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Prof. Hinanit Koltai, PhD, is a Senior Research Scientist at the Agricultural Research Organization, Volcani Center, Israel. She is the Editor of books and a member of Editorial boards in international scientific journals. She is a leading Author of more than 80 peer reviewed publications and more than 30 book chapters and invited reviews and she holds 9 patents. She teaches plant development and medical cannabis courses in Bar Ilan University, Israel.

Research in Koltai lab is focused on deciphering the "entourage effect" between cannabis compounds while specifying active pharmaceutical ingredients (API) from cannabis and their medical activity at the physiological and molecular levels in human cells and tissues. The lab combines state of the art chemistry and cellular and molecular biology tools, making novel discoveries in this field. Research results are IP protected; they are published in international scientific journals and form a scientific basis for the development of the new generation of cannabis-based medical products.

List of peer reviewed publications, last 5 years:


Expression of MAX2 under SCARECROW promoter enhances the strigolactone/MAX2 dependent response of Arabidopsis roots to low-phosphate conditions. 


Review on anti-cancer activity in wild plants of the Middle East. 

**Current Medicinal Chemistry**, 25:4656-4670.


*Ephedra foeminea* active compounds affect cell viability and actin structures in cancer cell lines. 


Anti-Inflammatory activity in colon models is derived from Δ9-Tetrahydrocannabinolic Acid that interacts with additional compounds in Cannabis extracts. 

**Cannabis and Cannabinoid Research**, 2: 167-182.


Medical Cannabis for the Treatment of Inflammation. 

**Natural Product Communications**, 13:1934578X1801300304.


*Calotropis procera*, Apple of Sodom ethnobotanical review and medicinal activities 


Identification of synergistic interaction between cannabis-derived compounds for cytotoxic activity in colorectal cancer cell lines and colon polyps that induces apoptosis-related cell death and distinct gene expression. 

**Cannabis and Cannabinoid Research**, 3:120-135.


Structure-activity relationship of cannabis derived compounds for the treatment of neuronal activity-related diseases. 

**Molecules**, 23:1526.

Variation in the compositions of cannabinoid and terpenoids in *Cannabis sativa* derived from inflorescence position along the stem and extraction methods. 
*Industrial Crops and Products*, 113: 376-382.


*Molecules*, in press.

*Current Neuropharmacology*, DOI: 10.2174/1570159x17666190903103923

*Oncotarget*, in press.

*Trends in Plant Sciences*, in press.