

MUHAMMAD HAMAYUN

Professor, Abdul Wali Khan University Mardan (AWKUM)

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Profile

Name: Muhammad Hamayun

Place of Birth: Peshawar, Khyber Pakhtunkhwa, Pakistan

Marital Status: Married

Home Address: R-40, University of Peshawar, Khyber Pakhtunkhwa, Pakistan

Education

- **Post-Doctorate (August 27, 2008–June 1, 2010)**

School of Applied Biosciences, College of Agriculture and Life Sciences, Kyungpook National University, South Korea

- **Ph.D. (Agriculture) August 2008**

Institution: School of Applied Biosciences, Kyungpook National University, South Korea

Thesis: Physio-hormonal changes in soybean as influenced by salinity, drought and gibberellin producing fungi

- **Ph.D. (Plant Science) June 2005**

Institution: Department of Biological Science, Quaid-i-Azam University, Pakistan

Thesis: Studies on ethnobotany, conservation and plant diversity of Utror and Gabral valleys, district Swat, Pakistan

- **M.Phil. (Plant Physiology) September 2000**

Institution: Department of Biological Science, Quaid-i-Azam University, Pakistan

Thesis: Studies on the effect of soil and foliar application of NPK on different growth parameters and yield in lentil (*Lens culinaris* Medic.)

- **M.Sc. (Botany) December 1997**

Institution: Department of Botany, University of Peshawar, Pakistan

Thesis: Effect of spacing and weeds free periods on the productivity of Maize (*Zea mays* L.)

Research Specialization

Plant Physiology, Growth Hormones, Ethnobotany, Plant-Microbe Interaction, Agronomy

Professional Experience

- **Professor** (Tenured: October 13, 2015-todate)
Department of Botany, Abdul Wali Khan University Mardan, Pakistan
- **Associate Professor** (TTS: October 12, 2011-October 12, 2015)
Department of Botany, Abdul Wali Khan University Mardan, Pakistan
- **Associate Professor** (BPS: June 11, 2010-October 11, 2011)
- **Chairman Botany** (Sept 09, 2010- April 27, 2016)
Department of Botany, Abdul Wali Khan University Mardan, Pakistan
- **Research Professor** (July 01, 2017-August 31, 2017), School of Applied Biosciences, Kyungpook National University, Korea
- **Research Professor** (July 01, 2014- Sept 30, 2014), School of Applied Biosciences, Kyungpook National University, Korea
- **Chairman Biotechnology** (October 15, 2012-March 19, 2013)
Department of Biotechnology, Abdul Wali Khan University Mardan, Pakistan
- **Chairman Agriculture** (October 15, 2012-March 19, 2013)
Department of Agriculture, Abdul Wali Khan University Mardan, Pakistan
- **Principal** (March 05, 2012-Jan 10, 2013)
University College of Science Shankar, Abdul Wali Khan University Mardan, Pakistan
Department of Botany, Abdul Wali Khan University Mardan, Pakistan
- **Professor on Contract** (March 01- August 31, 2009)
School of Applied Bioscience, Kyungpook National University, South Korea
- **Lecturer in Botany** (2002-2008)
Government Degree College Swabi, Higher Education Department, NWFP, Pakistan
- **Research Officer** (August 01, 2001- December 31, 2001)
World Wide Fund for Nature Conservation (WWF), Pakistan (Peshawar Office)

Editorial Experience

1. Editor-in-Chief, **Pakhtunkhwa Journal of Life Science** (ISSN: 2304-8182)

2. Associate editor, **Journal of Medicinal Plants Research** (ISSN: 1996-0875)
3. Editor, **Biosciences Biotechnology Research Asia** (ISSN: 0973-1245)
4. Editor, **Journal of Botany**, Hindawi Publishing Corporation (ISSN: 2090-0120)
5. Editor, **Korean Journal of Life Science** (ISSN: 1225-9918)
6. Editor, **Academic Journal of Agricultural Sciences**
(<http://www.xournals.com/academic-journal-of-agricultural-sciences/info/editorial-board>)
7. Editor, **African Journal of Botany**, published by International Scholars Journals, USA
(<http://internationalscholarsjournals.org>)
8. Editor, **International Journal of Medicinal Plant Research**, published by Science Park Journals (<http://scienceparkjournals.org/IJMPR>)
9. Editor, **Journal of Herbal Medicine Research**, E-Science Publisher, USA
10. Editor, **Journal of Phyto-pharmacotherapy and Natural Products** (ISSN: 0973-5941)
11. Editor, **Biotechnology**, An Indian Journal (ISSN: 0974-7435)
12. Editor, **Chronicles of Science**, published by Scholoxo Publications, USA
13. Technical editor, **International Journal of Botany** (ISSN: 1811-9719)
14. Technical editor, **Asian Journal of Plant Sciences** (ISSN: 1812-5697)
15. Technical editor, **Journal of Agronomy** (ISSN: 1812-5417)
16. Technical editor, **Journal of Biological Sciences** (ISSN: 1812-5719)
17. Technical editor, **American Journal of Plant Physiology** (ISSN: 1557-4539)
18. Reviewer, **The Research Council of Oman (TRESS)**, Al-Athaiba Muscat, Sultanate of Oman
19. Reviewer, **Journal of Basic Microbiology** (ISSN: 1521-4028)
20. Reviewer, **Spanish Journal of Agricultural Research** (ISSN: 1695-971-X)
21. Reviewer, **Process Biochemistry** (ISSN: 1359-5113)
22. Reviewer, **Scientia Horticulturae** (ISSN: 0304-4238)
23. Reviewer, **Journal of Microbiology and Biotechnology** (ISSN: 1017-7825)
24. Reviewer, **Journal of Agronomy and Crop Science** (ISSN: 1439-037X)
25. Reviewer, **Agroforestry Systems** (ISSN: 0167-4366)
26. Reviewer, **BMC Complementary and Alternative Medicine** (ISSN: 1472-6882)
27. Reviewer, **Journal of Medicinal Plants Research** (ISSN: 1996-0875)

Honors/Awards/Membership

- 2017: First Position in Agricultural Sciences and Second Position in Biological Sciences in KP
According to the “**Directory of Productive Scientists of Pakistan 2016**”, released by
Pakistan Council for Science & Technology
- 2017: Awarded “**The 2017 Albert Nelson Marquis Lifetime Achievement Award**” by
Marquis Who’s Who, USA
- 2017: **President FAPUASA** (2017-2018), Federation of All Pakistan Universities Academic
Staff Association, Khyber Pakhtunkhwa Chapter, Pakistan
- 2017: **President ASA** (2014-todate), Academic Staff Association, Abdul Wali Khan
University Mardan, Khyber Pakhtunkhwa, Pakistan
- 2016: Biography included in 33rd Edition of “**Who’s Who in the World**” by **Marquis Who’s
Who, USA**
- 2015: **General Secretary** (2015-2017), Korean Alumni Association of Pakistan (KAAP), KPK
- 2015: Attended training course organized by KOICA on “**Fostering Rural Leaders and
Saemaul Undong Pakistan**” held on 6-19 September, 2015, Korea
- 2014: **Research Productivity Award** for 2012-2013 by Pakistan Counsel for Science and
Technology (PCST), obtaining highest score in Biological Sciences throughout KPK
- 2014: Biography included in 32nd Edition of “**Who’s Who in the World**” by **Marquis Who’s
Who, USA**
- 2013: **Research Productivity Award** for 2011-2012 by Pakistan Counsel for Science and
Technology (PCST)
- 2013: Biography included in “**Top 100 Scientists 2013**” by the **International Biographical
Center (IBC)**, Cambridge, UK
- 2013: **Research Productivity Award** for 2011-2012 by Pakistan Counsel for Science and
Technology (PCST)
- 2013: Biography included in “**Leading Scientists of the World 2013**” by the **International
Biographical Center (IBC)**, Cambridge, UK
- 2013: **Member Board of Studies** for the Department of Microbiology, University of Haripur,
KPK, Pakistan
- 2012: **Research Productivity Award** for 2010-2011 by Pakistan Counsel for Science and
Technology (PCST)
- 2012: **Member Syndicate**, Abdul Wali Khan University, Mardan

2012: **Member Advance Studies & Research Board**, Abdul Wali Khan University, Mardan

2012: Biography published in 30th Edition of “**Who’s Who in the World**” by **Marquis Who’s Who**, USA

2011: **Research Productivity Award** for 2009-2010 by Pakistan Counsel for Science and Technology (PCST)

2011: **Member Board of Studies** for the Department of Botany, Islamia College University

2010: Biography included in “**Top 100 Scientists 2010**” by the **International Biographical Center** (IBC), Cambridge, UK

2010: **Approved PhD Supervisor**, Higher Education Commission (HEC) of Pakistan

2010: Biography included in “**2000 Outstanding Scientists**” by the **International Biographical Center** (IBC), United Kingdom

2009: Biography included in 27th Edition of “**Who’s Who in the World**” by **Marquis Who’s Who**, USA

2008: Awarded **Brain Korea (BK-21)** fellowship for Post-Doctoral research in South Korea

2006: Awarded **Korean Research Foundation (KRF)** Scholarship for PhD in South Korea

2006: Awarded Kyungpook National University **International Students Honor Scholarship**, for PhD studies in South Korea (2006-2008)

2002: Member Advisory Board, **Quaid-i-Azam Group of School & Colleges**, Swabi, KPK, Pakistan

2002: Awarded Grant by Ethnobotany Project, **WWF-Pakistan** for PhD research on Swat, Pakistan

1998: Awarded **University Grants Commission** (now HEC) merit scholarship during M. Phil.

