

1. Record Nr.	UNINA9910746981903321
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Titolo	Wheat Evolution and Domestication [[electronic resource] /] / by Moshe Feldman, Avraham A. Levy
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-30175-7
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (XXIII, 673 p. 28 illus., 22 illus. in color.)
Disciplina	580
Soggetti	Botany Agriculture Genetics Plant Science Genetics and Genomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. Taxonomy and Evolution of the tribe Triticeae Dumort -- 3. Genome structure of Triticeae species -- 4. B Chromosomes -- 5. Orphan genera of the subtribe Triticineae Simmonds -- 6. Secale L -- 7. Classification of the wheat group (the genera Amblyopyrum, Aegilops, and Triticum) -- 8. Amblyopyrum (Jaub. & Spach) Eig -- 9. Aegilops L -- 10. Triticum L. -- 11. Evolution of the diploid species of the sub-tribe Triticineae -- 12. Evolution of the allopolyploid species -- 13. Evolution of wheat under cultivation -- 14. Future prospects -- 15. References. .
Sommario/riassunto	This open access book covers a century of research on wheat genetics and evolution, starting with the discovery in 1918 of the accurate number of chromosomes in wheat. We re-evaluate classical studies that are pillars of the current knowledge in light of recent genomic data in the wheat group comprising 31 species from the genera Amblyopyrum, Aegilops, Triticum, and other more distant relatives. For these species, we describe morphology, ecogeographical distribution, phylogeny as well as cytogenetic and genomic features. For crops, we also address evolution under human selection, namely pre-domestication cultivation

and domestication. We re-examine the genetic and archeological evidence of where, when, and how domestication occurred. Several species are polyploids, including bread wheat which is a young allohexaploid. We discuss unique aspects of genome evolution and maintenance under polyploidization. Finally, we propose some thoughts on the future prospects of wheat improvement. As such, it can be of great interest to wheat researchers and breeders as well as to plant scientists and students interested in plant genetics, evolution, domestication, and polyploidy.
