

SCO- 1st YOUNG SCIENTIST CONCLAVE
Shaping SCO-STI Partnership: Young Scientists Perspectives



NOMINEE'S DETAILS/INFORMATION

Country Name: **PAKISTAN**

Last Name:

First Name: **MUHAMMAD IQBAL**

Date of Birth :
(DD/MM/YYYY)

02 October 1988

Address: C/O, Mr. Muhammad Iqbal, Scientific Officer, PARC-Balochistan Agricultural Research & Development Centre, brewery road Quetta-Pakistan.

Telephone: +92-333-5841401

Email : iqbal.jakhro@gmail.com

Title: Scientific Officer

Gender: Male

Institute/Affiliation: PARC-Balochistan Agricultural Research & Development Centre, brewery Road Quetta-Pakistan.

Field of Science and Technology: Soil Sciences

ACADEMIC QUALIFICATION: degree and discipline (please indicate where appropriate)

Degree:	Bachelors		Masters		PhD		Other	
Discipline:	Soil Science		Soil Science					

Nomination Statement (up to 300 words): Please describe area of expertise in which the nominee has demonstrated excellence. *Please provide the information in English.*

My M.Sc. (Master in Soil Science) studies in about soil management practices, soil physiochemical properties and ecology and sustainable environmental resources technologies in subjects of Soil Sciences. I have work in project of Research for Agricultural Development Program (RADP) soil project entitle "Nutrient Indexing and Integrated Nutrient Management for Major Crops & Establishment/Upgradation of Soil Chemistry Lab, BARDC, Quetta-Pakistan in 2015-17. I have done Master in Agriculture (Soil Sciences) in 2014, from Centre for Bio-saline Agriculture, Department of Soil Science and Faculty of Crop Production Sindh Agriculture University Tandojam-Pakistan. My master research study work about entitled "Influence of saline water on the survival, growth and development of Chiku (*Achras zapota* L.) Saplings". And Graduation completed in 2012, I have worked as Internee in well renowned research organization National Agricultural Research Center (NARC), Islamabad, my topic of study was related to "Application of humic acid for soil fertility in Islamabad district" and this is emergent technology in Pakistan.

Statement (up to 300 words): Please provide brief information on the nominee's innovative idea. *Please provide the information in English.*

I have worked on project of Research for Agricultural Development Program (RADP) soil project entitle "Nutrient Indexing and Integrated Nutrient Management for Major Crops & Establishment/Upgradation of Soil Chemistry Lab, BARDC, Quetta-Pakistan in 2015-17. The main project theme and conclusion of project is about biofertilizer application to agricultural soils can be summarized as it is useful soil reclamation by improving soil organic matter content, soil structure and increase crop production. Crop yields responded will be depending on the type of biofertilizer and with combination of inorganic fertilizers. Application of biofertilizer with N: P 75 Kg ha⁻¹ significantly increased the growth and yield of wheat crop and decreasing the soil pH in the saline soil. In both Districts the treatment-1 (Biofertilizer and 75% of treatment-2 fertilizers application) performed better than other treatments. The treatment-1 (Biofertilizer and 75% of treatment-2 fertilizers application) produced 07% to 12% more wheat grain yield than other treatments. In the Project areas of Balochistan found macro and micro nutrients deficiency and excess use of inorganic fertilizers effects on soil structure and severity of nutrients disorders. Therefore, it is concluded that the minimum use of chemical fertilizers, promote the use of biofertilizer with combination of N: P fertilizers (chemical) as the result improving soil structure and enhanced over all yield of the crop.

