

Dr. Muhammad Arif Munir

House No 8, Street 30, Sector G-6/1-3, Islamabad (Ph: 0300-5191866, (051)2823076),
Email: drarifmuneer1@gmail.com

Personal Information:

Father's Name:	Muhammad Sami
Domicile:	Punjab
Present Positions:	Principal Research Officer (Retd)
Date of Birth:	November 07, 1956

Academic Information:

M.Sc (Parasitology): Agriculture University, Faisalabad, Pakistan, (1977-1980) Passed
M.Sc (Medical Parasitology): London School of Hygiene & Tropical Medicine, University of London, U.K. 1985-1986 Passed
PhD (Medical Entomology): London School of Hygiene & Tropical Medicine, University of London, U.K. (Sept 1989-Sept 1994) Passed
Diploma of London School of Hygiene and Tropical Medicine (DLSHTM) (Medical Parasitology): London School of Hygiene & Tropical Medicine, University of London, U.K. 1995

Career Information:

1. **Research Officer(R.O):** PMRC, Central Research Centre, National Institute of Health, Islamabad, Pakistan, 1983-1994
2. **Senior Research Officer(SRO):** PMRC, Central Research Centre, National Institute of Health, Islamabad, Pakistan, 1995-2000
3. **Director Malaria Control Program:** Ministry of Health, Islamabad, 2000-2004
4. **Senior Research Officer/Officer Incharge RDC Section:** Pakistan Medical Research Council, Head Office, Islamabad, 2005-2010
5. **Principal Research Officer:** Pakistan Medical Research Council, Islamabad 2013- November 2016

Professional Relevant Experience in the Field:

- i. **Director National Malaria Control Programme:** I was involved in: 1) Framing of policies planning over all field supervision and technical guidance to the provinces 2) Co-ordination and liaison with the WHO and donor agencies as well as provinces 3) Evaluation and Assessment of the malaria control activities of the programme 4) Operation research and special training to the field officers of the provinces.
- ii. **Senior Research Officer/Principal Research Officer:-**1) I am working as Incharge RDC Section. This section is responsible for planning and development of research projects, evaluation of research proposals, coordination of research activities of PMRC research centres, liaison with national and international research institutions, and with the concerned ministry. Arranging and conducting all scientific meetings, seminars/symposia and conferences. The Publication section of the PMRC, which publishes PMRC annual reports, and Pakistan Journal of Medical Research was also the responsibility of this section. 2) I have been actively involved in the preparation of National Health Survey of Pakistan

Report "Health Profile of the People of Pakistan". This report was published in 1998. 3) I also coordinated all activities pertaining to the South Asian Infectious Diseases Network (SAIDNET).

- iii. **Research Officer:** Main responsibilities included supervision of diagnostic Parasitology and Medical Entomology/Vector Biology Laboratory, conducting research, and teaching and training of laboratory personnel.
 - a. **Diagnosics:** 1) Incharge Parasitology and Medical Entomology/VBC Laboratory in the Public Health Division, National Institute of Health (NIH), Islamabad, which dealt with diagnostic parasitic and vector borne diseases especially malaria and Leishmaniasis, 2) Involved in investigating out breaks of CCHF, Leishmaniasis, Malaria etc. in different part of the country.
 - b. **Research:** 1) Carried out various research projects on parasitic diseases such as helminthes and protozoan infections including cryptosporidiasis and leishmaniasis, 2) Established a Vector Biology Unit at NIH for research in vector borne diseases.
 - c. **Supervision and evaluation of postgraduate research:** 1) Supervised training courses in Leishmaniasis. 2) Evaluated a PhD. thesis as an external examiner for Quaid-e-Azam University, Islamabad, Pakistan.
 - d. **Teaching and training of laboratory personnel:** Teaching Parasitology to the students of College of Medical Laboratory technology (Diploma and B.Sc. Lab. Technology) at NIH, Islamabad. Also imparted in their training at the Parasitology laboratory as a part of their course.
- iv. **Coordinator National Bioethics Committee, Pakistan Medical Research Council 2010-2016**
- v. **Visiting Faculty Health Services Academy, Islamabad (2010, 2014-17):** As a visiting Faculty, I have been involved in teaching and supervision of postgraduate Diploma course (MEDVEC) students
- vi. **Member Board of Studies** Health Services Academy, Islamabad 2014-2016
- vii. **Member of the Steering Committee** of Malaria control programme on development of New Funding Model for GFATM and Planning and development of strategic Plans for Malaria control in Pakistan 2015
- viii. **Member of the National Steering Committee of Malaria control programme for mass distribution campaign of long lasting insecticide treated nets-2018**
- ix. **Member of the National Steering Committee of Malaria control programme for mass distribution campaign of long lasting insecticide treated nets in Merged districts of KP-2020**
- x. **Member Technical Working Group**, Malaria Control Programme Pakistan 1015-till date)

