

CURRICULUM VITAE (CV)
of
Krishna Pada Halder, PhD
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A. PERSONAL DETAILS:

1.	Name	: Krishna Pada Halder
2.	Father's name	: Late Tripti Halder
3.	Mother's name	: Late Manoka Halder
4.	Permanent address	: Vill: Brahamarber, P.O: Bayersingh, Dist: Khulna, Bangladesh
5.	Present address	: Chief Scientific Officer and Head, Farm Management Division, Bangladesh Rice Research Institute, Gazipur-1701, Bangladesh
6.	Date of birth	: 05-09-1962
7.	Nationality	: Bangladeshi by birth

B. EDUCATION

Degree / Certificate	Division/ Class/ Grade	Year of passing	Board / University	Subjects offered
Ph.D	Completed	2002	University of London, UK	Water stress and nutritional status on the growth medium of rice
M.Sc (Ag) Agronomy	Second Class	1987	Bangladesh Agril. University, Mymensingh	General Agronomy, Advanced Crop Husbandry, Agronomic Research
B.Sc (Ag) Hons	Second Class	1983	Bangladesh Agril. University, Mymensingh	Agronomy, Soil Science, Crop Botany, Genetics and Plant Breeding, Entomology, Pathology, Horticulture, Agril Chemistry, Statistics, etc
H.S.C (Science)	Second division	1979	Jessore	Bengali, English, Elective Math., Physics, Chemistry, Biology, etc.
S.S.C (Science)	First division	1977	Jessore	Bengali, English, Gen.Math., Elective Math., Physics, Chemistry, Biology, etc.

C. AWARD: DIC award in crop Science from Imperial College of Science, Technology and Medicine, UK.

D. LIST OF THESIS

Title of the thesis	Degree	Year	University	Country
Management needs for photoperiod sensitive rices based on climates	M.Sc (Ag) in Agronomy	1987	Bangladesh Agricultural University	Bangladesh
The influence of water stress and nutrient solution electrical (EC) conductivity on the growth of rice (<i>Oryza sativa</i> L.)	Ph.D	2002	Imperial College of Science, Technology and Medicine; University of London	UK

E. EMPLOYMENT

Position	Division and Organization	Place of posting	Period		Yrs- mons- days
			From	TO	
Scientific Officer (SO)	Farm Management Division, BRRI	BRRI Regional Station, Sonagazi, Feni	28-6-1987	18-6-1996	8 yrs 11 mons 20 ds
Senior Scientific Officer (SSO)	Farm Management Division, BRRI	BRRI Head Quarter, Gazipur	19-6-1996	15-10-2005	9 yrs 3 mons 26 ds
Principal Scientific Officer (PSO)	Farm Management Division, BRRI	BRRI Head Quarter, Gazipur	16-10-2005	2-4-2010	4 yrs 5 mons 16 ds
Principal Scientific Officer and Head (In-Charge)	Farm Management Division, BRRI	BRRI Head Quarter, Gazipur	03-04-2010	23-08-2013	3 yrs 4 mons 20 ds
Chief Scientific Officer (CSO) and Head	Farm Management Division, BRRI	BRRI Head Quarter, Gazipur	24-08-2013	Cont.	1 yrs 7 mons 21 ds

F. PROFESSIONAL TRAINING

Name	Period		Organization and Country
	From	To	
<u>In-Country Training</u>			
Administration, office management & communication	02-02-1986	13-02-1986	Graduate Training Institute , BAU, Mymensingh, Bangladesh
Theory and practices of rice production, applied research and communication.	11-2-1989	10-6-1989	BRRI, Bangladesh
Research planning and evaluation	26-11-1989	10-12-1989	Bangladesh Agricultural Research Council, Bangladesh
Communication and transfer of technology.	14-11-1993	04-12-1993	Graduate Training Institute, Bangladesh Agricultural University, Mymensingh, Bangladesh
Hybrid rice seed production training course	02-05-2007	03-05-2007	BRRI, Bangladesh
Modern land management course	22-07-2007	26-07-2007	Regional Public Administration Training Centre (RPATC), Dhaka, Bangladesh
Research proposal preparation and scientific report writing	24-08-2013	29-08-2013	BRAC-CMD, Rajendrapur, Gazipur, Bangladesh
<u>Foreign Training</u>			
Rice production	01-6-1994	17-7-1994	Korean International Co-operation Agency (KOICA), Republic of Korea
Safety induction course	11-11-1998	13-11-1998	Imperial College at Wye, UK

