

# *CURRICULUM VITAE*

## 1: PERSONAL INFORMATION

<b>Name</b>	<b>PROFESSOR DR. MUHAMMAD ARIF</b>		
<b>Nationality</b>	Pakistani	<b>Date of Birth</b>	June 02, 1964
<b>Gender</b>	Male	<b>Marital Status</b>	Married
<b>Position/Job Title</b>	Professor		
<b>Address at the Organization</b>	Department of Plant Pathology, The University of Agriculture Peshawar, Peshawar-25130, Khyber Pakhtunkhwa, Pakistan		
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<b>Website:</b>	<a href="http://www.aup.edu.pk">http://www.aup.edu.pk</a>		
<b>Specialization</b>	Plant Pathology (Molecular Plant Virology)		
<b>Area of Interest</b>	<ul style="list-style-type: none"> <li>• Molecular Plant Virology-Molecular and applied aspects of viruses infecting agricultural and horticultural crops</li> <li>• Development of molecular resistance in crop plants, field testing of transgenic plants and risk assessment of pathogen derived resistance (PDR) technologies</li> <li>• Disease-free seed potato production, multiplication, storage and marketing: Formal and informal strategies</li> <li>• Research needs to improve livelihood for the mountainous communities in South Asia</li> </ul>		

## 2: QUALIFICATION

DEGREE	YEAR	SUBJECT	INSTITUTION
<b>Post-Doc</b> (Fulbright Fellowship)	2003-2004	Molecular Plant Virology/ Plant Pathology	Washington State University- United States Department of Agriculture, Agricultural Research Services (USDA-ARS), Prosser, WA., USA.
<b>Ph. D</b>	1992-1995	Molecular Plant Virology/ Plant Pathology	University of Edinburgh, UK / Scottish Crop Research Institute, Invergowrie, Dundee, Scotland, UK
<b>M. Sc (Hons) Agri</b>	1986-1988	Plant Virology/ Plant Pathology	The University of Agriculture, Peshawar, Pakistan/ Pakistan Agricultural Research Council (PARC), National Agricultural Research Center (NARC), Islamabad, Pakistan
<b>B. Sc (Hons) Agri</b>	1982-1986	Plant Pathology	The University of Agriculture, Peshawar, Pakistan
Intermediate ( <b>F. Sc.</b> )	1981-1982	Pre-Medical	Board of Intermediate and Secondary Education (B. I. S. E), Mirpur, A.J & K., Pakistan
Matriculation ( <b>S. S. C</b> )	1979-1980	Science	Board of Intermediate and Secondary Education (B. I. S. E), Mirpur, A.J & K., Pakistan

**3: TEACHING/RESEARCH EXPERIENCE**

S. NO	PERIOD	DESIGNATION	DEPARTMENT/ AREA	LEVEL	INSTITUTION
1	June 22, 2018 onward	Chairman	Dept. of Plant Pathology	BPS-21	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
2	January 13, 2007 - <u>to-date</u>	Professor	Plant Virology/ Plant Pathology	BPS-21	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
3	March 15, 2009 –May 31, 2012	Chairman	Dept. of Plant Pathology	BPS-21	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
4	January 1, 2005 to January 12, 2007	Professor	Plant Virology/ Plant Pathology	BPS-20	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
5	August 15, 2004 – November 30, 2006	Regional Potato Seed Specialist/ Program Leader (International position through deputation)	Plant Virology/ Clean Seed production, protection & multiplication	International Research Scientist (IRS)	International Potato Center (CIP), Lima, <b>Peru:</b> South West Central Asia (SWCA), Liaison office-Dehli, India and Afghanistan, Kabul
6	September 1, 2000 to December 31, 2004	Associate Professor	Plant Virology/ Plant Pathology	BPS-19	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
7	March 2, 1998 to August 30, 2000	Assistant Professor	Plant Virology/ Plant Pathology	BPS-18	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan
8	October 4, 1988 to March 25, 1998	Lecturer	Plant Virology/ Plant Pathology	BPS-17	The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan

**4: PUBLICATIONS (INTERNATIONAL & NATIONAL SCIENTIFIC JOURNALS)**

S. NO	NAME OF AUTHOR	YEAR	TITLE OF PAPER	COMPLETE NAME OF THE JOURNAL & ADDRESS	Vol. No. & Page No.
1	Arif, M., G. Ruby, A. Rehman, M. Ali and S. Rehman.	2017	Screening of potato cultivars to <i>Potato mop-top virus</i> in Northwestern Pakistan.	<i>Potato Research</i> , (European Association of Potato Research)	59:295-312

2	Arif, M., W. Khan, M. Ibrahim and M. Fahim.	2015	Citrus tristeza virus: an increasing trend in the virus occurrence and distribution in citrus fruits of Northwest, Pakistan.	<i>Afr. J. Biotech.</i>	14: 2352-2360.
3	Arif, M., W. Khan, A. Shafi and Kamranullah.	2015.	Detection of beet necrotic yellow vein virus in Pakistan using bait-plant bioassay, ELISA and RT-PCR	<i>Afr. J. Biotech.</i>	14: 3206-3215.
4	Arif, M. M. Ali, Anayat-ur-Rehman and M. Fahim.	2014	Detection of Potato mop-top virus in soils and potato tubers using bait-plant bioassay, ELISA and RT-PCR.	<i>Journal of Virological Methods (UK)</i>	195: 221-227
5	Arif, M. M. Ali, Anayat-ur-Rehman and M. Fahim	2013	Occurrence of potato mop-top virus in Northwest of Pakistan	<i>European Journal of Plant Pathology</i> European Foundation for Plant Pathology	137: 787-796
6	Arif, M., Torrance, L. and Reavy, B	1994	Improved efficiency of detection of potato mop-top furovirus in potato tubers and in the roots and leaves of soil-bait plants.	<i>Potato Research</i> European Association of Potato research, Spring, Netherlands	<b>37:</b> 373-381.
7	Arif, M., Torrance, L. and Reavy, B	1995	Acquisition and transmission of potato mop-top furovirus by a culture of <i>Spongospora subterranea</i> f. sp. <i>subterranea</i> derived from single cystosorus.	<i>Annals of Applied Biology</i> Association of Applied Biologists, UK	<b>126:</b> 493-503.
8	Reavy, B., Arif, M., Kashiwazaki, S., Webster, K. D. and Barker, H.	1995	Immunity to potato mop-top virus in <i>Nicotiana benthamiana</i> plants expressing the coat protein gene is effective against fungal inoculation of the virus.	<i>Molecular Plant-Microbe Interactions</i> American Phytopathological Society, USA	<b>8:</b> 286-291.
9	Reavy, B. Arif, M., Cowan, G. H. and Torrance, L. 1998.	1998	Association of sequences in the coat protein/readthrough domain of potato mop-top virus with transmission by <i>Spongospora subterranea</i> .	<i>Journal of General Virology</i> Society of General Microbiology, UK	<b>79:</b> 2343-2347.
10	Barker, H., Reavy, B., Arif, M., Webster, K. D. and Mayo, M. A.	1994	Towards immunity to potato leafroll virus and potato mop-top virus using transgenic and host gene-mediated forms of resistance.	<i>Aspects of Applied Biology</i> Association of Applied Biologists, UK	<b>39:</b> 189-194.
11	Attaullah and Arif, M.	2017	Prevalence of major aphid and soil borne viruses infecting potato crop in North Western Pakistan	<i>Journal of Entomology and Zoology Studies</i>	