1996: Awarded **Merit Scholarship** during M.Sc., University of Peshawar

Research Publications

Published 2017

1. **Hamayun M**, A Hussain, SA Khan et al. (2017) Gibberellins producing endophytic fungus *Porostereum spadiceum* AGH786 rescues growth of salt affected soybean. *Frontiers in Microbiology* 8: 686 (IF: 4.165)
2. Khalid M, D Hassani, M Bilal, ZA Butt, **M Hamayun**, A Ahmad, D Huang, A Hussain (2017) Identification of oral cavity biofilm forming bacteria and determination of their

- growth inhibition by *Acacia arabica*, *Tamarix aphylla* L. and *Melia azedarach* L. medicinal plants. *Archives of Oral Biology* 81: 175 -185 (IF: 1.748)
3. Kang SM, M Waqas, **M Hamayun**, S Asaf, AL Khan, AY Kim, YG Park, IJ Lee (2017) Gibberellins and indole-3-acetic acid producing rhizospheric bacterium *Leifsonia xyli* SE134 mitigates the adverse effects of copper-mediated stress on tomato. *J Plant Interactions* 12: 373–380 (IF: 1.191)
 4. Asaf S, AL Khan, **M Hamayun**, MA Khan, S Bilal, SM Kang, IJ Lee (2017) Complete mitochondrial genome sequence of *Aspergillus oryzae* RIB 127 and its comparative analysis with related species. *Mitochondrial DNA Part B: Resources* 2: 632–633 (SCIE)
 5. Begum HA, **M Hamayun**, K Zaman, ZK Shinwari, A Hussain (2017) Heavy metal analysis in frequently consumable medicinal plants of Khyber Paktunkhwa, Pakistan. *Pak J Bot.* 49(3): 1155-1160 (IF: 0.69)
 6. Khuram I, S Barinova, N Ahmad, **M Hamayun** et al (2017) Ecological assessment of water quality in the Kabul River, Pakistan, using statistical methods. *Oceanological and Hydrobiological Studies* 46: 140-153 (IF: 0.67)
 7. Gul H, S Kinza, ZK Shinwari, **M Hamayun** (2017) Effect of Selenium on the biochemistry of *Zea mays* under salt stress. *Pak J Bot.* 49: 25-32 (IF: 0.69)
 8. Waqas M, YH Kim, AL Khan, R Shahzad, S Asaf, **M Hamayun**, SM Kang, MA Khan, IJ Lee (2017) Additive effects due to biochar and endophyte application enable soybean to enhance nutrient uptake and modulate nutritional parameters. *J Zhejiang Univ-Sci B* 18(2): 109-124 (IF: 1.676)
 9. Ali S, AL Khan, L Ali, TS Rizvi, SA Khan, J Hussain, **M Hamayun**, A Al-Harrasi (2017) Enzyme inhibitory metabolites from endophytic *Penicillium citrinum* isolated from *Boswellia sacra*. *Archives of Microbiology* (IF: 1.76)
 10. Gul F, A Hussain, G Jan, **M Hamayun** (2017) Genomic DNA Extraction for Molecular Identification of Endophytic Fungi: An Easy and Efficient Protocol. *Biosci. Biotech. Res. Asia* 14: 667-671
 11. Ismail, A Hussain, Islam Ud Din, A Sayyed, Husna, A Zeb, **M Hamayun** (2017) Indole acetic acid and flavonoids production by rhizospheric bacteria isolated from *Medicago sativa* L. rhizosphere. *Int. J. Biosci.* 10(4): 19-26
 12. Khan MA, Asadullah, L Badshah, **M Hamayun** (2017) Ethnobotanical and ecological characteristics of weeds growing in the maize fields at Chaghar

Published 2016

13. Waqas M, R Shahzad, AL Khan, S Asaf, YH Kim, SM Kang, S Bilal, **M Hamayun**, IJ Lee (2016) Salvaging effect of triacontanol on plant growth, thermotolerance, macro-nutrient content, amino acid concentration and modulation of defense hormonal levels under heat stress. *Plant Physiol & Biochem.* 99: 118-125 (IF: **2.928**)
14. Ullah N, A Nadhman, S Siddiq, S Mehwish, A Islam, L Jafri, **M Hamayun** (2016) Plants as antileishmanial agents: Current scenario. *Phytotherapy Research* 30(12): 1905-1925 (IF: **2.694**)
15. Jan I, Abdur Rab, M Sajid, A Iqbal, ZK Shinwari, **M Hamayun** (2016) Effect of calcium salt on soft rot, bitter pit and physicochemical properties of stored apples. *Pak. J. Bot.* 48(4): 1415-1420 (IF: **0.94**)
16. Kang SM, **M Hamayun**, M Waqas, JH Kim, ZK Shinwari, IJ Lee (2016) *Burkholderia* sp. KCTC 11096bp modulates pepper growth and resistance against *Phytophthora capsici*. *Pak. J. Bot.* 48(5): 1965-1970 (IF: **0.94**)
17. Jan S, **M Hamayun**, S Wali, A Bibi, H Gul, F Rahim (2016) Foliar application of ascorbic acid mitigates sodium chloride induced stress in eggplant (*Solanum melongena* L.). *Pak. J. Bot.* 48(3): 869-876 (IF: **0.94**)
18. Iqbal A, F Shah, **M Hamayun**, A Ahmad, A Hussain, M Waqas, SM Kang, IJ Lee (2016) Allergens of *Arachis hypogaea* and the effect of processing on their detection by ELISA. *Food & Nutrition Research* 60: 28945 (IF: **3.226**)
19. Ismail, **M Hamayun**, A Sayyed, Islam Ud Din, H Gul, A Hussain (2016) Gibberellin and indole acetic acid production capacity of endophytic fungi isolated from *Zea Mays*. *Int. J. Biosci.* 8(3): 35-43
20. Begum HA, **M Hamayun**, T Yaseen, S Akhter, M Shakeel (2016) Phytochemical analysis, antifungal bioassay and folklore uses of selected medicinal plants of family Rosaceae. *Pure & Applied Biol.* 5(2):183-192
21. Gul H, R Ahmed, **M Hamayun**, A Sayyed, Shabeena, Husna (2016) Response of eight Canola (*Brassica napus* L.) varieties to different concentrations of saline irrigation water. *S. Asian J. Life Sci.* 4(1): 1-17
22. Khan R, S Gul, **M Hamayun**, M Shah, A Sayyed, Ismail, HA Begum, H Gul (2016)

Effect of foliar application of zinc and manganese on growth and some biochemical constituents of *Brassica juncea* grown under water stress. *American-Eurasian J. Agric. & Environ. Sci.* 16 (5): 984-997

Published 2015

23. Shahzad R, M Waqas, AL Khan, **M Hamayun**, SM Kang, IJ Lee (2015) Foliar application of methyl jasmonate induced physio-hormonal changes in *Pisum sativum* under diverse temperature regimes. *Plant Physiol & Biochem.* 96: 406–416 (IF: **2.928**)
24. Kang SM, AL Khan, M Waqas, YH You, **M Hamayun**, GJ Joo, R Shahzad, KS Choi, IJ Lee (2015) Gibberellin-producing *Serratia nematodiphila* PEJ1011 ameliorates low temperature stress in *Capsicum annuum* L. *Eur J Soil Biol.* 68: 85-93 (IF: **2.67**)
25. Waqas M, AL Khan, **M Hamayun**, R Shahzad, SM Kang, JG Kim, IJ Lee (2015) Endophytic fungi promote plant growth and mitigate the adverse effects of stem rot: An example of *Penicillium citrinum* and *Aspergillus terreus*. *Journal of Plant Interactions* 10 (1): 280–287 (IF: **1.191**)
26. Romman M, S Jan, **M Hamayun**, I Ahmad, S Wali (2015) In vitro Antioxidant activity of stem and leaves extracts of *Hedera nepalensis* K. Koch. *Inter J Biosciences* 7(2): 19-24
27. Khan AL, M Waqas, J Hussain, Ahmed Al-Harrasi, **M Hamayun**, IJ Lee (2015) Phytohormones enabled endophytic fungal symbiosis improve aluminum phytoextraction in tolerant *Solanum lycopersicum*: An examples of *Penicillium janthinellum* LK5 and comparison with exogenous GA₃. *J Hazardous Materials* 295: 70-78 (IF: **4.836**)
28. Khan SA, JH Lee, **M Hamayun**, A Hussain, AL Khan, M Waqas, IJ Lee and JG Kim (2015) Alteration in the gene expression of *Glehnia littoralis* seedlings exposed to culture filtrate of *Penicillium citrinum* KACC43900. *J Plant Interactions* 10 (1): 51–58 (IF: **1.191**)
29. Waqas M, AL Khan, **M Hamayun**, R Shahzad, YH Kim, KS Choi and IJ Lee (2015) Endophytic infection alleviates biotic stress in sunflower through regulation of defence hormones, antioxidants and functional amino acids. *Eur J Plant Pathol.* 141: 803-824 (IF: **1.65**)
30. Jan S, Siahuddin, H Gul, S Wali, N Ahmad, I Ahmad, **M Hamayun** (2015) Effect of different suckrecides on the yield of tobacco (*Nicotiana tabacum* L). *Int J Biosci.* 6(2): 134-139