G. WORKSHOP

Name	Period		Organization and Country
	From	To	
Seed technology/Industry workshop	05-03-2012	08-03-2012	Goa, India

H. LANGUAGES

Language	Proficiency			
	Reading	Writing	Speaking	Listening
English	Excellent	Excellent	Excellent	Excellent
Bengali	Excellent	Excellent	Excellent	Excellent

I. WORK EXPERIENCE, DUTIES AND RESPONSIBILITIES

1. Working in the Farm Management Division of BRRI since 1987 with different capacities like Scientific Officer, Senior Scientific Officer and Principal Scientific Officer: also working as Head of the Farm Management Division since 03 April'2010.
2. Planning, designing and executing the research activities of the Farm Management Division of BRRI on rice crop.
3. Collection, compilation, analysis and interpretation of research data for the evaluation of the experiments.
4. Preparation of the annual internal review report, annual report of the Farm Management Division of BRRI and writing technical papers for scientific journals.
5. Assist the BRRI authority for leading, coordination and execution the different activities of Farm Management Division of BRRI.
6. Management of labor, land, farm implements, deep tube well, irrigation and drainage, draft animal, garden etc.
7. Assist the BRRI authority to coordinate Farm Management and Labour Management activities of the Regional Stations of BRRI.
8. Management of rice production and post harvest operation of rice
9. Worked as the In charge of BRRI Regional Station, Sonagazi, Feni
10. Worked as a Chairman and a member of many committee of BRRI, namely Dormitory committee, Tadanta Committee etc formed by BRRI authority.
11. Worked as a resource speaker for taking class at BRRI rice production training classes.

J. PUBLICATION: Forty two research publication published in different national and international journal (List is attached herewith)

K. KNOWLEDGE ON COMPUTER

1. Good understanding of Microsoft word and Excel
2. Statistical packages (Genstat, Irristat and Minitab).
3. Regular use of internet, and e-mail
4. Can learn new packages quickly.

L. PROFESSIONAL MEMBERSHIP

1. Bangladesh Society of Agronomy (Life member).
2. Bangladesh Society of Advancement of Science and Technology (Active member).
3. Bangladesh Krishivid Institution (Active member).
4. BRRI Scientist's Association (Active member).
5. BRRI Officers Club
6. Bangladesh Association for the Scientists and Scientific Profession (Life member).

