Integrated valorisation of Agricultural Plastic Waste as a strategy to improve and restore soil properties

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The agricultural sector generates a significant amount of plastic waste, which if not properly managed poses a threat to the environment. This paper introduces an overview on valorisation options of agricultural plastic waste which include recycling, energy recovery, pyrolysis, hydrothermal carbonization and hydrogen production.

The publication addresses the importance of the application of a holistic approach to tackle challenges related with agricultural plastic waste and soil recovery, combining sustainable waste management practices, implementation of robust collection schemes, plastic waste recovery and soil restoration strategies which all together, will ultimately lead to improved soil health and crop yields.

The research will enumerate possible approaches to integrate these strategies in various agricultural settings, including policy recommendations to support sustainable waste and soil management practices.

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