1. Record Nr. UNINA9910688259603321 Model Organisms in Plant Genetics / / Ibrokhim Y. Abdurakhmonov Titolo London:,:IntechOpen,,2022 Pubbl/distr/stampa Descrizione fisica 1 online resource (112 pages): illustrations 616.0 Disciplina Soggetti Medical genetics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Sommario/riassunto Model plants are required for research when targeted plant species are difficult to study or when research material is unavailable. Importantly, knowledge gained from model plants can be generally translated to other related plant species because many key cellular and molecular processes are conserved and regulated by 'blueprint' genes inherited from a common ancestor. Model Organisms in Plant Genetics addresses characteristics of model plants such as Arabidopsis, moss, soybean, maize, and cotton, highlighting their advantages and limitations as well as their importance in studies of plant development, plant genome polyploidization, adaptive selection, evolution, and domestication, as

well as their importance in crop improvement.