Participation in Innovation Competitions/ Awards/ Achievements: Please list previous participation in innovation competitions and awards/ achievements, if any. *Please provide the information in English.*

1. A project concept has been shortlisted for further review entitle "Diagnosing mineral nutrient status and its management for enhancing pistachio production and fruit quality".
2. Attended training entitle "Capacity building of NARS scientist advance analytical techniques" at Quetta-Pakistan.
3. Attended workshop entitle "Gender Mainstreaming in Disaster Management Contingency Planning" at Quetta-Pakistan
4. Participation in University of Balochistan Livestock Expo 2019. at Quetta-Pakistan
5. Lecture was delivered to the students of Balochistan Agriculture Collage Quetta during their visit to BARDC, Quetta.
6. Lecture was delivered to the students of Sardar Bahadur Khan Women's University during their visit to BARDC, Quetta.

DECLARATION BY THE CANDIDATE:

I hereby declare that all the information given above is true to the best of my knowledge I accept to participate in the virtual conference of 1st SCO –Young Scientists Conclave in India, and will attend the entire program of five days.

Place: BARDC, Quetta

Date: 09-10-2020

Signature of the nominee: 

Name of the nominating authority:

(Contact details, i.e. telephone, email and designation)

Place: Quetta

Date: 09/10/2020

Signature: 

9/10/2020
DG, BARDC, Quetta

NB: Please remember to include the following with Nomination Form:
Nominee's Curriculum Vitae/Biography at the end of nomination form.

CURRICULUM VITAE



Name: Muhammad Iqbal
M.Sc. Honors in Agriculture (Soil Sciences)

Designation: Scientific Officer

Mailing Address: C/O, Mr. Muhammad Iqbal, Scientific Officer
PARC-Balochistan Agricultural Research &
Development Centre, brewery road Quetta-Pakistan.

Email: iqbal.jakhro@gmail.com

Passport No: AN8341892

Date of Birth: 02 October 1988

Contact No: +92333-5841401

Province: Balochistan

Country: Pakistan

EDUCATION:

2012-2014 M.Sc. Honors in Agriculture (Soil Sciences) (1st division)

2008-2012 B.Sc. Honors in Agriculture (Soil Sciences) (1st division)

WORK EXPERIENCE:

- Worked on project under RAPD Soil project entitled "Nutrient Indexing and Integrated Nutrient Management for Major Crops & Establishment/Upgradation of Soil Chemistry Lab., BARDC, Quetta-Pakistan in 2015-17.
- Analyzed of soil samples collected from different research sites and farmers field of District Jhall Magsi-Pakistan.
- Physio-chemical analysis of soil samples collected from different BARDC's research field.
- Management of Automatic Weather Station at BARDC, Quetta-Pakistan.

PUBLICATIONS:

1. Habib S, Iqbal S, Mushtaq A, Rizwan S, Jabeen U, Bashir F, Raza MA, Ahmad J, Ismail T, **Jakhro MI** & Samad N (2019). Estimation of some heavy metals in the wheat varieties of Balochistan. International Journal of Biosciences. 15(6): 290-299.
2. Abro JA, Habib M, **Jakhro MI**, Maham F, Amed S, Latif A, Gola AQ, Abro A, Bugti GB, Nawaz U, Anwar M & Shahwani SA (2019). Effect of FYM and NPK on growth, yield and oil production of mustard under the agro-climatic condition of Tandojam-Pakistan. *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700210>.

