

Marcelo J. Carena  
Editor

# Cereals

 Springer

# Contents

## Section I Cereal Crop Breeding

<b>Maize Breeding</b> .....	3
Arnel R. Hallauer and Marcelo J. Carena	
<b>Rice Breeding</b> .....	99
Elcio P. Guimarães	
<b>Spring Wheat Breeding</b> .....	127
M. Mergoum, P.K. Singh, J.A. Anderson, R. J. Peña, R.P. Singh, S.S. Xu, and J.K. Ransom	
<b>Rye Breeding</b> .....	157
H.H. Geiger and T. Miedaner	
<b>Grain Sorghum Breeding</b> .....	183
Robert G. Henzell and David R. Jordan	
<b>Durum Wheat Breeding</b> .....	199
Conxita Royo, Elias M. Elias, and Frank A. Manthey	
<b>Barley</b> .....	227
R.D. Horsley, J.D. Franckowiak, and P.B. Schwarz	
<b>Winter and Specialty Wheat</b> .....	251
P. Baenziger, R. Graybosch, D. Van Sanford, and W. Berzonsky	
<b>Triticale: A “New” Crop with Old Challenges</b> .....	267
M. Mergoum, P.K. Singh, R.J. Peña, A.J. Lozano-del Río, K.V. Cooper, D.F. Salmon, and H. Gómez Macpherson	

**Section II Adding Value to Breeding**

<b>Statistical Analyses of Genotype by Environment Data .....</b>	<b>291</b>
Ignacio Romagosa, Fred A. van Eeuwijk, and William T.B. Thomas	
<b>Breeding for Quality Traits in Cereals: A Revised Outlook on Old and New Tools for Integrated Breeding .....</b>	<b>333</b>
Lars Munck	
<b>Breeding for Silage Quality Traits in Cereals .....</b>	<b>367</b>
Y. Barrière, S. Guillaumie, M. Pichon, and J.C. Emile	
<b>Participatory Plant Breeding in Cereals .....</b>	<b>395</b>
S. Ceccarelli and S. Grando	
<b>Index .....</b>	<b>415</b>