

Sowing a Plastic Planet

How Microplastics in Agrochemicals Are Affecting Our Soils, Our Food, and Our Future

CIEL's new briefing "Sowing A Plastic Planet" analyzes and exposes the underrecognized threat presented by the intentional use of microplastics in the agricultural sector.

It reveals a new facet of the toxic triad formed by agrochemicals, plastics, and the fossil fuels and calls on governments to urgently act to close regulatory gaps and comprehensively ban the intentional use of microplastics in agriculture and other industries.

Key Findings

- Despite receiving little public attention to date, the agricultural sector is one of the most significant users of intentionally added microplastics.
- The deliberate dispersion of microplastics in the environment through the application of plastic-coated fertilizers and pesticides is one of the most direct and preventable sources of growing microplastic pollution in agricultural soils.
- The use of plastic-coated synthetic fertilizers and pesticides is rising, with producers marketing their "controlled-release" function as key to sustainable, climate-friendly agriculture.
- Encapsulating agrochemicals in plastic and spreading them across soils and crops only compounds the significant health and environmental risks posed by agrochemicals and may exacerbate their harmful impacts.
- Governments should act now to close regulatory gaps and comprehensively ban the intentional use of microplastics in agriculture and other industries.

Microplastics in agriculture

Tiny particles of plastic — or microplastic — are accumulating across the planet in even the most remote areas. Humans are ingesting and breathing plastics and the toxins they contain through this continued environmental exposure. One of the least known and most concerning sources of **microplastic pollution is their deliberate addition to synthetic fertilizers and pesticides used in industrial agriculture.**



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