supports this amendment. Option 1 appears to embody a simpler approach to the issue. Similarly, we support greater enhancements for more dangerous weapons and larger numbers of weapons involved.

(C) <u>Mitigating Role Adjustment Ceiling</u> This amendment would provide a ceiling at level 32 or 30 for defendants who receive a mitigating role adjustment, thus making quantity less a measure of the seriousness of the offense than it would be for a defendant with a more important role in the offense. It is designed to limit the impact the quantity of drugs would have in determining the sentence of low-level defendants involved in drug crimes.

The Department supports the goal of this amendment but believes that as published the amendment is flawed. We would support the proposal if the following changes were made:

the ceiling were set at level 32 (which covers a 10year mandatory minimum sentence);

the cap applied only to minimal, but not minor, participants (the least culpable group);

drug defendants whose relevant conduct consisted only of drugs in their actual possession did not receive a mitigating role reduction and were not subject to the level 32 cap (because of the large amount of controlled substances in their actual possession);

defendants who possessed or had ready access to a firearm or other dangerous weapon or engaged in assaultive or violent behavior did not receive a mitigating role adjustment; and

Innguage were retained in §3B1.2 stating explicitly that the downward adjustment for a minimal participant should be used infrequently.

**DEPARTURES** (Amendments 7 and 14)

Amendment 7 requests comment on whether the guidelines should provide that departures may be based on cultural characteristics of defendants or the collateral consequences (e.g., impeachment or a bar to holding public office) a public official and other defendants might encounter as a result of a conviction.

The Department believes that collateral consequences should not be the basis for a downward departure. The fact that one defendant may suffer collateral consequences as the result of

conviction does not alter either the nature of the crime or the nature of the offender. Indeed, this would run counter to the intent of the guidelines, which are designed to achieve, in part, the same sentences for similar offenses committed by similar Taking collateral consequences into account would offenders. appear to discriminate among defendants on the basis of prohibited factors such as education and occupation. In addition, the parties may not be able to determine the potential collateral consequences during the plea bargaining process or after a criminal trial; and even if identified, they may never come to pass. For example, in negotiating a plea in a criminal fraud case, is the prosecutor required to consider the potential outcome of possible civil litigation? There are numerous situations when consideration of collateral consequences would be highly inappropriate, including lower sentences for deportable aliens, antitrust defendants in bid rigging cases who may be debarred, and others who face the loss of some benefit as a result of committing a crime.

Similarly, we believe that cultural characteristics should not be the basis for a downward departure. To recognize such characteristics would appear to discriminate on the basis of race, sex, national origin, creed or religion, and socioeconomic status -- prohibited factors for departure under 28 U.S.C. §994(d). Criminal laws are enacted to reflect societal norms. The fact that a defendant's cultural heritage made the unlawful conduct more acceptable in his or her community should have no bearing on the sentence imposed. This argument could well be used in the future to justify downward departures for violent crimes by gang members, organized crime figures, and racially motivated individuals who assert they would have been subjected to shame or worse in the community had they not committed the offense.

Amendment 14 would revise §5K2.0, Grounds for Departure, by specifically permitting departures for offender characteristics or other circumstances not ordinarily relevant to that determination. The proposal provides that if the characteristic or circumstances, or combination of characteristics or circumstances, is present to an unusual degree and distinguishes the case from the "heartland" cases covered by the guidelines in a way that is important to the statutory purposes of sentencing, then the factors may be considered.

This year the Department requested that the Sentencing Commission provide guidance regarding offender characteristics not ordinarily relevant for departure. However, the Commission has broadened the Department's proposal significantly by adding the language "or combination of characteristics or circumstances". This sweeping language may result in departures based on prohibited factors in 28 U.S.C. §994(d), which Congress intended would not be considered. The Department has opposed this "combination of characteristics" approach in the past and continues to do so on the grounds that it would lead to an erosion of the guidelines and, thus, undermine the goal of consistency in sentencing.

### MONEY LAUNDERING (Amendment 11)

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The Department is opposed to the proposed changes to the money laundering guidelines.

### ACOUITTED CONDUCT AS RELEVANT CONDUCT (Amendment 18)

The Department cannot support the published proposal advanced by the Practitioner's Advisory Group to change the definition of relevant conduct in guideline §1B1.3 to restrict the use of acquitted conduct in determining the guideline offense level. The amendment would provide that acquitted conduct may no longer be considered in determining the guideline range but can only be the basis for an upward departure.

This change would constitute a dramatic and illogical departure from the constitutional standards courts have historically applied in both pre-guidelines and guidelines cases and would reverse a long line of decisions in which ten courts of appeals have held that the Constitution does not preclude the use of acquitted conduct for sentencing purposes. These rulings are consistent with Supreme Court decisions allowing acquitted conduct to be introduced in evidence at a defendant's subsequent trial, Dowling v. United States, 493 U.S. 342 (1990), and allowing civil forfeiture notwithstanding acquittal on the same charges underlying the forfeiture. United States v. 89 Firearms, 465 U.S. 354 (1984). The broader rules of evidence admissible at sentencing, as compared to trial, also militate against a bar to using acquitted conduct for sentencing purposes. There is surely no unfairness in sentencing a defendant based on additional evidence, e.g., obtained from a search whose fruits could not be admitted at trial, that clearly shows that the defendant engaged in the conduct at issue.

