

Next-Generation Green Nanoherbicides: Bridging Nanotechnology and Industry for Sustainable Weed Management

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This presentation explores the development of next-generation green nanoherbicides as a sustainable alternative to conventional weed management. By utilizing biodegradable polymeric carriers, these smart delivery systems significantly enhance herbicidal efficacy while minimizing environmental toxicity and non-target impacts. The talk will highlight recent advancements in nanoformulations, their interaction mechanisms in agricultural ecosystems, and the crucial role of industry-academia partnerships in translating these nanotechnological innovations into scalable, real-world agricultural solutions.