




## Faculty Profile on University Website

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Title	<b>Dr.</b>	First Name	<b>Mohd. Gufran</b>	Last Name	<b>Khan</b>	Photograph
Designation	<b>Professor of Practice</b>					
Department	<b>Faculty of Agriculture Science &amp; Technology</b>					
Address (Residence)	<b>121, Avas Vikas Colony, Civil Lines Bareilly-243001, Uttar Pradesh (India).</b>					
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Web-Page	Orchid ID: LinkedIn ID: <a href="https://www.linkedin.com/in">https://www.linkedin.com/in</a> ResearchGate ID: <a href="https://www.researchgate.net">https://www.researchgate.net</a>					
<b>Educational Qualifications (Graduation Onwards)</b>						
Course/Degree	Institution		Year	Details/Thesis Topic/Subjects		
<b>B. Sc</b>	<b>MJP Rohilkhand University, Bareilly U.P.</b>		<b>1980</b>	Botany Zoology Chemisrty		
<b>M. Sc</b>	<b>MJP Rohilkhand University, Bareilly U.P</b>		<b>1982</b>	Botany		
<b>Ph. D</b>	<b>MJP Rohilkhand University, Bareilly U.P</b>		<b>1990</b>	Botany ( SalinityStress Physiology)		
<b>Post Doc</b>	<b>Ben- Gurion University, Israel</b>		<b>1992-93</b>	Biomass Production under saline irrigation		
<b>Career Profile</b>						
Organization / Institution		Designation	Duration	Role		
<b>MJP Rohilkhand University, Bareilly</b>		<b>Professor (POP)</b>	<b>November, 2025 To till Date</b>	<b>Teaching and Research</b>		
<b>Samara University Afar Ethiopia</b>		<b>Professor</b>	<b>Oct 2013 To July , 2025</b>	<b>Teaching, Research and community service</b>		
<b>Arba Minch University Ethiopia</b>		<b>Assistant Professor</b>	<b>Dec, 2008 To June 2013</b>	<b>Teaching and Research</b>		
<b>Dr.BR Ambedkar University S. L. S. Khandari campus Agra India</b>		<b>Assist. Professor ( Cont.)</b>	<b>September,1999 To Nov 2008</b>	<b>Teaching and Research</b>		
<b>GB Pant University of Agric &amp;Tech Pantnagar UK India</b>		<b>Teaching Associate</b>	<b>1998-1999</b>	<b>Teaching and Research</b>		
<b>CSIR Pool Scientist (at MJP (Rohilkhand University ) Bareilly India</b>		<b>Pool Scientist(SRA)</b>	<b>Sep 1994- Sep1997</b>	<b>Teaching and Research</b>		
<b>Jacob Blaustein Institute For Desert research ( Ben Gurion University ) Israel</b>		<b>Post Doc Fellow</b>	<b>1992-1993</b>	<b>Research</b>		
<b>Research Interests / Specialization</b>						
Salinity stress , Plant mineral Nutrition, industrial pollution ,						
<b>Teaching Experience (Subjects/Courses Taught)</b>						
30 years of teaching (UG & PG) and research experience at various Universities in India and abroad.						
<b>Honors &amp; Awards</b>						
❖ Former Senate Member , Samara University Afar Ethiopia 2020-23						
❖ Best Researcher Samara University, Ethiopia						
❖ Members of various scientific Societies and Editorial committees						
<b>Publications /Academic Activities (Numbers Only)</b>						
Research Papers Published in International Journals	64	Paper/Poster Presented in Seminars/ Conferences	03	Workshops & Trainings	08	
Research Papers Published in Other Journals	03	Seminar/ Conferences Attended	10	Faculty development Programs	03	
Articles Published in Popular Fora, e.g., Websites, Blogs, Newspapers, Magazines etc.	07	Membership of Academic/ Professional Bodies	01	Database Contribution	01	

## List of Publications

(Prof. M. Gufran Khan Ph.D)

