

“Another chapter in our suppressed history...”

The Army's Conquest-by-Cannabinoid Fantasy

Tod Mikuriya had been led to believe by Van Sim, MD, a director of research at Edgewood Arsenal in Maryland, that classified studies in the 1950s had established the anti-seizure properties of marijuana. (See graphic at bottom of page.) Gaining access to the marijuana studies done at Edgewood was one of many projects on the to-do list that Tod carried through life.

In 2004 he crossed paths with James Ketchum, MD, the psychiatrist who led the classified research program at Edgewood in the '60s. Although Ketchum, who had retired in 1976 as a colonel, didn't shed light on the Army's studies of marijuana as an anti-convulsant, he had other historical info of interest to Tod.

The U.S. Army, in a search for “non-lethal incapacitating agents,” tested cannabis-based drugs on GI volunteers at Edgewood throughout the 1960s according to Ketchum. Tod invited him to describe the experiments in detail at the Society of Cannabis Clinicians meeting March 9, 2007, in Los Angeles.

Camelot's ideal weapon: one that leaves the infrastructure intact and the population manageable.

Ketchum was a young captain finishing a residency at Walter Reed Army Hospital when he got assigned in 1961 to be the supervising psychiatrist at Edgewood Arsenal. The new president, John F. Kennedy, was enthusiastic about funding the search for non-lethal incapacitants (first authorized by Eisenhower in 1958). Camelot's ideal weapon: one that leaves the infrastructure intact and the population manageable.

The synthetic analog of THC tested by the Army in pursuit of this ideal, EA 2233, was developed by a chemist named Harry Pars employed by the Arthur D. Little company of Cambridge, Mass. It was a mixture of eight stereoisomers of the THC molecule (different arrangements of the same atoms). EA 2233 was ingested at strengths ranging from 10 to 60 micrograms per kilogram of body weight. Although its effects lasted up to 30 hours, they were not potent enough for military purposes.

Ketchum excerpts an interview with a GI on EA 2233 in a self-published memoir. The responses are pretty much what you'd expect from someone

who had ingested THC being questioned by an un-threatening authority figure:

Q: How are you?

A: Pretty good, I guess.

Q: Pretty good?

A: Well, not so good maybe.

Q: You've got a big grin on your face.

A: Yeah. I don't know what I'm grinning about either....

Q: Suppose you had to get up and go to work now. How would you do?

A: I don't think I'd even care.

Q: Suppose the place was on fire?

A: I don't think it would be —it would seem funny.

Q: It would seem funny? Do you think you'd have the sense to get up and run out or do you think you'd just enjoy it?

A: I don't know. Fire doesn't seem to present any danger to me right now.

[Note the realism of the test subject and the scientist's flight of fancy.]

Q: Can you think of anything now which would seem hazardous or worry you or are you just in a—

A: No. No. Everything just seems funny in the Army. Seems like everything somebody says, it sounds a little bit funny.

The Dream Dies Hard

When the eight isomers of EA 2233 were isolated and purified in the years following 1964 they were tested by an Edgewood doctor named Fred Sidell (while Ketchum focused on more promising incapacitants, mainly an atropine derivative known as BZ, and LSD). Two of the THC isomers caused such a dramatic drop in blood pressure, according to Ketchum, that the lab stopped testing all of them.

Ketchum still wonders if one of the two potent isomers would work as an incapacitant. “The finding that isomers 2 and 4 possessed uniquely powerful postural hypotensive effects that prevented standing without fainting led Sidell to discontinue testing out of an abundance of caution for the welfare of the subjects. It later occurred to me that this property, in an otherwise non-lethal compound, might be an ideal way to produce temporary inability to fight (or do much else) without toxicological danger to life.”



Major James Ketchum, MD, interviewing a test subject at Edgewood Arsenal.

Evidently, the dream lives on!

Ketchum's presentation to the pro-cannabis MDs was followed by a succinct chemistry lecture by Alexander T. Shulgin, PhD. It was Shulgin who gave Harry Pars the idea to synthesize nitrogen analogs of THC back at the start of the '60s. Later in life Shulgin gained renown for designing “designer” drugs, including MDMA.

The session was organized and moderated by SCC founder Tod Mikuriya, MD, who described the talks by Ketchum and Shulgin as “another chapter in our suppressed history.”