3. Amanullah, Rahujo ZA, Hassan M, Yaqub M, **Jakhro MI**, Ahmed S, Ahmed N, Khetran MA, Ahmed S, Naseer NS & Sadiq N (2019). Effect of organic and inorganic fertilizers on yield and yield attributes of wheat variety Ujala-2015 under irrigated conditions of Balochistan. *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700215>.
4. Ahmed I, Ahmed S, Hanan A, Jamil K, **Jakhro MI**, Latif A, Badini MA, Ahmed N, Khetran ZA & Shahwani SA (2019). Efficacy of different botanical and synthetic insecticides on red pumpkin beetle (*Aulacophora foveicollis*) in bitter gourd. *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700213>.
5. Gola AQ, Unar MH, Wahocho NA, Aziz T, Abro JA, Khan Z, **Jakhro MI** & Bugti GH (2019). Effect of salt NaCl stress on seed germination and vegetative growth of Gaillardia (*Gaillardia puchella* L.). *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700221>.
6. Badini MA, Gola AQ, **Jakhro MI**, Aziz T, Ahmed S, Mengal MI, Saleem M, Abro JA & Shah SIA (2019). Response of Okra varieties, to zinc and boron supplement under the agro-climatic condition of Tandojam-Pakistan. *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700222>.
7. Gola AQ, **Jakhro MI**, Tareen AK, Mastoi MS & Khosa MA (2018). Influence of pruning on fruits production of jujube *Ziziphus mauritiana* Lam. *Pure Applied Biology*. <http://dx.doi.org/10.19045/bspab.2018.700146>.
8. Gola AQ, **Jakhro MI**, Habib M, Ahmed S, Badini MA, Shahwani MW, Naseer NS & Shah SIA (2018). Influence of various growing media on growth and flowering of zinnia (*Zinnia elegans*) Dreamland. *Pure Applied Biology*. 7(3): 946-954.
9. Khuhro WA, Kandhro MN, Sadiq N, **Jakhro MI**, Amanullah, Naseer NS, Ahmed S & Latif A (2018). Impact of irrigation stress on agronomic traits of promising wheat varieties in Tandojam-Pakistan. *Pure Applied Biology*. 7(2): 714-720.
10. Amanullah, Khetran AS, Ahmed M, **Jakhro MI**, Rahujo ZA, Jamali MH, Naseer NS, Ahmed S & Sadiq N (2018). Production efficiency of mung bean (*Vigna radiate* L.) through seed inoculation and NP application in Balochistan. *Pure Applied Biology*. 7(2):700-705.
11. Amanullah, Ahmed S, **Jakhro MI**, Ahmed M, Sadiq N, Yaqub M & Ahmed S (2018). Influence of row spacing on yield and yield attributes of black gram (*Vigna mungo* L. Hepper) variety Chakwal in Balochistan. *Pure Applied Biology*. 7(2): 413-418.
12. Aujla KM, Sadiq N, Laghari S & **Jakhro MI** (2018). Supply projections for beef in Pakistan by the year 2030 AD. *Pure Applied Biology*. 7(2): 470-475.
13. Ahmed S, Ahmed N, **Jakhro MI**, Yaqub M, Latif A, Ahmed I, Khetran MA, Sadiq N & Amanullah (2018). Effect of different insecticides against spotted bollworms (*Earias Vittella* F.) on okra at BARDC Quetta. *Pure Applied Biology*. 7(2): 897-905.
14. Ahmed S, Ahmed S, Khetran MA, Ahmed S, Shahwani SA, Amin M & **Jakhro MI** (2018). To study the effect of natural enemy *Trichogramma*

