

1. Record Nr.	UNINA9910639995003321
Autore	Hori Kiyosumi
Titolo	Molecular Research in Rice: Agronomically Important Traits 2.0
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
ISBN	3-0365-4944-7
Descrizione fisica	1 electronic resource (182 p.)
Soggetti	Research & information: general Biology, life sciences Technology, engineering, agriculture
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>This volume presents recent research achievements concerning the molecular genetic basis of agronomic traits in rice. Rice (<i>Oryza sativa</i> L.) is the most important food crop in the world, being a staple food for more than half of the world's population. Recent improvements in living standards have increased the worldwide demand for high-yielding and high-quality rice cultivars. To develop novel cultivars with superior agronomic performance, we need to understand the molecular basis of agronomically important traits related to grain yield, grain quality, disease resistance, and abiotic stress tolerance. Decoding the whole rice genome sequence revealed that ,while there are more than 37,000 genes in the ~400 Mbp rice genome, there are only about 3000 genes whose molecular functions are characterized in detail. We collected in this volume the continued research efforts of scholars that elucidate genetic networks and the molecular mechanisms controlling agronomically important traits in rice.</p>