

Contents

Contributors	vii
Preface	ix
1 Systematics and Phylogeny of Cattle <i>A. Hassanin</i>	1
2 Genetic Aspects of Domestication <i>J.A. Lenstra and M. Felius</i>	19
3 Breeds of Cattle <i>D.S. Buchanan and J.A. Lenstra</i>	33
4 Molecular Genetics of Coat Colour Variation <i>A. Ruvinsky</i>	67
5 Genetics of Morphological Traits and Inherited Disorders <i>F.W. Nicholas</i>	90
6 Cytogenetics and Chromosome Maps <i>D.M. Larkin and M. Farré</i>	103
7 Bovine Genomics <i>D.L. Adelson, Z. Qu, J.M. Raison and S.L. Lim</i>	130
8 Bovine Immunogenetics <i>Y. Aida, S.-n. Takeshima, C.L. Baldwin and A.K. Kaushik</i>	153
9 Genetics of Disease Resistance <i>A. Ruvinsky and A. Teale</i>	192
10 Molecular Biology and Genetics of Bovine Spongiform Encephalopathy <i>N. Hunter</i>	217
11 Genetics of Behaviour in Cattle <i>P. Wiener</i>	234

12	Genetics of Reproduction in Cattle <i>B.W. Kirkpatrick</i>	260
13	Modern Reproductive Technologies and Breed Improvement <i>H.A. Shojaei Saadi and C. Robert</i>	284
14	Developmental Genetics <i>A. Ruwinsky</i>	318
15	Genetic Improvement of Dairy Cattle <i>V. Ducrocq and G. Wiggans</i>	371
16	Molecular Genetics of Milk Protein Production <i>J.A. Sharp and K. Nicholas</i>	397
17	Genetics of Fatty Acid Composition in Bovine Milk and Beef <i>R.A. Nafikov, H. Soyeurt and D.C. Beitz</i>	433
18	Genetic Improvement of Beef Cattle <i>B.P. Kinghorn, R.G. Banks and G. Simm</i>	451
19	Genomic Prediction and Genome-wide Association Studies in Beef and Dairy Cattle <i>D.J. Garrick and R. Fernando</i>	474
20	Genetics of Feed Intake and Efficiency <i>D.P. Berry, E. Kennedy and J.J. Crowley</i>	502
21	Genetics of Growth and Body Composition <i>M.L. Thonney</i>	523
22	Genetics of Meat Quality <i>R.G. Mateescu</i>	544
23	Genetic Aspects of Cattle Adaptation in the Tropics <i>H.M. Burrow</i>	571
24	Standard Genetic Nomenclature <i>Z.-L. Hu, J.M. Reecy, F. McCarthy and C.A. Park</i>	598
	Index	609