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Nota di contenuto	Chapter. 1. Introduction to biofortification and challenges for nutrition security -- Chapter. 2. Nutritional Security Approaches for Legumes Biofortification-A major Challenge -- Chapter. 3. Micronutrients enrichments in legumes through agronomic and cultural practices -- Chapter. 4. General aspects of genetic improvement (traditional and transgenic methods) aiming at Food Biofortification -- Chapter. 5. Contribution of Conventional Breeding Approaches in Legumes Biofortification -- Chapter. 6. Contribution of Biotechnological Approaches for Micronutrients Improvements in Legumes -- Chapter. 7. Nutritional enrichment in legumes through OMICs approaches -- Chapter. 8. How Genome Editing can be helpful in the Biofortification of Legume -- Chapter. 9. Transgenic Strategies and genome editing Towards Nutritional Enrichment -- Chapter. 10. Biofortification of Legume Hybrids Obtained Through Intergeneric Hybridization -- Chapter. 11. The Importance of Plant Growth-Promoting Rhizobacteria in The Biofortification of Legumes -- Chapter. 12. Plant-microbe interaction for legume bio-fortification: Present status and future challenges -- Chapter. 13. Improving iron nutrition in legumes to overcome hidden hunger -- Chapter. 14. Bio-fortification of zinc in legumes to alleviate the zinc deficiency -- Chapter. 15. Organic approaches towards iron and zinc biofortification in legume Crops -- Chapter. 16. Legumes Biofortification for Selenium Contents --

Chapter. 17. Iodine biofortification of legumes -- Chapter. 18. Enriching Legumes Protein Contents and Essential Amino Acid -- Chapter. 19. Enriching legume protein contents -- Chapter. 20. Bio-molecular Aspects of Plant Nutrition Related to Food Biofortification -- Chapter. 21. Medicinal legumes in Turkey: a gift of nature for bios -- Chapter. 22. Variability in the biofortification properties of fenugreek (*Trigonella foenum-graecum* L.) -- Chapter. 23. Biofortification: Lesson from the Past and Strategies for Future Food Security.

Sommario/riassunto

Sustainable food production is vital to ensure food and nutritional security to growing human population. Recently, there has been a shift in agricultural production system, crop production is not only considering yield as primary interest to produce higher number of calories for reducing hunger, but also more nutrient-rich food to reduce malnutrition or “hidden hunger”. Micronutrient malnutrition is a continuing and serious public health problem in many countries, various Interventions to alleviate this problem have been implemented. Biofortification, the process of breeding nutrients into food crops, provides a comparatively cost effective, sustainable, and long-term means of delivering more micronutrients. Legumes have higher protein content than most plant foods approximately twice than cereals and are rich in the key micronutrients folate, niacin, thiamine, calcium, iron and zinc. This book summarizes the biofortification of legumes. Detailed information through contributed chapters shed light on legumes research relevant to human health, with key topics that include genomic and genetic resources for food security, conventional and modern breeding approaches for improving nutrition, agronomic traits and biotechnological interventions.
