

# Discover the 2-in-1 'plastic feeding machine': the caterpillar and its gut bacteria easily digest the most persistent plastic

Here is the savior of mankind?

Each year, people release about 300 million tons of plastic into the environment, transporting them everywhere and dumping in a landfill; most likely the plastic you threw away years ago is still around somewhere on this tiny Earth. Things start to get worse, as the plastic breaks down into microscopic plastic - tiny plastic particles begin to creep into the water, spilling out into the sea, finding a way to get into our bodies. Humans have yet to find a way to handle plastics effectively.

But maybe Mother Nature kept the answer to that burning problem. Scientists have discovered that caterpillars are interested in eating this persistent waste. While they can't eat off the garbage we have, the secrets that lie in the caterpillar's stomach can help us solve a difficult problem.



*' Nature has given us a wonderful starting point, showing us how to decompose plastic by natural means, ' said biologist and new study author Christophe LeMoine at Brandon University. " But we still have to solve a few problems before we can apply this technology, it's best to minimize the use of plastic until the problem is resolved ."*

Many localities have applied laws to limit plastic waste, many large corporations are determined to reduce plastic in production, many households have better understand the harmful effects of plastic to the environment. But plastic recycling is still difficult. Even if we cut that indigestible garbage, there are tons of plastic still on the

ground and in the water.

In nature, there exists a group of organisms called by science called 'plastivore'. These organisms are capable of digesting the common plastics, and researchers have identified about 50 species that feed on plastic, from bacteria, fungi to caterpillars. Recently, we have discovered a few more insects that are able to turn polyethylene - the second most difficult plastic to break down - into energy.