Do Microorganisms or Mealworms Poly-degrade Polystyrene Faster?

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Plastic pollution is extremely bad for the environment. It kills thousands of organisms yearly and that number will only grow. Being able to cut back that plastic or get rid of it all together will be a key event to turning the problems that it causes around.This scientist´s hypothesis is that the mealworms will eat the plastic faster because they have other body parts like mandibles to help chew the plastic easier. The procedures for this experiment is to first cut out ten five gram pieces of plastic and place them in five containers and five agar plates. After that, dissect 100 mealworms and place 20 mealworms guts in each of the agar plastic as well as 20 live mealworms in each of the containers. At the beginning, the middle, and the end the masses of the containers and the agar plates are taken. After the experiment is done, the agar plates need to be properly disposed of by soaking it in 10% bleach and then thrown away. At the end of the experiment The bacteria ate, on average, 3.4 grams of plastic and the mealworms ate only 0.78 grams of plastic. The bacteria ate four times the amount of plastic that the mealworms did, showing that the scientist's hypothesis, that the mealworms would eat more than the bacteria, is not supported by the evidence.

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