Experience in Health System Development:

- Contributed in the development of following guidelines for malaria control on:
 - External Quality Assurance of Malaria Laboratory Services – Operational Guidelines for DLS
 - Guidelines for Case Management of malaria
 - Guidelines for Malaria Microscopy
- Team member for the development of strategic Plan of National Malaria Control 2001, 2015

Current Research Interest:

- **Biology and Taxonomy of Phlebotomine Sandflies in Relation to Transmission and Control of Leishmaniasis, in Pakistan.** The main research was carried out in Northern Pakistan and Azad Jammu & Kashmir (1990 - 1994) to study the systematic and biology of Phlebotomine Sandflies the Vectors of Visceral Leishmaniasis.
 - Epidemiology and control of other Parasitic and Vector Borne Diseases e.g. Dengue, CCHF
 - **Malaria Prevention and control:** Conducted Malaria Indicator Survey in 38 districts of Pakistan 2013-14.
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Training/Courses/Meetings/Workshops Attended:

- i. National Course on the isolation and identification of bacterial agents causing acute diarrhea. 26 March to 27 April, 1983
- ii. WHO Regional Course on Isoenzyme Characterization of Leishmania Spp. of old World. Islamabad, 11-22 November, 1984.
- iii. WHO Regional Course on Developments and Planning for Leishmaniasis Control, NIH, Islamabad. 12-22 April, 1985.
- iv. Three months post M.Sc training in Medical Entomology especially in Phlebotomine sandflies. The training was completed in United Kingdom from 1st October, 1986 to 31st December, 1986 and was sponsored by the WHO/TDR Special Programme for Research & Training in Tropical Diseases.
- v. Undertook practical field training in the south of France the active focus of visceral leishmaniasis, to study Phlebotomine sandflies. The WHO/TDR and the London School of Hygiene & Tropical Medicine sponsored this training for a period of three weeks from 8-29 July 1990.
- vi. Rodent control in Urban Environment. Pakistan Agricultural Research Centre, Islamabad, 15-17 January 1995.
- vii. Attended a workshop on the community use of bed-nets for prevention against malaria. National Institute of Malaria Research & Training (NIMRT), Lahore. 27-30 June 1995.
- viii. Attended workshop on malaria titled "Malaria New Challenges ahead. This was a collaborative Workshop of NIH/Punjab Health Department/WHO held at Multan from May 11-12, 1996. Also I was one of the Key organizers of this workshop.
- ix. Attended a Training Workshop on Project Development, Formulation and Processing organized by National Development Foundation and Pakistan Council for Science & Technology, Islamabad, 21 to 25 April, 1996.
- x. Attended a seminar on "INCO-DC" European Union specific programme for Science and technology cooperation with developing countries, Islamabad, 14th April 1997.
- xi. Attended WHO Regional Consultation on Preparation of Regional Strategy on Insecticide Impregnated Bednets, Islamabad, 23-25 November, 1998.
- xii. Attended Meeting of the National Expert Advisory Panel for Emerging & Re-emerging Pathogens, February 28, 1998. PMRC in collaboration with NIH arranged this meeting at NIH Islamabad.
- xiii. Meeting with Chinese Delegation on Collaboration in Research in Traditional Medicine with the June, 13, 1998.
- xiv. National Workshop on Improving Planning Capabilities and Use of Economic Principles in Health Management, June 16, 1998.
- xv. Conducted and attended a three day workshop in Larkana Sindh in April 1999. The title of the workshop was the use of Insecticide impregnated Bed nets for malaria control.
- xvi. In addition a number of national and international meetings attended and represented government of Pakistan as Director Malaria Control Programme (2000-2004)
- xviii. Attended a "Capacity building workshop for Doctors and Public Health Staff levels involved in the Prevention, case detection, Case reporting and Management of Dengue fever in Surveillance, Vector control, Awareness and clinical case management at

- Federal Government Services Hospital, Islamabad and made presentation on Dengue vector Behaviour and Control 22-23 September 2014.
- xix. Attended International Conference on Dengue Control Punjab Health Department and member Integrated Vector Management Group Lahore-Pakistan 2019
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International Meetings/Symposium Attended.