1.Khan M.G. and K.A.Varshney (1986)	Effect of IAA, GA <sub>3</sub> , Zeatin and their combinations on early growth stages of lobia ( <i>Phaseolus lunatus</i> L.) Agric.Res.Commu. 1(1): 23-26
2.Khan M.G. and K.A.Varshney (1988)	Differential genotypic behaviour of soybean ( <i>Glycine max</i> L.Merr.) for tolerance to salt stress. Biosci.Res.Bull. 491-2):24-32
3.Khan M.G. and K.A.Varshney (1988)	Nodulation, leghaemoglobin contents and number of roots in two cultivars of soybean under salt stress.Vegetos 1(2): 95-100
4. Khan M.G. and K.A.Varshney (1989)	Studies on various forms of nitrogen and proteolytic activity in soybean ( <i>Glycine max</i> L.Merrill) under salt stress.Bangl.J.Bot 18(1):95-97
5. Khan M.G. and K.A.Varshney (1989)	Influence of salt stress on sodium and potassium concentrations in two cultivars of soybean( <i>Glycine max</i> L. Merrill) Indian J. Plant Physiol. 32(2): 369-371
6. Khan M.G. and K.A.Varshney (1989)	Effect of Rubber factory effluents on growth parameters of some forage crops.Vegetos 2(2): 261-264
7. Khan M.G. and K.A.Varshney (1989)	Effect of Rubber factory effluents on chlorophyll contents of some forage crops. Paper Present. in National Seminar held at Kanpur India 1989.
8. Khan M.G. and K.A.Varshney (1989)	Chemical composition of effluents of Rubber factory Bareilly. Paper Present. in National Seminar held at Kanpur India 1989
9. Khan, M.G.(1987)	Genetic Engineering :Science Ka Karishma In Bareilly College Annual Magazine (Urdu)
10. Khan M.G. and K.A.Varshney (1990)	Accumulation of Betaine and choline in <i>Glycine max</i> L. under salts stress. J.Indian Bot. Soc.69:401-404
11. Khan M.G.,A.K.S.Gehlot and K.A.Varshney (1992)	Effect of Rubber factory effluents on seed germination and early seedling growth of some leguminous crops. Bangl.J.Bot. 21(2):262-363
12.Khan M.G.(1992)	Effect of salt stress on nitrate reductase activity in some leguminous crops.Paper present. In International seminar on Inorganic Nitrogen assimilation held at Tiberia( Israel).
	Studies on yield attributes of soybean( <i>Glycine</i>

	<p><i>max</i> L.Merrill) under salt stress.J.Indian Bot.soc.,72:135-137.</p>
13. Khan M.G.(1993)	<p>Physiological studies on salinity and nitrogen interaction in alfalfa I- Biomass production and root development. J.Plant Nutrition 17(4):657-668</p>
14. Khan M.G.,M.Silberbush and S.H.Lips(1994)	<p>Physiological studies on salinity and nitrogen interaction in alfalfa II..Photosynthesis and Transpiration J.Plant Nutrition 17(4):669-682</p>
15. Khan M.G.,M.Silberbush and S.H.Lips(1994)	<p>Effect of salt stress on nitrate reductase activity in some leguminous crops. Indian J. Plant Physiol.37(3):185-187</p>
16. Khan M.G.(1994)	<p>Inorganic nitrogen nutrition in alfalfa under saline conditions. Paper abstracted in Proceed.in International symposium on Inorganic Nitrogen Assimilation held at Seeheim Darmstadt(Germany).</p>
17. Khan M.G.(1995)	<p>Physiological studies on salinity and nitrogen interaction in alfalfa I-Nitrate Reductase activity. J.Plant Nutrition 18(III) 2495-2500</p>
18. Khan M.G.,M.Silberbush and S.H.Lips(1995)	<p>H<sup>+</sup>-ATPase activity; A messege in salinity response. Physiol.&amp; Mol. Biol. Plants 2(2):1-2</p>
19. Khan, M.G.(1996)	<p>Nitrate and nitrite reductase activity in soybean plants raised with saline water.Indian J. Plant Physiol. Vol1(No.2)N.S.128-29</p>
20.Khan, M,G,(1996)	<p>Effect of nitrogen nutrition on growth and mineral status of alfalfa plants under saline water.Indian J Plant Physiol.Vol No.4(N.S.)279-283</p>
21. Khan M.G., M.Silberbush and S.H.Lips(1997)	<p>Alleviation of salinity caused inhibition in growth and nitrogen assimilation in maize through some growth regulators. Pap.present.in National seminar organized by Academy of Environmental Biology at Muzzaffar Nagar. 1997.</p>
22. Khan M.G. and H.S.Srivastava (1997)	<p>Effect of nitrogen nutrition on growth and mineral composition of alfalfa plants in saline conditions.Pap. Present. In National seminar of ISPP held at New Delhi 1997</p> <p>Plant Plasma memebrane H<sup>+</sup> -ATPase . Physiol. &amp;Mol.Biol.Plants4(1):3-5</p>

