

Marijuana ingredients show promise in battling superbugs

September 8 2008

Substances in marijuana show promise for fighting deadly drug-resistant bacterial infections, including so-called "superbugs," without causing the drug's mood-altering effects, scientists in Italy and the United Kingdom are reporting.

Besides serving as infection-fighting drugs, the substances also could provide a more environmentally-friendly alternative to synthetic antibacterial substances now widely used in personal care items, including soaps and cosmetics, they say. Their study is scheduled for the Sept. 26 issue of ACS' monthly *Journal of Natural Products*.

In the new study, Giovanni Appendino and colleagues point out that scientists have known for years that marijuana contains antibacterial substances. However, little research has been done on those ingredients, including studies on their ability to fight antibiotic resistant infections, the scientists say.

To close that gap, researchers tested five major marijuana ingredients termed cannabinoids on different strains of methicillin-resistant *Staphylococcus aureus* (MRSA), a "superbug" increasingly resistant to antibiotics. All five substances showed potent germ-killing activity against these drug-resistant strains, as did some synthetic non-natural cannabinoids, they say.

The scientists also showed that these substances appear to kill bacteria by different mechanisms than conventional antibiotics, making them more

likely to avoid bacterial resistance, the scientists note. At least two of the substances have no known mood-altering effects, suggesting that they could be developed into marijuana-based drugs without causing a "high."

Article: [dx.doi.org/10.1021/np8002673](https://doi.org/10.1021/np8002673)

Source: ACS

Citation: Marijuana ingredients show promise in battling superbugs (2008, September 8)
retrieved 27 April 2024 from
<https://phys.org/news/2008-09-marijuana-ingredients-superbugs.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.