31. Hameed N, S Jan, H Gul, S Wali, **M Hamayun**, I Ahmad (2015) Topsin-M application affected nucleic acid, amino acid and phenol contents of *Cicer arietinum* L. *Int J Biosci.* 6(2): 140-146
32. **Hamayun M**, A Hussain, SA Khan, M Irshad, AL Khan, M Waqas, R Shahzad, A Iqbal, N Ullah, G Rehman, HY Kim, IJ Lee (2015) Kinetin modulates physio-hormonal attributes and isoflavone contents of Soybean grown under salinity stress. *Frontiers in Plant Sci.* 6: 377 (IF: 4.495)
33. Khan SA, **M Hamayun**, N Bibi, SK Sherwani (2015) Isolation, screening and co-metabolism of polycyclic aromatic hydrocarbons by soil bacteria. *American-Eurasian J Agric. & Environ. Sci.* 15 (5): 800-812
34. Naz S, **M Hamayun**, A Sayyed, S Gul, Z Parveen, M Khalid, H Gul (2015) Effect of foliarly applied potassium on *Capsicum Annuum* L. grown under sodium chloride stress. *Int J Agron Agric Res.* 6(5): 47-61
35. Jan S, H Khan, **M Hamayun**, A Mehmood, I Ahmad, N Ahmad, IJ Lee (2015) Chemical composition, mineral profile and antimicrobial activity of *Stachys parviflora* and *Calotropis procera*. *J Pure & Applied Microbiol.* 9(2): 1103-1110 (IF: 0.16)
36. Jan S, **M Hamayun**, SA Khan, N Ahmad, I Ahmad, S Wali (2015) Plant diversity of Hindu Kush mountain region of Utror and Gabral, Northern Pakistan. *Pak J Weed Sci Res.* 21(2): 247-271
37. Gul H, R Ahmad, **M Hamayun** (2015) Impact of exogenously applied ascorbic acid on growth, some biochemical constituents and ionic composition of guar (*Cymopsis tetragonoloba*) subjected to salinity stress. *Pakhtunkhwa J Life Sci.* 3(1-2): 22-40
38. Begum HA, **M Hamayun**, K Zaman, A Hussain, M Rauf (2015) Phytochemical evaluation of ethnobotanically selected medicinal plants of Mardan, Pakistan. *J Adv Botany & Zoo.* 3(1): 1-5

Published 2014

39. Kamran M, AL Khan, M Waqas, **M Hamayun**, SM Kang, YH Kim, IJ Lee (2014) Effects of plant-derived smoke on the growth dynamics of Barnyard Grass (*Echinochloa crus-galli*). *Acta Agric Scandinavica Section B - Plant Soil Sci.* 64(2): 121-128 (IF: 0.705)
40. Kang SM, AL Khan, M Waqas, YH You, JH Kim, JG Kim, **M Hamayun**, IJ Lee (2014) Plant growth promoting Rhizobacterias reduces adverse effects of salinity and osmotic stress by regulating phytohormones and antioxidants in *Cucumis sativus*. *J Plant*

Interactions 9(1): 673-682 (IF: **IF: 1.191**)

41. Rehman G, A Shehzad, AL Khan, **M Hamayun** (2014) Role of AMP-activated protein kinase in cancer therapy. *Archiv der Pharmazie* 347: 457-468 (IF: **2.04**)
42. Ali S, A Ahmad, RS Khan, S Khan, **M Hamayun et al.** (2014) Genotyping of HCV RNA reveals that 3a is the most prevalent genotype in Mardan, Pakistan. *Adv Virol.* (<http://dx.doi.org/10.1155/2014/606201>)
43. Jan S, S Wali, N Ahmad, I Ahamd, **M Hamayun**, N Shah (2014) Pharmacognostic and pharmacological studies of leaf, stem and fruit of *Emexspinosa* (L.) Campd. *Int J Biosci.* 5(10): 37-45
44. Jan G, FG Jan, **M Hamayun**, K Khan, A Khan (2014) Diversity and conservation status of vascular plants of Dir Kohistan valley, Khyber Pakhtunkhwa Province. *J Bio Env Sci.* 5(1): 164-172
45. Gul H, R Ahmed, **M Hamayun**, A Sayyed, M Qasim, Shabeena (2014) Growth performance of Canola grown under different salinity regimes. *Int J Emerging Technol. Advanced Eng.* 4(8): 59-68
46. Sayyed A, H Gul, **M Hamayun**, H Nangyal, I Fazal (2014) Influence of Sodium Chloride on growth and chemical composition of *Tagetes erecta*. *South Asian J Life Sci.* 2(2): 29-32
47. Naz F, H Gul, **M Hamayun**, A Sayyed, Husna and SK Sherwani (2014) Effect of NaCl stress on *Pisum sativum* germination and seedling growth with the influence of seed priming with Potassium (KCL and KOH). *American-Eurasian J Agric & Environ Sci.* 14(11): 1304-1311
48. Hamid N, H Gul, **M Hamayun** (2014) Comparative performance of *Vigna unguiculata* L. (Walp) and *Vigna radiata* L. (Wilckzck) (Fabaceae) in elevated Carbondioxide concentrations. *Pakhtunkhwa J Life Sci.* 2(1): 1-15
49. Shahzad R, J Khan, AR Gurmani, M Waqas, **M Hamayun**, AL Khan, SM Kang, IJ Lee (2014) Seed priming with gibberellic acid (GA₃) in Sponge-gourd modulated high salinity stress. *Pakhtunkhwa J Life Sci.* 2(1): 75-86
50. Haleem J, **M Hamayun**, H Gul (2014) Evaluating the antibacterial activities of *Rhazya stricta* Decne. *Pakhtunkhwa J Life Sci.* 1(2): 36-45
51. Begum N, H Gul, **M Hamayun**, IU Rahman, F Ijaz et al. (2014) Influence of seed priming with ZnSO and CuSO on germination and seedling growth of *Brassica rapa*

under NaCl stress. *Middle-East J Sc Res.* 22 (6): 879-885

52. **Hamayun M**, H Gul, SA Khan, G Jan, Zia Ullah (2014) Effect of potassium nitrate and salinity on growth and endogenous gibberellins of *Glycine max* Var. Daewonkong. *Pakhtunkhwa J Life Sci.* 2(3-4): 96-105

Published 2013

53. Hussain A, ST Shah and **M Hamayun** (2013) Root colonization and phytostimulation by phytohormones producing entophytic *Nostoc* sp.AH-12. *Current Microbiol.* 67:624-630 (IF: 1.52)
54. Khan AL, M Waqas, AR Khan, J Hussain,, SM Kang, SA Gilani, **M Hamayun**, JH Shin, M Kamran, A Al-Harrasi, BW Yun, M Adnan and IJ Lee (2013) Fungal endophyte *Penicillium janthinellum* LK5 improves growth of ABA-deficient tomato under salinity. *World J Microbiol Biotechnol.* 29: 2133-2144 (IF: 1.532)
55. Khan AL, M Waqas, **M Hamayun**, A Al-Harrasi, A Al-Rawahi, IJ Lee (2013) Co-synergism of endophyte *Penicillium resedanum* LK6 with salicylic acid helped *Capsicum annuum* in biomass recovery and osmotic stress mitigation. *BMC Microbiology.* 13:51(IF: 3.104)
56. Gul H, R Ahmed and **M Hamayun** (2013) Effect of saline water irrigation on the growth of Canola under field conditions. *Pakhtunkhwa J Life Sci.* 1(2):80-93
57. **Hamayun M**, SA Khan and AL Khan (2013) Wood as a fuel source in the Hindukush: A case study of Utror and Gabral valleys, Northren Pakistan. *Pakhtunkhwa J Life Sci.* 1(2): 94-99

Published 2012

58. Kang SM, AL Khan, **M Hamayun**, J Hussain, GJ Joo, YH You, JG Kim and IJ Lee (2012) Gibberellins producing *Promicromonospora* sp. SE 188 improves *Solanum lycopersicum* plant growth and influences endogenous plant hormones. *The Journal of Microbiology.* 50(6):902-909 (IF: 1.621)
59. Khan SA, **M Hamayun** (Co-first author), AL Khan, IJ Lee, ZK Shinwari and JG Kim (2012) Isolation of plant growth promoting endophytic fungi from dicots inhabiting coastal sand dunes of Korea. *Pakistan Journal of Botany.* 44(4):1453-1460 (IF: 0.94)
60. **Hamayun M**, SA Khan, AL Khan, M Afzal and IJ Lee (2012) Endophytic *Cephalotheca sulfurea* AGH07 reprograms soybean to higher growth. *Journal of Plant Interactions.* 7(4): 301-306 (IF: 1.191)

