Exploring Innovative Practices and Ecological Value in Green and Sustainable Agriculture

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Abstract

Aiming at the needs of ecological protection in China's Yellow River Basin and the green and sustainable development of agriculture, this report carries out practical innovation around ecological restoration, green production, resource utilization of agricultural waste and collaborative services. The university has developed a whole-chain ecological restoration technology, which improves the efficiency of contaminated soil treatment and the ability of river basin rain and flood regulation, providing technical support for the ecological revitalization of the Yellow River Basin; it has selected and bred new high-quality green yellow peach varieties, and built a green orchard prevention and control system centered on biological control, which solves the problems of pesticide residue and ecological imbalance caused by chemical pesticides and fills the gap in the high-end fruit market; it has innovated high-value utilization of agricultural by-products and recycling technology for agricultural waste along the Yellow River, alleviating the problem of low utilization rate of agricultural organic waste in the basin. Moreover, the university has built a "green education + university-local-enterprise collaborative service" system, and established 32 expert courtyards to promote sustainable models, providing a referable path for green agricultural innovation services for agricultural universities at home and abroad.

Keywords

Green Agriculture Engineering, Sustainable Development, Practice; Ecological Value.