12	Ghufran-ul-Haq and Arif, M.	2018	<i>Tomato yellow leaf curl virus</i> in tomato crop of Khyber Pakhtunkhwa province: Virus and vector prevalence and transmission properties	<i>Sarhad Journal of Agriculture</i> NWFP AUP	
13	Reavy, B. <b>Arif, M.</b> , Torrance, L. and Barker, H.	1996	Biotechnological approaches to resistance to potato mop-top virus.	<i>Proceedings, Crop Protection in Northern Britain</i>	
14	Reavy, B., Barker, H. <b>Arif, M.</b> , Kashiwazaki, S., Webster, K. D., Jolly C. A. and Mayo, M. A.	1994	Exploiting coat protein transgenesis to create improved forms of resistance to two potato viruses	<i>Scottish Crop Research Institute, Annual Report, 1993.</i>	1993: 103-105
15	Kadian, MS, Ilangantileke, <b>S, Arif, M</b> , Hossain, M, Roder, W, Sakha, BM, Singh, SV, Farooq, K, and Mazeen, ACM.	2007	Status of potato seed systems in South West Asia (SWA)	<i>Potato Journal</i> Published by Indian Potato Association	34: 25-30
16	<b>Arif, M.</b> , Mughal, S. M., Khalid, S. and Hassan, S.	1995	Some biological, physical and serological properties of potato leafroll virus in Pakistan.	<i>Pakistan Journal of Botany</i> Pakistan Botanical Soc., Karachi Uni., Karachi	27: 233-241
17	<b>Arif, M.</b> , Reavy, B. and Torrance, L. 1999.	1999	Read-through protein gene of potato mop-top furovirus is associated with acquisition and transmission of the virus by <i>Spongospora subterranea f.sp subterranea</i> .	<i>Pakistan Journal of Botany</i> Pakistan Botanical Soc., Karachi Uni., Karachi	31: 225-236
18	<b>Arif, M.</b> , Ibrahim, M., Ahmad, A. and Hassan, S	2005	Elimination of citrus tristeza closterovirus from citrus bud-wood through thermotherapy	<i>Pakistan Journal of Botany</i> Pakistan Botanical Soc., Karachi Uni., Karachi	37: 423-430
19	<b>Arif, M.</b> , Ahmad, A., Ibrahim, M. and Hassan, S.	2005	Occurrence and distribution of virus and virus like diseases of citrus in North West Frontier Province of Pakistan	<i>Pakistan Journal of Botany</i> Pakistan Botanical Soc., Karachi Uni., Karachi	37: 407-421
20	<b>Arif, M.</b> , Thomas, P. E., Crosslin, J. M. and Brown, C. R.	2009	Development of molecular resistance in potato against <i>Potato leaf roll virus</i> and <i>Potato virus Y</i> through <i>Agrobacterium</i> -mediated double transgenesis.	<i>Pakistan Journal of Botany</i> Pakistan Botanical Soc., Karachi Uni., Karachi	41:945-954
21	<b>Arif, M.</b> , Thomas, P. E.,	2009	<i>Agrobacterium</i> -mediated transformation of potato using	<i>Pakistan Journal of Botany</i>	41:1477-1488

	Crosslin, J. M. and Brown, C. R.		potato leafroll virus Rep. and potato virus Y CP genes. And assessment of replicase resistance against natural infection of PLRV	Pakistan Botanical Soc., Karachi Uni., Karachi	
22	Hassan, S. Arif, M. and Deofer, T.	1993	Preliminary studies on viral diseases of tomato in Malakand Agency.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 181-187
23	Hassan, S., Arif, M. and Deofer, T.	1993	Etiological studies of viral diseases of tomato in Malakand Agency.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 27-35
24	Hassan, S., Arif, M. and Deofer, T.	1993	Epidemiological studies of tomato viruses in Malakand Agency of North West Frontier Province of Pakistan.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 37-41
25	Haque, G., Hassan, S., Akhtar, A. and Arif, M.	1993	Control of soybean mosaic virus through thermotherapy	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 177-180
27	Haque, G., Arif, M., Hassan, S., Akhtar, A. and Khan, M.	1993	Assessment of yield losses in soybean mosaic virus.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 227-229
27	Ali, G. A., Ali, A., Arif, M., Shafiq, M. and Hassan, S.	1993	Evaluation of indirect and two-step enzyme-linked immunosorbent assay for the detection of beet curly top, beet western yellows and cucumber mosaic viruses in sugar beet.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	9: 591-598
28	Arif, M., Khalid, S. and Hassan, S.	1992	Purification and serodiagnosis of potato leafroll virus in Pakistan.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	8: 209-215
29	Arif, M., Hassan, S. and Shafiq, M.	1991	Incidence and distribution of viruses infecting sugar beet crop in North-west Frontier Province, Pakistan.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	7: 665-673
30	Arif, M., Hassan, S. and Shafiq, M.	1991	The effect of beet western yellows and beet curly top viruses on some yield components in sugar beet root crop.	<i>Sarhad Journal of Agriculture</i> NWFP AUP	7: 779-784
31	Gul, F., Hassan, S. and Arif, M.	1992	Identification, incidence and distribution of ratoon stunting disease of sugarcane.	<i>Pakistan Journal of Phytopathology</i>	4:9-13
32	Arif, M., Reavy, B. and Barker, H.	1999	Engineering high level of coat protein mediated resistance to fungal transmission of potato mop-top furovirus in <i>Nicotiana glauca</i>	<i>Pakistan Journal Biological Sciences</i>	2: 78-483
33	Arif, M. and Reavy, B.	2000	<i>In vitro</i> transcription and translation of potato mop-top furovirus RNA3: coat protein and readthrough cistron.	<i>Pakistan Journal of Biological Sciences</i>	3: 303-305
34	Arif, M., Ali, A., Stephen,	2000	Evaluation of resistance in soybean germplasm against soybean mosaic	<i>Pakistan Journal of Biological Sciences</i>	3: 1921-1925

