

ISSN 1991-8925

Volume 29

July 2007

BANGLADESH
JOURNAL OF
SUGARCANE

BANGLADESH JOURNAL OF SUGARCANE

Volume 29 July 2007

Publication No. 137



BANGLADESH SUGARCANE RESEARCH INSTITUTE

ISHURDI-6620, PABNA, BANGLADESH

BANGLADESH JOURNAL OF SUGARCANE

Volume 29

July 2007

EDITORIAL BOARD

Md. Abdul Mannan, <i>M.Sc. (Ag.) (BAU); Ph. D. (BSMRAU)</i>	- Editor
Arif ul Alam, <i>M.Sc. (Ag) (BAU); Ph. D. (UPLB. Phil)</i>	- Associate Editor
Samajit Kumar Pal, <i>M.Sc. (Ag.) (BAU); Ph. D. (Phil.)</i>	- Assistant Editor
M.A. Samad Miah, <i>M.Sc. (Ag.) (BAU); Ph. D. (U.K.)</i>	- Member
M Khalilur Rahman, <i>M S (Agro.) Ph. D. (USSR)</i>	- Member
Md. Mahmudul Alam, <i>M.Sc. (Ag.Econ.) (BSMRAU)</i>	- Member
Md. Abdullah, <i>M.Sc. (Ag.) (BAU); Ph. D. (Thailand)</i>	- Member
Md. Amzad Hossain, <i>M.Sc. (Ag.) (BAU); Ph. D. (Japan)</i>	- Member

EDITOR'S NOTE

I am happy to forward the 29th volume of the Bangladesh Journal of Sugarcane. The volume contains problem oriented research results and recommendations to overcome constraints of sugarcane cultivation in the country as well as elsewhere in the world. The contributors of the volume are from this institute; however, authors from other organizations have contributed.

I thank the contributors of 29th volume of the Bangladesh Journal of Sugarcane for their interest and continued support to the Journal on behalf of the editorial board. I believe that Bangladesh Journal of Sugarcane is an ideal journal for the enthusiastic scientists working on sugarcane and auxiliary sugar crops throughout the world. It is our expectation that in the future submission of articles will be regular and helps bring out next volumes in time.

We are interested in bringing out some changes to accommodate quality reviewed papers and research results on allied sugar crops. Further responses from relevant scientists are also expected.

I believe that the articles of the volume would help minimize farmers field oriented problems. This will benefit the farmers, students, teachers, scientists and interested persons by increasing the yield of cane and sugar and will also enhance productivity in achieving self-sufficiency in sugar and gur production in Bangladesh.

Dr. Md. Abdul Mannan
DIRECTOR GENERAL
&
EDITOR

CONTENTS

	Page
Transformation of Foreign Gene in Sugarcane Variety Isd 28 using <i>Agrobacterium</i>-mediated Method	
– M.A. Hossain, M.M. Shaik, N. Islam, H.M. Faruquee and M.A.S. Miah.....	1
Morphological Characters of Some Exotic Sugarcane Varieties	
– K. M. Alam, M.A. Hossain, A.K.M.R. Islam and A.B.M.M. Rahman.....	7
Influence of Manganese and Boron on Sustainable Sugarcane Yield in Old Himalayan Piedmont Plain Soils	
– G.C. Paul, S.M. Bokhtiar, M.A. Haque, K.M. Alam and G.M.A. Hossain.....	17
Economics of Subsidy Used for Sugarcane Production in Mills Zones of Bangladesh	
– M.M. Alam, G.M. Monirul Alam, S.K. Pal and M.A. Rashid.....	23
Fingerprinting of Sugarcane using RAPD Markers	
– N. Islam, M.A. Hossain, R.M.S. Shah Nawaz and S. Akhter.....	28
Susceptibility of Some Promising Sugarcane Clones to Major Insect Pests of Sugarcane	
– M. Abdullah, M.M. Biswas, M.A. Alam, M.A. Rahman and M. Begum.....	34
Response of Sugarcane Varieties to Different Levels of Inputs	
– M.S. Hossain, A.K.M.R. Islam, M.J. Alam and M.L. Kabir	42
Effect of NPK and Nematode Inoculum on Root Knot Disease Incidence and Some Yield Parameters Contributing to Yield of Sugarcane and Recovery of Sugar	
– M. Iqbal, M.U. Ahmed, I. Hossain and I.H. Miah	48
Performance of Sugarcane with Double Intercrops in Tista Meander Flood Plain Soils	
– T. Ahmed, M.K. Bashar, M.M. Biswas, M. Abdullah and M.N. Kashem.....	56
Agronomic Performance of Some Promising Clones of Sugarcane Influenced by Different Planting Time	
– A.K.M.R. Islam, M.S. Hossain, M.J. Alam, M.K. Rahman and M.L. Kabir.....	60
Profitability of Intercropping with Sugarcane in Some Selected Mills Zones	
– G.M. Monirul Alam, M.M. Alam, M. J. Alam, W. A. Zahan and M..S. Alam.....	64
Performance of Selected Winter Vegetables as First and Sunhemp as Second Intercrop with Paired Row Sugarcane	
– M.N. Kashem, G. M. A. Hossain, M.A. Jabber, M.K. Bashar and K.S. Alam.....	68
Screening Sugarcane Clones for Abiotic stress	
– M.K. Begum, M.A.S. Miah, M.S. Islam, M.R. Alam and M.A. Hossain.....	74