Publication in national and international Journal

Full Papers 42 as Principal author: 25 and as Co-author: 17

<p>1. K. P. Halder and S. W. Burrage. 2006. Effect of water stress and nutrient solution electrical conductivity (EC) on ion concentration in different plant parts of rice. . Indian Agriculturist. 50(3&4):135-142.</p>
<p>2. K. P. Halder and S. W. Burrage. 2005. Effect of drought stress and nutrient solution electrical conductivity on ion uptake by rice plant. Indian Agriculturist. 49(3&4):197-212.</p>
<p>3. K. P. Halder and S. W. Burrage. 2003. Water stress in terms of solar radiation (0.60 MJ m⁻²) received by the plant and nutrient solution electrical conductivity on leaf gas exchange of rice grown in nutrient film technique. Indian Agriculturist. 47(3&4):225-233.</p>
<p>4. K.P. Halder., M.A. Rashid., M.A. Rashid.,A.A. Choudhury and M.A.W. Miah. 1995. Effect of time and frequency Influence of hand weeding on the yield and yield components of transplanted modern rice. <i>The Bangladesh Rice Journal</i>. 6 (1&2):73-76.</p>
<p>5. K.P. Halder., M.J.U.Chowdhury. and M.K. Dey Amin . 1999. Growth and yield of wheat as affected by planting method and variety in the coastal area of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 26(2): 281-284.</p>
<p>6. K.P.Halder., M.J.U.Chowdhury. and N.Ahmed. 2000. Effect of planting methods and nitrogen rates on the yield and yield components of aus rice grown under rainfed condition at the coastal area of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 27(1): 59-64.</p>
<p>7. K.P.Halder., M.J.U.Chowdhury.N. Ahmed and M.M. Husain. 2000. Effect of planting dates, seedling age and spacing on the yield and yield components of late transplanted aman rice in coastal region of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 27(2): 199-203.</p>
<p>8. K.P. Halder., N. Ahmed., M. Hasan, R. Yasmin and S.S. Parul. 2002. Effect of spacing and nitrogen rates on the yield and yield components of dibble aus rice in the coastal area of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 29(1):15-18</p>
<p>9. K.P. Halder., M.J.U.Chowdhury.,N. Ahmed., M. Hasan and S.S. Parul. 2002. Effect of sowing methods on the yield and yield components of upland aus rice in the coastal area of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 29(1): 19-22.</p>
<p>10.K. P. Halder. and S. W Burrage. 2003. Drought stress effects on water relations of rice grown in nutrient film technique. Pakistan Journal of Biological Sciences. 6(5):441-444.</p>
<p>11.K.P.Halder, S.M.A.Sattar and M.J.U.Chowdhury 2003. Effect of planting dates on dry matter accumulation, yield and yield components of some transplant aman rice. J. Sci. Foundation. 1(2):99-105.</p>
<p>12.K.P.Halder, S.M.A.Sattar, M.S.Islam and M.J.U. Chowdhury. 2004. Effect of planting dates on phenological events of transplanted aman rice. Journal of Agronomy. 3(2):90-93.</p>

13. K. P. Halder. and S. W Burrage. 2003. Effect of drought stress on photosynthesis and leaf gas exchange of rice grown in nutrient film technique (NFT). <i>Pakistan Journal of Biological Sciences.</i> 7(4):563-565.
14. K. P. Halder, S.W. Burrage and M.S.Islam. 2004. Effect of drought stress and nutrient solution electrical conductivity (EC) on dry matter partitioning of rice. <i>J. Bangladesh Agril. Univ.</i> 2(2):221-224.
15. K. P. Halder and S. W Burrage. 2005. Effect of drought stress in terms of solar radiation (0.60 MJ m ⁻²) received by the plant and nutrient solution electrical conductivity on dry matter, yield and yield components of rice. <i>J. Subtrop. Agric. Res. Dev.</i> 3(1):51-56.
16. K.P. Halder., M.A. Rashid., S.B.Siddique., K.U. Ahmed., M.A. Rashid. and A.A. Choudhury. 1995. Influence of planting times on the growth and yield of some modern transplanted aman rices. <i>The Bangladesh Rice Journal.</i> 6 (1&2):7-11.
17. K. P. Halder and S.W. Burrage. 2005. Effect of water stress and electrical conductivity of nutrient solution on the growth of rice. <i>J. Bangladesh Agril. Univ.</i> 3(2):333-342.
18. K. P. Halder and S. W. Burrage. 2007. Water stress and nutrient solution electrical conductivity (EC) on rice plant. I. Photosynthetic Gas Exchange Aspects. <i>Bangladesh Rice J.</i> 12(1&2):17-23.
19. K. P. Halder and S. W. Burrage. 2007. Water stress and nutrient solution electrical conductivity (EC) on rice plant. II. Water Relation Aspect. <i>Bangladesh Rice J.</i> 12(1&2):25-29.
20. K. P. Halder and S. W. Burrage. 2007. Water stress and nutrient solution electrical conductivity (EC) on rice plant. III. Yield and Yield Component. <i>Bangladesh Rice J.</i> 12(1&2):31-35.
21. K. P. Halder and S. W. Burrage. 2008. Effect of water stress in terms of solar radiation (0.60 MJ M ⁻²) and nutrient solution electrical conductivity on water relations of rice. <i>Bangladesh Rice J.</i> 13(1):63-67.
22. K. P. Halder and S. W. Burrage. 2007. Effect of intermittent water stress and nutrient solution electrical conductivity on nutrient uptake by rice plant. <i>J. Bangladesh Agril Uni.</i> 5(1):1-10.
23. K.P. Halder and M.J.U.Chowdhury.2003. Effect of planting date, seedling age and variety on the yield and yield components of late transplant aman in the coastal area of Bangladesh. <i>Bangladesh J. Agril. Sci.</i> 31 (2) (Accepted)
24. K. P. Halder. and S. W Burrage. 2003. Growth and dry matter production of rice as affected by drought stress grown in nutrient film technique. (Accepted in <i>Indian Agriculturist</i>).
25. K. P. Halder. and S. W Burrage. 2003.The influence of drought stress on root

