

RELAY CROPPING AS A TOOL FOR IMPROVING THE RESILIENCE AND SUSTAINABILITY OF THE ENVIRONMENT: A BIBLIOGRAPHIC ANALYSIS

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The environment is increasingly encountering a major test of climate change effects in contemporary crop growing. Fundamentally, several choices or systems are applied in the global campaign of managing such tests. Relay cropping has been tried as a multiple-crop-dependent tool to deal with the consequences of drought, and soil erosion, among others. It is imperative to discover how relay cropping has recently contributed to the environment as a tool for improved resilience and sustainability for high farm returns. This paper reveals the latest worldwide focus on relay cropping with respect to its contribution to a healthier environment. The available literature was searched in Scopus Database covering a data range of 2019-2024. Thirty-nine documents were retrieved, comprising articles, reviews, book chapters, and books, before exporting and analysing data using VOSviewer Software. Countries that dominated the search results were United States, India, Bangladesh, Czech Republic, Kenya, and Slovakia. Major funding of the research initiative came from North America and Asia continents. The most common areas linked to relay cropping included ecosystem environment, agronomy, and land degradation and development. Soybean, corn, cotton, and wheat are the major crops that support resource conservation, ecological biodiversity, and nutrient recycling. Notable limitations in the use of relay cropping, however, were; resultant lower yields and resource competition through crop overlap. In general, relay cropping intensifies soil quality, and averts soil degradation to expand farm profits. Consequently, it is recommended that countries adopt more sustainably intensified systems that are geared towards a flexible, user-friendly, and feasible environment.