23.Khan, M.G.(1997)	Response of alfalfa to potassium calcium and nitrogen under stress induced by sodium chloride . <i>Biologia Plantarum</i> 40(2):251-259
24.Garg S.K., Khan, M.G. and H.S.Srivastava (1998)	Changes in growth and nitrogen assimilation in maize plants induced by NaCl and growth regulators <i>Biologia Plantarum</i> 41(1):93-99
25. Khan M.G., M.Silberbush and S.H.Lips(1997)	Nitrate assimilation and nitrate reductase activity in maize plants raised with NaCl salinity. Pap. Present. In National seminar of Plant Physiology and Biochemistry held at PantNagar 1998
26. Khan M.G. and H.S.Srivastava (1998)	Nitrate application improves plant growth and nitrate reductase activity in maize under saline condtions. <i>Indian J Plant Physiol.</i> Vol 5 No.2(N.S.):159-163
27. Khan M.G., M.Silberbush and S.H.Lips(1998)	Zinc deficiency in wheat: a hidden cause of low productivity. <i>Indian Farmer's Digest.</i> Feb 2000, 15-16
28. Khan M.G. and H.S.Srivastava (2000)	Application of cobalt and molybdenum improves biomass and some biochemical constituents in <i>Pisum sativum</i> L. grown under saline conditions. Pap. Present. in 23 <sup>rd</sup> all India Conf. organized by Indian Bot. Soc. at Meerut 2000.
29.Khan, M.G., S.C. Shankhdhar and R.C. Pant (2000)	Effect of cobalt and and molybdenum on salinity induced changes in <i>Lathyrus sativa</i> L. Pap. Present.in 23 <sup>rd</sup> all India Conf. organized by Indian Bot. Soc. at Meerut 2000.
30.Shalini and Khan , M.G. (2000)	Does polyamine application enhance salinity tolerance in maize plants? Paper present. In National symposium on Role of Biosciences in new Millenium organized by Society of Biosciences at Agra India 2001
31.Singh, V. and Khan, M.G. (2000)	Evaluation of some weeds of Singrauli for saponins, tannins and alkaloids. <i>Vegetos</i> 14: 69-70
32.Khan, M.G.(2001)	Studies on nitrate uptake, nitrate reductase activity and kinetics in alfalfa grown under salinity. Pap. Present.in 25 <sup>th</sup> all India Conf. organized by Indian Bot. Soc. at Bareilly India 2002.
	Cobalt and molybdenum induced changes in <i>Lathyrus sativus</i> L. grown under salinity I-

33. Upadhyay, R., M.G. Khan and S.V.S. Chauhan (2001)	Biomass production and root development. Indian J Appl. & Pure Biol 23(1) :113-16
34. Khan, M.G. (2002).	Cobalt and molybdenum induced changes in Lathyrus sativus L. grown under NaCl salinity II- Total N pigment composition, protein contents and proline accumulation. Indian J Appl. & Pure Biol 23 (2)
35. Vandna Singh and Khan, M.G. (2008)	Effect of NaCl salinity and calcium on germination and early growth of three grain legumes. Bionotes 6(4): 120
36. Vandna Singh and Khan, M.G. (2008)	Physiological responses of Pea ( <i>Pisum sativum</i> L.) to cobalt and molybdenum under salinity I- Growth and root development. Indian J. Environmental Sciences 9(1): 27-29
36. Vandna Singh and Khan, M.G. (2008)	Physiological responses of Pea ( <i>Pisum sativum</i> L.) to cobalt and molybdenum under salinity II- pigment composition, total N protein content and proline accumulation. Indian J. Environmental Sciences 9(1): 31-32
37. Khan, M.G. (2004)	Brassinosteroids : a newest group of Plant hormone (Communicated to Can J Bot)
38. Singh V., Shalini Rajpal and M.G. Khan (2005)	Do elevated CO <sub>2</sub> levels in air enhance crop productivity? Bionotes 8(4): 98-98
39. Singh V., Shalini Rajpal and M.G. Khan (2005)	Germination and biomass production in barley ( <i>Hordeum vulgare</i> L.) as affected by polyamine application Bionotes, 10(2): 51-52
40. Khan M.G. and S.K. Garg (2006)	Physiological and biochemical responses of Pea ( <i>Pisum sativum</i> L.) Pap. Abst, in Proceedings of National symposium organized by DST New Delhi at SVBP University of Tech & A Meerut 2008
41. Khan, M.G. (2006)	Impact of textile waste water on seed germination and some physiological parameters in some leguminous crops. Asian J Plant sciences 10: 269-73
	Sustainable use of textile effluents for food crop production : An alternative to sustain food