61. Waqas M, AL Khan, **M Hamayun**, M Kamaran, SM Kang, YH Kim, IJ Lee (2012) Assessment of endophytic fungi cultural filtrate on seed germination of soybean. *African J. Biotechnology*. 11(85): 15135-15143 (IF: 0.573)
62. Khan AL, ZK Shinwari, YH Kim, M Waqas, **M Hamayun**, M Kamran and IJ Lee (2012) Role of endophyte *Chaetomium globosum* LK4 in growth of *Capsicum annuum* by production of gibberellins and indole acetic acid. *Pakistan Journal of Botany*. 44(5):1601-1607 (IF: 0.94)
63. Waqas M, AL Khan, M Kamran, **M Hamayun**, SM Kang, YH Kim, IJ Lee (2012) Endophytic fungi produce gibberellins, indole acetic acid and promote plant growth during stress. *Molecules*. 17(9):10754-10773 (IF: 3.06)
64. Khan AL, **M Hamayun**, M Waqas, SM Kang, YH Kim, DH Kim and IJ Lee (2012) *Exophiala* sp.LHL08 association gives heat stress tolerance by avoiding oxidative damage to cucumber plants. *Biology and Fertility of Soils*. 48:519–529 (IF: 3.069)
65. Jan S, **M Hamayun**, N Ahmad, Y Nawaz, AL Khan, A. Iqbal, K. Rehman, IJ Lee (2012) Antibacterial potential of plants traditionally used for curing diarrhea in Khyber Pakhtunkhwa, Pakistan. *Journal of Medicinal Plant Research*. 6(23): 4039-4047 (IF: 0.879)
66. Khan AL, **M Hamayun**, SA Khan, SM Kang, ZK Shinwari, M Kamran, S. Rehman, JG Kim and IJ Lee (2012) Pure culture of *Metarhizium anisopliae* LHL07 reprograms soybean to higher growth and mitigates salt stress. *World J Microb. & Biotechnology*. 28(4): 1483-1494 (IF: 1.532)
67. Khan AL, **M Hamayun**, SM Kang, YH Kim, HY Jung, JH Lee and IJ Lee (2012) Endophytic fungal association via gibberellins and indole acetic acid can improve plant growth potential in abiotic stress: An example of *Paecilomyces formosus* LHL10. *BMC Microbiology*. 12:3 (IF: 3.1)
68. Kang SM, AL Khan, **M Hamayun**, YH Kim and IJ Lee (2012) *Acinetobacter calcoaceticus* ameliorated plant growth and influenced gibberellins and functional biochemicals. *Pakistan Journal of Botany*. 44(1): 365-372 (IF: 0.94)
69. Khan AL, **M Hamayun**, R Radhakrishnan, M Waqas, SM Kang, YH Kim, JH Shin, YS Choo, JG Kim and IJ Lee (2012) Mutualistic association of endophyte *Paecilomyces formosus* LHL10 offered thermo-tolerance to *Cucumis sativus*. *Antonie van Leeuwenhoek*. 101: 267–279 (IF: 2.072)
70. Khan AL, **M Hamayun**, J Hussain, SM Kang and IJ Lee (2012) The newly isolated

endophytic fungus *Paraconiothyrium* sp. LK1 produces ascotoxin. *Molecules*. 17: 1103-1112 (IF: 3.06)

71. Tang DS, **M Hamayun** (Co-first author), AL Khan, S Jan, Y Nawaz, M Irshad, YU Na and IJ Lee (2012) Exposure to red light, temperature and exogenous gibberellins influenced germination of some serious winter weeds. *African J. Biotechnology*. 11(2): 273-279 (IF: 0.573)

Published 2011

72. Kim YH, AL Khan, **M Hamayun** (Co-first author), SM Kang, YJ Beom and IJ Lee (2011) Influence of short-term silicon application on endogenous physio-hormonal levels of *Oryza sativa* L. under wounding stress. *Biological Trace Element Research*. 144(1-3): 1175-1185 (IF: 1.798)
73. Khan AL, **M Hamayun** (Co-first author), N Ahmed, M Waqas, SM Kang, YH Kim and IJ Lee (2011) *Exophiala* sp. LHL08 reprograms *Cucumis sativus* to higher growth under abiotic stresses. *Physiologia Plantarum*. 143(4): 329-343 (IF: 3.656)
74. Khan AL, **M Hamayun**, YH Kim, SM Kang and IJ Lee (2011) Ameliorative symbiosis of endophyte (*Penicillium funiculosum* LHL06) under salt stress elevated plant growth of *Glycine max* L. *Plant Physiology & Biochemistry*. 49(8): 852-861 (IF: 2.928)
75. Na CI, **M Hamayun**, AL Khan, YH Kim, KI Choi, SM Kang, SI Kim, JT Kim, JG Won and IJ Lee (2011). Influence of prohexadione-calcium, trinexapac-ethyl and hexaconazole on lodging characteristic and gibberellin biosynthesis of rice (*Oryza sativa* L.). *African Journal of Biotechnology*. 10(61): 13097-13106 (IF: 0.573)
76. Khan AL, **M Hamayun**, N Ahmad, J Hussain, SM Kang, YH Kim, M Adnan, DS Tang, M Waqas, R Radhakrishnan, ES Park and IJ Lee (2011). Salinity stress resistance offered by endophytic fungal interaction between *Penicillium minioluteum* LHL09 and *Glycine max* L. *Journal of Microbiology and Biotechnology*. 21(9): 893–902 (IF: 1.685)
77. **Hamayun M**, SA Khan, AL Khan, ZK Shinwari, N Ahmad, YH Kim and IJ Lee (2011) Effect of foliar and soil application of nitrogen, phosphorus and potassium on some yield parameters of lentil. *Pakistan Journal of Botany*. 43(1): 391-396 (IF: 0.94)
78. **Hamayun M**, SA Khan, AL Khan, N Ahmad, Y. Nawaz and IJ Lee (2011) Gibberellin producing *Neosartorya* sp. CC8 reprograms Chinese cabbage to higher growth. *Scientia Horticulturae*. 129(3): 347-352 (IF: 1.538)
79. Khan AL, **M Hamayun**, HY Kim, SM Kang, JH Lee and IJ Lee (2011) Gibberellins

producing endophytic *Aspergillus fumigatus* sp. LH02 influenced endogenous phytohormonal levels, isoflavonoids production and plant growth in salinity stress. *Process Biochemistry*. 46: 440–447 (IF: 2.529)

Published 2010

80. **Hamayun M**, SA Khan, AL Khan, G Rehman, YH Kim, I Iqbal, J Hussain, EY Sohn, IJ Lee (2010) Gibberellins production and plant growth promotion by pure cultures of *Cladosporium* sp. MH-6 isolated from Cucumber (*Cucumis sativus* L.). *Mycologia*. 102(5): 989-995 (IF: 2.638)
81. Nadeem A, **M Hamayun**, SA Khan, AL Khan, IJ Lee and DH Shin (2010) Gibberellin producing endophytic fungi isolated from *Monochoria vaginalis*. *Journal of Microbiology and Biotechnology*. 20(12): 1744–1749 (IF:1.685)
82. Tang DS, **M Hamayun** (Co-first author), AL Khan, ZK Shinwari, YH Kim, SM Kang, JH Lee, CI Na, Y. Nawaz, KK Kang and IJ Lee (2010) Germination of some important weeds as influenced by red light and nitrogenous compounds. *Pakistan Journal of Botany*. 42(6): 3739-3745 (IF: 1.2)
83. **Hamayun M**, SA Khan, AL Khan, ZK Shinwari, J Hussain, E Sohn, SM Kang, YH Kim, MA Khan and IJ Lee (2010) Effect of salt stress on growth attributes and endogenous growth hormones of Soybean cultivar Hwangkeumkong. *Pakistan Journal of Botany*, 42(5): 3103-3112 (IF: 1.2)
84. Khan AL, J Hussain, **M Hamayun**, SA Gillani, YH Kim, S Rehman, KN Watanabe and In-Jung Lee (2010) Elemental allelopathy and antifungal activities of *Inula falconeri* from Himalaya Pakistan. *Acta Agriculturae Scandinavica Section B-Soil and Plant Science*. 60: 552-559 (IF: 0.705)
85. Lee SK, EY Sohn, **M Hamayun** (Co-first author), JY Yoon and IJ Lee (2010) Effect of silicon on growth and salinity stress of soybean plant grown under hydroponic system. *Agroforestry systems*. 80: 333-340 (IF: 1.373)
86. Hussain J, N Rehman, AL Khan, **M Hamayun**, SM Hussain and ZK Shinwari (2010) Proximate and essential nutrients evaluation of selected vegetables species from Kohat region, Pakistan. *Pakistan Journal of Botany*. 42(4): 2847-2855 (IF: 1.2)
87. Kang SM, JT Kim, **M Hamayun** (Co-first author), IC Hwang, AL Khan, YH Kim, JH Lee and IJ Lee (2010) Influence of Prohexadione-Calcium on growth and gibberellins content of Chinese cabbage grown in alpine region of South Korea. *Scientia*

Horticulturae. 125(2): 88-92 (IF: **1.538**)

