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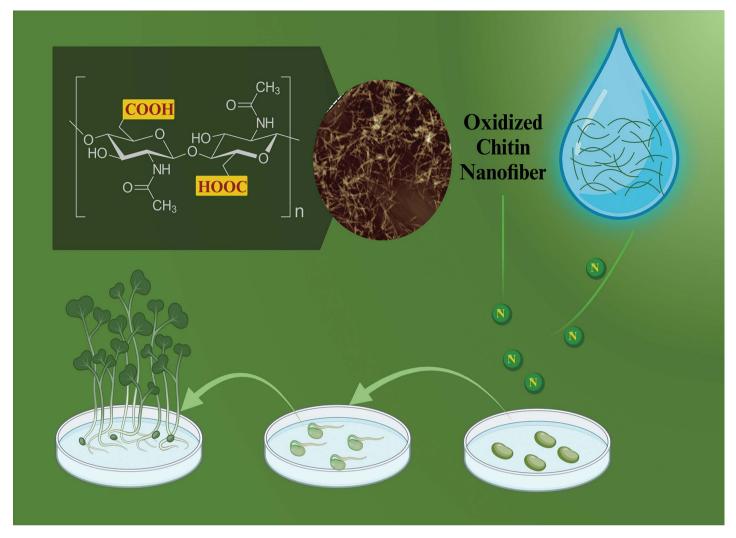
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Showcasing research from Professor Luo's laboratory, Department of Nutritional Sciences, University of Connecticut, Storrs, USA.

Chitin nanofibers derived from deep eutectic solvent extraction and ammonium persulfate oxidation as a seed nanopriming agent for microgreen growth enhancement

We proposed a method to extract high-purity chitin from lobster shells using deep eutectic solvents and prepared chitin nanofibers (ChNFs) through ammonium persulfate oxidation. Structural and functional properties of ChNFs were characterized, showing improved crystallinity and dispersibility with extended oxidation. ChNFs were applied as seed nanopriming agents, enhancing the growth, nitrogen content, and antioxidant capacity of broccoli and radish microgreens. This highlights a green approach to valorize seafood waste and promote sustainable agricultural practices.

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