Scientists stir the pot for right to grow marijuana

Government's monopoly on plants is restricting research, critics say.

Arran Froad

US scientists are waging a campaign urging the government to allow them to grow marijuana for research purposes. The US Drug Enforcement Administration (DEA), which oversees licenses to grow the plants, is mulling a landmark legal decision that could transform marijuana research in the country.

Scientists can access most illegal drugs, such as MDMA (methyleneedioxymethamphetamine, or 'ecstasy') and lysergic acid diethylamide (LSD), from various accredited laboratories. But the only legal source for marijuana for medical research in the US is the National Institute on Drug Abuse (NIDA). Even after researchers have Food and Drug Administration approval for their studies and clear their work with the DEA, NIDA can refuse to supply them with the product.

This effectively allows NIDA to dictate the research agenda along political instead of scientific lines, critics charge. "The role that NIDA plays in marijuana research is unique," says Rick Doblin, founder and president of the Multidisciplinary Association for Psychedelic Studies (MAPS), a nonprofit group that funds research on controlled substances.

Even when NIDA has come through, the quality of the product has been poor, containing stems and seeds from the plant, critics say.

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In a 2007 study that used NIDA marijuana, Donald Abrams of the University of California, San Francisco, found that 14 of 18 participants preferred vaporized to smoked marijuana ([Clin. Pharmacol. Ther. doi:10.1038/sj.clpt.6100200]). "In general the NIDA marijuana, which is dehydrated and requires hydration, can be quite harsh," Abrams says. "The vaporizer smoothes that out."

Hoping to end NIDA's monopoly, Lyle Craker, professor of plant, soil and insect sciences at the University of Massachusetts Amherst, in 2004 filed a lawsuit against the DEA. His lawsuit is supported financially by MAPS, which hopes to allocate his crop to other scientists.

On 12 February, a DEA court ruled in support of Craker, who has extensive experience growing other plants for medicinal use. The agency has since filed a series of objections against the ruling, citing security concerns, likening MAPS founder Rick Doblin to the Colombian drug lord Pablo Escobar and claiming Craker's supply would contravene the UN Single Convention on Narcotic Drugs treaty, which requires governments to own stocks of cannabis. The agency declined to comment on the case.

The treaty is not viewed as problematic in the UK, where GW Pharmaceuticals cultivates cannabis for Sativex, an under-the-tongue spray for multiple sclerosis. Mark Rogerson, press officer for the company, says countries can grant licenses for medical research within the terms of the convention.

"There are no treaty problems," adds Doblin. "The DEA is concerned about the research working out and contradicting their propaganda about marijuana."

Mahmoud ElSohly, project director of the National Center for Natural Products Research, has overseen the US marijuana cultivation program for more than 25 years, and questions whether another source of marijuana is necessary. "We are fulfilling the [research community's] needs so they have no need for another contract," he says.

ElSohly says that quality issues have been addressed since the installation of a deseeding machine in 2001. "People that say the supply is not there and that the quality is not there. I can tell you categorically that is not true," he says.

ElSohly, who testified against Craker's application to grow marijuana in the lawsuit, himself holds a license to grow cannabis and extract the active ingredients—cannabinoids—for use by pharmaceutical companies. MAPS's lawyers claim this is evidence that the DEA can allow other scientists to grow marijuana without violating the treaty.

In the meantime, the DEA's deputy administrator has an undefined period to respond to the court's ruling. More than 35 members of Congress have signed a letter urging the agency to grant Craker a license.
London

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