



NETmicroplastic





NETmicroplastic is a multi-actor network focusing on microplastics in soil for gaining scientific knowledge, identifying potential risks, and triggering innovation. It aims to deepen our understanding of microplastics in support of policy and society. It encourages dialogue and co-development to bring forward environmentally friendly management practices especially in fruit and wine growing.

WE NEED A MORE COMPREHENSIVE VIEW OF MICROPLASTICS IN AGRICULTURAL SOIL.

Microplastics in soils are tiny plastic particles (less than five millimeters in diameter) either added through soil amendments or resulting from the breakdown of larger plastic items. Major sources are mulching films, compost products, sewage sludge, fertilizers, and littering. While the use of plastics has increased twentyfold since the 1960s, we still know little about the actual amounts and sources of microplastic entering the soil and resulting in pollution. Open questions are how microplastic interacts with plants and soil organisms, how it is degraded, and which risks it poses to humans and the environment. Bio-based materials that are developed as alternatives to conventional plastics need to be critically assessed regarding safe use and degradation pathways.

A NETWORK BUILT AMONG ACADEMIA, INDUSTRY, AGRICULTURE, THE EDUCATION SECTOR, THE PUBLIC, AND POLICY.

NETmicroplastic was initiated by the AIT Austrian Institute of Technology as a partnership among institutions primarily from Lower Austria, which reaches out nationally and Europe-wide. The network organizes multi-actor events focusing on microplastics in soil. It aims to fill knowledge gaps, and develops concepts for innovative solutions in agriculture, with a focus on fruit and wine growing.

STRENGTHENING LOWER AUSTRIA AS A LOCATION FOR RESEARCH AND INNOVATION.

Together with farmers associations, small and large industry, consumer groups, primary, secondary and agricultural schools, and researchers, a strategic research and innovation agenda on microplastics is being formulated for the province of Lower Austria. This will give direction towards a more sustainable agriculture while strengthening local economies.

JOIN US!

Interested to be part of the network? Get in touch: info@net-microplastic.eu



PROMOTING RESEARCH ON PLASTIC IN SOIL.

NETmicroplastic sets up collaborative national and European research initiatives to fill knowledge gaps concerning plastic materials currently used in agriculture and to gather information on biodegradable alternatives. It explores plastic degradation pathways and studies innovative uses of novel materials and compounds.

LINKING BETWEEN POLYMER CHEMISTRY & MATERIALS RESEARCH AND SOIL SCIENCE & SOIL ECOLOGY.

Sound scientific data from both soil ecology and materials research will deliver more environmentally friendly products made of plastic and bio-based alternatives. Information on microplastic's effects on the soil and on potential risks to human health will guide policy in decision making. Awareness in society of potential hazards will enable that more sustainable products will be used in agriculture in the future.

BOOSTING KNOWLEDGE EXCHANGE ACROSS DIFFERENT ACTORS AND STAKEHOLDER GROUPS.

NETmicroplastic's ample communication channels reach out to a wide range of stakeholders. The network encourages initiative building by all actors in the microplastic debate and fosters continued dialogue between researchers, industry, and practitioners.



RESEARCH TACKLING POLICY CONCERNS.

NETmicroplastic aligns with EU policies that emphasize on the need to reduce plastic use and waste. The EU Action Plan "Towards Zero Pollution for Air, Water and Soil" demands that by 2030 the EU reduces microplastics by 30%, and the EU Fertilizing Products Regulation foresees that non-biodegradable polymers and additives in fertilizers are being phased out after 2026. The Austrian bioeconomy plan proclaims that raw materials that cannot be reused must as far as possible be replaced by renewable ones; and a national action plan on microplastics 2022-2025 lays down relevant action fields.

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CORE NETWORK PARTNERS



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