	M. and Hassan, S.		potyvirus		
35	<b>Arif, M.</b> and Hassan, S.	2000	Occurrence and distribution of soybean mosaic potyvirus in soybean crop of North-west Frontier Province, Pakistan and characterization of prevalent isolates	<i>Pakistan Journal of Biological Sciences</i>	3: 2126-2130
36	<b>Arif, M.</b> and Hassan, S.	2002	Evaluation of resistance in soybean germplasm to soybean mosaic potyvirus under field conditions.	<i>OnLine Journal of Biological Sciences</i>	2: 601-604
37	<b>Arif, M.,</b> Stephen, M. and Hassan, S.	2002	Effect of soybean mosaic potyvirus on growth and yield components of commercial soybean varieties.	<i>Pakistan Journal of Plant Pathology</i>	1: 54-57
38	<b>Arif, M.,</b> Moeen Uddin., Kadian, M.S., Ilangantileke, S. and Wassimi, N.	2005	Clean seed production, multiplication and marketing for increased potato production in Afghanistan.	In: South, West and Central Asia, International Potato Centre, Newsletter. Vol.9 (1) September, New Delhi, India.	9: 10-11
39	<b>Arif, M.</b>	2005	Crop and disease management trainings in Afghanistan.	The Week at ICARDA, September 2005 No. 887/888. P: 3	September issue page-3
40	<b>Arif, M.</b>	2005	Rebuilding Agriculture in Afghanistan	International Potato Center (CIP), Annual Report 2005. CIP, Lima Peru.	pp-42.
41	<b>Arif, M., S.</b> Ilangantileke, S. J. H. Rizvi, M. S. Kadian, Moeen Uddin, M. E. Hussaini, and N. Wassimi.	2006	CIP establishes a potato clean seed production system in Afghanistan	In: South, West and Central Asia, International Potato Centre, New Delhi, India.	Newsletter. Vol.9 (2) (September) pp-10
42	<b>Arif, M., S.</b> Ilangantileke, S. J. H. Rizvi, M. S. Kadian, Moeen Uddin, M. E. Hussaini, and N. Wassimi.	2006	Capacity building for clean seed production in Afghanistan,	In: South, West and Central Asia, International Potato Centre, Newsletter. New Delhi, India.	Vol.9 (2) (September) , pp-11

43	Arif, M., Moeen-Uddin, M. S. Kadian, S. Ilangantileke and N. Wassimi	2006	Increasing potato production in Afghanistan	CIP electronic Newsletter	<a href="http://www.cipotato.org/pressroom/press_releases_detail.asp">http://www.cipotato.org/pressroom/press_releases_detail.asp</a>
44	Arif, M.	2005	Increasing potato seed production in Afghanistan/	Published in <i>Consultative Group on International Agricultural Research (CGIAR) Booklet- 2005.</i>	

## 5 NATIONAL AND INTERNATIONAL PROCEEDINGS:

S. NO	AUTHORS	YEAR	TITLE	NAME OF PUBLISHER & ADDRESS
1	Arif, M., Torrance, L. and Reavy, B.	1995	Acquisition and transmission of potato mop-top furovirus by a culture of <i>Spongospora subterranea</i> f. sp. <i>subterranea</i> derived from single cystosorus.	<i>Published in Proceeding of AAB Meeting on Virus Movement in Cell, Plant and Vector.</i> March 27-28, 1995. Churchill College, Cambridge, UK.
S. NO	AUTHORS	YEAR	TITLE	NAME OF PUBLISHER & ADDRESS
2	Arif, M., Reavy, B. and Torrance, L.	1998	Role of read-through protein gene of potato mop-top furovirus in fungus transmission by <i>Spongospora subterranea</i> f. sp. <i>subterranea</i> .	Published in Proceeding of sixth National Conference of Plant Scientists. October 20-22, 1998. Department of Botany, University of Peshawar, Peshawar.

