

# Irrigation and Water Management Research

1985-2016

## *Program Leader*

**Dr. Md. Abdur Razzaque Akanda**  
CSO and Head

## **Compiled and Edited**

*Dr. Md. Abdur Razzaque Akanda, Chief Scientific Officer*

*Dr. Abeda Khatun, Principal Scientific Officer*

*Dr. Md. Anower Hossain, Senior Scientific Officer*

*Dr. Sujit Kumar Biswas, Senior Scientific Officer*

*Dr. Khokan Kumar Sarker, Scientific Officer*

*Rahena Parvin Rannu, Scientific Officer*

*K. Faisal Ibn Murad, Scientific Officer*

*SK. Shamsul Alam Kamar, Scientific Officer*

*Md. Roknuzzaman, Scientific Officer*

*Farzana Akter, Scientific Officer*



**Irrigation and Water Management Division**  
**Bangladesh Agricultural Research Institute**  
**Joydebpur, Gazipur-1701**

## **Published by**

Irrigation and Water Management Division  
Bangladesh Agricultural Research Institute  
Joydebpur, Gazipur-1701  
Tel: 88-02-9261512  
Email: razzaquebari@gmail.com

**Printed (Third Edition): November, 2016**

## **Design and Word Processing**

Md. Shamim Miah, Computer Operator

## **Printed at**

Maysha Printing Press  
Shop No. 500/501  
Lane No. 8, Bakusha Market  
Nilkhet, Dhaka-1205, Cell: 01818805245  
E-mail: mpphasan@yahoo.com

## **Citation**

Akanda, M. A. R. et al. (eds.). 2016. Irrigation and Water Management Research Abstracts 1985-2016. Irrigation and Water Management Division. Bangladesh Agricultural Research Institute (BARI), Joydebpur, Gazipur-1701.



বাংলাদেশ কৃষি গবেষণা ইনস্টিটিউট  
BANGLADESH AGRICULTURAL RESEARCH INSTITUTE  
JOYDEBPUR, GAZIPUR-1701

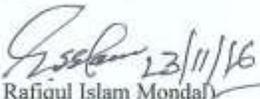
কৃষিই সমৃদ্ধি

Office Ph : 9252715  
FAX : 9261501-5  
Fax: 880-2-9261415  
E-mail: dg.bari@bari.gov.bd  
Web: www.bari.gov.bd

## Preface

It is a great pleasure for me to write a few words on the Abstracts of Irrigation and Water Management Research. I am very glad to know that Irrigation and Water Management Division, Bangladesh Agricultural Research Institute (BARI) is going to publish "Irrigation and Water Management Research Abstracts" on different research activities carried out during the 1985-2016. This publication highlights the findings very briefly of research activities on irrigation and water management aspect. It is certainly an opportunity for the concerned scientists, teachers, students and other readers to get almost all the research findings of the division for the said period in a single volume like this one. The compilers have rightly chosen the annual reports of IWM Division of the Institute as the source of materials for incorporation here in this volume. The abstracts show the findings of 174 (one hundred seventy four) experiments of the said division those have been carried out during a long period of thirty two years beginning from 1985-2016. It contains valuable information and research results many of which may be considered as appropriate technologies. Farmers and other users may get benefit from these technologies. Mention may be made of such findings as irrigation water requirement of different crops, response of irrigation to different crops at different growth stages, efficiency of different methods of irrigation, micro irrigation systems such as drip, sprinkler etc., performances of the machinery for irrigation and their utility and farmers' preferences, wastewater and groundwater management, crops modeling tolerance of crop varieties against water loggings, salinity and drought, assessment of water productivity etc.

I firmly believe that this publication will be helpful for the scientists, students and teachers in developing effective research program on irrigation and water management. It will also help extension personnel and policy makers. I express my heartfelt thanks to the scientists of Irrigation and Water Management Division for their sincere effort for this publication.

  
(Dr. Md. Rafiqul Islam Mondal)  
Director General

<b>Contents</b>	<b>Page No</b>
<b>Cereal Crops</b>	<b>1</b>
Wheat	1
Maize	9
<b>Pulse Crops</b>	<b>14</b>
Lentil	14
Chickpea	14
Cowpea	15
<b>Oilseed Crops</b>	<b>16</b>
Mustard	16
Groundnut	18
Sesame	20
Sunflower	21
Soybean	22
<b>Tuber Crops</b>	<b>23</b>
Potato	23
Sweet Potato	26
<b>Vegetable Crops</b>	<b>27</b>
Winter Tomato	27
Summer Tomato	32
Brinjal	34
Cabbage	35
Cauliflower	35
Garden pea	36
Capsicum	36
Radish	37
Pumpkin	37
Bottle Gourd	38
Bitter Gourd	38
<b>Fruit Crops</b>	<b>39</b>
Mango	39
Jackfruit	39
Guava	40
Papaya	40
Litchi	40
Watermelon	41
Muskmelon	42
Strawberry	42
Mandarin	43
Sweet Orange	43
<b>Spices Crops</b>	<b>44</b>
Onion	44
Garlic	48
Chilli	49
<b>Non-Commodity</b>	<b>50-65</b>