- chilonis* (Ishii) against spotted bollworm (*Earias Vittella* F.) on okra. *Pure Applied Biology*. 7(2): 655-661.
15. Sootahar MK, Memon MN, Shah ZH, Kaleri AA, Sootahar MK, Zounr AK, Vistro IA & **Jakhro MI** (2017). Evaluation of secondary macronutrients in mango (*Mangifera indica* L.) orchard of various districts of Sindh. *Pure Applied Biology*. 6(4):1216-1225.
 16. Jamro SA, Ali MU, Buriro M, Ahmed MI, Jamro GM, Khan A, Shah FA, Saddique WA, Sher A & **Jakhro MI** (2017). Impact of various sowing dates on growth and yield parameters of different cotton varieties. *J of Applied Environmental & Biological Sciences*. 7(8): 135-143.
 17. **Jakhro MI**, Shah SI, Amanullah, Zehri MY, Rahujo ZA, Ahmed S, Ahmed S & Jakhro MA (2017). Growth and yield of spinach (*Spinacia oleracea* L.) Under fluctuating levels of organic and inorganic fertilizers. *Intentional J of Development Research*. 7(2): 11454-11460.
 18. Amanullah, Khan J, Yaqoob M, Naseer NS, Sadiq N, **Jakhro MI** & Bugti GA (2016). Impact of Bio-fertilizer with NP Application on yield and yield components of wheat variety Tijaban-10. *International J of Environmental & Agriculture Research*. 2(11): 100-103.
 19. Amanullah, Khetrani MA, Badani LA, Rahujo ZA, **Jakhro MI**, Sadiq N & Bugti GA (2016). Comparative study on yield and yield components of psyllium *Plantago ovata* varieties in Balochistan. *J Pharmacognosy and Phytochemistry*. 5(6). Pp. 270-272.
 20. **Jakhro MI**, Raisani AR, Panezai GM, Parveen S, Naseem M & Bhuro GA (2015). Influence of saline water on the survival growth and development of chiku (*Achras zapota* L.) saplings. *Life Sciences Intentional J*. 9(1, 2, 3 & 4) 3223-3229.
 21. **Jakhro MI**, Panezai GM, Parveen S, Tareen MH, Saleem M & Sanaullah (2015). Effect of humic acid on soil micronutrients under different wet and dry cycles using two soil series. *Life Sciences Intentional J*. 9(1, 2, 3 & 4) 3264-3269.
 22. Gola AA, Inayatullah R, Rehman SM, Faisal BS, Khan KP, **Jakhro MI** & Khan KS (2015). Evaluating salinity tolerance of sheesham (*Dalbergia sisso* L.) tree seedlings. *J of Biology Agriculture Healthcare*. 5(23): 60-64.

POSTER PRESENTED:

1. Javed Hussain Umrani, Zhao Jun, Qammarudin Chachar, Mumtaz Ali Sahito, Ibtessam Tahir Ansari, Sadaruddin Chachar & **Muhammad Iqbal Jakhro**. (2016). "ABP9 gene Improves Phenotypes for Drought Stress Tolerance in Transgenic Maize (*Zea mays* L.)". International Symposium on Phenomes & Genomes 11-13 May, 2016, School of Life Sciences, Fudan University, Shanghai, China.

TRAINING AND WORKSHOPS:

- Attended a seminar on “Soil health monitoring, fertility management and data visualization” on 20 October 2018 at Boys scout hall Quetta-Pakistan. Organized by FAO.
- Attended a commodity based workshop entitle “Implementation of 4R nutrients stewardship for sustainable management for rice in Balochistan” on 21 October 2018 at Boys scout hall Quetta-Pakistan. Organized by FAO.
- Attended a meeting regarding Soil fertility atlas of Balochistan at Serena Hotel Quetta-Pakistan on 22 October 2018. Organized by FAO.
- Two days of workshop on (organic and inorganic fertilizer uses). In Nuclear Institute Agriculture Tandojam-Pakistan 2014.
- ASLP training Mango canopy Management Sindh Agriculture University Tandojam-Pakistan 2013.
- Attended training & workshop of the “Food Safety in Balochistan” held at University of Balochistan Quetta-Pakistan on 2016.
- Attended seminar of “Crop water requirement using crop and climatic parameters” held at BARDC, Quetta-Pakistan on 2017.
- Attended seminar of “Screening of different wheat germplasm against drought conditions” held at BARDC, Quetta-Pakistan on 2017.
- Conducted workshop/farmers day from Naseerabad division through RADP Soil project on 2017.

LIFE TIME MEMBERSHIPS:

- Soil Society of Pakistan
- Bolan Society for Pure and Applied Biology (BSPAB)

PROFESSIONAL SKILLS:

- Operate Atomic Absorption Spectrophotometer
- Operate Flame Photometer
- Operate Spectrophotometer
- Perform Soil, Water and Plant analysis
- Operate Kjaldal (for determination of total Nitrogen)

SOFTWARE SKILLS:

- MS office (word, excel, power point).

LANGUAGES:

English, Urdu & Basic Chinese