## 5 (a): BOOKS PUBLISHED/CHAPTER CONTRIBUTED

S. NO	Author (s)	YEAR	TITLE OF BOOK	NAME OF PUBLISHER & ADDRESS
1	Arif, M. and Rizvi, S. J. H. (Ed).	2006	<i>Potato Clean Seed Production Manual.</i>	Published by International Potato Center (CIP)/ International Center for Agricultural Research in Dry Areas (ICARDA)/USAID
2	Arif, M. (Reviewed & Contributed Chapter)	1998	<i>Diagnostic Methods in Plant Viruses</i> by M. Bashir and S. Hassan.	Pakistan. Agricultural Research Council, Islamabad.
3	Arif, M.	2006	Diseases and insects of potato and their control. In: <i>Potato Clean Seed Production Manual.</i> Eds. M. Arif and S. Javed H. Rizvi. PP-7-32.	Published by International potato Center (CIP)/International Center for Agricultural Research in Dry Areas (ICARDA)/USAID

4	Arif, M.	1998	Molecular Methods in Plant Virus Detection. In: <i>Diagnostic Techniques in Plant Virology</i> . Chapter 12. [M. Bashir and S. Hassan]. PP. 201-238.	Pakistan. Agricultural Research Council, Islamabad
5	Reavy, B. Arif, M. and Torrance, L.	1998	Early detection of the fungus-transmitted virus, potato mop-top virus. In: Manceau, C. and Spak, J. (eds). <i>Advances in the Detection of Plant Pathogens by Polymerase Chain Reaction</i> . Pages: 17-21.	Office for Official Publications of the European Communities, Luxembourg
6	Arif, M., S. J. H. Rizvi, M.S. Kadian, and S. Ilangantileke	2006	<i>Clean Seed Production, Multiplication and Marketing for Increased Potato Production in Afghanistan</i> -Working Paper. International Potato Center, Lima, Peru. 40p.	International Potato Center, Lima, Peru.
7	Kadian, M.S.; Arif, M.; Ilangantileke, S.	2009	Improving livelihood of resource poor farmers by enhancing potato productivity in Afghanistan. Yadav, J.S.P.; Singh, R.K.; Gupta, V.P. (eds). <i>Converting deserts in to oasis</i> . New Delhi (India).	National Academy of Agricultural Sciences, New Delhi, India. pp. 209-216.

#### 5 (b): BOOK REVIEW

S. NO	Author (s)	YEAR	TITLE	COMPLETE NAME OF THE JOURNAL & ADDRESS	Vol. No. & Page No.
1	Arif, M. and Hassan, S.	2000	Pathogen-derived resistance against plant viruses: postscript and prospects. <i>Pakistan Journal of Biological Sciences</i> 3: 1-9	<i>Pakistan Journal of Biological Sciences</i>	3: 1-9.
2	Arif, M.	2000	Fungally-Transmitted Rod-shaped Viruses: Biology, Transmission and Molecular Pathology	<i>Pakistan Journal of Biological Sciences</i>	3: 1194-1212.

#### 7 (a): CONFERENCES/ SEMINARS/ WORKSHOPS ATTENDED OUTSIDE PAKISTAN

CONFERENCES			
S. NO	PERIOD	TITLE	PLACE & ORGANIZER
1	November 28 to December 09, 2011	Training of Trainers workshop on <i>Obsolete pesticides inventory, Environmental risk assessment and Safeguarding</i>	International Agricultural Research and Training Center (IARTC), Izmir, Turkey, Organized by Food and Agriculture Organization (FAO) of United Nations



2	September 28- October 3, 2009	40 <sup>th</sup> Anniversary meeting and 17 <sup>th</sup> Biennial Conference of Australian Plant Pathology Society (APPS), Inc 2009.	Newcastle, Australia, Australian Plant Pathology Society (APPS)
3	July 28 - August 4, 2005	2005 Regional Planning and Priority Setting Meeting at Regional office, CIP-SWCA, Delhi	Delhi, India: International Potato Center, South Asia Chapter
4	February 23-24, 2005	Third Steering Committee Meeting of Future Harvest Consortium to Rebuild Agriculture in Afghanistan	Kabul, Afghanistan: Future Harvest Consortium to Rebuild Agriculture in Afghanistan (FHCRAA)
5	November 22 - December 3, 2004	Research to Address the Millennium Development Targets: Present Research and Future Needs. CIP Annual Review and Planning Meeting	Lima, Peru: International Potato Center (CIP)
6	November 3- 8, 2004	Regional Planning Meeting at CIP, South West Central Asia office at New Delhi	Delhi, India: International Potato Center, South Asia Chapter
7	August 9-13, 2003	Annual Meeting of the American Phytopathological Society 2003	Charlotte, North Carolina, USA: American Phytopathological Society
8	August 10-14, 2003	The 87 <sup>th</sup> Annual Meeting of the Potato Association of America	Spokane, Washington, USA: Potato Association of America
9	March, 1995	Annals of Applied Biology Meeting on <i>Virus Movement in Cell, Plant and Vector</i>	Churchill College, University of Cambridge, Cambridge, UK: Association of Applied Biologists (AAB)
10	August 1994	Annals of Applied Biology Presidential Meeting	University of Dundee, Dundee, UK: Association of Applied Biologists (AAB)
11	January 1993	Annual meeting of Society of General Microbiology	University of Warwick, Warwick, England, U.K: Society of General Microbiology (SGM)
12	August 1993	International symposium on Biotechnology	Scottish Crop Research Institute, Invergowrie, Dundee, Scotland, U.K: International Congress on Virology (ICV)
13	August 1993	International Congress of Virology	University of Glasgow, Glasgow, Scotland, UK: International Congress on Virology (ICV)
<b>S.NO.</b>	<b>PERIOD</b>	<b>TITLE</b>	<b>PLACE &amp; ORGANIZER</b>
14	October 30 to November 11, 2005	Clean seed production, multiplication and marketing for increased potato production in Afghanistan	Lima, Peru: International Potato Center (CIP)
15	October 30 to November 11, 2005, Lima, Peru	CIP's impact as active member of Future Harvest Consortium for Rebuilding Agriculture in Afghanistan (FHCRAA)	Lima, Peru: International Potato Center (CIP)

16	October 30 to November 11, 2006	Sustaining potato production in Afghanistan	Lima, Peru: International Potato Center (CIP)
17	August 25, 2005	DFID Alternative Livelihood Workshop. ICARDA-Kabul Afghanistan	Kabul Afghanistan: ICARDA/DFID
18	April 19-20, 2005	DFID: First Annual Alternative Livelihood Projects Workshop, Kabul Afghanistan	Kabul Afghanistan: ICARDA/DFID

