

## **SYNTHETIC DERIVATIVES OF PHYTOCANNABINOIDS**

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The endocannabinoid system influences variety of processes in the human body which are presumed to be important in pathophysiology of schizophrenia and other neurodegenerative diseases. Apart from that many phytocannabinoids exhibit a broad spectrum of antimicrobial effects. Cannabidiol (CBD) and tetrahydrocannabinol (THC) were selected as suitable structures for synthetic modifications. Series of halogenated and hydroxylated derivatives of cannabidiol and tetrahydrocannabinol were sequentially prepared and tested for antimicrobial effects. Several structures exhibit greater antimicrobial activity than crude cannabis extracts or pure CBD and THC. In addition, behavioral studies in rats show anti-psychotic effects of brominated CBD.