There are, moreover, additional reasons why changing the present rules with respect to acquitted conduct would be unwise. First, the change would lead to a large increase in litigation. Frequently, the effect of an acquittal is unclear because the basis of the jury's verdict cannot be definitively established. For example, suppose a defendant and a confederate are charged with selling drugs and the defendant with using a firearm during and in relation to that crime (18 U.S.C. §924(c)). The defendant is convicted of the drug charge but acquitted of the firearms offense. Should that mean that the defendant can assert the acquittal to successfully resist the government's attempt to apply the enhancement in guideline §2D1.1 for possessing the

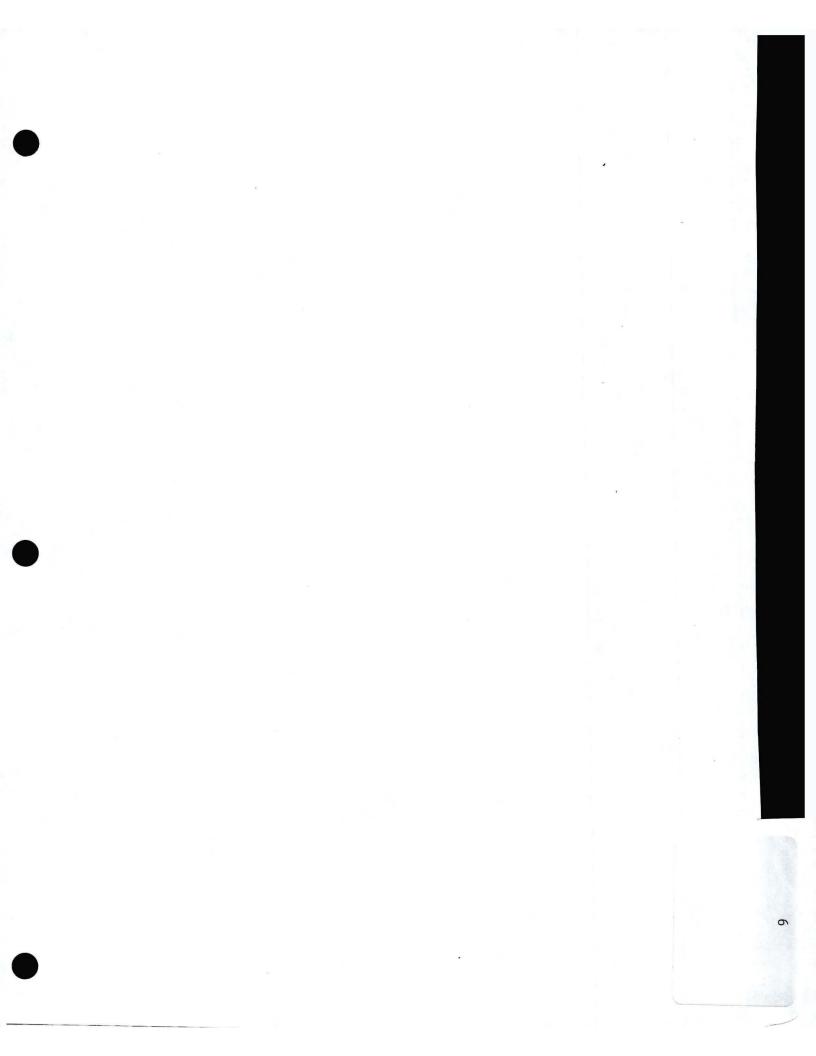
firearm? Not necessarily. The proof at trial may have been weak as to whether the firearm belonged to the defendant or to the confederate, also present in the room. The doubt may have been sufficient to cause the acquittal, but, if that was the basis therefor, not to preclude an enhancement under the guidelines. In other cases, the verdicts may simply be inconsistent, for example, a case in which the defendant is convicted of aggravated bank robbery (18 U.S.C. §2113(d)) for placing life in jeopardy by using a firearm, but acquitted under 18 U.S.C. §924(c) for using the firearm to commit the robbery. Based on anecdotal information from the United States Attorneys, it is our belief that the number of inconsistent verdicts, particularly in drug and fraud prosecutions, is growing. In each of these situations, if the Commission were to bar the use of acquitted conduct in determining the guideline range, difficult litigation would arise over the effect of the acquittal -- an increased burden on the already highly complex sentencing process that we think is unjustified and that many courts, we suspect, would not welcome.

Second, a limitation on the use of acquitted conduct would likely lead to unwarranted charging and sentencing disparity, contrary to the goal of the Sentencing Reform Act, and would encourage more trials and sentencing hearings. Under the proposal, the court would remain obligated to consider conduct not charged in the indictment but within the ambit of relevant conduct yet could not consider that same conduct if it had been charged and resulted in acquittal. Often, the decision whether to bring a charge that later results in acquittal will be a close one, on which reasonable prosecutors would reach conflicting judgments. If the rule on acquitted conduct were changed as proposed, these reasonable but opposing charging decisions by prosecutors would produce markedly different sentences. Moreover, the change would create a temptation for prosecutors to decline to bring charges that they fear could result in acquittal and wait to bring supporting facts to the court's attention at Likewise, defendants, who are encouraged under the sentencing. current definition of relevant conduct to enter pleas when charged with several counts with similar offenses will, if the proposed amendment is adopted, have a strong incentive to go to trial to try to defeat one or more of the multiple counts, thereby increasing the number of trials in the hard-pressed justice system. For all of these reasons, the superficially appealing but unsound proposal to limit the use of acquitted conduct should be rejected.

ACCEPTANCE OF RESPONSIBILITY (Amendment 32)

This amendment, published by the Commission at the request of a district judge, would provide an additional one-level decrease for a defendant who goes to trial but avoids actions that unreasonably delay or burden the proceedings or place an

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undue burden on the government. We believe this additional point designed to assist the expeditious administration of justice will have just the opposite effect -- it will encourage defendants to go to trial. The Department believes there is no justification for this amendment.

Under the current guidelines, many defendants who go to trial receive credit for acceptance of responsibility; the proposed point for not contesting frivolous issues will give them the same three points they would now receive for pleading early. They will be in the same guideline range and will have the right to appeal. The proposed additional point actually lowers the risk of going to trial. In some cases, defendants will actually receive more points for going to trial under this proposal.

The proposal also raises several difficult issues that would require litigation, such as what would constitute an undue burden or "frivolous" motion. Can the defendant receive the reduction for assisting in the administration of justice and then raise ineffective assistance of counsel on appeal? Would this amendment penalize defendants for exercising their constitutional rights? Litigation in the Ninth Circuit is now focused on the similar constitutional issue of granting a point for acceptance of responsibility for timely notification of intent to plead guilty. The proposal is also inconsistent with the principle that clients are not sanctioned for the inappropriate trial tactics of their attorneys.

TAX OFFENSES (Amendment 12(C))

The Department is opposed to any amendment of the tax tables this year. Because changes to the tax tables made during the last amendment cycle took effect as recently as November 1993, it is imperative that these amendments be allowed to work before further changes are made.