### 7 (b): CONFERENCES/ SEMINARS/ WORKSHOPS ATTENDED IN PAKISTAN

CONFERENCES			
S. No	PERIOD	TITLE	PLACE & ORGANIZER
1	April 20-22, 1996	Crop Protection Conference-1996	The University of Agriculture, Peshawar: Crop Protection Association of Pakistan
2	October 20-22, 1998	Sixth National Conference of Plant Scientists	Department of Botany, University of Peshawar, Peshawar: Pakistan Botanical Society (PBS)
3	October 1-3, 2001	Third National Conference of Plant Pathology	National Agricultural Research Centre, Islamabad: Pakistan Phytopathological Society (PPS)
4	November 28-29, 2011	8 <sup>th</sup> National Conference of Phytopathological Society	Department of Plant Pathology, University of Agriculture Faisalabad.
5	June 27 to 29, 2011	Three Days Workshop for Evaluators of NAEAC by Foreign Expert	Islamabad: Higher Education Commission
6	December 11-13, 2012	Three Days Workshop of Program Evaluators of NAEAC on the Accreditation process	Islamabad: Higher Education Commission, QAA & NAEAC
7	September 28 to 30, 2017	Fourth Training Workshop of Program Evaluators NAEAC	Islamabad: Higher Education Commission, QAA & NAEAC

### 8: SUPERVISION EXPERIENCE

#### 8(a): Ph. D/M.PHIL/ M. SC (H) STUDENT SUPERVISED & AWARDED DEGREE

S. NO	NAME OF STUDENT	TITLE	UNIVERSITY	YEAR	ROLE AS	
					Major Supervisor	Co-Supervisor
		<b>Ph. D</b>				

1	Attaullah (Ph. D)	Biology and molecular biology of important viruses infecting potato crop in north of Pakistan	AUP	2017	Major Supervisor	
2	Ghufran -ul-Haque (Ph. D)	Biology and molecular biology of important furoviruses in Pakistan	AUP	2018	Major Supervisor	
<b>M.PHIL/ M. SC (H)</b>						
1	Irfan Tahir	Occurrence and distribution of aphid-borne viruses in potato of Azad Kashnir	AUP	2017	Major Supervisor	
2	Nayla Haneef	Detection of major soil-borne viruses in potato and association of virus and vector in national infection	AUP	2016	Major Supervisor	
3	Altaf Hussain	Management of Potato virus Y (PVY) in field	AUP	2015	Major Supervisor	
4	Aqleem Abbas	Management of PLRV through thermo therapy	AUP	2015	Major Supervisor	
5	S. Muzammal Hussain	Management of aphid-borne viruses in field conditions	AUP	2014	Major Supervisor	
6	Ghazala Ruby	Screening potato germplasm against major soil-borne viruses of potato crop in Northwest of Pakistan	AUP	2013	Major Supervisor	
7	Shawana Ahmad	Molecular detection and characterization of beet necrotic yellow vein virus	AUP	2013	-	Co-Supervisor
8	Shamsur Rehman	Study of important soil-borne viruses in major potato growing areas of Hazara and Malakand divisions of Khyber Pakhtunkhwa, Pakistan	AUP	2013	Major Supervisor	
9	Kamran Ullah	Characterization of <i>beet necrotic yellow vein benyvirus</i> isolates and response of sugar beet germplasm against the virus	AUP	2012	Major Supervisor	-
10	Anayat- ur -Rehman	Characterization of <i>potato mop top pomovirus</i> isolates and screening of potato germplasm for resistance	AUP	2012	Major Supervisor	-
11	Amna Shafi	Characterization of beet necrotic yellow vein benyvirus in Pakistan	AUP	2010	Major Supervisor	-
12	Murad Ali	Incidence and distribution of potato mop-top pomovirus in north of Pakistan and screening of potato germplasm to it	AUP	2009	Major Supervisor	-
13	Waseemullah Khan	Incidence and distribution of fungus-transmitted viruses of sugar beet and screening of germplasm against them	AUP	2009	Major Supervisor	-
14	Muhammad Ibrahim	Epidemiological Studies of Virus, Viroid and Prokaryotic Diseases of Citrus in NWFP	AUP	2002	Major Supervisor	-
15	Muhammad Attique	Studies on the control of Virus and Virus-like Diseases of Citrus in the NWFP	AUP	2002	Major Supervisor	-
16	Moazam Stephan	Effect of Soybean Mosaic Potyvirus on Yield and Growth Components of Soybean	AUP	2001	Major Supervisor	-
17	Bushra Rasheed	Biology and Epidemiology of Aphid-transmitted Viruses of Potato Crop in NWFP	AUP	2000	-	Co-Supervisor

18	Asad Ali	Screening Soybean Germplasm for Resistance to Soybean Mosaic Virus	AUP	1997	–	Co-Supervisor
19	Mahmood Ahmad	Strategies for the Control of Sugar beet Viruses	AUP	1993	–	Co-Supervisor
20	Hakim Khan	Chemotherapy and Thermo-therapy of Tomato Mosaic Virus.	AUP	1992	–	Co-Supervisor
21	Muhammad Irshad	Etiology and Epidemiology of Viral Diseases of Tomato in Malakand Agency	AUP	1992	–	Co-Supervisor
22	Muhamad Shafiq	Ecological and Epidemiological Studies of Sugar beet Viruses in NWFP	AUP	1991	–	Co-Supervisor
23	Gulshad Ali	Biological and Serological Characterization of Sugar beet Viruses	AUP	1991	–	Co-Supervisor
24	Ghufran-ul-Haq	Assessment of Yield Losses in Soybean due to Soybean Mosaic Virus and its Control through Thermo-therapy.	AUP	1991	–	Co-Supervisor
25	Rasool Muhammad	Studies on Viral Diseases of Potato Crop in NWFP.	AUP	1990	–	Co-Supervisor
26	Akhtar Ali	Biological Characterization of Soybean Mosaic Virus in the NWFP.	AUP	1990	–	Co-Supervisor

