

Mushrooms help to break down plastic

By Jamie Johnson

MUSHROOMS could be the key to winning the battle against plastic waste, leading scientists at Kew Gardens have said.

The first report on the state of the world's fungi has revealed that if the natural properties of fungus can be harnessed, plastic could be broken down naturally in weeks rather than years.

Dr Ilia Leitch, a senior scientist at Kew Gardens, said: "This is incredibly exciting. We are in the early days of research, but I would hope to see the benefits of fungi that can eat plastic in five to 10 years."

Kew Gardens and a team of more than 100 scientists

from 18 countries have compiled the paper, which shows how different organisms can decompose plastics, clean up radioactive material and even speed up the production of biodiesel.

Found last year by a team of Chinese scientists on a rubbish dump in Pakistan, *Aspergillus tubingensis* breaks down bonds between plastic molecules, then splits them using its mycelia. The process takes weeks, rather than the decades it usually requires for plastic to naturally disintegrate.

"This ability has the potential to be developed into one of the tools needed to address the growing environmental problem of plastic waste," the report said.

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D. Telegraph 12th September 2018