Only a small fraction of Ketchum's work at Edgewood involved THC derivatives. Ketchum says he was motivated to write his memoir to distinguish the ethical, scientific drug studies conducted by the Army on knowing volunteers from the extremely kinky, unsafe drug studies conducted by the CIA on unwitting civilians. “*Chemical Warfare: Secrets Almost Forgotten*” is published by ChemBook, 2304 Fairbanks Drive, Santa Rosa, CA 95403. Learn more at

forgottensecrets.net

A chapter of Ketchum's book is devoted to what we now called “informed consent.” GIs considered Edgewood Arsenal good duty and volunteered with alacrity for the two-month stint. Ketchum writes, “We never needed to browbeat, threaten or hint at repercussions for someone's unwillingness to participate in a drug test. Invariably, would-be volunteers inundated us with applications, year after year. An abundance of troops were obviously more than willing to jump through all the hoops required in order to make the list of accepted candidates. In fact, the ratio

Ketchum says the media has conflated the ethical, scientific drug studies conducted by the Army on knowing volunteers with the kinky, unsafe drug studies conducted by the CIA on unwitting civilians.

of the number of applicants to the number accepted increased progressively throughout the 1960s.”

When Ketchum arrived at Edgewood in 1961 the detachment of test subjects consisted of 20 men. By 1963 it was 50. “Eventually a cohort of 60-80 arrived, requiring the prior review of as many as 300-500 applicants.” Some 7,000 enlisted men took part in the program, most between 1961-70. “None, to my knowledge,” writes Ketchum, “returned home with a significant injury or illness attributable to chemical exposure. Nevertheless, years later, a few former



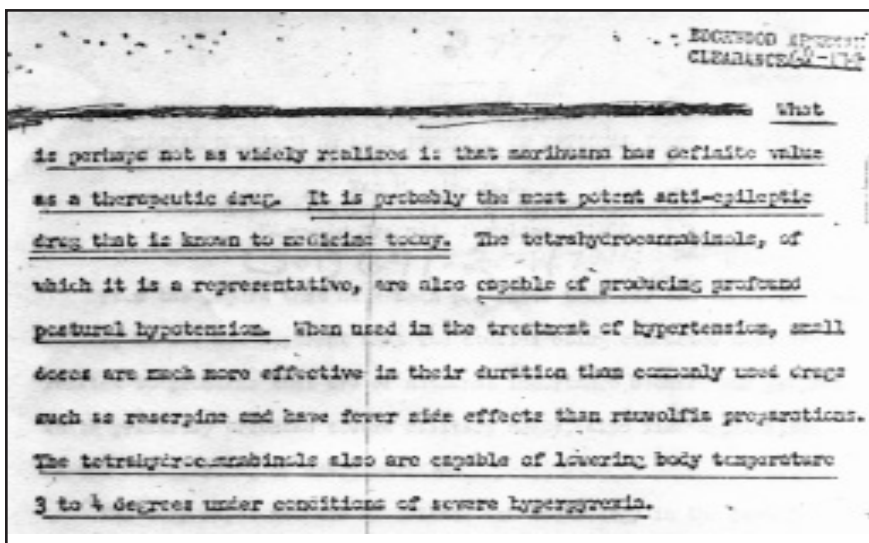
Many soldiers considered a two-month stint at Edgewood Arsenal good duty. Some 7,000 enlisted men took part in the program in the 1960s.

volunteers did claim that the testing had caused them to suffer from some malady.”

Those claims came from subjects exposed to agents other than EA 2233. Ketchum questions their validity, noting “None of the three careful follow-up studies found statistical evidence for any particular illness, and death rates were lower than expected for every drug tested, except for non-significant higher rates in those who received atropine or scopolamine.”

Ketchum said at the Society of Cannabis Clinicians meeting that he and his staff at Edgewood Arsenal had no inkling EA 2233 in low doses might be therapeutic. “We weren't looking for benefit,” he acknowledged.

Ketchum mentioned that Hitler was so afraid of chemical weapons being used against him that he wouldn't authorize the use of thousands of tons of nerve gas the Nazis had synthesized and stockpiled.



ANTICONVULSANT POTENTIAL OF MARIJUANA was mentioned in a 1968 paper entitled “Medical Research on Drug Problems of National Importance” by Van M. Sim, PhD, MD, who had directed cannabis research at Edgewood Arsenal 1954-1959. In response to Tod's request for information about the studies in 1971, Sim said the work was classified. One day in the 1980s, Tod said, he got a call “out of the blue” from Dr. Sim, who told him the very promising studies had been conducted at Edgewood in the '50s. Four decades later in California Mikuriya encountered many patients with epilepsy and other neurological disorders who reported using marijuana to reduce the occurrence and severity of seizures.



ALEXANDER SHULGIN, JAMES KETCHUM, AND TOD MIKURIYA (with videocam, characteristically). Chemist Shulgin gained renown as the creator of “designer” drugs, including MDMA. Back in the '60s he had suggested the synthesis of nitrogen analogs of THC —drugs which Ketchum would test on GI volunteers. Photo was taken in 2004. Shulgin hosted a picnic at which he introduced Tod to Ketchum (who recalled Tod contacting him back in the '70s to ask about his work). A warm friendship ensued.

photo by Judy Ketchum