

Liquid biodegradable mulching technology for weed management

Challenge

Due to climate change the risk for new weeds and pests is growing. At the same time there is tendency to reduce the use of pesticides and black polyethylene (PE) mulches. Consequently, there is a concrete need for environmentally sustainable pest and weed management solutions in horticulture, vegetable production and landscaping.

Solution

New liquid mulching technology for weed control. Novel technology – based on wood or plant originating materials (e.g. peat or other nature based fibers, water, pyrolysis oil and minor additives such as biochar) – decreases the use of synthetic pesticides and plastic mulches in horticulture and landscape management.

Benefits

Liquid mulching technology ensures the good control of weeds and growth of yield plants. No plastic or chemical residues remain to soil to cause environmental concern. Wood/plant basing materials of the mulch increase the organic matter content and fertility of soils.



IPR- and regulatory status

MULCH COMPOSITION, METHOD OF MANUFACTURING AND RELATED USES, Patent granted in Finland 15.2.2019, FI127775 (B), National application phase in Europe (validation phase), Canada and China (accepted). The product itself does not need authorization in Europe. The main effect of the mulch against weeds is physical and is not covered by the scope of the EC Regulation 1107/2009 regarding the placing of plant protection products on the market. REACH approval for production of pyrolysis oil and biochar are needed.

A MULCH COMPOSITION AND USES THEREOF, patent application filed in Finland 2022

Licensing contact

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