#### 8 (b): M. PHIL/ M. SC (H) STUDENTS IN PROGRESS

S.NO.	NAME OF STUDENT	TITLE	NAME OF UNIVERSITY	REGISTRATION DATE
1	Muhammad Ibrahim	Assessment of BYDV in Peshawar Division	AUP	Spring 2015
2	Attaullah	Assessment of seed borne infection of major viruses infecting pluses of KPK and response commercially germplasm against prevalent viruses	AUP	Spring 2015
3	Manoor Baluch	Production of virus-free seed potatoes through formal techniques	AUP	Spring 2018

#### 8 (c) : PH. D STUDENTS IN PROGRESS

S. NO	NAME OF STUDENT	TITLE	NAME OF UNIVERSITY	REGISTRATION DATE
1	Aqleem Abbas	Occurrence and distribution of major diseases of potato in Gilget-Baldistan and impact of climate change on potato diseases	AUP	Fall 2015
2	Ghazala Ruby	Characterization and management of virus causing leaf curl diseases in vegetable crops of Northwest of Pakistan	AUP	Fall 2013

#### 9: RESEARCH PROJECTS IN PROGRESS/COMPLETED

S. NO	TITLE	DONOR AGENCY	AMOUNT (RS/\$)	DURATION		ROLE AS	
				FROM	TO	PI	CO.PI

1	Establishment of informal disease-free seed potato production system in Khyber Pakhtunkhwa province	Endowment Fund, UAP	1.41 Million	2017	2018	PI	-
2	Characterization of Fungus-transmitted Rod-shaped viruses infecting potato and sugar beet crops of the NWFP and screening of germplasm for the source of resistance to them.	HEC, Islamabad, Pakistan	Rs. 2.141 Million	2009	2015	PI	-
3	Studies on Epidemiology and Biology of Virus and Viroids Diseases of citrus and their Control through Integrated Approaches	HEC, Islamabad, Pakistan	Rs. 0.781 Million	2004	2008	PI	-
4	Characterization of soybean mosaic virus and screening of soybean germplasm for the source of resistance to it.	PSF, Islamabad, Pakistan.	Rs. 0.800 Million	1999	2001	PI	-
5	Production of Virus-Free Citrus Propagative Bud-wood in Pakistan. University Grants Commission, Islamabad, Pakistan	AUP Local Funds	Rs. 0.300 Million	2002	2003	PI	-
6	Epidemiology and Management of aphid-transmitted viruses in potato crop of NWFP University Grants Commission, Islamabad, Pakistan	HEC, Islamabad, Pakistan	-	-	-	-	CO-PI
7	Studies on Viral Diseases of Tomato in Malakand Division, NWFP.	Govt. of Holland & Govt. of Pakistan joint Project	-	-	-	-	CO-PI
8	Studies on Viral Diseases of Sugar beet in NWFP.	NSRDB/UG C, Islamabad	-	-	-	-	CO-PI

#### 10. PROJECT LEADERSHIP EXPERIENCE: DOCUMENTATION, TECHNICAL REPORTING-INTERNATIONAL & NATIONAL DONORS

##### 10 (A): INTERNATIONAL DONORS

S. No	Author(s)	Year	Title	Donors
1	Arif, M., S. J. H. Rizvi, M.S. Kadian, and S. Ilangantileke	2006	Clean seed production, multiplication and marketing for increased potato production in Afghanistan. CIP/ICARDA Project 06-00: Final technical Report for Rebuild Agriculture Market Programs in Afghanistan (RAMP)/USAID. December 2005. 90pp.	International Potato Center (CIP)/ International Center for Agricultural Research for Dry Areas (ICARDA)/ USAID
2	Arif, M. and S. J. H. Rizvi.	2005	Clean seed production, multiplication and marketing for increased potato production in Afghanistan. Annual Project Report for year 2005. Rebuild Agriculture Market Programs in Afghanistan (RAMP)/USAID. March 2005. 30pp.	International Potato Center (CIP)/ International Center for Agricultural Research for Dry Areas (ICARDA)/ USAID
3	Arif, M and	2004	Clean Seed Production, Multiplication and	International Potato Center

	S. J. H. Rizvi.		Marketing for Increased Potato Production in Afghanistan. CIP/ICARDA Project 06-00: Annual Report for the year 2004. USAID through Chemonics/ RAMP-Afghanistan.	(CIP)/ International Center for Agricultural Research for Dry Areas (ICARDA)/ USAID
4	Arif, M. and S. J. H. Rizvi	2004 - 2006	24 Monthly Reports of CIP/ICARDA Project 06-00: Clean Seed Production, Multiplication and Marketing for Increased Potato Production in Afghanistan. (September 2004-2006 Reports). USAID through Chemonics/ RAMP-Afghanistan.	International Potato Center (CIP)/ International Center for Agricultural Research for Dry Areas (ICARDA)/ USAID
5	Arif, M.	2005	Clean seed production, multiplication and marketing for increased potato production in Afghanistan. 2004-Technical Co-operation Report, International Potato Center, Lima, Peru. April 2005. 20pp.	International Potato Center (CIP)
6	Arif, M.	2006	Clean seed production, multiplication and marketing for increased potato production in Afghanistan. 2005-2004-Technical Co-operation Report, International Potato Center, Lima, Peru. December 2005. 25pp.	International Potato Center (CIP)
7	Arif, M.	2004	Development of Pathogen-Derived Molecular Resistance to Potato virus Y and Leafroll in Important Potato Cultivars of Pakistan and the USA. Final Technical Report. Fulbright Program, CIES, Washington D C.55p.	Fulbright Program, CIES, Washington, D C