- i. **Leishmaniasis: The First Centenary (1885-1985) Current Status and New Strategies for Control.** NATO held this meeting in Athens, Greece, from 20-27 September 1987.
 - a. **First International Symposium on Phlebotomine sandflies**, held in Rome, Italy from 4-6 September 1991.
 - b. **WHO/UNESCO/UNDP Second Regional Meeting on Combating Malaria and First Regional Meeting on Malaria Vector Control.** This meeting was held in Tehran, Iran from 4-8 December 1995.
 - ii. Meeting of the American Public Health Association, November 1997 held in Indianapolis, USA.
 - iii. First Regional Meeting of the South Asian Infectious Diseases Network, held in Dhaka, Bangladesh from January 27-28, 1999.
 - iv. Meeting of the American Public Health Association, November 1999 held in Chicago, USA.
 - v. Attended a WHO meeting on Roll Back Malaria held in Cairo, Egypt in the year 2000 and presented a country paper on Roll Back Malaria Programme Pakistan.
 - vi. Represented Pakistan in the WHO meeting of National Programme Managers and epidemic preparedness held in Damascus, Syria on 1-5 April 2001. During this meeting a two years Plan of Action highlighting the Project components and activities was prepared.
 - vii. Attended Inter-country Meeting of National Programme Managers, Muscat, Oman from 24-28 March, 2002
 - viii. Represented Pakistan in the meeting on epidemic preparedness and response in Malaria Geneva (2003)
 - ix. Represented Pakistan in Cross-Boarder Meeting on RBM Malaria in Iran (2004)
 - x. In addition represented government of Pakistan in number of international meetings regarding malaria control (2000-2004).
 - xi. World health organization (who) global technical strategy (GTS) for malaria control and elimination 2016-2025 Country typology meeting, 14 - 15 October 2013, Geneva, Switzerland.
 - xii. RBM Country and Regional Support Partnership Committee CRSPC Review Workshop 20-22 February 2017, Kampala, Uganda
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Consultancies:

International:

- WHO Short Term Consultant to the Sultanate of Oman from May 18 to June 01, 1996 (two weeks) to assess the Leishmaniasis situation.
- WHO Short Term Consultant to Sudan for Assessment of Visceral Leishmaniasis and Rift Valley Fever in North Sudan with particular reference to Vector Control, Dec 2-18 2007

Local:

- One week consultancy to Health Net International, Peshawar on Leishmaniasis control, June 1997.
- WHO Evaluator for the Rapid Assessment of First NID Round in December, 1997-Pakistan 6-18 January 1998.

- WHO National Evaluator for In-depth EPI Review, from 27 April to 11 May 1998.
- WHO national assignment on DDT Use & Management in Pakistan. The assignment involved pre-testing of questionnaire for reporting by parties (as per Stockholm convention) using DDT on amounts, conditions of use, stockpiles and relevance to vector-borne disease management strategies and submission of a report. Pakistan 2005.
- Consultant Malaria Programmatic Review (Federal component)-National Malaria Control Programme 2013, Islamabad.
- 6 weeks consultancy for write-up of GFATM New funding request for malaria control programme Pakistan ongoing.
- WHO Consultant for Review of Leishmaniasis Situation in Pakistan 2018-19
- WHO National Consultant for Malaria Programmatic Review 2019

Local Presentations/Lectures:

- i. Guest speaker on the role of Sandflies in transmission of leishmaniasis and various methods of vector sampling, 1991- Armed Forces Institute of pathology, Rawalpindi
- ii. Lecture Presentation on Phlebotomine Sandflies as vectors of human diseases, to the staff and students of Health Services Academy, Islamabad on November 16, 1995.
- iii. Presentation on the role of medical entomology in public health, to the MPH students and staff of Health Services Academy, Islamabad, 1996.
- iv. Presentation on Methods in Malaria Vector Control at Malaria workshop for health professionals held in Multan from May 11-12, 1996.
- v. Delivered Lectures on Malaria Eradication and Control including Vector control given to the Malaria Technicians during Training Workshop held at NIH, Islamabad in February - April 1999.
- vi. Lectures given to MPH Students at Health Services Academy, Islamabad on Medical Entomology and Epidemiology of Malaria June 1999.
- vii. Presentation made on " Efficacy of insecticide-impregnated bed nets for personal protection against malaria Larkana District, Sindh" at the **Workshop on Malaria and its control in Sindh** 5th April, 2000.
- viii. Presentation to Ministry of National Health Services & Regulation and Provincial Health Departments on Malaria Indicator Survey 2013
- ix. Number of Lectures given to the MPH students of Health Services Academy and presentations made at various national forums on malaria and Leishmaniasis Control (2001-2016)
- x. Presentation on Leishmaniasis Situation in Pakistan to Health Departments of Provinces and Ministry of National Health Services and Regulation 2018
- xi. Presentation on Malaria Programmatic Review in National Workshop on MPR 2019

International Presentations:

- i. Presented a paper entitled " A Review of Malaria Control Activities in Pakistan" at the WHO/UNESCO/UNDP Second Meeting on Combating Malaria and First Regional Meeting on Malaria Vector Control; Tehran, Iran, 4-8, December 1995.
- ii. Presented a paper entitled " Geographical and Age Related Variation in the Activity of some Enzymes Associated with Insecticide Detoxification in Sand flies (Diptera: Phlebotomine)" at the First International Symposium of Phlebotomine Sandflies, held in Rome, Italy from 4-6 September, 1991.
- iii. Presented a Paper entitled " Tobacco and Pan Use in Pakistan" at the National Health Survey of Pakistan Forum, during the Annual Meeting of the American Public Health

- Association, held from November 9 - 13, 1997 in Indianapolis, USA.
- iv. Country presentations on Roll back malaria in Cairo in 1999
 - v. Country presentation on current malaria situation and Roll Back Malaria programme, Damascus, April 1-3 2001.
 - vi. Besides above number of presentations made at various international forums on malaria and Leishmaniasis Control

Editorial Board

- **Assistant Editor** Pakistan Journal of Medical Research 1996-1998.
- **Joint Editor**, Pakistan Journal of Medical Research 1998-2001, 2010-2017
- **Member Editorial Advisory Board of Pakistan Journal of Medical Research (PJMR)**, Pakistan Health Research Council, Islamabad-Pakistan 2019

Computer Literacy

Good working knowledge and skill of;

- Windows XP
- Microsoft Word
- Microsoft Power Point
- Internet/email computer packages

Research publication:

1. **Munir, M.A.**, Anwar, A.H. and Chaudhry, A.H. The nature and organ specificity of Hydatid Disease in buffalo (*Bubalus bubalus*). Pak. J. Vet. Res. 1982, 2(1): 12-13
2. Anwar, A.H. and **Munir, M.A.** Study on the incidence and organ specificity of hydatid disease in camel at Faisalabad abattoir. Pak. J. Animal. Sci. 1980, II(3-4)
3. Naseem, K. and **Munir, M.A.** Book review on the digenetic trematodes of fishes of Karachi coast by Dr. Bilqees Fatima. Higher Education News, 1882, II(12), pp.6.
4. **Munir M.A.**, Rab, M.A., Iqbal, J., Burney, M.I., Ghafoor, A. and Khan, M.A. A review of the status of leishmaniasis in Pakistan from 1960-1986. In Leishmaniasis the Current Status and New strategies for Control. NATO-ASI Series A, Life Sciences, 63, Plenum Press, N.Y. & London. 1989, pp. 47-56.
5. **Munir, M.A.** Saleem., M., Rehman, M.Z., Maqsood, A., and Amjad, M. (1989). Incidence of aflatoxins in non-perishable food commodities in Pakistan. J.P.M.A. 39: 154-157.
6. Rab, M.A., Iqbal, J., Azmi, F.H., **Munir, M.A.** and Saleem, M. Visceral Leishmaniasis: A sero-epidemiological study of 289 children from endemic foci in Azad Jammu & Kashmir by Indirect Fluorescent Antibody Technique (IFAT). J.P.M.A., 1989, 39:225-228.
7. Malik, Z., **Munir, M.A.** and Ghafoor, A. Intestinal Parasitic Infections among referred patients from Islamabad / Rawalpindi. Sci. Int. (Lahore). 1990, 2(1) 57-62
8. Anwar, F., Khan, I.A., **Munir, M.A.**, Yusuf, M.O. and Asghar, H. Prevalence of *Cryptosporidium* in Rawalpindi/Islamabad. A comparison of saline, iodine and stained preparations. J.P.M.A. 1990, 40: 219-221.
9. **Munir, M.A.**, Hemingway, J. and Lane, R.P. Geographical and age related variation in the activity of some enzymes associated with insecticide detoxification in sandflies (Diptera: Phlebotominae). Parasitologia 33(Suppl, 2), 1991, 445-451.