(Continued)

CONTENTS

(Continued)

Productivity of Sugarcane with Wheat-Mungbean Intercropping Combination under Paired Row Planting System	78
– M.J. Alam, M.S. Hossain, A.K.M.R. Islam, M.K. Rahman and M.L. Kabir.....	
Performance of Green Manures as Second Intercrops on Sugarcane Productivity in Sugarcane-Potato Intercropping System	85
– G.M.A. Hossain, M.N. Kashem, K.M. Alam, M.K. Bashir and G.C. Paul.....	
Efficacy of Cruiser 70 WS and Cruiser BLE in Controlling Termites and Seed Borne Pathogens when Applied with Sett Treating Fungicides	92
– M. A. Rashid, M. N. Alam, M. A. T. Sohel, N. Islam and S. Akhter.....	
Performance of Sugarcane Grown under Water-Logging Stress Condition	96
– M.S. Islam, M.A.S. Miah, M.K. Begum, M.R. Alam and M.A. Hossain.....	
Evaluation of Some Selected Clones in the Himalayan Piedmont Plain Soils	106
– M.M. Rahman, B.P. Podder, M.A. Rahman, R.C. Kabiraj and K.S. Alam.....	
Performance of Some Sugarcane Varieties in Northern Region of Bangladesh	110
– R.C. Kabiraj, M.M. Rahman, M.A. Rahman and K. S. Alam	
Ratooning Potential of BSRI Released Latest Sugarcane Varieties in Old Himalayan Piedmont Plain Soils	115
–N.U. Khan, R.C. Kabiraj, K. S. Alam, and M. H. Rahman.....	
Productivity of Tropical Sugarbeet Varieties in Respect of Growth, Yield and Quality	120
– M.K. Rahman, M.J. Alam, M.S. Hossain, A.K.M.R. Islam and M.L. Kabir.....	
SHORT COMMUNICATIONS	
Varietal Performances of Budchip as Planting Materials for Sugarcane at Chuadanga Area	124
– M.A. Rahman and S.U.K. Eusufzai.....	
Screening of Some Short Residual Insecticides in Controlling Sugarcane Termite	127
– M. M. Biswas, M. A. Alam, T. Ahmed and M. Abdullah	
Determination of Cane Sampling Method for Chemical Analysis	131
– M.S. Arefin, M.R. Alam and M.A. Jabber.....	
Efficacy of Some Carbofuran Insecticides against Top Shoot Borer of Sugarcane	133
– S. Akhter, M.A. Alam, M. Begum, M.N. Alam and N. Islam.....	
Comparative Resistance of Thirty Sugarcane Clones to Wilt Disease of Sugarcane	137
– F. Begum, M.I. Talukder, M. Iqbal and M.A. Rahman.....	
Control of Sugarcane Termites with Some New Organophosphate Insecticides	140
– M.N. Alam, M. Abdullah, M.A. Alam and M.A.T. Sohel.....	