<p>42. Gautam. I.K., S.K. Garg and M.G.Khan(2008)</p>	<p>security, Submitted to J African Development Studies. Addis Ababa Ethiopia 2010</p>
<p>43. Sheweta Chaudhary and Khan, M.G(2008)</p>	<p>Impact of Tannery effluent on germination and some physiological parameters in maize (<i>Zea mays</i> L.) Paper presented in International Conference on Ecosystem Conservation and Sustainable Development held on 10-12 Feb 2011 at Ambo University Ethiopia</p>
<p>44. M.G.Khan, Daniel G., M. Konjit, T., A. Thomas and Eyasu, S.S. and Awokw G. (2011)</p>	<p>The comparative Impact of Textile, Tannery and Sewage effluents on seed germination, biomass, leaf area, root development and chlorophyll contents in French bean (<i>Phaseolus vulgaris</i> L.). Paper presented in National Symposium on Environment and Development, May 24-25 Dilla University Ethiopia</p>
<p>45. Khan, M.G and Eyasu, S,S (2010)</p>	<p>Impact of textile effluents on some growth, physiological and biochemical characteristics of lablab bean (<i>Dolichos lablab</i> L.) Paper presented in 2nd National symposium on Biodiversity and Nat. cons. June 3-6 2011 at Arba Minch University Ethiopia.</p>
<p>46. M. Gufran Khan, Zelalem T., Fanos W., Zewede T. and Awoke G.(2011)</p>	<p>Physiological Studies on seed germination, biomass production and pigment composition in Clover (<i>Trifolium alexandrinum</i> L.) Lucerne (<i>Medicago sativa</i> L.) and lablab bean (<i>Dolichos lablab</i> L.) grown with Textile waste water (Accepted in International J Curr. Res.)</p>
<p>47. M. Gufran Khan and Awoke Guadie(2011).</p>	<p>Polyamine application enhances biomass, nitrate acquisition and assimilation in alfalfa under salinity. Submitted to Indian J Plant physiology (submitted for publication in Asian J of Env. Water Pollution).</p>
<p>48. M. Gufran Khan, and Awoke Guadie (2011)</p>	<p>Impact of Tannery effluent on germinability and some physiological parameters in maize (<i>Zea mays</i> L). In: Proceed. of the Intern. Conf. on Ecosystem Con. And Sustainable Dev (ECOCASD 2011). Natarajan et al., (eds.), 252-61. Organized by Ambo University, Ethiopia</p>
<p>49. M. Gufran Khan, Eyasu S. S., Awoke G. and Tolera S.(2011)</p>	<p>Effect of salinity and sodicity on germination, biomass, Leaf area, and chlorophyll contents in Maize (<i>Zea mays</i> L.). Presented In 3<sup>rd</sup> national symposium held at Dilla University June 2012</p>