88. **Hamayun M**, EY Sohn, SA Khan, ZK Shinwari, AL Khan and IJ Lee (2010) Silicon alleviates the adverse effects of salinity and drought stress on growth and endogenous plant growth hormones of Soybean (*Glycine max* L.). *Pakistan Journal of Botany*. 42(3): 1713-1722 (IF: **1.2**)
89. **Hamayun M**, SA Khan, AL Khan, JH Shin and IJ Lee (2010) Exogenous gibberellic acid reprograms soybean to higher growth, and salt stress tolerance. *Journal of Agricultural and Food Chemistry*. 58(12): 7226-7232 (IF: **2.906**)
90. Kang SM, **Hamayun M** (Co-first author), GJ Joo, AL Khan, YH Kim, SK Kim, IJ Lee (2010) Effect of Burkholderia sp. KCTC 11096BP on some physiochemical attributes of Cucumber. *European Journal of Soil Biology*. 46(3-4): 264-268 (IF: **2.67**)
91. **Hamayun M**, SA Khan, ZK Shinwari, AL Khan, N Ahmad and IJ Lee (2010) Effect of polyethylene glycol (PEG) induced drought stress on physio-hormonal attributes of Soybean. *Pakistan Journal of Botany* 42(2): 977-986 (IF: **1.2**)
92. **Hamayun M**, SA Khan, AL Khan, DS Tang, J Hussain, B Ahmad, Y Anwar and IJ Lee (2010) Growth Promotion of Cucumber by Pure Cultures of Gibberellin-Producing *Phoma* sp. GAH7. *World Journal of Microbiology and Biotechnology*. 26: 889-894 (IF: **1.532**)
93. Kim YH, AL Khan, **M Hamayun**, JT Kim, JH Lee, IC Hwang, CS Yoon and IJ Lee (2010) Effects of Prohexadione Calcium on growth and gibberellins contents of *Chrysanthemum morifolium* R. cv Monalisa White. *Scientia Horticulturae*. 123(3): 423-427 (IF: **1.538**)
94. **Hamayun M**, SA Khan, I Iqbal, B Ahmad and IJ Lee (2010) Isolation of a Gibberellin-producing fungus (*Penicillium* sp. MH7) and Growth Promotion of Crown Daisy (*Chrysanthemum coronarium*). *Journal of Microbiology and Biotechnology*. 20(1): 202-207 (IF: **1.685**)
95. Khan AL, J Hussain, **M Hamayun**, SM Kang, HY Kim, KN Watanabe and IJ Lee (2010) Allelochemical, Eudesmane-Type Sesquiterpenoids from *Inula falconeri*. *Molecules* 15(3): 1554-1561 (IF: **3.06**)
96. Khan AL, J Hussain, **M Hamayun**, SA Gilani, S Ahmad, G Rehman, YH Kim, SM Kang and IJ Lee (2010) Secondary metabolites from *Inula britannica* L. and their biological activities. *Molecules* 15(3): 1562-1577 (IF: **3.06**)
97. Siddikee MA, **M Hamayun**, GH Han and TM Sa (2010) Optimization of gibberellic

acid production by *Methylobacterium oryzae* CBMB20. *Korean J. Soil Sci. Fert.* 43(4): 522-527 (Foreign journal)

Published 2009

98. **Hamayun M**, SA Khan, AL Khan, G Rehman, EY Sohn, SK Kim, GJ Joo and IJ Lee (2009) *Phoma herbarum* as a New Gibberellin-Producing and Plant Growth-Promoting Fungus. *Journal of Microbiology and Biotechnology.* 19(10): 1244-1249 (IF: **1.685**)
99. Hussain J, AL Khan, N Rehman, **M Hamayun**, ZK Shinwari, Wasiullah and IJ Lee (2009) Assessment of herbal products and their composite medicinal plants through proximate and micronutrients analyses. *Journal of Medicinal Plant Research.* 3(12): 1072-1077 (IF: **0.879**)
100. Khan AL, J Hussain, **M Hamayun**, ZK Shinwari, H Khan, YH Kang, SM Kang and IJ Lee (2009). Inorganic profile and allelopathic effect of endemic *Inula koelzii* from Himalaya Pakistan. *Pakistan Journal of Botany.* 41(5): 2517-2527 (IF: **1.2**)
101. Kim YH, **M Hamayun**, CI Na, AL Khan, SM Kang, HH Han and IJ Lee (2009) Exogenous application of plant growth regulators increased the total flavonoid content in *Taraxacum officinale* Wigg. *African J Biotechnology.* (21): 5727-5736 (IF: **0.573**)
102. **Hamayun M**, SA Khan, I Iqbal, YH Hwang, DH Shin, EY Sohn, BH Lee, CI Na, IJ Lee (2009) *Chrysosporium pseudomerdarium* Produces Gibberellins and Promotes Plant Growth. *The Journal of Microbiology.* 47(4): 425-430 (IF: **1.621**)
103. **Hamayun M**, SA Khan, MA Khan, AL Khan, SM Kang, SK Kim, GJ Joo and IJ Lee (2009) Gibberellin production by pure cultures of a new strain of *Aspergillus fumigatus*. *World Journal of Microbiology and Biotechnology.* 25: 1785-1792 (IF: **1.685**)
104. Khan SA, **M Hamayun** (Co-first author), AL Khan, B. Ahmad, S Ahmed and IJ Lee (2009). Influence of pH, temperature and glucose on biodegradation of 4-aminophenol by novel bacterial strain *Pseudomonas* sp. ST-4. *African J Biotechnology.* 8(16): 3827-3831 (IF: **0.573**)
105. **Hamayun M**, S A Khan, HY Kim, M F Chaudhary, YH Hwang, DH Shin, IK Kim, BH Lee and IJ Lee (2009) Gibberellin Production and Plant Growth Enhancement by Newly Isolated Strain of *Scolecobasidium tshawytschae*. *Journal of Microbiology and Biotechnology.* 19 (6): 560-565 (IF: **1.685**)
106. Joo GJ, SM Kang, **M Hamayun** (Co-first author), SK Kim, CI Na, DH Shin and IJ Lee (2009) *Burkholderia* sp. KCTC 11096BP as a Newly Isolated Gibberellin Producing

- Bacterium. *The Journal of Microbiology*. 47(2): 167-171 (IF: **1.621**)
107. Khan SA, **M Hamayun**, HY Kim, HJ Yoon, IJ Lee and JG Kim (2009) Gibberellin Production and Plant Growth Promotion by a New Strain of *Gliomastix murorum*. *World Journal of Microbiology and Biotechnology*. 25: 829-833 (IF: **1.532**)
108. Hussain J, AL Khan, N Rehman, **M Hamayun**, T Shah, M Nisar, T Bano, ZK Shinwari and I-J Lee (2009) Proximate and nutrient analysis of selected vegetable species: A case study of Karak region, Pakistan. *African J Biotechnol*. 8 (12): 2725-2729 (IF: **0.573**)
109. Khan AL, **M Hamayun**, J Hussain, H Khan, SA Gilani, A Kikuchi, K N Watanabe, EH Jung and IJ Lee (2009) Assessment of allelopathic potential of selected medicinal plants of Pakistan. *African J Biotechnol*. 8(6): 1024-1029 (IF: **0.573**)
110. **Hamayun M**, SA Khan, N Ahmad, DS Tang, SM Kang, CI Na, EY Sohn, YH Hwang, DH Shin, BH Lee, JG Kim and IJ Lee (2009) *Cladosporium sphaerospermum* as a new plant growth promoting endophyte from the roots of *Glycine max* (L.) Merr. *World Journal of Microbiology and Biotechnology*. 25 (4): 627–632 (IF: **1.532**)
111. SA Khan, **M Hamayun**, HY Kim, HJ Yoon, JC Seo, YS Choo, IJ Lee, SD Kim, IK Rhee and JG Kim (2009) A new strain of *Arthrinium phaeospermum* isolated from *Carex kobomugi* Ohwi is capable of gibberellin production. *Biotechnology Letters* 31:283–287 (IF: **1.853**)
112. SM Kang, GJ Joo, **M Hamayun**, CI Na, DH Shin, HY Kim, JK Hong and IJ Lee (2009) Gibberellin production and phosphate solubilization by newly isolated bacterial strain of *Acinetobacter calcoaceticus* and its effect on plant growth. *Biotechnology Letters* 31: 277-281 (IF: **1.853**)
113. Yoon JY, **M Hamayun**, SK Lee and IJ Lee (2009) Methyl jasmonate alleviated salinity stress in soybean. *Journal of Crop Science and Biotechnology*. 12(2): 63-68 (Foreign journal)

Published 2008

114. Jang SW, **M Hamayun**, HY Kim, DH Shin, KU Kim and IJ Lee (2008) Effect of elevated nitrogen levels on endogenous gibberellins and jasmonic acid contents of three rice (*Oryza sativa* L.) cultivars. *Journal of Plant Nutrition and Soil Science* 171: 181-186 (IF: **1.816**)
115. Khan SA, **M Hamayun** (Co-first author), HJ Yoon, HY Kim, SJ Suh, SK Hwang, JM Kim, IJ Lee, YS Choo, UH Yoon, WS Kong, BM Lee and JG Kim (2008) Plant growth

