Lipid nanovectors for carrying phytohormones to rooting recalcitrant plants

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Agricultural practices aimed at fostering quality products are means to combat food globalization and are supported by local and international institutions. In this context, plant biotechnologies have gained relevance, especially nanotechnology, which provides new pathways for solving old problems. Here we devised innovative and totally biocompatible nanovectors based on lipids extracted from plant byproducts, i.e. olive pomace, for administrating phytohormones (auxins) to rooting recalcitrant plants. Auxins are poorly bioavailable molecules, due to their hydrophobic character, which limits applications. The treated plants were two Tuscan olive cultivars, Leccino and Leccio del Corno. The first trials show promising results and extensive rooting.