

Cannabis Pharmacology: The Usual Suspects and a Few Promising Leads.

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Abstract

The golden age of cannabis pharmacology began in the 1960s as Raphael Mechoulam and his colleagues in Israel isolated and synthesized cannabidiol, tetrahydrocannabinol, and other phytocannabinoids. Initially, THC garnered most research interest with sporadic attention to cannabidiol, which has only rekindled in the last 15 years through a demonstration of its remarkably versatile pharmacology and synergy with THC. Gradually a cognizance of the potential of other phytocannabinoids has developed. Contemporaneous assessment of cannabis pharmacology must be even far more inclusive. Medical and recreational consumers alike have long believed in unique attributes of certain cannabis chemovars despite their similarity in cannabinoid profiles. This has focused additional research on the pharmacological contributions of mono- and sesquiterpenoids to the effects of cannabis flower preparations. Investigation reveals these aromatic compounds to contribute modulatory and therapeutic roles in the cannabis entourage far beyond expectations considering their modest concentrations in the plant. Synergistic relationships of the terpenoids to cannabinoids will be highlighted and include many complementary roles to boost therapeutic efficacy in treatment of pain, psychiatric disorders, cancer, and numerous other areas. Additional parts of the cannabis plant provide a wide and distinct variety of other compounds of pharmacological interest, including the triterpenoid friedelin from the roots, canniprene from the fan leaves, cannabisin from seed coats, and cannflavin A from seed sprouts. This chapter will explore the unique attributes of these agents and demonstrate how cannabis may yet fulfil its potential as Mechoulam's professed "pharmacological treasure trove."