Sincerely, 5km

Jø Ann Harris Acting Deputy Attorney General

# U.S. Sentencing Commission Public Hearing on Proposed Guideline Amendments March 24, 1994

### TAB 1 9:00 a.m. Marvin Miller National Organization for the Reform of Marijuana Laws Julie Stewart Peggy Edmundson Alice O'Leary Families Against Mandatory Minimums Reverend Andrew Gunn Clergy for Enlightened Drug Policy 2 10:15 a.m. Tom Hillier Federal Public and Community Defenders Nkechi Taifa 3 10:30 a.m. American Civil Liberties Union 4 10:45 a.m. Dr. John Morgan Dr. John Beresford Committee on Unjust Sentencing 11:10 a.m. Reverend Jesse L. Jackson 5 National Rainbow Coalition 11:25 a.m. BREAK 6 11:40 a.m. K.M. Hearst U.S. Postal Service 7 11:55 a.m. Mary Lou Soller American Bar Association LUNCH 12:10 p.m.

9	1:00 p.m.	Barbara Piggee Families Against Discriminative Crack Laws
		Shyrl Worth Neighborhood Families Against Unjust Crack Laws
		Dr. Arthur Curry Dr. Robert Lantz Families Against Mandatory Minimums
10	1:45 p.m.	Alan Chaset National Association of Criminal Defense Lawyers
11	12:00 p.m.	Kevin Zeese Drug Policy Foundation
12	2:15 p.m.	Marjorie Peerce New York Council of Defense Lawyers
	2:30 p.m.	BREAK
13	2:45 p.m.	Careen Winters Maureen Winters Joseph Timilty Donna Messenger Ed Rosenthal
		Margaret Williams
14	4:00 p.m.	Professor Jonathan Turley The Project for Older Prisoners

Ruth Dodd

NATIONAL ORGANIZATION FOR THE REFORM OF MARIJUANA LAWS



1001 CONNECTICUT AVENUE, NW • SUITE 1010 • WASHINGTON, DC 20036 • T 202-483-5500 • F 202-483-0057

March 18, 1994

U.S. Sentencing Commission One Columbus Circle, NE Suite 2-500 Washington, D. C. 20002-8002

Dear Commissioners:

Thank you for taking the time to review the proposed "marijuana amendment." The weight equivalency issue is certainly one that deserves our attention.

Unfortunately, I will be out of town for most of the day on Thursday, March 24, so I probably will not be able to testify before the Commission. Hence, I have summarized NORML's request and arguments below, which I hope you will have an opportunity to review before the hearing.

NORML asks that the U.S. Sentencing Commission promulgate the following provisions as an amendment to the U.S. Sentencing Guidelines:

1. A female marijuana plant should be equated to 100 grams of marijuana, regardless of how many plants are grown.

2. Male plants should not be counted. Consequently, grown male plants should not factor into the equation, and half of a plot of seedlings should be discarded because 50% are assumed to be male.

3. All changes made to the U.S. Sentencing Guidelines should apply retroactively.

The overall logic of NORML's argument is as follows:

1. Weight-based sentencing can never be a perfect way of administering justice, but if we are to use a weight per plant ratio, equating each female marijuana plant and seedling to 100 grams is at least realistic.

2. The 100 grams per plant formula would continue the existing sentencing structure used for 49 or less plants, which more closely reflects the potential yield of a plant than the 1,000 grams per plant ratio. As you know, "the equivalency of 100 grams of marihuana per plant used in offenses involving fewer than fifty plants was developed after a review by the Commission of information relating to the actual yield of marijuana plants under a variety of conditions." [1]

3. The U.S. Sentencing Commission originally adopted the 1,000 grams per plant ratio from the Congressional enactment of a conversion system to be used (and is used) in mandatory minimum sentencing. U.S. Senator Joseph Biden explained at the time of the enactment that the 1,000 grams per plant ratio was designed to curtail "unnecessary debate" between prosecutors and defendants. There is no suggestion that the 1,000 grams per plant ratio was based on realistic science, or that it was intended to punish growers more severely than possessors of the finished product. [2]

4. The timing of the arrest creates a "cliff" in sentencing. A defendant who is arrested before harvesting 60 plants is eligible for a 63-month sentence, but if he or she were arrested the day after harvesting the plants and sentenced on the total weight of smokeable material, he or she would receive a much shorter sentence.

5. Using the 100 grams per plant ratio for 49 or less plants, while using the 1,000 grams per plant ration for 50 or more plants, creates another cliff. Those arrested with 49 plants or seedlings receive 10-16 months, while those arrested with 50 plants or seedlings receive 33-63 months.

6. In a nutshell, the 1,000 grams per plant ratio:

• was originally implemented in the U.S. Sentencing Guidelines because Congress used the ratio to simplify sentencing procedures and guidelines for mandatory minimums;

• was not originally based on scientific evidence, and in fact is unreasonable based on the actual potential of a plant's yield; and

• is punishing growers ten times as severely as possessors of the finished product.

Hence, the only reason to maintain the present ratio would be to purposefully impose harsher sentences on growers because they are supposedly "more culpable" than others who are caught with already-packaged marijuana.

Growers are not more culpable. A person with 60 plants is not more likely to be a dealer than someone who possesses 60,000 grams ( $60 \times 1,000$  grams) of cured, dried marijuana. (This is 125 pounds of marijuana.) In fact, a person with 60 plants isn't more likely to be a dealer than someone with 6,000 grams ( $60 \times 100$  grams), or 12.5 pounds of packaged marijuana. Many people grow for personal use, and many others are forced to grow for medicinal use.

7. Changing the U.S. Sentencing Guidelines to reflect the 100 grams per plant formula will allow judges to give probation sentences for cases they deem special, such as medical cases.

[1] U.S. Sentencing Commission, "Proposed Guideline Amendments for Public Comment," December 1993.

[2] U.S v. John Marshall, Appeal from the United States District Court for the District of Nebraska, filed July 19, 1993, docket number 92-3398.