- promotion and *Penicillium citrinum*. *BMC Microbiology* 8: 231 (IF: 3.1)
116. Jang SW, **M Hamayun**, EY Sohn, DH Shin and IJ Lee (2008) Growth and Gibberellins Level of Two Rice Cultivars as Influenced by Different Nitrogen Containing Compounds. *Journal of Crop Science and Biotechnology*. 11 (4): 223-226 (Foreign journal)
117. Tang DS, **M Hamayun**, YM Ko, YP Zhang, SM Kang, IJ Lee (2008) Role of Red Light, Temperature, Stratification and Nitrogen in Breaking Seed Dormancy of *Chenopodium album* L. *Journal of Crop Science and Biotechnology*. 11 (3): 199-204 (Foreign journal)
118. Khan SA, **M Hamayun**, SO Rim, I JLee, JC Seu, YS Choo, IN Jin, SD Kim, IK Lee and JG Kim (2008) Isolation of Endophytic Fungi Capable of Plant Growth Promotion from Monocots Inhabited in the Coastal Sand Dunes of Korea. *Journal of Life Science* 18(10): 1355-1359 (Foreign journal)

Published 2007

119. Kim HY, IJ Lee, **M Hamayun** (Co-first author), JT Kim, JG Won, IC Hwang and KU Kim (2007) Effect of prohexadione-calcium on growth components and endogenous gibberellins contents of rice (*Oryza sativa* L.). *Journal of Agronomy and Crop Science*. 193: 445-451 (IF: 2.565)
120. **Hamayun M** (2007) Traditional uses of some medicinal plants of Swat valley, Pakistan. *Indian Journal of Traditional Knowledge*. 6 (4): 636-641 (IF: 0.399)
121. Adnan SM, **M Hamayun**, S Begum and IJ Lee (2007) Studies on ethnomedicinal knowledge, market assessment and conservation status of some socio-economically important medicinal plants of Roringar valley, District Swat, Pakistan. *Journal of Phytopharmacotherapy and Natural Products*. 1 (1): 67-72 (Foreign journal)
122. **Hamayun M**, MA Khan, MF Chudhary and H Ahmad (2007) Studies on traditional knowledge of medicinal herbs of Swat Kohistan, District Swat, Pakistan. *Journal of Herbs, Spices and Medicinal Plants*. 12 (4): 11-28 (Foreign journal)
123. Jang SW, **M Hamayun**, EY Sohn, DH Shin, KU Kim and IJ Lee (2007) Studies on the effect of silicon nutrition on plant growth, mineral contents and endogenous bioactive gibberellins of three rice cultivars. *J. Crop Sci. Biotech.*10: 47-51 (Foreign journal)
124. Hwang SJ, **M Hamayun**, HY Kim, KU Kim, DH Shin, JE Kim, SY Kim and IJ Lee (2007) Diurnal Variation in Endogenous Gibberellin Levels of Rice Shoots. *J. Crop Sci. Biotech.* 10 (3): 163-166 (Foreign journal)
125. Hwang SJ, **M Hamayun**, HY Kim, CI Na, KU Kim, DH Shin, SY Kim and IJ Lee (2007)

Effect of nitrogen and silicon nutrition on bioactive gibberellin and growth of rice under field conditions. *J. Crop Sci. Biotech.* 10 (4): 281-286 (Foreign journal)

Published 2006

126. Khan SA, **M Hamayun** and S Ahmad (2006) Degradation of 4-aminophenol by newly isolated *Pseudomonas* sp. strain ST-4. *Enzyme and Microbial Technology*. Volume 38(1-2): 10-13 (IF: 2.624)
127. **Hamayun M**, SA Khan and MA Khan (2006) Ethnopharmacology, indigenous collection and preservation techniques of some frequently used medicinal plants of Utror and Gabral, District Swat, Pakistan. *African Journal of Traditional, Complementary and Alternative Medicines*. 3(2): 57-73 (IF: 0.71)
128. **Hamayun M**, A Khan, SA Khan and MA Khan (2006) Study on traditional knowledge and utility of medicinal herbs of District Buner, NWFP, Pakistan. *Indian J. Trad. Knowledge*. 5 (3): 407-412 (IF: 0.399)
129. **Hamayun M**, SA Khan, H Ahmad, DH Shin and IJ Lee (2006) Morel collection and marketing: A case study from the Hindu-Kush mountain region of Swat, Pakistan. *Lyonia*. 12 (2): 7-13 (Foreign journal)
130. **Hamayun M** and SA Khan (2006) Studies on the Traditional Uses of Some Medicinal Shrubs in Swat Kohistan, Pakistan. *Acta Botanica Yunnanica*. 28 (6): 665-668 (Foreign journal)
131. **Hamayun M**, SA Khan, EY Sohn and IJ Lee (2006) Folk medicinal knowledge and conservation status of some economically valued medicinal plants of District Swat, Pakistan. *Lyonia*. 12 (2): 89-101 (Foreign journal)
132. Ahmad N, **M Hamayun** and MF Chaudhry (2006) Studies on the effect of foliar application of 2, 4-dichlorophenoxy acetic acid (2, 4-D) on different yield parameters in Chickpea. *Sarhad J. Agric.* 22 (1), 145-149 (HEC recognized)
133. Jamal Z, **M Hamayun**, N Ahmad and MF Chaudhary (2006) Effects of soil and foliar application of different concentrations of NPK and foliar application of $(\text{NH}_4)_2\text{SO}_4$ on different yield parameters in wheat. *Journal of Agronomy*. 5 (2): 251-256
134. **Hamayun M**, S Afzal Khan, IJ Lee and MA Khan (2006) Conservation assessment of Hindu-kush mountain region of Pakistan. *Asian Journal of Plant Sciences*. 5(4): 725-732
135. **Hamayun M**, S Afzal Khan, HY Kim, CI Na and IJ Lee (2006) Traditional knowledge and ex-situ conservation of some threatened medicinal plants of Swat Kohistan,

Published 2005

136. Rehman G, SA Khan and **M Hamayun (2005)** Studies on Diabetic Nephropathy and Secondary disease in Type 2 Diabetes. *International Journal of Diabetes in Developing Countries*. 25 (1): 25-29 (IF: 0.451)
137. Khan SA, **M. Hamayun** and S Ahmed (2005) Optimization of some physio-chemical conditions for the degradation of 4-aminophenol by newly isolated *Pseudomonas* species ST-4. *Bangladesh J Microbiol*. 22: 109-112 (Foreign journal)
138. **Hamayun M**, SA Khan and W Muhammad (2005) Investigation on the prevalence of Leukemia in North West Frontier Province of Pakistan. *Turkish Journal of Cancer*. 35 (3): 119-122 (Foreign journal)
139. **Hamayun M**, SA Khan, I Iqbal, G Rehman, T Hayat and M A Khan (2005) Ethnobotanical Profile of Utror and Gabral Valleys, District Swat, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
140. **Hamayun M (2005)** Ethnobotany of some useful trees of Hindu-Kush mountain region: A case study of swat Kohistan, District Swat, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
141. Ahmad N, MF Chaudhry and **M Hamayun (2005)** Effect of foliar application of 2, 4-dichlorophenoxy acetic acid (2, 4-D) on different growth parameters of Mustard. *Sarhad J. Agric*. 21 (1): 125-130 (HEC recognized)
142. Ahmad N, MF Chaudhry, I Ahmad and **M Hamayun (2005)** Effect of foliar application of 2, 4-dichlorophenoxy acetic acid (2, 4-D) on different yield parameters in Mustard. *Sarhad J. Agric*. 21 (4): 747-750 (HEC recognized)
143. **Hamayun M**, F Hussain, SA Khan and N Ahmad (2005) Allelopathic effect of *Cyperus rotundus* and *Echinochloa crus-galli* on seed germination, plumule and radicle growth in Maize (*Zea mays* L.). *Pak. J. Weed Sci. Res*. 11 (2): 81-84 (HEC recognized)
144. **Hamayun M**, SA Shah, R Afza and Shahidullah (2005) Studies on folk uses of medicinal plants of Razmak Valley, North Waziristan. In A. A. Khan and M. Arshad (eds) A national workshop on Conservation Linked to Livelihood Opportunities: Case Studies. WWF-Pakistan. Proceedings, Page 77-85 (Conference Proceedings)

Published 2004

145. Rehman G and **M Hamayun (2004)** Studies on Diabetic Nephropathy and Secondary

- diseases in Type 1 Diabetes. *International Journal of Diabetes in Developing Countries*. 24: 50-55 (IF: 0.451)
146. **Hamayun M** and ZK Shinwari (2004) Folk Methodology of Charas (Hashish) Production and its Marketing at Afridi Tirah, Federally Administered Tribal Areas (FATA) Pakistan. *J. Industrial Hemp*. 9 (2): 41-50 (Foreign journal)
 147. Iqbal I and **M Hamayun** (2004) Studies on the traditional uses of plants of Malam Jabba valley, District Swat, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
 148. **Hamayun M** and MA Khan (2004) Studies on collection and marketing of *Morchella* (morels) of Utror-Gabral valleys, District Swat, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
 149. Ahmad H, S Khan, A Khan and **M Hamayun** (2004) Ethnobotanical resources of Manikhel forests, Orakzai Tirah, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
 150. **Hamayun M** and MF Chaudhry (2004) Effect of foliar and soil application of NPK on different growth parameters and nodulation in Lentil. *Sarhad J. Agric.* 20 (1). 103-111 (HEC recognized)
 151. Ahmad N, MF Chaudhry and **M Hamayun** (2004) Studies on the effect of foliar application of 2, 4-dichlorophenoxy acetic acid (2, 4-D) on different growth Parameters of Chickpea. *Sarhad J. Agric.* 20 (4): 613-618 (HEC recognized)

