Contents

Part I  Milling

1 Rice Milling Technology to Produce Brown Rice .......................... 3  
V. Eyarkai Nambi, Annamalai Manickavasagan, and S. Shahir

Part II  Physical and Chemical Properties

2 Variations in Brown Rice Quality Among Cultivars ....................... 25  
Shabir Ahmad Mir, Manzoor Ahmad Shah,  
and Sowriappan John Don Bosco

3 Engineering Properties of Brown Rice  
from Selected Indian Varieties ........................................... 45  
V.R. Sinija, S. Sulochana, and M.S. Shwetha

4 Brown Rice Flour Rheology ................................................. 67  
Shumaila Jan, H.A. Pushpadass, D.C. Saxena,  
and R.P. Kingsly Ambrose

5 Physicochemical Characteristics of Rice Bran .......................... 79  
M.N. Lavanya, N. Venkatachalapathy, and Annamalai Manickavasagan

Part III  Nutritional and Health Benefits

6 Chemical and Nutritional Properties of Brown Rice .................... 93  
Sila Bhattacharya

7 Medicinal and Health Benefits of Brown Rice ........................... 111  
Shruti Pandey, K.R. Lijini, and A. Jayadeep

8 Glycaemic Properties of Brown Rice .................................... 123  
S. Shobana, M. Jayanthan, V. Sudha, R. Unnikrishnan,  
R.M. Anjana, and V. Mohan
Nutritional and Health Benefits of Rice Bran Oil

Amanat Ali and Sankar Devarajan

10 Microbial Association in Brown Rice and Their Influence on Human Health

P. Panneerselvam, Asish K. Binodh, Upendra Kumar, T. Sugitha, and A. Anandan

Part IV Value Addition

11 Germinated Brown Rice

Shabir Ahmad Mir, Manzoor Ahmad Shah, and Annamalai Manickavasagan

12 Value-Added Products from Brown Rice

Shabir Ahmad Mir, Manzoor Ahmad Shah, and Idrees Ahmed Wani

Part V Storage

13 Extending Shelf Life of Brown Rice Using Infrared Heating

Chandrasekar Venkitasamy and Zhongli Pan

14 Storage Entomology of Brown Rice

M. Loganathan, J. Alice R.P. Sujeetha, and R. Meenatchi

Part VI Challenges in Consumption and Marketing

15 Hurdles in Brown Rice Consumption

V. Mohan, V. Ruchi, R. Gayathri, M. Ramya Bai, S. Shobana, R.M. Anjana, R. Unnikrishnan, and V. Sudha

16 Opportunities and Challenges in Marketing of Brown Rice

S. Selvam, P. Masilamani, P.T. Umashankar, and V. Alex Albert

Index

Contents
Brown Rice
Manickavasagan, A.; Chandini, S.K.; Venkatachalapathy, N. (Eds.)
2017, XIV, 290 p. 41 illus., 23 illus. in color., Hardcover
ISBN: 978-3-319-59010-3