlying mechanisms. ***Phytotherapy Research*** doi: 10.1002/ptr.4819.
164. Rehman NU, Bashir S, AlKharfy KM **Gilani AH**, 2012. Mechanisms underlying the antidiarrheal, antispasmodic and bronchodilator activities of *Fumaria parviflora* and involvement of tissue and species specificity. ***Journal of Ethnopharmacology*** pii: S0378-8741(12)00564-8. doi: 10.1016/j.jep.2012.08.039.
165. Aqeel Y, Iqbal J, Siddiqui R, **Gilani AH**, Khan NA Anti-Acanthamoebic properties of resveratrol and demethoxycurcumin. ***Experimental Parasitology*** 2012; pii: S0014-4894(12)00286-X. doi: 10.1016/j.exppara.2012.09.007.
166. Mueen MA, Imran I, Samra B, Malik MH, Rehman NU, **Gilani AH** (2012). Evaluation of gut modulatory and bronchodilator activities of *Amaranthus spinosus* Linn. ***BMC Complementary and Alternative Medicine***; 12:166 DOI: 10.1186/1472-6882-12-166
167. Janbaz K, Zia U, Mehmood MH, Bashir S, Chaudhary MI, **Gilani AH**, (2012). Anti-inflammatory, free radical scavenging and calcium antagonist activities of *Corchorus fascicularis* Lam. crude extract. ***Journal of Animal and Plant Sciences*** (in press; MS 11-579).
168. Palla AH, Khan RA, **Gilani AH**, Marra F (2012) Macrolides Used Over Penicillins for Treatment of Adult Pharyngitis in Pakistan. ***BMC Pulmonary Medicine*** (accepted with revision).
169. Janbaz, K., Shabbir, A. Mehmood, M.H., **Gilani, A.H.**, (2012). Pharmacological basis for the medicinal use of *Rhus coriaria* Linn. in hyperactive gut disorders. ***Journal of Animal and Plant Sciences*** (in press).

Review Articles:

1. **Gilani AH** and Atta-ur-Rahman (2005) Trends in Ethnopharmacology. *Journal of Ethnopharmacology* 100: 43-49 (invited perspective article for a special issue of the journal on completion of its 100 volumes).
2. Saeed SA, Urfi MZS, Ali TM, Khimani FW, **Gilani AH** (2005). Antioxidants: their role in health and disease. *International Journal of Pharmacology* 1 (3): 210-217.
3. Carpenter DO, El-Qaderi S, Fayzieva D, **Gilani AH**, Hambartsumyan A, Herz K, Isobaev M, Kasymov O, Kudyakov R, Majitova Z, Mamadov E, Nemer L, Revich B, Stege P, Suk W, Upshur R, Yilmaz B, Zaineh K (2006). Children's Environmental Health in Central Asia and the Middle East. *International Journal of Occupational & Environmental Health* 12:362-368.
4. Ali A, **Gilani AH** (2007) Medicinal value of ginger with focus on its use in nausea and vomiting of pregnancy. *International Journal of Food Properties* 10: 269-278.
5. Anwar F, Latif S, Ashraf M, **Gilani AH**, 2007. *Moringa oleifera*: a food plant with multiple medicinal uses. *Phytotherapy Research* 21:17-25.
6. Ghanbari R, Anwar F, Alkharfy KM, **Gilani AH**, Saari N (2012). Valuable Nutrients and Functional Bioactives in Different Parts of Olive (*Olea europaea L.*) – A Review. *International Journal of Molecular Sciences* 2012, 13(3), 3291-3340; doi:10.3390/ijms13033291
7. **Ahmed T**, Gilani AH. Therapeutic Potential of Curcuminoids in Alzheimer's disease. *Neuroscience Research* (submitted; NSR-S-12-00328).
8. Sahib NG, Anwar F, Hamid AA, Saari N, **Gilani AH** Coriander (*Coriandrum sativum L.*) as a Potential Source of High-Value Components for Functional Foods and Nutraceuticals- A Review. *Phytotherapy Research* (in press; PTR-12-0852)

Book Chapters

9. Malik, F, Hussain, S., Dil, A.S., Hannan A and **Gilani AH** (2005). Islamic Republic of Pakistan, Chapter 22, In: *WHO Global Atlas of Traditional, Complementary and Alternative Medicine* (Map volume), Editors: C.K. Ong, G. Bodeker, C. Grundy, G. Burford, K. Shein, World Health Organization, Geneva, pp. 165-169.
10. **Gilani AH**, Ghayur MN (2005). Ginger: from myths to reality. In: Gottschalk-Batsschkus, C.E., Green, J.C. (Eds.), *Ethnotherapies in the cycle of life* - Books on Demand/Ethnomed Institut für Ethnomedizin e.V., Munich, pp. 307-315
11. **Gilani AH**, Ghayur MN (2005). The betel nut chewing culture. In: Gottschalk-Batsschkus CE, Green JC (Eds.), *Ethnotherapies in the cycle of life* - Books on Demand/Ethnomed Institut für Ethnomedizin e.V., Munich, pp. 287-294
12. Ghayur MN, **Gilani AH**, Janssen LJ (2008). Plant as a source of muscarinic receptor agonists: evidence and implications for use. In: *Handbook of Ethnopharmacology*. M Eddouks (ed) Research Signpost, Kerala, pp. 315-328.
13. **Gilani AH**, Khan A (2009) Herbs used to treat respiratory disorders other than infections. In: P K Mukherjee and P Houghton (ed) *Evaluation of Herbal Medicinal Products [Perspectives of Quality, Safety and Efficacy]* Pharmaceutical Press, London pp.835-843.
14. **Gilani AH**, Khan AU (2009) Medicinal value of novel combination of cholinergic and calcium antagonist constituents in olive. Chapter 89, In: *Olives and Olive Oil in Health and Disease Prevention*. Academic Press-Elsevier, Victor R. Preedy and Ronald Ross Watson (editors), pp.835-843.
15. Bashir S, Khan NA, **Gilani AH**. Physiology of Citrate Handling by the Kidney. In *Urolithiasis: Basic science and clinical practice*, J Talati, HG Tiselius, D Albala, Z Ye (eds); DOI 10.1007/978-1-4471-4387-1_21, © Springer-Verlag London 2013.
16. Babar ZUD, Jamshed S, Malik A, Gilani AH. The pharmaceutical industry, intellectual property rights and access to medicines in Pakistan. In: Lofgren, H & Williams, O (eds) *The New Political Economy of Drugs: Production, Innovation and TRIPS in the Global South*, Routledge, London 2012 (in press).