Published 2003

152. **Hamayun M** (2003) Ethnobotanical studies of some useful shrubs and trees of District Buner, NWFP, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
153. **Hamayun M**, A Khan and MA Khan (2003) Common medicinal folk recipes of District Buner, NWFP, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
154. **Hamayun M**, MA Khan and S Begum (2003) Marketing of medicinal plants of Utror-Gabral valleys, Swat, Pakistan. *Ethnobotanical Leaflets* (Foreign journal)
155. **Hamayun M** (2003) Effect of spacing and weed free periods on the productivity of Maize (*Zea mays* L.). *Pak. J. Weed Sci. Res.* 9(3-4): 179-184 (HEC recognized)
156. **Hamayun M**, MA Khan, A Latif, S Khan and M Waseem (2003) Folk uses of wild medicinal Plants in Afridi Tirah. International Conference on "Conservation and Sustainable Uses of Medicinal and Aromatic Plants in Pakistan". Page 153-160 (Conference Proceedings)
157. Iqbal I, MA Khan and **M Hamayun** (2003) Studies on Ethnobotanical Profile of Malam

Jabba Swat. International Conference on "Conservation and Sustainable Uses Medicinal and Aromatic Plants in Pakistan". Page 144-152 (Conference Proceedings)

Books & Book Chapters

1. **Muhammad Hamayun** (2009) **Wild Plants of Hindu Kush and Their Cultural Uses**. LAP Publishing, Germany (ISBN: 978-3838312231). Book is available online at <http://www.amazon.com>
2. **Muhammad Hamayun**, SA Khan and IJ Lee (2009) **Abiotic Stresses and Soybean**. Lambert Academic Publishers, Germany (ISBN: 978-3838312651). Book is available online at <http://www.amazon.com> (one of the best sellers)
3. SA Khan and **Muhammad Hamayun** (2009) **Endophytic Fungi and Coastal Dune Vegetation**. Lambert Academic Publishers, Germany (ISBN: 978-3838314662). Book is available online at <http://www.amazon.com>
4. Gul Jan, Farzana Gul Jan, **Muhammad Hamayun** (2011) **An Ethnobotanical Survey on Fuel Wood and Timber plant Species Of Dir Kohistan Valley, Khyber Pakhtoon Khwa Province, Pakistan**. VDM Verlag Dr. Müller, Germany (ISBN: 978-3639361841). Book is available online at <http://www.amazon.com>
5. Gul Jan, **Muhammad Hamayun**, Farzana Gul Jan (2011) **Exploration of Indigenous Herbal Knowledge of District Mardan**. Lambert Academic Publishers, Germany (ISBN: 978-3846516508). Book is available online at <http://www.amazon.com>
6. Nadeem Ahmad, **Muhammad Hamayun**, Samin Jan (2012) **Weeds Inhabiting Endophytic Fungi and Plant Growth Promotion**. Lambert Academic Publishers, Germany (ISBN: 978-3846589717). Book is available online at <http://www.amazon.com>
7. Gul Jan, **Muhammad Hamayun**, Farzana Gul Jan (2015) **Conservation Issues and Plant Resources of Malam Jaba Valley, Pakistan**. Lambert Academic Publishers, Germany (ISBN: 978-3659495106). Book is available online at <http://www.amazon.com>
8. Gul Jan, **Muhammad Hamayun**, Farzana Gul Jan (2015) **Medicinal Flora of Kumrate Valley, KP Pakistan**. Lambert Academic Publishers, Germany (ISBN: 978-3659324765). Book is available online at <http://www.amazon.com>
9. **Muhammad Hamayun** and In-Jung Lee (2008) **Weeds as Source of Traditional Medicine in Pakistan**. KU Kim, DH Shin & IJ Lee (eds). Utility of Weeds and Their Relatives As Resources. Kyungpook National University Korea. Ililsa Press, Daegu,

Korea (ISBN: 978-89-6031-057-5)

10. **Muhammad Hamayun** and Aziz Ahmad (2003) **Marketing of Medicinal Plants in Swat**. In ZK Shinwari, AA Khan & T Nakaike (eds), Medicinal and other Useful Plants of District Swat Pakistan. WWF Peshawar Pakistan, National Conservation Society of Japan (NACS-J), publisher Al-Aziz Communications, Pakistan (ISBN: 969-8283-21-8)

Conferences and Symposia Presentations

International

1. Jan FG, **M Hamayun**, G Jan, MA Khan, M Ahmad, M Zafar, M Shah. Ethnoveterinary plant remedies used by Gujjar Communities in Northern areas of Pakistan. 12th National and 3rd International Conference of Botany, Sept 1-3 (2012), Islamabad, Pakistan. P. 215
2. Jan G, MA Khan, FG Jan, **M Hamayun**, M Ahmad, M Zafar, R Khan, A Khan. Exploitation and prospects for conservation: Plant diversity of Dir Kohistan Valley (Khyber Pakhtoonkhwa), Pakistan. 12th National and 3rd International Conference of Botany, Sept 1-3 (2012), Islamabad, Pakistan. P. 216
3. Waqas M, AL Khan, **M Hamayun**, SM Kang, YH Kim, M Kamran, R Radhakrishnan, IJ Lee. Endophytic fungi: an eco-friendly strategy for mitigation of salinity and drought stress in cucumber. The Korean Society of Crop Science Conference, Oct 20-21(2011), Dhanyang, South Korea. Korean Journal of Crop Science (Vol 56 Supp. 2). P. 44
4. Khan AL, **M Hamayun**, M Waqas, R Radhakrishnan, M Kamran, SM Kang, YH Kim, IJ Lee. Heat stress resistance offered by endophytic fungi *Exophiala* sp. LHL08 and *Paecilomyces formosus* LHL10 to cucumber plants. The Korean Society of Crop Science Conference, Oct 20-21 (2011), Dhanyang, South Korea. Korean Journal of Crop Science (Vol 56 Supp. 2). P. 432
5. Khan AL, **M Hamayun**, SM Kang, YH Kim, M Waqas and IJ Lee. Phytohormones producing endophytic fungal interaction with *Cucumis sativus* alleviated salinity stress. The Korean Society of Crop Science Conference, April 21-22, 2011, Mokpu, South Korea. Korean Journal of Crop Science (Vol 56 Supp. 1). P. 37
6. **Hamayun M**, AL Khan, YH Kim, SM Kang and IJ Lee. Endophytic fungi isolated from soybean and their role in plant growth and development. Conference of the Korean Society for Horticultural Science, 28-29 May, 2010, South Korea. *Kor. J. Hort. Sci.*

Technol. 28 (Suppl. I): 157

7. Khan AL, **M Hamayun**, YH Kim, SM Kang, JH Lee, IJ Lee. Secretion of gibberellins by *Aspergillus fumigatus* sp. LH02 influenced isoflavone biosynthesis, phytohormones and plant growth in salinity stress. The Korean Society of Crop Science Conference, Oct 21-22, 2010, Busan, South Korea. *Korean Journal of Crop Science* (Vol 55 Suppl. 2). P. 63
8. Kim YH, SM Kang, JH Lee, **M Hamayun**, AL Khan and IJ Lee. Effect of application of cycocel, daminozide and paclobutrazol on growth characteristics of Poinsettia (*Euphorbia pulcherrima* W.). Conference of the Korean Society for Horticultural Science, 28-29 May, 2010, South Korea. *Kor. J. Hort. Sci. Technol.* 28 (Suppl. I): 1272
9. Kim YH, **M Hamayun**, AL Khan, SM Kang, JH Lee and IJ Lee. Effects of silicon on ethylene and salicylic acid contents of rice after wounding stress. Conference of the Korean Society of Crop Science, 8-9 April, 2010. Daejun, South Korea. *Kor. J. Crop Sci.* 55 (Suppl. 1): page 25
10. AL Khan, **M Hamayun**, Kim YH, SM Kang, JH Lee and IJ Lee. Production of gibberellins by *Aspergillus fumigatus* LH02 and its propitious endophytic association to increase isoflavone contents under high salt stress and plant growth promotion in Soybean. Conference of the Korean Society of Crop Science, 8-9 April, 2010, Daejun, South Korea. *Kor. J. Crop Sci.* 55 (Suppl. 1): page 45
11. **Hamayun M**, AL Khan, CI Na, SM Kang, KI Choi and IJ Lee (2009) Exogenous kinetin application alleviated the adverse effects of salinity on physio-hormonal attributes of Soybean. The Korean Society of Crop Science-Spring symposium, Samcheuk, Korea. (April 16-17) page 38
12. Kang SM, **M Hamayun**, AL Khan, YH Kim, JH Lee and IJ Lee (2009) Effect of *Burkholderia cepacia* SE4 on endogenous phytohormones and amino acid contents of cucumber. The Korean Society of Crop Science-Spring symposium, Samcheuk, Korea. (April 16-17) page 40
13. Kim YH, AL Khan, **M Hamayun**, JT Kim, JH Lee, SM Kang, IC Hwang, CS Yoon and IJ Lee. Effects of Prohexadion-Calcium on Growth and Gibberellins Contents of *Chrysanthemum morifolium* R. cv Monalisa White. Conference of the Korean Society for Horticultural Science, 23-24 October, 2009, South Korea. *Kor. J. Hort. Sci. Technol.* 27 (Suppl. II): 118
14. **Hamayun M**, YH Kim, AL Khan, SM Kang, JH Lee and IJ Lee. *Penicillium* sp. MH7

