Record Nr. UNINA9910688389303321 Recent Research and Advances in Soilless Culture / / Metin Turan, [and Titolo three others], editors Pubbl/distr/stampa London:,:IntechOpen,,2023 Descrizione fisica 1 online resource (166 pages) Disciplina 635 Soggetti Horticulture Horticultural crops Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. The Effects of Different Substrates with Chemical and Organic Fertilizer Applications on Vitamins, Mineral, and Amino Acid Content of Grape Berries from Soilless Culture 97 -- 2. Nutrient Solution for Hydroponics 906 -- 3. A Potential Alternative for Agar in In Vitro Culture Media Based on Hydrocolloids Present in Nopal: General Structure and Mechanical Properties 28 -- 4. Soilless Culture for Agribusiness throughout Urban Farming in Indonesia 104 -- 5. Obtaining Cell Cultures of Medicinal Plants 38 -- 6. Soilless Cultivation to Secure the Vegetable Demand of Urban and Peri-Urban Population 200 -- 7. Intensive Production of Solanum lycopersicum in Soil and Greenhouse 19. Sommario/riassunto Due to the world's increasing population, the demand for food is rapidly growing. There is a real concern that we are headed toward a food crisis. Land for farming is dwindling, leading to the need to develop alternative production methods. One of the most promising is soilless agriculture, which refers to growing crops, particularly horticultural crops, in different growing media or in substrates other than soil (substrate culture) or in aerated nutrient solutions (water culture). The primary advantage of soilless agriculture is that it is independent of the negative effects of climate change and chemical

pollution (temperature and soil intensity variations, drought, salinity, soil degradation, low biodiversity, toxicity, and diseases). This book presents up-to-date information on soilless culture types, how to

manage plant nutrition, fertilizer use, organic cultivation, plant diseases and plant protection in soilless agriculture, the use of smart agricultural tools, the evaluation of carbon and water footprint, and the economic aspects of soilless agriculture.