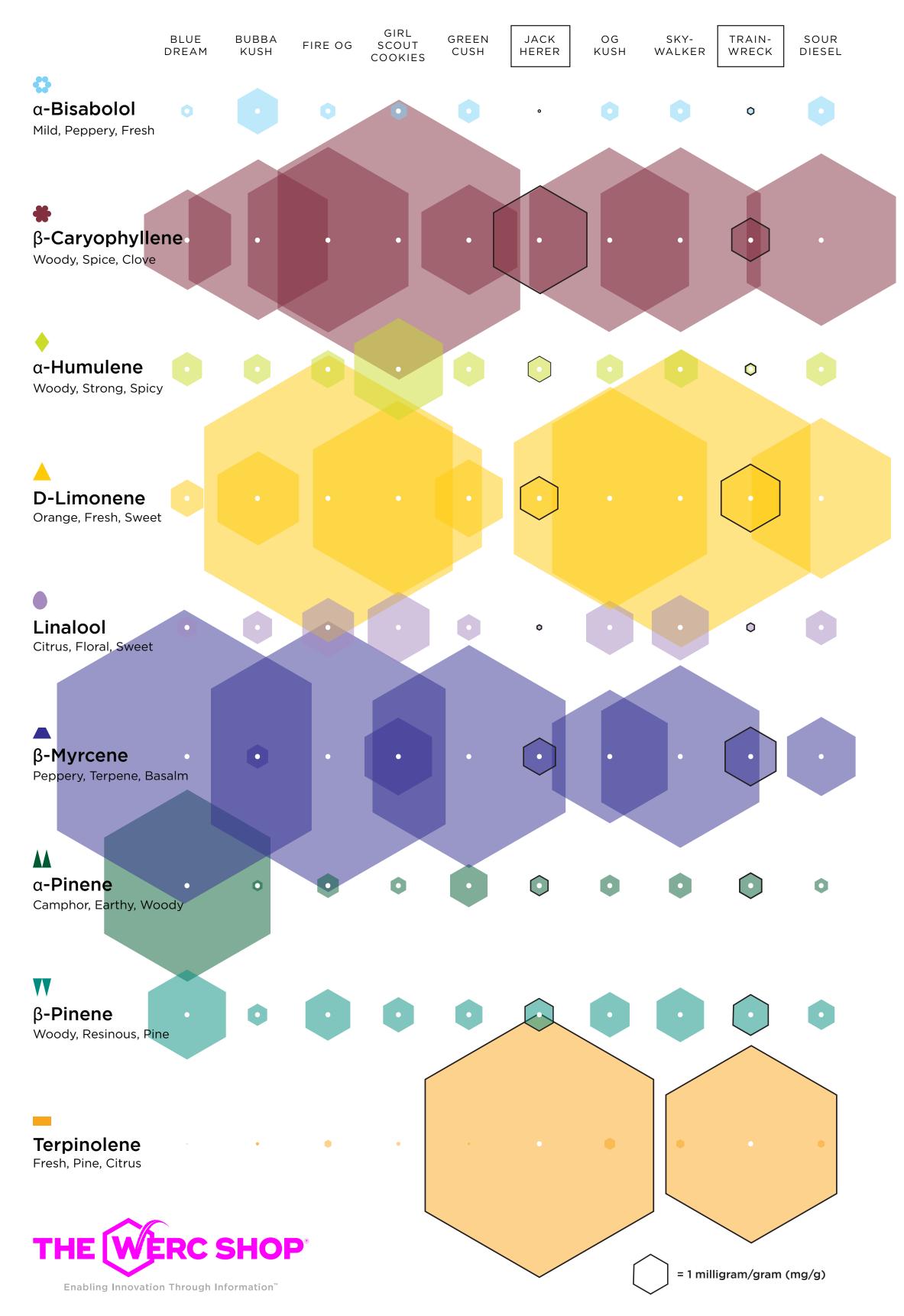


CULTIVAR PROFILE SPOTLIGHT:

JACK HERER & TRAINWRECK

Characterizing Cannabis By Chemical Fingerprint Not Phenotype

Cannabis is commonly categorized according to physical characteristics, (e.g. Indica, Sativa, Hybrid). Historically, these phenotypic categories have been mapped to broad physiological effects (e.g. Indica = sedating, Sativa = stimulating, Hybrid = in-the-middle). This turns out to have been misguided. Testing data demonstrates that phenotypes rarely correlate with the chemical fingerprint of an individual strain. As a result, presuming effects from physical attributes is both misleading and confusing. A more enlightening system involves categorization by chemical fingerprint. This makes sense as the experiential effects of cannabis directly correlate with chemical composition.



ABOUT JACK HERER

Introduced in 1994 at the High Times Cannabis Cup in Amsterdam, Jack Herer is a hybrid cultivar bred by Nevil Schoenmakers for Sensi Seed Bank of the Netherlands. Named after the American author and activist, Jack Herer consists of Northern Lights #5, Haze, and Skunk #1 lineage. Previously regarded as a modern breakthrough in Cannabis horticulture, Jack Herer retains the properties of its Haze parentage while reducing the lengthy flowering periods associated with these breeds. A flagship of the Sensi Seeds brand, Jack Herer has cemented itself as one of the most popular hybrids in the Dutch medical system and the world abroad.

ABOUT TRAINWRECK

Originating from Humboldt County, California, Trainwreck is a hybrid clone widely popularized in the 90's for its signature flavor and effect. A true narrow-leaf type, Trainwreck features a chemical profile rich in terpinolene and THC.

COMPARING CANNABINOIDS*

	Jack Herer	Trainwreck
Cannabidiol (CBD) Max	0.29%	0.24%
Cannabigerol (CBG) Max	0.61%	0.51%
Cannabichromene (CBC) Max	0.01%	0.01%
Tetrahydrocannabinol (THC) Max	18.32%	15.11%

^{*} All cannabinoid and terpene values displayed are averages based upon many samples. Individual specimens can vary significantly from these averages.

ABOUT TERPENES

Terpenes and terpenoids are a widespread class of organic compounds that play a prominent role in the aroma, taste and effects of cannabis. Terpenes are not unique to cannabis, but rather are found across the botanical spectrum and are the primary constituents of plant-derived essential oils.

While the labels indica and sativa are commonly understood to identify the physical characteristics of the cannabis plant, the chemical composition, including terpenes, is more indicative of the physiological effects characteristic of different strains.

Plants and animals use terpenes and terpenoids to communicate with the world around them. In fact, the same messenger can have various meanings depending on the recipient. D-limonene found in a juicy mandarin can say something different to a human ("Eat Me") than to an insect ("stay away!"). The idea that terpenes can act as messengers and exert physiological effects beyond smell and taste is not simply theoretical.