<p>50.Khan M.G. (2011)</p>	<p>The impact of arba minch and hawassa textile effluent on the physiology and growth of Clover (<i>Trifolium alexandrinum</i> L.) Lucerne (<i>Medicago sativa</i> L.) and field bean (<i>Dolichos lablab</i> L.) In Res. Proc. Arba Minch Univ. vol 1 (1). 10-19</p>
<p>51. Khan Gufran M. (2011)</p>	<p>Air pollution: an outcome of the industrialization , a hidden danger to human health. Reporter Ethiopia. com /Business-opinion 7<sup>th</sup> july 2012</p> <p>Biotechnology: A Novel Tool to Sustain Agriculture Productivity in Saline Environment. Life Sciences Feed, 2012; <b>1</b>: 17-21</p>
<p>52.Khan M.G. (2012)</p>	<p>The comparative Impact of Textile, Tannery and Sewageeffluents on seed germination, biomass, leaf area, root development and chlorophyll contents in French bean (<i>Phaseolus vulgaris</i> L.) Environ. Sci.: an Indian J Vol 8:issue 8</p>
<p>53. Khan, Gufran.M. Eyasu S. and Tolera S. (2012)</p>	<p>Spatio-temporal variations in the biomass and Photosynthetic production of phytoplankton in a large tropical rift valley lake (L. Chamo, Ethiopia). Communicated ( African J of Biotech)</p>
<p>54. M.Gufran Khan (2012)</p>	<p>Impact of salinity and sodicity on Biomass, Total Nitrogen, Nitrate reductase activity, Leaf area, and chlorophyll contents in Maize (<i>Zea mays</i> L.) Life sciences leaflets 57(on line &amp; print) : 55-64</p>
<p>55. Gufran Khan M, Sengar R S, Gautam IK, Maurya jn and Garg SK. (2012)</p>	<p>Germination and early growth performances of some fodder crops grown under saline and sodic conditions</p>
<p>56. M.Gufran Khan ( 2012)</p>	<p>In Proceedings: Samara University 2<sup>nd</sup> National symposium Ethiopia PP-</p>
<p>57. Eyasu Shumbulo , Demeke Kifle and Gufran K. Mohamed ( 2013)</p>	<p>Woody species diversity, management and contribution of local community in protected forest of Kuneba district, Afar Region Ethiopia. J Environ. Sci. &amp; Tech. 8 (4) : 172-179</p> <p>Effect of nitrogen, phosphorus and potassium fertilization on growth and yield of onion (<i>Allium cepa</i> L.) grown in southwestern Ethiopia (Accepted in Environ. Sc : an Indian journal.)</p>

<p>58. M.Gufran Khan , G.Shimelis, H. Alemu, Kebenu F.(2014)</p>	<p>Phytoremediation of sugar factory effluent polluted soil by some tree species and its impact on germination and growth in maize(<i>Zea mays</i> L.) and Lentil (<i>lens esculentum</i>L.) In Proceedings: Samara University 3<sup>rd</sup> National symposium on sustainable Livelihood development: Pastoral and Agro pastoral context. Ethiopia Vol 3: PP- 117-29</p>
<p>59 . M.Gufran Khan , G.Shimelis, H. Alemu, Kebenu F.(2015)</p>	<p>Systemin: A wound responsive plant peptide hormone. <i>Biotech Today</i> 6(2): 24-27</p>
<p>60. Tefera J., Minyishaw E., Kebenu F. Nurhusen A and Khan M.Gufran (2015)</p>	<p>Prospectus of Biomass Production of three pasture grasses using saline irrigation in semi arid condnions of Afar Ethiopia North East Africa Life Sciences Leaf lets Vol 82: 30-38</p>
<p>61. Muluneh Bekele, Ali Mohammed Amsalu Nebiyu and M. Gufran Khan (2015)</p>	<p>Phytoremediation of tannery effluents by Teff(<i>Ergarostis teff</i>) and wheat(<i>Triticum aestivum</i>) straw and evaluation of its toxicity by Sesame(<i>Sesamum indicum</i> L). Paper published in In Proceedings: Samara University 4th National symposium on sustainable Livelihood development: Pastoral and Agro pastoral context. Ethiopia Vol 3: PP- 117-29</p>
<p>62.. M.Gufran Khan, Abebe Chaka, Alemu H. Brhanu abayu and Kebenu,F.(2016).</p>	<p>A critical appraisal of <i>Amarantus</i> and <i>Chenopodium</i> weeds for their harmful and beneficial aspects in context to food security in pastoral area DIJBRAR1;1</p>
<p>63. Maurya, S.K., Khan, M.G. and Garg, S.K.(2016)</p>	
<p>64. M.Gufran Khan, Abebe Chaka, Alemu H. and Kebenu,F.(2017)</p>	
<p>65. . M.Gufran Khan, Abebe Chaka, M. Shahnawaz and Endris S,.(2017)</p>	

