

Rocket-fueled bacteria clean up waste

October 26 2005

Bacteria that make rocket fuel as part of their metabolism are making sewage treatment less expensive and kinder to the environment, British researchers say.

The microbes, whose biology is baffling scientists, have also helped solve a long-standing mystery about the world's oceans, scientists reported in this week's issue of the journal Nature.

The bacteria, provisionally called "Brocadia anammoxidans," were discovered in a yeast plant in the Netherlands in the late 1990s. They consume ammonia and convert it into nitrogen gas, producing hydrazine, or rocket fuel, as part of the process known as the anammox reaction.

Although researchers are puzzled as to how the bacteria manage to contain the explosive compound, scientists have already put them to work breaking down the ammonia-rich waste from sewage and industrial effluent.

Nature reports the new anammox treatment plants consume less fuel and cause less pollution than conventional ones and might soon become commonplace around the world.

Copyright 2005 by United Press International

Citation: Rocket-fueled bacteria clean up waste (2005, October 26) retrieved 26 April 2024 from



https://phys.org/news/2005-10-rocket-fueled-bacteria.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.