#### 10 (b) NATIONAL DONORS

S. No	Author(s)	Year	Title	Donors
1	Arif, M	2017	Establishment of informal disease-free seed potato production system in Khyber Pakhtunkhwa province	Endowment Fund, UAP
2	Arif, M	2015	Characterization of Fungus-transmitted Rod-shaped Viruses Infecting Potato and Sugar beet Crops of the NWFP and Screening of Germplasm for the Source of Resistance to them. 200 pages. Third and Final Annual Technical Report	Higher Education Commission Islamabad, Pakistan
3	Arif, M	2013	Characterization of Fungus-transmitted Rod-shaped Viruses Infecting Potato and Sugar beet Crops of the NWFP and Screening of Germplasm for the Source of Resistance to them. 160 pages. Second Annual Technical Report	Higher Education Commission Islamabad, Pakistan
4	Arif, M.	2011	Characterization of Fungus-transmitted Rod-shaped Viruses Infecting Potato and Sugar beet Crops of the NWFP and Screening of Germplasm for the Source of Resistance to them. 100 pages. Ist Annual Technical Report	Higher Education Commission Islamabad, Pakistan
5	Arif, M.	2011	Studies on Epidemiology and Biology of Virus and Viroids Diseases of citrus and their Control through Integrated Approaches. Final Tech. Repot.	Higher Education Commission Islamabad, Pakistan
6	Arif, M.	2008	Studies on Epidemiology and Biology of Virus and Viroids Diseases of citrus and their Control through Integrated Approaches. Ist Annual	Higher Education Commission Islamabad, Pakistan

			Technical Report	
7	Arif, M. and Hassan, S.	2001	Production of Virus-Free Citrus Propagative Budwood in Pakistan. Ist Annual Technical Report	NWFP The University of Agriculture Peshawar
8	Arif, M. and Hassan, S.	2002	Production of Virus-Free Citrus Propagative Budwood in Pakistan. 2nd Annual Technical Report.	NWFP The University of Agriculture Peshawar
9	Arif, M., and Hassan, S.	2001	Epidemiology and Management of aphid-transmitted viruses in potato crop of NWFP. Final Technical Report	Higher Education Commission Islamabad, Pakistan
10	Arif, M.	1999	Characterization of soybean mosaic virus and screening of soybean germplasm for the source of resistance to it. First Annual Technical Report	Pakistan Science Foundation, Islamabad.
11	Arif, M.	2000	Characterization of soybean mosaic virus and screening of soybean germplasm for the source of resistance to it. Second Annual Technical Report	Pakistan Science Foundation, Islamabad.
12	Arif, M.	2001	Characterization of soybean mosaic virus and screening of soybean germplasm for the source of resistance to it. Third and Final Annual Technical Report	Pakistan Science Foundation, Islamabad.
13	Arif, M., and Hassan, S.	1991	Viral Diseases of Sugar beet in the NWFP and Their Controls. First Annual Technical Report	National Scientific Research and development Board/ University Grants Commission (NSRDB/UGC), Islamabad.
14	Arif, M., and Hassan, S.	1992	Viral Diseases of Sugar beet in the NWFP and Their Controls. Second Annual Technical Report	NSRDB/UGC, Islamabad.
15	Arif, M., and Hassan, S.	1993	Viral Diseases of Sugar beet in the NWFP and Their Controls. Ist Annual Tech. Report	NSRDB/UGC, Islamabad.
16	Hassan, S. and Arif, M..	1991	Viral Diseases of Tomato in Malakand Agency and Their Control. First Annual Technical Report of Research Project	PATA Ground Water Project NWFP\ Government of Holland.
17	Hassan, S. and Arif, M.	1992	Viral Diseases of Tomato in Malakand Agency and Their Control. Second Annual Technical Report of Research Project	PATA Ground Water Project NWFP\ Government of Holland.
18	Hassan, S. and Arif, M.	1993	Viral Diseases of Tomato in Malakand Agency and Their Control. Third Annual Technical Report of Research Project	PATA Ground Water Project NWFP\ Government of Holland.

#### 11. PLANNING, MONITORING AND EVALUATION EXPERIENCE: QUALITY ASSESSMENT AND ACCREDITATION OF INSTITUTES/DEPARTMENTS

S. NO	TITLE	ROLE AS	
		Convener	Member
1	Report of the Accreditation Inspection Committee (AIC) (Zero Visit) on Department of Plant Pathology, Faculty of Agriculture, University of Poonch, Rawalakot. March 2018	Convener/Exp of AIC	

2	Report of the Accreditation Inspection Committee (AIC) (Second Round) on Department of Plant Pathology University of Agriculture Faisalabad. November 2017	Convener/ Expert of AIC	
1	Report of the Accreditation Inspection Committee (AIC) on Department of Plant Pathology, PMAS University of Arid Agriculture for National Agricultural Education Accreditation Council (NAEAC), Islamabad. June 2010	Convener/ Expert of AIC	-
2	Report of the Accreditation Inspection Committee (AIC) on Department of Plant Pathology University of Agriculture Faisalabad. April 2011	Convener/ Expert	-
3	Report of the Accreditation Inspection Committee (AIC) on Institute of Agricultural Sciences, University of Punjab. Lahore 2011	Convener/ Expert of AIC	-
4	Report of the Accreditation Inspection Committee (AIC) on Department of Plant Pathology, University College of Agriculture, University of Sargodha, Sargodha. 2012.	Convener/ Expert of AIC	-
5	Report of the Accreditation Inspection Committee (AIC) on Department of Plant Pathology, BZU, Multan 2013.	Convener/ Expert of AIC	
6	Self Assessment Reports of B. Sc (H), M. Sc (H) and Ph. D programs of the Department of Plant Pathology, KP The University of Agriculture Peshawar	Chairman of the Dept.	-

