

Phytocannabinoids

January 12, 2024 • vajiramandravi.com



About Phytocannabinoids

- Cannabinoids are a class of compounds found in the cannabis plant.
- The prefix 'phyto' in phytocannabinoid means it comes from a plant.
- Cannabinoids bind to receptors in the bodies of animals to produce a variety of neurological effects.
- The researchers extracted cannabidiol from a cannabis plant and made it react with hydrogen, using palladium as a catalyst.
- This process yielded a mixture of molecules with the same composition and order of atoms but different structures. One of them was THCBD.

What were THCBD's effects?

- Researchers tested the antibacterial properties of tetrahydrocannabidiol (THCBD), a semisynthetic phytocannabinoid, against *Staphylococcus aureus*, the bacteria responsible for the second most number of deaths due to AMR worldwide.
- The minimum quantity found to be efficacious against a strain of Gram-positive *S. aureus* used commonly in AMR research was found to be 0.25 µg/ml, which the researchers called "potent".

- They found that THCBD “significantly reduced” the number of viable microbial cells of S. aureus skin infections in mice.

Key facts about Antimicrobial resistance (AMR)

- It is a major health concern worldwide.
 - It refers to when bacteria, viruses, fungi, and parasites no longer respond to medicines used to treat them.
-

Q1) What is Staphylococcus aureus?

It is a type of bacteria. It stains Gram positive and is non-moving small round shaped or non-motile cocci. It is found in grape-like (staphylo-) clusters. It is one of the five most common causes of infections after injury or surgery. It affects around 500,000 patients in American hospitals annually.

Source: [Jammu CSIR lab finds cannabis plant compound has antibiotic effects | Explained](#)

Source: <https://vajiramandravi.com/current-affairs/phytocannabinoids/>

© Vajiram & Ravi. For personal use only.