

BIODEGRADABLE MULCH FILM



SUSTAINABLE MULCHING SOLUTION

The biodegradable mulch film, based on PHA, offers an eco-friendly solution for sustainable farming. Produced through a blow film extrusion process, this bio-based material naturally degrades in soil, reducing plastic waste. Designed for 3-6 month crop cycles, the black mulch film provides effective soil coverage and weed control, available in width of 100, and in thickness from 20 to 40 microns.

WHAT IS PHA?

Natural PHA (Polyhydroxyalkanoate) is a family of biodegradable, water-insoluble biopolymers. Serving as a renewable, carbon-based alternative to fossil-fuel plastics, PHAs offer a compostable and marine-safe solution for various applications, including packaging and agricultural uses. With properties similar to traditional plastics, these eco-friendly polyesters support a circular economy by reducing plastic waste and contributing to sustainable, bio-based product systems.

BENEFITS



recyclable



biodegradable
in soil



plastic free

WASTE DISPOSAL PATHWAY

Designed to be plowed into soil and fully degrade, supporting sustainable farming without leaving harmful residues.



TARGET LITTER

Substitutes conventional PE mulch films, which degrade into plastic pieces and microplastics that accumulate in the soil.



IMPACT

Reduces microplastics in soil caused by film fragmentation. Moreover, eliminating the need for collecting the mulch film after use cuts down on labour cost and saves time.



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TARGET AUDIENCE

Agricultural sector (farmers, wholesalers)



APPLICATION CASES

Mulch films for short cycle (3-6 months) crops.



IMPLEMENTATION STEPS

Standard procedures, as with conventional mulching films.



THINGS TO MONITOR

Appearance, quality, ease of application, soil degradation, durability



CONTRIBUTION TO THE INSPIRE PROJECT

The INSPIRE project, funded by the European Union's Horizon program, is a pioneering initiative aimed at contributing to the drastic reduction of litter, macro and microplastics in European rivers in a holistic approach by utilizing a series of detection, collection and prevention technologies and actions. This solution directly reduces microplastics accumulation in the environment. Learn more at <https://inspire-europe.org/>

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