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Interaction and Stability Analysis; 15 Genotype-Environment Interaction: Progress and Prospects
16 Analysing QTL-Environment Interaction by Factorial Regression, with an Application to the CIMMYT Drought and Low-nitrogen Stress Programme in Maize17 Elements of Genotype-Environment Interaction: Genetic Components of the Photoperiod Response in Maize; 18 Mechanisms of Improved Nitrogen-use Efficiency in Cereals; 19 Biplot Analysis of Multi-environment Trial Data; 20 Linear-Bilinear Models for the Analysis of Genotype-Environment Interaction; 21 Exploring Variety-Environment Data Using Random Effects AMMI Models with Adjustments for Spatial Field Trend: Part 1: Theory
22 Exploring Variety-Environment Data Using Random Effects AMMI Models with Adjustments for Spatial Field Trend: Part 2: Applications23 Applications of Mixed Models in Plant Breeding; 24 Defining Adaptation Strategies and Yield-stability Targets in Breeding Programmes; Index

Sommario/riassunto

This text provides an overview of the rapidly developing integration and interdependence of quantitative genetics, genomics, and bioinformatics, and their application to plant breeding. Authors include international authorities from around the world.