

Plant of the Month  
By Patrick Fast, Alkemist Labs 2020

# Hemp

## *Cannabis sativa* L.

### History/Tradition

Native to Asia, Cannabis is one of the 50 essential herbs in TCM, hemp seeds are known as “Huomaren”.

In current times, the non-psychoactive seeds are commonly consumed for protein and omega fatty acid content.

Stalks are used for fiber to make rope, textiles, paper, etc.

Bhang (Cannabis) is part of the ancient Hindu tradition. One preparation available is bhang goli which is freshly ground cannabis with water. Apart from this, sweetened bhang golis are also widely available; these are not considered a drug, but a traditional sleeping aid and appetizer. Bhang goli has metabolizing effects after approximately two hours, sending a user into a dreamlike meditational state. Bhang is also part of many Ayurvedic medicinal preparations. Bhang powder is available legally at ayurvedic dispensaries. Similar preparations to Bhang are used in parts of Africa, where Cannabis has been traded for centuries as a fiber and medicine crop.



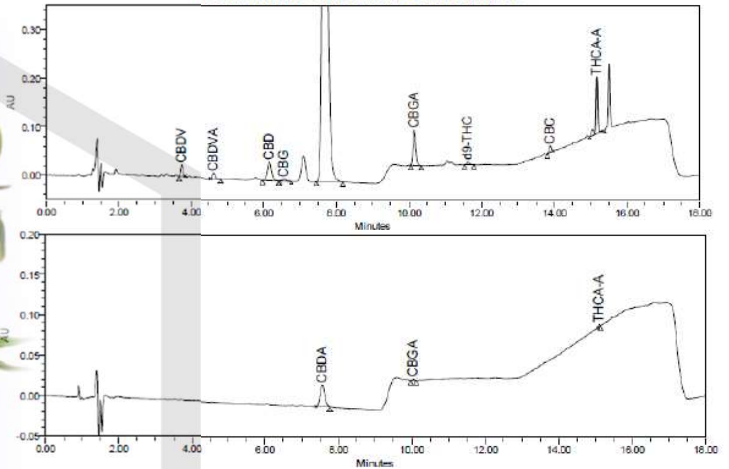
### Preparation

Hemp seeds or herb are mashed into a powder and added to water to make a decoction.

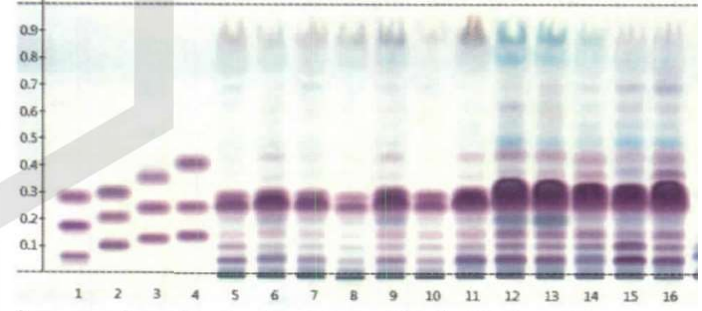
Trichomes are mechanically separated from flower materials using ice water and micron-screens or other methods. The resulting, high-potency product is known as “Hashish”. Afghanistan produces many varieties of some of the world’s best traditional Hashish.

### HPLC Chromatogram

Determination of Cannabinoids Content by HPLC



### HPTLC Chromatogram



### Chemistry and Pharmacology

Cannabis has been the subject of research surrounding Cannabinoids, Terpenes, and recently Flavonoids. The many cannabinoids and their carboxylate acids are shown to have varying effects, including analgesic, antioxidant, and anxiolytic properties just to name a few.



## References