66. M.Gufran Khan, Abebe Chaka, M. Awate and Endris S.,(2018)	
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## **Contribution of Prof. Mohammed Gufran Khan (Ph.D) to Samara University Afar Ethiopia**

### **A. Research and Community Projects**

1. Potential and future prospects of biomass production in salt affected soils using some forage crops. (2014)
2. Impact of sugar factory effluent on nearby soils and crop production and its phytoremediation by some tree species viz., *Azadirachta indica*, *Moringa oleifera* and *Accaia nilotica* (2015)
3. Adaptation trial of some low land maize varieties under irrigation at Adar and Adlela woreda Afar Region Funded by Pastoral community development Board and SU (2016)
4. Increasing production and productivity of maize and sweet potato through intercropping among pastoral and semi pastoral farmers of Afar regional state.(2016)
5. Phytoremediation of tannery effluents by Teff (*Eragrostis teff*) and wheat (*Triticum aestivum*) straw and evaluation of its toxicity by Sesame (*Sesamum indicum* L).(2017)
6. Maize multiplication and seed production in Asaiyta and Afambo woreda of Afar. (2018)
7. Allelopathic effect of *Amaranthus* and *Chenopodium* weeds on some vegetable crops as grown in afar regional state.(2018)
8. Screening of seed genotypes of barley for adaptation in Assaita afar ,

### **B. Publications with Samara University staff**

- 1.. **M.Gufran Khan , G.Shimelis, H. Alemu, Kebenu F.(2014)**. Impact of salinity and sodicity on Biomass, Total Nitrogen, Nitrate reductase activity, Leaf area, and chlorophyll contents in Maize (*Zea mays* L.) Life sciences leaflets 57(on line & print) : 55-64
- 2.. **M.Gufran Khan , G.Shimelis, H. Alemu, Kebenu F.(2015)**. Germination and early growth performances of some fodder crops grown under saline and sodic conditions In Proceedings: Samara University 2<sup>nd</sup> National symposium Ethiopia PP
- 3.. **Tefera J., Minyishaw E., Kebenu F. Nurhusen A and Khan M.Gufran (2015)**. Woody species diversity, management and contribution of local community in protected forest of Kuneba district, Afar Region Ethiopia. J Environ. Sci. & Tech. 8 (4) : 172-179
- 4.. **Muluneh Bekele, Ali Mohammed Amsalu Nebiyu and M. Gufran Khan (2015)** Effect of nitrogen, phosphorus and potassium fertilization on growth and yield of onion (*Allium cepa* L.) grown in southwestern Ethiopia (Accepted in Environ. Sc : an Indian journal.)
- 5... **M.Gufran Khan, Abebe Chaka, Alemu H. Brhanu abayu and Kebenu,F.(2016)**. Phytoremediation of

sugar factory effluent polluted soil by some tree species and its impact on germination and growth in maize (*Zea mays* L.) and Lentil (*Lens esculentum* L.)

In Proceedings: Samara University 3<sup>rd</sup> National symposium on sustainable Livelihood development: Pastoral and Agro pastoral context. Ethiopia Vol 3: PP- 117-

**6.. M.Gufran Khan, Abebe Chaka, Alemu H. and Kebenu,F.(2017)** Prospectus of Biomass Production of three pasture grasses using saline irrigation in semi arid conditions of Afar Ethiopia North East Africa Life Sciences Leaf lets Vol 82: 30-38

**7. .M.Gufran Khan, Abebe Chaka, M.Shahnawaz and Endris S.,(2017)** Phytoremediation of tannery effluents by Teff (*Eragrostis teff*) and wheat (*Triticum aestivum*) straw and evaluation of its toxicity by Sesame (*Sesamum indicum* L).

Paper published in In Proceedings: Samara University 4th National symposium on sustainable Livelihood development: Pastoral and Agro pastoral context. Ethiopia Vol 3: PP- 117-29.

**8. M.Gufran Khan, Abebe Chaka, M. Awate and Endris S.,(2019)** A critical appraisal of *Amarantus* and *Chenopodium* weeds for their harmful and beneficial aspects in context to food security in pastoral area DIJBAR 1; (1)