### Summary:

The way the U.S. Sentencing Guidelines now read, an individual who is arrested with 120 seedlings--regardless of how puny, and whether or not they were being grown as medicine--will receive a mandatory minimum sentence of 5 years. If the U.S. Sentencing Guidelines are changed to reflect the fact that half of these seedlings--if they even live--will grow up to be male and therefore not smokeable, the individual would be sentenced for 60 plants. Using the 1,000 grams per plant formula, this would be the equivalent of possessing 125 pounds of packaged, dried, smokeable marijuana. (60 plants x 1,000 grams = 60,000 grams = 2,000 ounces = 125 pounds)

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If the U.S. Sentencing Guidelines are further changed to reflect a more accurate portrayal of a marijuana plant's actual yield, the individual would be sentenced instead as if he or she possessed 12.5 pounds of packaged marijuana. (60 plants x 100 grams = 6,000 grams = 200 ounces = 12.5 pounds)

While it is unlikely that a person who is growing 120 plants and seedlings will ever be able to harvest even 12.5 pounds of smokeable marijuana, this is at least more reasonable than if they were sentenced for having the equivalent of a full 125 pounds of marijuana--or, for that matter, sentenced for a mandatory minimum of 5 years in federal prison.

Sincerely,

Richard Cowan National Director

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	No.	92-3398
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United States of America, Appellant, V. John Marshall, Appellee. United States of America, Appellee. \* \* \* Appeal from the United \* States District Court for \* \* \* Appellee. \*

Submitted: April 15, 1993

Filed: July 19, 1993

Before McMILLIAN and BEAM, Circuit Judges, and SACHS, Senior District Judge.

SACHS, District Judge

The Government appeals from the district court's sua sponte departure downward in the sentencing of this drug case involving a large number of marijuana plants. Under a plea agreement, defendant pled guilty to the manufacture and possession with intent to manufacture in excess of 100 marijuana plants. In return for the guilty plea the United States agreed to make a non-binding recommendation at sentencing that the court impose its sentence at

'The Honorable Howard F. Sachs, Senior United States District Judge for the Western District of Missouri, sitting by designation. the low end of the applicable Sentencing Guideline range. Under the presentence report the imprisonment range was 97 to 121 months, calculated on a conversion ratio of one plant to one kilogram. On its own motion the court departed downward and imposed a 66 month sentence.

The district court at sentencing observed that "the determination that he should be charged with 416 kilograms of marijuana simply just doesn't make sense to me." In following the Guidelines to determine the Total Offense Level, and thereafter departing downward, the judge added that he viewed the classification as "arbitrary and capricious" when the conversion ratio is one kilogram to a plant, for 50 or more plants, but only 100 grams per plant for 49 or fewer plants.

We are compelled to reverse for resentencing, although we acknowledge skepticism about the rationale used by the Sentencing Commission. Disagreement with the Guidelines does not justify a departure. <u>United States v. Muzika</u>, 986 F.2d 1050, 1054 (7th Cir. 1993); <u>United States v. Jones</u>, 905 F. 2d 867, 870 (5th Cir. 1990); <u>United States v. Lopez</u>, 875 F.2d 1124, 1126 (5th Cir. 1989). An impression that an arbitrary and capricious factor has become embedded in the Guidelines may well, however, justify further consideration, on remand, of the constitutional validity of the Guideline provision, irrespective of the widespread (if occasionally grudging) judicial acceptance of the marijuana plant conversion ratio.<sup>1</sup>

<sup>&#</sup>x27;As will be further indicated, we are inclined to believe that there may be an acceptable rationale for "going light" on minor offenders, with 49 or fewer plants. See, e.g., <u>United States v.</u> <u>Webb</u>, 945 F.2d 967 (7th Cir. 1991), <u>cert. denied</u>, 112 S.Ct. 1228 (1992). We do not question and are in no position to question rulings in this circuit and elsewhere that would justify a more severe penalty for growers than for possessors of the finished product. Where we do suggest there may be room for further development of the issues would relate to (1) what rationale, if any, there is for penalizing growers on a ten-to-one ratio, if that

If, on remand and further study, defendant wishes to challenge the marijuana plant conversion ratio as arbitrary and capricious, and violative of substantive due process, an orderly presentation should be made, after adequate notice (unless the matter can be submitted on motions and briefs). Without legal challenge from or adopted by defendant, however, the district court is obligated to follow the Guidelines.

Because our suggestion that further challenge may be fruitful could be baffling, in light of the widespread validation of the conversion ratio, some further indication of what troubles us may be appropriate, as well as some indication of why we believe the issue may remain open in this circuit.

To begin with the final point, it will be acknowledged that shortly before the sentencing below there was a ruling in this circuit that it was not irrational to equate one marijuana plant with one kilogram of marketable marijuana. United States v. Smith, 961 P.2d 1389, 1390 (8th Cir. 1992). The rationale given was that Congress intended "heightened culpability of growers" and "may have equated one plant with one kilogram based on culpability not weight." A member of this panel joined that ruling on the issue, which has been declared "foreclosed" in this circuit. United States v. Johnston, 973 F.2d 611, 613 (8th Cir. 1992). It will be i observed, however, that the law in this circuit simply addresses

is occurring, and (2) whether there is reason to believe that Congress and the Sentencing Commission actually intended such disparity in punishment, as between growers and possessors. It seems quite possible, from the limited information we have, that "arbitrary and capricious" punishment is occurring, probably unintended by the original enacting parties. We believe there is some novelty in these points, which are not discussed in what may be the most thorough appellate survey of the conversion ratio controversy. United States v. Lee, 957 F.2d 778, 783-5 (10th Cir. 1992).

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the rationality of heightened culpability, not the surprising degree of disparity.<sup>2</sup>

Turning to the source of the marijuana plant conversion ratio, it appears the Sentencing commission adopted a ratio derived from congressional enactment of a conversion system usable in establishing minimum sentence qualifications. Derivation from 21 U.S.C. § 841(b)(1)(A), (B) and (D) is noted in the Sentencing Commission's "Background" statement on page 89 of the 1991 Guidelines Manual (applicable in this case). Senator Biden explained that the Congressional action was designed to curtail "unnecessary debate" between prosecutors and defendants, and stated, without explanation, that "[T]he bill uses 1,000 plants as the equivalent of 1,000 kilograms." 134 Cong. Rec. S17368 (daily ed. Nov. 10, 1988).