shoot ratio, yield and yield components of rice grown in nutrient film technique (NFT). (Accepted in Indian Agriculturist).
26. MS Islam, K. P. Halder and MJU Chowdhury. 2008 . Effect of crop establishment methods and variety on the yield of rice in the irrigated ecosystem. <i>Intl. J. BioRes.</i> 4(3):57-61
27. MS Islam, K. P. Halder , MJU Chowdhury and A. Khatun. 2008 . Effect of different spacing on the yield under system of rice intensification (SRI) technique in T. aman season. <i>Intl. J. BioRes.</i> 4(4):116-121.
28. MS Islam, K. P. Halder , MJU Chowdhury and M.A.B. Siddique. 2008 . Labor use efficiency and profitability of irrigated rice as affected by spacing and method of weed control. <i>Intl. J. BioRes.</i> 4(5):31-35.
29. MS Islam, K. P. Halder , MJU Chowdhury and M.A.B. Siddique. 2008 . Productivity and profitability of rice cultivation by direct seeding with different seed rates and transplanting with different spacing. <i>Intl. J. BioRes.</i> 5(5):33-38
30. MAA Mamun, MJU Chowdhury K. P. Halder and MS Islam. 2008 . Labor requirement and benefits of rice cultivation due to weeding methods and spacing. <i>Eco-friendly Agril. J.</i> 1(4):208-210.
31. MS Islam, K. P. Halder , AA Mamun and MS Islam. 2008 . Effect of seedling age and density on labor requirement and growth and yield of BRRI dhan29 under modified SRI practice. <i>Eco-friendly Agril. J.</i> 1(5):243-247.
32. MS Islam, MAR Sarkar, K. P. Halder , MH Kabir and MT Islam. 2009 . Yield and yield components of rice as influenced by spacing, seedling age and seedling density under the modified system of rice intensification. <i>Eco-friendly Agril. J.</i> 2(11):940-945.
33. M. G. Ali, M.A. Mannan., K. P. Halder . and S. B. Siddique. 1993 . Effect of planting dates on the growth and yield of modern transplanted aman rice. <i>Ann. Bangladesh Agric.</i> 3 (2):103-108.
34. S.B.Siddique., K. U. Ahmed., M.G. Ali., M.A.Jabbar., A.A. Choudhury and K.P.Halder . 1995 . Effect of planting time on yield of modern rice varieties in the south-east part (Chittagong) of Bangladesh. <i>The Bangladesh Rice Journal.</i> 6 (1&2):69-71.
35. M.A. Rashid., Md. A. Jabbar., S.B.Siddique., M.A. Rashid. and K.P. Halder . 1995 . Effect of rate and timing of N application, harvesting date and cutting height on performance of ratoon crop of BR 17. <i>The Bangladesh Rice Journal.</i> 6 (1&2):91-94.
36. M.Begum., A.A.Mamun., N.Ahmed., Z.Iqbal. and K.P. Halder . 1999 . A study of weed vegetation in boro rice (irrigated rice) as affected by land topography in old Brahmaputra flood plain agroecological zone of Bangladesh. <i>Indian Agric.</i> 43 (3&4):143-150.
37. M.J.U.Chowdhury., K.P.Halder ., M.M.Rahman and M.M. Muniruzzaman. 1999 . Effect of age group and working periods on the efficiency of labourers for rice cultivation.. <i>Bangladesh J. Agril. Sci.</i> 26(1): 141-145.
38. M.J.U.Chowdhury., K.P.Halder and M.S.Kabir. 2000 . Productivity and