10. Rab, M.A., **Munir, M.A.** and Solangi, S.M. Plague: Management and Prevention. Pak. J. Med. Res. 1994, 33(3): 143-144.
11. Hafiz, R. and **Munir, M.A.** A time for serious consideration towards the irrational use of antimalarial drugs in Pakistan. Pak. J. Med. Res. 1995, 34(1):1.
12. **Munir, M.A.**, Hafiz, R., Solangi, S.M. and Athar, S.D. Insecticide impregnated bed-nets provide protection against malaria. Pak. J. Med. Res. 1995, 34(3), 134-135.
13. **Munir, M.A.**, Hafiz, R., Solangi, S.M. and Dil, A.S. Insecticide-impregnated bed nets: A new tool for malaria prevention and control, an old strategy with new perspectives. Pak J. Med. Res. 1996, 35 (2): 103-106.
14. **Munir, M.A.**, Rab, M.A., Mujahid, A.A. and Solangi, S.M. A review of malaria control activities in Pakistan. Proceedings of The WHO/UNESCO/UNDP second meeting on combating malaria and first regional meeting on malaria vector control, Tehran, Iran. Proceedings of the Second Technical Meeting & The First Regional Conference On: Combating Malaria, Tehran I.R, of Iran 4-8 Dec. 1995.
15. Mujahid A.A and **Munir M.A.** A Review of the Malaria Situation in Pakistan and Brief on National Control Programme. Pak J. Med. Res. 37(4) Special suppl, 1998.
16. Rowland, M, **Munir, M.A.**, Durrani, N, Noyes, H and Reburn, H. An Out break of Cutaneous Leishmaniasis in an Afghan Refugees Settlement in North-West Pakistan. Transactions of the Royal Society of Tropical Medicine & Hygiene, 93, 1-4, 1999.
17. Iqbal, J., Munir MA, Khan, M.A. Cryptosporidium infection in young children with diarrhoea in Rawalpindi, Pakistan. American Journal of Tropical Medicine. 60 (5): 868-870, 1999
18. Jamshaid Iqbal, **Arif Muneer**, Nabila Khalid, and Mohammed A. Ahmed. Performance of the optimal test for malaria diagnosis among suspected malaria patients at the rural health centers. Am. J. Trop. Med. Hyg., 68(5), 2003, pp. 624–628.
19. Khan MA, Walley JD, **Munir MA**, Khan MA, Khokar NG, Tahir Z, Nazir A, Shams N. District level External Quality Assurance (EQA) of Malaria Microscopy in Pakistan. Malaria Journal, 10:45, 2011.
20. **Munir MA**, Alam SE, Khan Z, Saeed Q, Arif A, Iqbal R , Saqib MAN, Qureshi H. Dengue fever in patients admitted in tertiary care hospitals in Pakistan. Journal of Pakistan Medical Association, Vol 64 No. 5,253-259, 2014
21. Rafique I, Saqib MAN, Siddiqui S, **Munir MA**, , Qureshi H, Javed N, Naz S, Tirmazi, I.Z. Experience of stigma among hepatitis B and C patients in Rawalpindi and Islamabad, Pakistan. Eastern Mediterranean Health Journal, Vol 20, No 12, 796-801 2015
22. Rafique I, Saqib MAN, **Munir MA**, Siddiqui S, Qureshi H, Habibullah S, Bashir S, Rehman S, Ashraf S. Economic burden of dengue in four major cities of Pakistan during 2011. Journal of Pakistan Medical Association, Vol 65 No.3,256-259, March 2015
23. Rafique I, Saqib MAN, Siddiqui S, **Munir MA**, Malik IA, Rao MH, Ahmed J, Bashir S, Khan O, Firdoud R, Ahmed S . Dengue knowledge and its management practices among physicians of major cities of Pakistan Vol. 65 No.4,392-396, April 2015
24. Muhammad Amir Khan, **Muhammad Arif Munir**, Shirin Anil, Maqsood Ahmad, John Walley, Ejaz Qadeer, Karam Shah, Nida Khan, Athar Nazir. Structured performance monitoring of TB-care at facility, district and province levels — Pakistan experience. Journal of Pakistan Medical Association, Vol 64 No. 5,253-259, 2016.
25. Zaki AB, **Munir MA**, Hassan SA, Khan IA, Mukhtar U, Arsalan A, Mushtaq S. Adulticidal Efficacy of *Azadirachta Indica* (Neem Tree), *Sesamum indicum* (Til) and *Pinus sabinana* (Pine Tree) Extract against *Aedes aegypti* under laboratory conditions. Pakistan Journal of Medical Research, Vol. 55, Number1, 11-15, 2016.
26. Muhammad Arif Nadeem Saqib, Ibrar Rafique, Huma Qureshi, **Muhammad Arif Munir** Rizwan Bashir, Babur Wasim, Arif Khalid Bhatti, Shahzad Alam Khan Ahmed Lubna Bhatti. Burden of Tobacco in Pakistan - Findings from Global Adult Tobacco Survey 2014. *Nicotine & Tobacco Research*, ntx179, <https://doi.org/10.1093/ntr/ntx179>

