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| Title | **Advancements in Arid Agriculture for the 21st Century: Emerging Paradigms, Innovations, and Future Prospects** |
| Aim & Scope (Max 2 Paragraph + List of Topics) | **Aims**:  *Advancements in Arid Agriculture for the 21st Century: Emerging Paradigms, Innovations, and Future Prospects* aims to inform and educate readers about the vital role of arid agriculture in global food security, climate change mitigation, and sustainable development. It strives to showcase the latest innovations, technologies, and sustainable practices that are reshaping farming in arid regions while exploring future prospects in the field. Additionally, the book seeks to address ethical, social, and environmental challenges, fostering a holistic understanding of arid agriculture.  **Scope**:  The scope of this book encompasses a range of topics, including the scientific foundations of arid agriculture, a comparison of traditional and modern practices, innovative water management techniques, crop selection and breeding for arid conditions, sustainable farming practices, climate-smart agriculture, government policies, emerging trends, and ethical considerations. It provides a comprehensive view of the field, combining technical expertise with a deep understanding of the ethical, social, and environmental dimensions of arid agriculture, ultimately inspiring a sustainable and forward-thinking approach to farming in arid environments.  **Topics:**   1. Arid Agroecosystems: A Comprehensive Overview of their Role in Global Food Security and Environmental Sustainability 2. Advanced Irrigation and Water Resource Management Strategies for Sustainable Arid Agriculture 3. Crop Selection and Genetic Adaptations for Arid Conditions: Enhancing Yield and Tolerance to Water Scarcity 4. Sustainable Agricultural Practices in Arid Ecosystems: Organic Farming, Agroforestry, and Permaculture Approaches 5. Precision Agriculture and Technological Advancements for Resource Optimization in Arid Farming Systems 6. Futuristic Innovations and Paradigms in Arid Agriculture: Vertical Farming, Hydroponics, and Beyond 7. Arid Soil Microbiome Dynamics: Unraveling the Role of Microorganisms in Nutrient Cycling and Soil Health 8. Biotechnology in Arid Crop Improvement: An Approach to Drought Resistance 9. Remote Sensing and Geospatial Technologies for Arid Land Monitoring and Precision Agriculture 10. Concluding Remarks and the Imperative for Ongoing Innovation in Arid Agriculture |
| Important dates | Chapter/paper submission starts on: **1.10.2023**  Last date for chapter/paper submission:**31.5.2024**  Acceptance notification:**31.7.2024**  Last date for registration:**31.8.2028** |
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