



Powered by Clickability

Scientist: NASA found life on Mars - and killed it

- NEW:** Scientist: NASA possibly found life on Mars - and killed it
- Theory: Mars microbes drowned, baked by accident
- Research focuses on Viking space probes of 1970s
- Other scientists say theory is plausible

WASHINGTON (AP) -- Two NASA space probes that visited Mars 30 years ago may have found alien microbes on the Red Planet and inadvertently killed them, a scientist is theorizing.

The Viking space probes of 1976-77 were looking for the wrong kind of life, so they didn't recognize it, a geology professor at Washington State University said.

Dirk Schulze-Makuch presented his theory in a paper delivered at a meeting of the American Astronomical Society in Seattle, Washington.

The paper was released Sunday.

Based on a more expansive view of where life can take root, the paper's findings may prompt NASA to look for a different type of Martian life when its next spacecraft to visit Mars is launched later this year, one of the space agency's top scientists said.

Last month, scientists excitedly reported that new photographs of Mars showed geologic changes that suggest water occasionally flows there -- the most tantalizing sign that Mars is hospitable to life.

In the 1970s, the Viking mission found no signs of life.

But it was looking for Earth-like life, in which salt water is the internal liquid of living cells.

Given the cold dry conditions of Mars, life could have evolved on Mars with the key internal fluid consisting of a mix of water and hydrogen peroxide, said Schulze-Makuch.

That's because a water-hydrogen peroxide mix stays liquid at very low temperatures, or -68 degrees Fahrenheit, and doesn't destroy cells when it freezes. It can suck water vapor out of the air.

The Viking experiments of the 1970s wouldn't have noticed hydrogen peroxide-based life and, in fact, would have killed it by drowning and overheating the microbes, said Schulze-Makuch.

One Viking experiment seeking life on Mars poured water on soil. That would have essentially drowned hydrogen peroxide-based life, he said. And different experiment heated the soil to see if something would happen which would have baked Martian microbes.

"The problem was that they didn't have any clue about the environment on Mars at that time," Schulze-Makuch said. "This kind of adaptation makes sense from a biochemical viewpoint."

Even Earth has something somewhat related. He points to an Earth bug called the bombardier beetle that produces a boiling-hot spray that is 25 percent hydrogen peroxide as a defense weapon.

Schulze-Makuch acknowledges he can't prove that Martian microbes exist, but given the Martian environment and how evolution works, "it makes sense."

In recent years, scientists have found life on Earth in conditions that were once thought too harsh, such as an ultra-acidic river in Spain and ice-covered lakes in Antarctica.

Schulze-Makuch's research coincides with work being completed by a National Research Council panel nicknamed the "weird life" committee. The group worries that scientists may be too Earth-centric when looking for extraterrestrial life.

The problem for scientists is that "you only find what you're looking for," said Penn State University geosciences professor Katherine Freeman, a reviewer of the NRC work.

A new NASA Mars mission called Phoenix is set for launch this summer, and one of the scientists involved said he is eager to test the new theory about life on Mars.

However, scientists must come up with a way to do that using the mission's existing scientific instruments, said NASA astrobiologist and Phoenix co-investigator Chris McKay.

He said the Washington State scientist's paper piqued his interest.

"Logical consistency is nice, but it's not enough anymore," McKay said.

Other experts said the new concept is plausible, but more work is needed before they are convinced.

"I'm open to the possibility that it could be the case," said astrobiologist Mitch Sogin of the Marine Biological Lab in Woods Hole, Massachusetts.

A member of the National Research Council committee, Sogin also cautioned against "just-so stories about what is possible."

Copyright 2007 The [Associated Press](#). All rights reserved. This material may not be published, broadcast, rewritten, or redistributed.

Find this article at:

<http://www.cnn.com/2007/TECH/01/07/mars.life.ap/index.html>

Check the box to include the list of links referenced in the article.