There is no suggestion evident to us that it was intended to punish growers more severely than possessors of the finished product. As recently as May of 1991, a district judge was given to understand that "one marijuana plant can reasonably be expected to produce a kilogram of a mixture or substance containing marijuana." <u>United States v. Lewis</u>, 762 F. Supp. 1314, 1316 (B.D. Tenn.), <u>aff'd. without opinion</u>, 951 F.2d 350 (6th Cir. 1991).<sup>3</sup> On the other hand, we find a Drug Enforcement Administration estimate of an average

<sup>3</sup>The current published view of the Sentencing Commission is that "the average yield from a mature marihuana plant equals 100 grams of marihuana." 1991 Guidelines Manual, 89.

We acknowledge, however, that this circuit's ruling sustaining the even more extraordinary disparity in punishment between possession of cocaine powder and cocaine base, on a cruel and unusual punishment challenge, may tend to discourage further challenge of the marijuana plant conversion ratio. See United States v. Buckner, 894 F.2d 975, 980-1 (8th Cir. 1990). With so, much at stake, however, in this and other cases, we are reluctant to say that full exploration of the issues is unwarranted, either in this case or in connection with the crack cocaine punishments, which continue to perplex many sentencing judges. We do not invite mere repetition of prior rejected arguments, without new facts or legal analysis.

plant yield of 400 grams, and a "possible" yield of 1000 grams. 54 Fed. Reg. 9121, 9136 (1989) (Sentencing Commission Notice).

On remand it may be developed that Congress did not have the DEA information when it amended the statute in question. But if Congress did in fact have the 400 gram average yield estimate before it, it may be presumed that Congress did intend to punish growers more severely, as the courts have surmised, but only on a ratio of about 2 1/2 to one, not far from the "treble damage" type . . of punishment that is frequently used. Our limited examination of the issues reveals nothing to suggest that there was a Congressional intent to adopt a harsh ten-to-one punishment ratio, applicable to marijuana plant growers, as the Sentencing Commission seems to have assumed.4

If it develope that the only available logiclative history is the one-sentence statement of a conclusion by Senator Biden, one might suppose that the Conster meant and big collection under stood, that there was, for practical purposes, a rough equivalence hat an a mail and a set a first of first and a set Somewhat less likely would be an understanding by the Senator that the ratio is unfavorable to growers, but within sufficiently conventional bounds so that he and his colleagues would not think the matter controversial enough to mention. Most unlikely, however, is that a ten-to-one ratio, as used by the Sentencing Commission, was being knowledgeably but silently adopted by . Congress as an appropriate standard for purposes of punishment.

In offering the above observations we of course do not intend to prejudge any issue, legal or factual, that may be developed before the district court on remand.

<sup>&</sup>lt;sup>4</sup>Several years of inaction arguably suggests Congressional and Sentencing Commission satisfaction with the current situation, but #

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The judgment is reversed for reconsideration of the sentencing decision.

A true copy.

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Attest:

CLERK, U.S. COURT OF APPEALS, EIGHTH CIRCUIT

## THE CITY UNIVERSITY OF NEW YORK MEDICAL SCHOOL THE SOPHIE DAVIS SCHOOL OF BIOMEDICAL EDUCATION

THE CITY COLLEGE OF NEW YORK DEPARTMENT OF PHARMACOLOGY [RM J903] 138th STREET & CONVENT AVENUE NEW YORK, NEW YORK 10031

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# REMARKS OF John P. Morgan, M.D. Professor of Pharmacology

February 18, 1994

In 1980 (May 21), 1986 (September 25) and now, 1994 (February 6), a <u>New York Times</u> reporter has discovered the "new highly-potent marijuana." The narrative of the three reports is nearly identical: some group of previous marijuana consumers (Beats; Hippies; Baby-Boomers) recalling their days of inconsequential smoking misunderstand the current dangers of the new potent marijuana. Jane Brody, Peter Kerr, and now Melinda Henneberger, relying on "drug treatment experts and law enforcement officials," present as fact that today's marijuana is 10 or even 20 times more potent than the marijuana of the 60s and 70s.

This green miracle attributed to unspecified agronomic wisdom is never documented. The "potent" drug is then linked to a number of harms involving pulmonary, immune, and cognitive functions. This narrative is now so fixed that it appears immune to research, data, fact and truth.

Marijuana potency is expressed as the percentage weight of the sample contributed by delta-9-THC. This active chemical was not identified until 1966 and potency was rarely measured before 1970. Reports from street drug laboratories assessing anonymously submitted samples indicate that from 1970 to 1975, commercial marijuana averaged 2-4 percent THC.

In 1975, a federally-funded marijuana potency monitoring project was established at the University of Mississippi. Essentially all plant samples tested have been seized by the DEA or state criminal agencies. The summer 1993 quarterly report traces the project's entire experience. Since 1974, approximately 20,000 samples of marijuana have been analyzed. The average THC content of all samples is 2.93 percent. Since the laboratory first received more than 250 seizures annually in 1981, there has been <u>no</u> discernible pattern of increased potency. The highest average potency was 3.96 percent in 1984. The lowest was 1.9 percent recorded in the last complete year tallied, 1992. These 1992 figures came from the assessment of approximately 3500 seized samples with total weight exceeding 1.5 million pounds.

The new potent marijuana is a myth.

MJ POTENCY

QUARTERLY REPORT POTENCY MONITORING PROJECT

### REPORT #46

April 1, 1993 - June 30, 1993

Mahmoud

Director NIDA Marijuana Project

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SAMUS AND ROSE

Samir A. Ross, Ph.D. Laboratory Supervisor NIDA Marijuana Project

Research Institute of Pharmaceutical Sciences School of Pharmacy University of Mississippi University, MS 38677

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### INTRODUCTION

As of June 30, 1993, samples from 21076 seizures of marijuana, hashish and hash oil have been analyzed. Of these 19858 were marijuana, 887 were hashish and 331 were hash oil. Composite analytical data on these samples show the following:

### % by Dry Weight of △9-THC in all Samples analyzed by the Project as of June 30, 1993

	<pre># Of Samples <u>Analyzed</u></pre>	Arithmetic H <u>Average</u> <u>Conc</u>	lighest entration	Lowest Concentration
Marijuana	19858	2.93	29.86	Trace*
Hashish	887	3.43	28.23	Trace
Hashish Oil	331	16.52	43.18**	0.04

For this report period April 1, 1993 through June 30, 1993, samples from 1989 seizures have been analyzed -- 1943 marijuana, 35 hashish, and 11 hash oil.