<p>economic impact of late transplant aman rice as affected by spacing and variety. <i>Bangladesh J. Agril. Sci.</i> 27(2): 233-238.</p>
<p>39.M.A. Muttaleb., M.A.Rashid and K.P.Halder. 2000. Adoption of balanced fertilizer in rainfed rice production in a coastal area of Bangladesh. <i>Bangladesh J. Train. and Dev.</i> 13 (1&2):211-217.</p>
<p>40.S.S. Parul., M. Hasan., K.M. Akther., K.P. Halder and R. Yasmin. 2002. Socio-economic condition of a Bangladesh village: A study at barind tract. <i>Bangladesh J. Agril. Sci.</i> 29 (1): 23-30</p>
<p>41.M.S. Rhaman, A.L. Shah, M.A.Mazid Miah, M.Ishaque and K.P.Halder.2002. Study of salinity status in BRRI Sonagazi farm. <i>Bangladesh Rice J. 11(Special):</i>29-34.</p>
<p>42.M.A.A.Mamun, K P Halder, M R Manir, M A Hossain, M Z Alam and N Akter. 2011. Effect of harvesting time on seed quality of BRRI DHAN29. <i>Eco-friendly Agril. J.</i> 4(02): 546-549</p>

Short communication, Bulletin, Symposium proceedings and Megazine

<p><u>Short Communication: 01</u></p> <p>S.K.Zaman., G.M.Panaullah., K.P. Halder and N.I. Bhuiyan. 1991. BR20 and BR21: Promising upland rices for Bangladesh coastal region. <i>IRRN</i> 16:6 (December 1991) P.17</p>
<p><u>Bulletins: 01</u></p> <p>M.J.U. Chowdhury, K.P.Halder and M.S. Islam. 2003. Bulletin about activities of Farm Management Division of BRRI, made on 06 January, 2003.</p>
<p><u>Symposium Proceedings : 01</u></p> <p>M.J.U.Chowdhury, M.S.Islam and K.P.Halder. 2005. Farm management status and its impact on crop production and yield gap between research organization and farmer's field of Bangladesh. Paper presented at 8th Biennial Agronomy Convention organized by Bangladesh Society of Agronomy, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh held on 26 May 2005.</p>
<p><u>Magazine : 01</u></p> <p>Md. Sirajul Islam, Krishna Pada Halder and Md. Jahan Ullah Chowdhury 2004 Poverty and its relationship with environment. Published in Observer Magazine. Friday, July 9, 2004.</p>

List of Technology Developed:

Involved in the development of the following technologies:

1. Gender issue and application of nitrogenous fertilizer for the profitability and labor efficiency for rice cultivation. If USG is applied as a source of N by male labor the highest marginal rate of return (MRR) Tk. 138.7 ha⁻¹ was obtained

indicating that additional investment of every Tk.100.0 ha⁻¹ gave return of Tk. 138.7 ha⁻¹. Therefore, application of USG in the rice field is profitable than application of PU as a source of nitrogen.

