1. Record Nr. UNINA9910557363903321 Autore Varanda Carla Titolo The Application of Viruses to Biotechnology Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Pubbl/distr/stampa Institute, 2021 1 electronic resource (296 p.) Descrizione fisica Soggetti Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Viruses are microscopic agents that exist worldwide and are present in Sommario/riassunto humans, animals, plants, and other living organisms in which they can cause devastating diseases. However, the advances of biotechnology and next-generation sequencing technologies have accelerated novel virus discovery, identification, sequencing, and manipulation, showing that they present unique characteristics that place them as valuable tools for a wide variety of biotechnological applications. Many applications of viruses have been used for agricultural purposes, namely concerning plant breeding and plant protection. Nevertheless, it

is interesting to mention that plants have also many advantages to be used in vaccine production, such as the low cost and low risks they entail, showing once more the versatility of the use of viruses in biotechnology. Although it will obviously never be ignored that viruses are responsible for devastating diseases, it is clear that the more they are studied, the more possibilities they offer to us. They are now on the

front line of the most revolutionizing techniques in several fields, providing advances that would not be possible without their existence. In this book there are presented studies that demonstrate the work developed using viruses in biotechnology. These studies were brought by experts that focus on the development and applications of many viruses in several fields, such as agriculture, the pharmaceutical

industry, and medicine.