1. Record Nr. UNINA9910669814803321 Autore Bandyopadhyay Ranajit Titolo Development and scale-up of bioprotectants to keep staple foods safe from aflatoxin contamination in Africa / / Ranajit Bandyopadhyay [and five others1 Pubbl/distr/stampa Cambridge:,: Burleigh Dodds Science Publishing,, 2022 Descrizione fisica 1 online resource (42 pages) Collana Burleigh Dodds series in agricultural science Disciplina 628.96 Soggetti Pests - Control Sustainable agriculture Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Aflatoxins pose a significant public health risk, decrease productivity Sommario/riassunto and profitability and hamper trade. To minimize aflatoxin contamination a biocontrol technology based on atoxigenic strains of Aspergillus flavus that do not produce aflatoxin is used widely in the United States. The technology, with the generic name Aflasafe, has been improved and adapted for use in Africa. Aflasafe products have been developed or are currently being developed in 20 African countries. Aflatoxin biocontrol is being scaled up for use in several African countries through a mix of public, private, and public-private interventions. Farmers in several countries have commercially treated nearly 400,000 ha of maize and groundnut achieving >90% reduction in aflatoxin contamination. This chapter summarizes the biology of aflatoxin-producing fungi and various factors affecting their occurence. including climate change. Various management practices for aflatoxin mitigation are then discussed. These include biological control, which is increasingly being adopted by farmers in several countries. We discuss biocontrol product development and commercialization in

adoption and other challenges.

various African countries. Subsequently, we highlight some barriers to