2. Profitability and labor efficiency for rice cultivation indicated that hand weeding and use of weeder increased labor cost is Tk.4080 ha⁻¹.and Tk 930 ha⁻¹over application of herbicide Refit.
3. Study the efficiency of BRRI laborers and contractor's laborers for different methods of weed control indicating that cost increased by Tk 3645 ha⁻¹ and Tk. 1177 ha⁻¹ in hand weeding and weeder machine, respectively operated by BRRI Laborers over herbicides application.
4. Cost and return of HYV rice cultivation during aus'04, Taman'04 and Boro season'04-05 was conducted at the West Byde of BRRI farm, showed that the total variable cost for rice production in one hectare of land was Tk. 22283, 25144 and 32856 in aus, aman and boro seasons respectively. The gross return was Tk. 43170, 53720 and 76600 in aus, aman and boro seasons respectively. The gross margin was Tk. 20887, 28658 and 43744 in aus, aman and boro seasons respectively. The BCR was 1.94, 2.14 and 2.33 in aus, aman and boro seasons respectively.
5. The drum seeding method produced the 10-15% higher grain yield that might be higher number of panicle number m⁻² and grains panicle⁻¹ compared to direct seeding and transplanting method. The drum seeding method reduced growth duration about 10 to 11 days compared to transplanting method.
6. In 2005-06, the laborer's wage rate at different locations around BRRI Head quarters was Tk. 127 to 134 for eight hours works per day.
7. At BRRI about 60% labours man day were utilized for research activities, 35% for support service and 5% for other activities.
8. Weeding cost increased in hand weeding about Tk. 3758 ha⁻¹ and Tk. 3653 ha⁻¹ over RIFIT applied plot in aus and aman season, respectively.
9. Weeding cost increased in hand weeding about Tk. 1667 ha⁻¹ over weeding by weeder machine.
10. Contractor's labors are more efficient than BRRI's muster roll labors.
11. Ten to 15% labor was saved in drum seeding method of rice compared to transplanting method has identified.
12. Direct sowing of rice seeds could save labour cost and reduced growing period without affecting yield significantly compare to transplanting method. (In direct sowing method, Tk. 1286.15 ha⁻¹ and Tk. 576.9 ha⁻¹ profit were obtained from aus and boro seasons, respectively).
13. Highest biomass of cowpea is obtained from June sowing.
14. In T.aman season, growing rice using two seedlings hill⁻¹ with a spacing of 25 cm X 20 cm is the best in term of productivity and profitability. It gave Tk. 405 ha⁻¹ marginal rate of return.
15. Surveyed the adoption of balanced fertilizer in rainfed rice production coastal area of Feni district. Eighty seven percent of the farmers had poor or moderately adopted balanced fertilizer compared to 13 percent having fairly adopted. None were balanced fertilizer adopter.
16. Comparing line transplanting and haphazard transplanting of rice, it was found that haphazard transplanting could save labor cost (14%) and time.
17. Algae control in rice field by using copper sulphate @ 100 gm per 10 liters of water at 25 days after transplanting has been identified for better growth and yield of rice.
18. Water stress at reproductive phase is very much sensitive than water stress at vegetative phase has been identified. Under water limiting condition application of nutrients reduced grain yield (22-32%) compared to unfertilized plots have also been documented.

19. Reproductive phase water stress is very much sensitive for grain filling of rice. It was identified that the grain yield decreased in water stressed plant mainly due to decreased of filled grain percentage.
20. Panicle initiation, heading and maturity delayed with decreasing air temperature and solar radiation. An average temperature 23.92, 26.17 and 21.31^oC for 10 days after start of heading was required for complete heading for Nizersail, BR11 and BR22 respectively. BR11 is most sensitive to temperature and solar radiation than BR22 and Nizersail.
21. In T. aman season, forty five to 60 days old seedling and the variety BR23 is suitable for late planting (20 to 30 September) in the south-eastern coastal area of Bangladesh. Later planting like 10 October grain yield decreased drastically (43 to 53%) compared to planting on 20 and 30 September.
22. The cut-off date of planting for Nizersail was 22 September while 15 September was for BR11 and BR22 at Joydebpur area of Bangladesh.
23. Suitable method of labor supervision has been identified from direct supervision, indirect supervision, job contract and contractor's laborers. The contractor's labour could complete the job with shortest time. Quality of work is better for direct supervision with institute's labor.
24. Earlier working time of the day (6 am to 8 am) is the productive hour for laborer's work. Male laborers are better for harvesting and females are for weeding and winnowing of rice.
25. It was identified that the number and intensity of weed infestation especially annuals weed decreases according to the descending of land elevation.
26. Mechanical and manual weeding has no significant different effect at early stage of rice growth (38-48 DAT). Manual weed control is desirable in our socio-economic situation. Quality of weeding is better by manual weeding and mechanical weeding save time.

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