27. Ibrar Rafique , Muhammad Arif Nadeem Saqib, **Muhammad Arif Munir** , Huma Qureshi, Ijaz-ul-Haq Taseer, Rizwan Iqbal , Waqaruddin Ahmed , Tasleem Akhtar, Rizwanullah. Asymptomatic dengue infection in adults of major cities of Pakistan, Asian Pacific Journal of Tropical Medicine 2017; 1–5. <https://doi.org/10.1016/j.apjtm.2017.09.013>
 28. Ibrar Rafique, Muhammad A.N. Saqib, **Muhammad A. Munir**, Huma Qureshi, Rizwanullah, Shahzad A. Khan and Heba Fouad. Prevalence of risk factors for noncommunicable diseases in adults: key findings from the Pakistan STEPS survey. EMHJ – Vol. 24 (1) 2018
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Reports Written:

1. Report on assessment of leishmaniasis situation in Sultanate of Oman 1996- WHO Assignment WHO
 2. Report on WHO national assignment on DDT Use & Management in Pakistan. The assignment involved pre-testing of questionnaire for reporting by parties (as per Stockholm convention) using DDT on amounts, conditions of use, stockpiles and relevance to vector-borne disease management strategies and submission of a report. Pakistan 2005.
 3. Assessment of Visceral Leishmaniasis and Rift Valley Fever in North Sudan with particular reference to Vector Control, 2007- WHO Assignment
 4. Malaria Programmatic Review (Federal Component) 2013, Islamabad.
 5. Malaria Indicator Survey in 38 high risk districts of Pakistan 2014
 6. Situation Analysis of Leishmaniasis in Pakistan 2018
 7. Malaria Programmatic Review Pakistan (Federal Malaria Control Programme) 2019
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Thesis written

1. Systematic and Biology of Phlebotomine sandflies from the visceral leishmaniasis foci of Northern Pakistan. 1994. London University (Ph.D. Thesis).
 2. Susceptibility of House Dust Mites *Dermatophagoides farinae* to some insecticides. 1986. London University (M.Sc Thesis).
 3. Incidence of hydatidosis in ruminants at Faisalabad abattoir and chemical characterization of cyst fluid in buffalo. 1980. University of Agriculture, Faisalabad (M.Sc Thesis).
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