- promoted growth attributes of Crown Daisy (*Chrysanthemum coronarium*). The Korean Society of Crop Science. Chonnan National University, Gwangju, Korea (October, 2009). *Korean Journal of Crop Science*. 54 (Supp. 2): 76
15. Yun HJ, SA Khan, **M Hamayun**, JS Hwang, YS Choo and JG Kim (2009) Proteomic analysis of *Glehnia littoralis* as influenced by culture filtrate of *Penicillium citrinum* KACC43900". Recent Trends in Bio-Convergence Technology. Daejeon, Korea (June 25-26, 2009)
 16. Khan SA, **M Hamayun**, HJ Yun, and JG Kim (2009) Isolation of gibberellins encoding genes from genomic DNA of fungal isolate *Arthrinium phaeospermum* KACC 43901. The Korean Society for Microbiology and Biotechnology, Yungnam Jibu Seminar, Yungnam, Korea. (Feb 20-21, 2009) page 68
 17. Khan SA, **M Hamayun**, HJ Yun and JG Kim (2009) Isolation of gibberellins encoding genes from genomic DNA of fungal isolate *Glomastix murorum* KACC 43902. The Korean Society for Microbiology and Biotechnology, Yungnam Jibu Seminar, Yungnam, Korea. (Feb 20-21, 2009) page 69
 18. Khan SA, **M Hamayun**, HJ Yun and JG Kim (2009) Isolation of gibberellins encoding genes from genomic DNA of fungal isolate *Penicillium citrinum* KACC 43900. The Korean Society for Microbiology and Biotechnology, Yungnam Jibu Seminar, Yungnam, Korea. (Feb 20-21, 2009) page 70
 19. **Hamayun M**, SM Kang, N Ahmad, DS Tang, CI Na, KI Choi and IJ Lee (2008) Influence of silicon on growth and endogenous hormones of soybean under salt and drought stress condition. Symposium toward Enhancing Agricultural Biodiversity for Future Crop Production. The Korean Society of Crop Science (www.cropscience.or.kr), Gyeong-Ju, Korea (October 23-24, 2008) Page 75
 20. **Hamayun M**, SM Kang, DS Tang, CI Na, YH Hwang and IJ Lee (2008) Effect of salinity and drought stress on growth and endogenous hormones of soybean. Symposium toward Enhancing Agricultural Biodiversity for Future Crop Production. The Korean Society of Crop Science (www.cropscience.or.kr), Gyeong-Ju, Korea (October 23-24, 2008) Page 75
 21. **Hamayun M**, DS Tang, SM Kang, YM Ko, KI Choi, SA Lee, EY Sohn and IJ Lee (2008) Effect of Gibberellic Acid and Salinity on Growth and Endogenous Growth Hormones of Soybean Cultivar Hwangkeum. The 2008 Joint Annual Meeting (5-9 Oct. 2008)

George R. Brown convention Center, Houston Texas, U.S.A.

22. **Hamayun M**, SY Lee and IJ Lee (2008) Effect of silicon on salinity alleviation of soybean (*Glycine max* L.). 5th International Crop Science Congress and Exhibition. International convention Center, Jeju, Korea (April 13-18, 2008) page 124.
23. Khan SA, SO Rim, **M Hamayun**, IJ Lee, JG Kim (2008) Gibberellin Production and Plant Growth Promotion by a New Strain of *Glomastix murorum*. The 49th International Symposium of Korean Society of Life Science. Dae-Jun, Korea (October 10-11, 2008) page 99
24. Khan SA, SO Rim, **M Hamayun**, IJ Lee, CB Yu, IK Rhee and JG Kim (2008) A new strain of *Arthrinium phaeospermum* isolated from *Carex kobomugi* Ohwi is capable of gibberellin production. The 49th International Symposium of Korean Society of Life Science. Dae-Jun, Korea (October 10-11, 2008) page 99
25. Khan SA, SO Rim, **M Hamayun**, IJ Lee and JG Kim (2008) Gibberellin Producing Novel Endophytic Fungus Isolated from the Roots of *Ixeris repens*. The 49th International Symposium of Korean Society of Life Science. Dae-Jun, Korea (October 10-11, 2008) page 100
26. Khan SA, SO Rim, **M Hamayun**, IJ Lee and JG Kim (2008) Isolation of Endophytic Fungi from Sand Dune Flora and Their Role in Plant Growth Promotion. The 49th International Symposium of Korean Society of Life Science. Dae-Jun, Korea (October 10-11, 2008) page 100
27. Khan SA, **M Hamayun** and JG Kim (2008) Isolation of fungal strains producing GAs from the east coast of Korea. Meetings of the Three Divisions of the International Union of Microbial Societies (IUMS). International Congress of Mycology, Istanbul, Turkey (August 5-9, 2008) page 103
28. Khan SA, **M Hamayun**, SO Rim and JG Kim (2008) Screening and identification of GAs producing fungal strains from sand-dune plants. The Korean Society for Microbiology and Biotechnology, Seoul KyoYuk MunHwa HoeKwan, Seoul, Korea. (June 26-27, 2008) page 300
29. **Muhammad Hamayun** (2006) Trade and conservation status of medicinal plants: A case study of Hindu Kush mountain region of Swat, Pakistan. "International symposium on the present and future of Life Sciences and Biotechnology" organized by Korean Society of Life Sciences, Daegu, Republic of Korea (September 28-29) (**Oral**

Presentation).

30. **Muhammad Hamayun** (2006) Traditional Knowledge of some important medicinal plants of Pakistan. 13th International Symposium & Conference of the Plant Resources Society of Korea on Search and Development of New Bio-materials for Human Life". Kyungpook National University, Daegu, Korea (November 16-17) **(Oral Presentation)**.

National

31. **Muhammad Hamayun** (2003) Effect of spacing and weed free periods on the productivity of Maize (*Zea mays* L.). First International Weed Science Conference, NWFP Agricultural University Peshawar (October 23-26) **(Oral Presentation)**.
32. Attended fourth meeting of Tissue Culture, Bara-Gali 15-19 June 1997, organized by University of Peshawar, Pakistan.

Research Supervision

PhD Supervision

PhD Research Students under Supervision: 09

PhD Supervised (Completed)

1. Dr. Farzana Gul (2017)
2. Dr. Hussan Ara Begum (2017)

PhD Co-Supervised (Completed)

3. Dr. Muhammad Romman (Islamia College University-2016)
4. Dr. Nadia Bibi (COBAM, University of Peshawar-2016)
5. Dr. Sajid Ali (COBAM, University of Peshawar-2017)

M.Phil Supervision

M.Phil. Research Students under Supervision: 22

M.Phil. Supervised (Completed)

1. Ismael
2. Khalid Khan
3. Noorul Islam
4. Kiran Shahjeer
5. Shumaila Siraj
6. Tariq Hayat

Research Projects Completed/Approved

- Project:** Studies on ethnobotany, conservation and plant diversity of Utror and Gabral valleys, district Swat, Pakistan.

Project Cost: 0.056 Million (PKR)

Current Status: Completed (2003)

Funding agency: World Wide Fund for Conservation of Nature (WWF-Pakistan)
- Project:** Exploration of the mechanisms of allelopathy mediated by “Esculentoside D” isolated from *Phytolacca latbenia*: A plant indigenous to Pakistan.

Project Cost: 0.5 Million (PKR)

Current Status: Completed (June 2016)

Funding agency: Higher Education of Pakistan
- Project:** Cross signaling between *Nostoc* and rice roots during root colonization under axenic conditions.

Project Cost: 1.3459 Million (PKR)

Current Status: Approved

Funding agency: NRPU, Higher Education of Pakistan
- Project:** Unravelling the gene regulatory functions of novel flood-induced NAC transcription factors in controlling stress and senescence response of *Arabidopsis thaliana*.

Project Cost: 0.253 Million (PKR)

Current Status: Approved

Funding agency: Higher Education of Pakistan

Patent (International)

Title of Invention: *Scolecobasidium tshawytschae* and method for preparing a gibberellin using the same

Application No. (date): 10-2009-0022545 (17-03-2009)

Registration No. (date): 1010983290000 (19-12-2011)

Publication date: 26-12-2011 (<http://www.patent2.kipris.or.kr>)

Nucleotide Sequences Submitted to NCBI (GenBank), USA

Number of Nucleotide Sequences Submitted to GenBank: 31

Accession Nos. of Submitted Sequences

HM017065; EU821334; FJ950742; GU270552; GU270551; FJ950741; HM623425; HQ444388;
HM771268; GU390694; GU390693; GU390692; GU390691; GU390690; FJ808681; FJ808680;
FJ808679; FJ950743; FJ950740; FJ824816; EU821333; EU821332; EU823317; EU823316;
EU823315; EU823314; EU823313; EU823312; EU823311; HM017066; FJ445745