Composite analytical data on the samples analyzed during this quarter is as follows:

% by Dry Weight of  $\triangle^9$ -THC in samples analyzed between <u>April 1, 1993</u> to <u>June 30, 1993</u>

	Arithmetic <u>Average</u>	Highest <u>Concentration</u>	Lowest Concentration
Marijuana	3.28	26.16	0.10
Hashish	5.34	28.23	0.22
Hashish Oil	15.31	36.36	3.91

\*Less than 0.0095% \*\*Highest hash oil analyzed as confiscated material <u>Cannabis</u> plant material, categorized by physical description of the samples, showing the high and low  $\triangle^9$ -THC concentration is as follows:

% by Dry Weight of △<sup>9</sup>-THC in all Samples analyzed by the Project <u>as of June 30, 1993</u>

	<pre># Of Samples Analyzed</pre>	Arithmetic <u>Average</u>	c Highest <u>Concentration</u>	Lowest Concentration
Loose Plant Material	14401	2.51	29.86	Trace*
Kilobricks	2932	2.73	16.85	0.01
Buds	1808	4.69	29.86	0.01
Sinsemilla	679	7.88	20.06	0.19
Thai Sticks	38	3.74	8.92	0.05

% by Dry Weight of  $\triangle^9$ -THC in samples analyzed between April 1, 1993 June 30, 1993

	# Of Samples <u>Analyzed</u>	、 Arithmetic <u>Average</u> <u>Co</u>	Highest oncentration	Lowest Concentration
Loose Plant Material	1052	2.94	26.16	0.10
Kilobricks	794	3.03	8.40	0.20
Buds	81	9.01	26.16	0.50
Sinsemilla	14	9.66	19.14	2.09
Thai Sticks	0	0.00	0	0

\*Less than 0.0095%

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 $\triangle^9$ -THC concentrations by year confiscated are shown in Table 2.

# Table 1. Normalized versus Non-normalized Cannabinoid Averages of Illicit <u>Cannabis</u> Samples by Year Seized

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		NORMA	LIZED		CGN	Napinol
Year	No. Of <u>Seizures</u>	<u> </u>	<u>%</u> CBD	<u> 8 CBC</u>	<u>* CBN</u>	Kilograms
74 75 76 77 78 79 80 81 82 83 84 83 84 85 87 88 89 90	113 150 210 251 132 221 153 250 482 1227 1118 1613 1554 1699 1823 1270 1260	0.36 0.48 0.98 1.76 1.72 1.53 1.96 2.11 3.34 3.44 3.96 2.63 2.24 2.23 3.84 2.66 3.83	0.00 0.00 0.00 0.01 0.02 0.01 0.02 0.11 0.02 0.11 0.02 0.07 0.14 0.06 0.23 0.18 0.20 0.11	0.08 0.09 0.12 0.10 0.12 0.12 0.12 0.16 0.18 0.17 0.16 0.13 0.09 0.11 0.11 0.11 0.14 0.16 0.18	0.44 1.17 0.62 0.74 1.27 1.40 0.69 0.98 0.74 0.54 0.47 0.52 0.44 0.33 0.54 0.60 0.37	18013.328 67159.536 101190.992 173611.056 154532.064 71859.168 44094.656 147438.416 299883.264 776255.744 1258949.630 729123.584 669372.672 620931.840 352152.832 179098.240 52982.432
91 92 93	2505 3409 284	3.78 1.90 4.36	0.17 1.24 0.07	0.17 0.09 0.15	0.27 0.23 0.15	76269.056 682670.592 81438.768

## NON-NORMALIZED AVERAGES

Year	No. Of <u>Seizures</u>	<u> </u>	<u>%</u> CBD	<u>%</u> CBC	€ <u>CBN</u>
74	113	0.89	0.03	0.08	0.49
75	150	0.71	0.03	0.10	0.55
76	210	0.72	0.00	0.09	0.37
77	251	0.91	0.08	0.10	0.43
78	132	1.37	0.01	0.12	0.67
79	221	1.67	0.02	0.12	0.24
80	153	2.06	0.10	0.14	0.47
81	250	2.37	0.36	0.16	0.38
82	482	3.05	0.34	0.19	0.33
83	1227	3.23	0.22	0.17	0.30
84	1118	3.29	0.24	0.17	0.34
85	1613	2.82	0.28	0.14	0.23
86	1554	2.30	0.29	0.15	0.21
87	1699	2.93	0.30	0.17	0.30
88	1823	3.29	0.28	0.15	0.30
89	1270	3.07	0.37	0.14	0.22
90	1260	3.36	0.38	0.18	0.19
91	2505	3.00	0.45	0.19	0.16
92	3409	3.13	0.24	0.20	0.34
93	284	4.73	0.17	0.15	0.20

Year	Loose <u>Material</u>	Kilobrick	Buds	<u>Sinsemilla</u>	Thai <u>Sticks</u>	<u>Hashish</u>	<u>Hash</u> Oil
74	1.30	0.40	**	**	0.54	0.86	15.88
75	1.03	0.47	1.34	**	**	2.31	13.09
76	1.87	0.54	3.03	**	**	3.28	18.82
77	1.27	0.53	1.38	3.20	4.91	1.81	18.89
78	1.47	0.96	2.11	6.28	0.49	2.15	21.31
79	1.57	0.79	3.03	3.66	0.13	2.32	20.91
80	1.02	0.63	3.81	6.40	0.05	2.58	16.56
81	1.48	0.78	3.52	6.38	** i	2.91	17.45
82	2.63	**	5.14	7.10	4.60	2.69	19.88
83	2.94	**	4.99	7.47	4.17 .	5.47	21.36
84	2.91	4.07	4.37	6.67	5.71	5.75	16.75
85	2.44	3.80	4.88	7.28	6.26	6.49	15.08
86	1.96	2.98	5.09	8.43	4.22	2.63	16.51
87	2.59	3.32	4.47	7.93	4.45	2.62	13.36
88	2.77	3.53	5.18	7.62	3.36	3.35	8.52
89	2.49	3.85	3.89	6.95	**	7.06	11.96
90	2.79	3.76	4.27	10.10	0.12	5.30	16.60
91	2.27	3.11	4.40	10.53	**	5.21	13.07
92	2.67	3.08	5.80	8.57	**	6.18	14.36
93	4.13	4.06	10.64	8.91	**	**	26.78

# Table 2. Comparison of Non-normalized $\bigtriangleup^9-\text{THC}$ Concentrations in Different Forms by Year Confiscated 1974 - 1993\*

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\* All figures are given as percent by dry weight. \*\* No samples analyzed which were confiscated in this year.