## 12. CONSULTANCIES: AND WORK EXPERIENCE IN INTERNATIONAL AGENCIES

S. NO	TITLE	MAJOR CONDUCT AND ACHIEVEMENTS	AGENCY/ ORGANIZATION
1	<b>Regional Seed Specialist and Project Leader</b>	Work as <b>Regional Seed Specialist</b> and <b>Project Leader</b> for International Potato center (CIP) in ICARDA/CIP joint USAID funded project on Clean seed production, multiplication and marketing for increased potato production in Afghanistan and also represented <b>CIP</b> in <b>Future Harvest Consortium to Rebuild Agriculture in Afghanistan (FHCRAA)</b> . The main focus of the responsibilities were: (a) Identifying adapted improved varieties acceptable to producers and the consumers, and disseminating knowledge on improved varieties and cultivation techniques to improve dominant varieties in the country, (b) Evaluating existing constraints to the production of quality seed and the development of a sustainable seed production, multiplication and distribution system, (c) Developing a complex of economically efficient measures to minimize storage and handling losses in seed and ware potato for a broader adoption of storage, and seed multiplication methods on economical basis and Economic validation, and consolidation of the project results. Impact of the project was assessed by USAID Team and rated as HIGH impact project (eg. 95%) and International Potato center (CIP) awarded “ <b>Certificate of Appreciation</b> ”. The project target areas were in <b>Eastern, Central, Northern and Southern provinces of Afghanistan</b> , therefore, the undersigned has traveled to train project staff, MAIL staff and farmers and monitoring of the project activities in most difficult and conflict areas of Afghanistan.	International Potato center (CIP)
2	<b>Consultant</b>	Work as <b>Consultant</b> for <i>Solidarites</i> to develop capacity of Progressive Relay Farmers (PRFs), technical staff of <i>Solidarites</i> ,	<i>Solidarites</i> , French NGO



		staff of Ministry (MAIL) on potato clean seed production, multiplication and marketing in <b>Bamiyan</b> and <b>Samangan</b> provinces of Afghanistan. During this consultancy work, surveys and diagnostic studies conducted on existing seed potato production constraints in Bamiyan and Samongon provinces and a package of comprehensive and practicable recommendations was developed on seed potato production in Bamiyan and Roy Doab, for implementation in its future programs.	
3	<b>Consultant</b>	Work as <b>consultant</b> for <b>Aga Khan Foundation, Afghanistan (AKFA)</b> in <b>Badakhshan Province, Afghanistan</b> on identification of alternative cropping system in relation to the actual water availability in area surrounding each of the project canals based on analysis of farming system. The study was based on seven districts including Faizabad, Bharak, Jurm, Khash, Ishkashim, Shegnon and Koranwamungon with man focus on: Develop research agenda with MAIL, analyze farming system in project areas, identify alternative cropping opportunity based on water availability, recommend cropping pattern in different agro-ecological zones and additional technical support EU funded project in Badakhshan Province, Afghanistan.	Aga Khan Foundation, Afghanistan (AKFA)
4	<b>Consultant</b>	<b>FAO</b> , Pesticide Risk Reduction Group and Principal Trainer on <i>Obsolete Pesticides Inventory, Environment Risk Assessment and Safeguarding</i>	FAO, Izmir, Turkey

### 13: PRESENT AND PAST MEMBERSHIPS OF NATIONAL AND INTERNATIONAL SCIENTIFIC SOCIETIES

S. No	NATIONAL AND INTERNATIONAL SCIENTIFIC SOCIETIES
1	Australian Plant Pathological Society (APPS)
2	American Phytopathological Society (APS)
3	American Potato Association (APA)
4	Society of General Microbiology (SGM)
5	Association of Applied Biologist (AAB)
6	International Working Group on Plant Viruses with Fungal Vector (IWGPVFFV)
7	The Society for the Advancement of Breeding Research in Asia and Oceania (SABRAO)
8	Pakistan Phytopathological Society (PPS)
9	Crop Protection Association of Pakistan (CPAP)
10	Pakistan Botanical Society (PBS)

### 14: AWARDS AND DISTINCTIONS

S. NO	NAME OF THE AWARD	AGENCY
1	Association of Commonwealth Universities (ACU) Award for the year 1992-1995	Association of Commonwealth Universities (ACU), UK
2	Fulbright Research Fellow Award for the year 2002-2004	Fulbright Commission, USA
3.	Recommended /Nominated for the Presidential Award for Technology & Technology 2010	
4	Recommended/Nominated for Sitara-i-Imtiaz, 2013 & 2016	

**15: Countries visited for the purpose of professional conduct**

USA, UK and European Union Countries, Canada, Australia, Peru and South American Countries, Saudi Arabia & Middle Eastern Countries, Afghanistan, India and Turkey

**16: ADDITIONAL PROFESSIONAL AND MANAGERIAL RESPONSIBILITIES-CONDUCTED AND IN PROGRESS**

S. NO	TITLE/RESPONSIBILITY
1	Conveners, Accreditation Inspection Committees (AICs) for the accreditation of various Department at University of Agriculture, Faisalabad, Arid University Rawalpindi, Punjab University, BZU University, Multan, and University of Sargodha, University of Poonch, Rawalakot.
2	Present, National Curriculum Revision Committee for Plant Pathology 2010 and 2014
3	Member/Secretary, National Curriculum Revision Committee for Plant Pathology 2010
4	General Secretary 2008-10 Session, Pakistan Phytopathological Society (APS),
5	Member of Think Tank, NWFP The University of Agriculture, Peshawar
6	Chairman, Department of Plant Pathology, The University of Agriculture, Peshawar
7	Convener, Board of Studies in Plant Pathology, The University of Agriculture, Peshawar
8	Member, Board of Faculty, Faculty of Crop Protection & Crop Production Sciences
9	Member, Board of Studies in Microbiology, Hazara University, Manshera, NWFP
10	Member, Board of Studies in Microbiology, Abasyn University. NWFP, Peshawar
11	Member, Academic Council, The University of Agriculture, Peshawar
12	Approved Examiner, University of Peshawar, Peshawar
13	Approved Examiner, Islamia College University Peshawar, Peshawar
14	Editor/Associate Editor, Sarhad Journal of Agriculture, a bimonthly referred journal. 1998-2003.
15	Member, Central Purchase Committee, The University of Agriculture, Peshawar. 1998-2002
16	Member, Science and Technology Fund Management and Procurement Committee, The University of Agriculture, Peshawar. 2000-to date.
17	Warden and Senior Warden, NWFP The University of Agriculture, Peshawar. 1998-2002, and 2003-2004.
18	Member, Committee for Pakistan in the 21 <sup>st</sup> Century: Vision 2030 Document, NWFP The University of Agriculture, Peshawar
19	Member, Library Committee, The University of Agriculture Peshawar
20	Member, Board of Governor, Institute of Biotechnology and Genetic Engineering, AUP, Peshawar



July 10, 2018

Prof. Dr. Muhammad Arif