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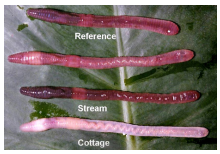

The three species of worms shown alongside a "reference" worm NAtional Geographic

Metal Eating Worms Could Help Reduce Pollution

The newly-evolved species consume arsenic, zinc and copper.

Some three new metal-eating worm species were found in landfills in the United Kingdom, thriving under layers of heavy metal rich deposits. Scientists say they appear to have developed a "taste" for heavy metals, such as lead, zinc, arsenic, and copper, which they digest and then excrete into nature in a slightly different form, allowing for plants to better integrate the metals into their metabolism.

 The species, which were yet to be named, were discovered at old, abandoned mining sites in Cwmystwyth, Wales by researchers at University of Reading, led by Mark Hodson. He said that the worms seem to be simply devouring the metals they encounter, and the metals somehow contribute to their development. The researcher also said that the worms found an ingenious way of rendering the metal elements inert in their bodies, by coating each particle with a special protein, which prevents the chemical from interacting with the insides of the creature.

 Although they haven't been able to study them thoroughly as of yet, scientists say that the three types of worms unearthed in England could very well be a part of three different species, which are believed to have evolved separately from each other. They were investigated in a lab by using highly-sensitive x-rays, to illuminate the inside workings of the "culprits." Hodson and his team were able to track arsenic particles over 1000 times smaller than a grain of sand all the way through their bodies.

 This discovery has an important practical aspect, as scientists envision using ecology in cleaning landfills for the first time. In other words, if worms are placed at designated spots inside landfills, where toxic wastes abound, they could transfer the heavy elements to plants, which can, in turn, be harvested to obtain a cleaner soil in those areas.