The above averages are not normalized by weight of seizure, but are simple arithmetic means calculated by dividing the sum of the  $\triangle^9$ -THC concentrations of each form by the number of seizures of that form. These figures should be more useful in spotting trends than the normalized averages. The normalized averages (as found in Table 5) should give a better representation of what was on the street in the given years.

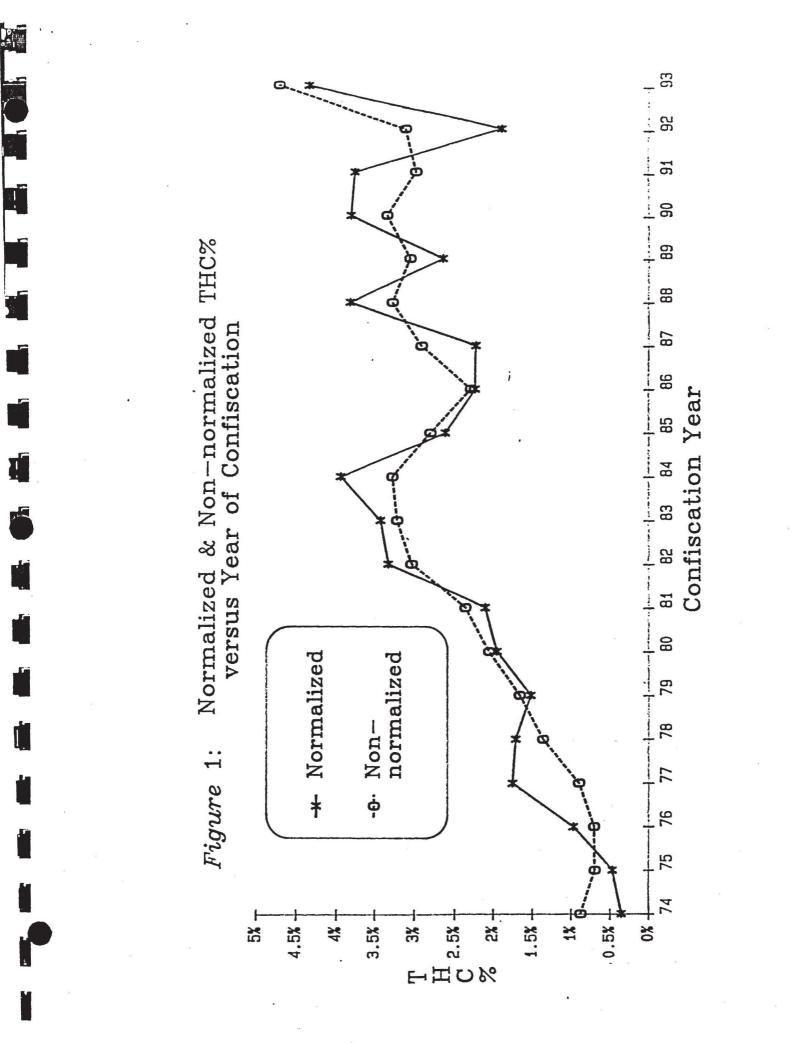


Table	з.	Normalized $\Delta^{y}$ -	THC	Averages*	of	Illicit	Cannabis Samples Analyzed	
		through June	30,	1993 by 1	Year	Seized	and Description	

YR	BD	KB	МН	SM	TS	YR/TOTAL	
76 77 80 81 82 83 84 85 88 88 89 90 91 93	3.03 (1) 0.53 (7) 2.44 (25) 3.35 (11) 4.26 (6) 4.46 (33) 2.91 (50) 3.90 (126) 4.53 (178) 5.25 (106) 3.58 (68) 4.37 (109) 5.86 (153) 4.31 (196) 4.60 (117) 5.84 (375) 7.77 (216) 9.22 (25)	4.43 (73) 3.94 (97) 2.67 (194) 3.96 (139) 3.53 (54) 4.52 (111) 3.47 (507)	1.60 (27) 2.28 (63) 1.52 (43) 0.55 (181) 0.65 (114) 1.64 (182) 3.36 (410) 3.43 (1076) 3.72 (879) 2.59 (1381) 2.21 (1351) 1.95 (1350) 3.80 (1431) 2.52 (934) 3.69 (969) 3.43 (1548) 1.34 (2074) 2.18 (139)	5.62 (18) 5.56 (36) 6.48 (52) 10.62 (32) 5.84 (43) 6.29 (98) 5.62 (86) 7.28 (61) 9.21 (75)	0.00 (0) 4.91 (1) 0.40 (3) 0.13 (1) 0.05 (1) 0.00 (0) 5.33 (8) 5.19 (7) 7.63 (3) 6.26 (1) 3.56 (6) 3.62 (3) 2.11 (2) 0.00 (0) 0.12 (1) 0.00 (0) 0.00 (0) 0.00 (0)	$\begin{array}{c} 0.98 & (210) \\ 1.76 & (251) \\ 1.72 & (132) \\ 1.53 & (221) \\ 1.96 & (153) \\ 2.11 & (250) \\ 3.34 & (482) \\ 3.44 & (1227) \\ 3.96 & (1118) \\ 2.63 & (1613) \\ 2.24 & (1554) \\ 2.23 & (1699) \\ 3.84 & (1823) \\ 2.66 & (1270) \\ 3.83 & (1260) \\ 3.78 & (2505) \\ 1.90 & (3409) \\ 4.36 & (284) \end{array}$	
							1

\*\*4.57(1808) 2.51 (2932) 2.67(11401) 5.88(679) 5.64(38) 2.84(19858)

### Description Key:

Description; code for the physical description of samples as follows:

- MH Marijuana; marijuana in the form of loose <u>Cannabis</u> plant material with leaves, stems and seeds; includes cigarettes and those samples which cannot be described otherwise.
- KB Kilobrick; marijuana compressed into the form of a kilobrick (classical Mexican packaging); has leaves, stems and seeds.
- BD Buds; marijuana in the form of buds of flowering tops of the <u>Cannabis</u> plant with seeds.
- SM Sinsemilla; marijuana in the form of Sinsemilla; i.e., flowering tops of the female <u>Cannabis</u> plant with no seeds.
- TS Thai Sticks; marijuana in the form of Thai Sticks, leafy material tied around a small stem.
  - \* All figures are given as percent by dry weight.
- \*\* Averages include 397 samples analyzed which were seized prior to 1976. The number in parentheses indicated the number of samples analyzed.

# Table 4. Normalized △9-THC Averages\* of Illicit <u>Cannabis</u> Samples Analyzed through March 31, 1993 by Year Seized and Source

76 $2.96$ (5) $0.00$ (0) $0.98$ (205) $0.00$ (0) $0.00$ (0) $0.98$ (210) $77$ $0.78$ (4) $0.42$ (1) $1.76$ (241) $2.06$ (2) $1.32$ (3) $1.76$ (251) $78$ $0.78$ (5) $0.74$ (1) $1.72$ (109) $4.85$ (17) $0.00$ (0) $1.72$ (132) $79$ $1.76$ (162) $3.76$ (3) $1.53$ (48) $4.27$ (6) $0.31$ (2) $1.53$ (221) $80$ $5.11$ (31) $1.71$ (21) $1.96$ (77) $2.25$ (13) $0.46$ (11) $1.96$ (153) $81$ $1.79$ (1) $0.46$ (6) $2.14$ (177) $1.64$ (16) $0.52$ (50) $2.11$ (250) $82$ $0.00$ (0) $2.21$ (130) $3.60$ (226) $0.00$ (0) $1.63$ (126) $3.34$ (482) $83$ $0.00$ (0) $1.41$ (13) $3.46$ (824) $0.00$ (0) $1.41$ (331) $3.96$ (1118) $85$ $0.00$ (0) $0.00$ (0) $4.07$ (787) $0.00$ (0) $1.41$ (331) $3.96$ (1118) $85$ $0.00$ (0) $0.00$ (0) $2.38$ (752) $0.00$ (0) $1.64$ (802) $2.24$ (1554) $87$ $0.00$ (0) $0.00$ (0) $2.34$ (1146) $0.00$ (0) $1.98$ (553) $2.23$ (1699) $88$ $0.00$ (0) $0.00$ (0) $2.75$ (751) $0.00$ (0) $0.01$ (519) $2.66$ (1270) $90$ $0.00$ (0) $0.00$ (0) $3.78$ (1562) $0.00$ (0) $5.08$ (943) $3.78$ (2505)	YR	FG	PD	PM	PS	ST	YR/TOTAL
92       0.00 (0)       0.00 (0)       3.73 (2388)       0.00 (0)       0.97 (1021)1.90 (3409)         93       0.00 (0)       0.00 (0)       4.62 (263)       0.00 (0)       2.07 (20)       4.36 (284)	76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92	2.96 (5) 0.78 (4) 0.78 (5) 1.76 (162) 5.11 (31) 1.79 (1) 0.00 (0) 0.00 (0)	0.00 (0) 0.42 (1) 0.74 (1) 3.76 (3) 1.71 (21) 0.46 (6) 2.21 (130) 1.41 (13) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0)	0.98 (205) 1.76 (241) 1.72 (109) 1.53 (48) 1.96 (77) 2.14 (177) 3.60 (226) 3.46 (824) 4.07 (787) 2.80 (770) 2.38 (752) 2.34 (1146) 3.84 (1264) 2.75 (751) 3.83 (771) 3.78 (1562) 3.73 (2388)	$\begin{array}{c} 0.00 & (0) \\ 2.06 & (2) \\ 4.85 & (17) \\ 4.27 & (6) \\ 2.25 & (13) \\ 1.64 & (16) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & ($	0.00 (0) 1.32 (3) 0.00 (0) 0.31 (2) 0.46 (11) 0.52 (50) 1.63 (126) 1.89 (390) 1.41 (331) 1.10 (843) 1.64 (802) 1.98 (553) 4.50 (559) 0.01 (519) 3.96 (489) 5.08 (943) 0.97 (1021)	0.98 (210) 1.76 (251) 1.72 (132) 1.53 (221) 1.96 (153) 2.11 (250) 3.34 (482) 3.44 (1227) 3.96 (1118) 2.63 (1613) 2.24 (1554) 2.23 (1699) 3.84 (1823) 2.66 (1270) 3.83 (1260) 3.78 (2505) )1.90 (3409)

\*\*1.79 (290) 0.87(207) 3.10 (12604) 3.69 (54) 1.33(6703) 2.84(19858)

### Source:

- PM Potency Monitoring; designates those samples received through the DEA under the scope of the Potency Monitoring Program.
- PS Psychiatric; received through a psychiatrist or other MD from a patient having psychiatric or medical problems related to marijuana use.
- PD Police Department; designates those samples received from police department; e.g., samples received from the Gulfport, Miss., police chief would be classified as PD; place seized would be Gulfport, Miss.
- ST State Crime Labs; designates those samples received from state crime labs or other state agencies. In the overall printout, samples received from state agencies will be classified by the state's 2- letter abbreviation as used by the U.S. Postal Service.

FG - Fugitive; designates samples received when no arrests were made.

- \* All figures are given as percent by dry weight.
- \*\* Averages include 397 samples analyzed which were seized prior to 1976. The number in parentheses indicates the number of samples analyzed.

#### Table 5. Domestic Cultivation\*

Cannabis Samples Analyzed through June 30, 1993

0.0% of 113 samples seized in 1974 was known to be Domestic 6.0% of 150 samples seized in 1975 was known to be Domestic 0.0% of 210 samples seized in 1976 was known to be Domestic 6.4% of 251 samples seized in 1977 was known to be Domestic 9.1% of 132 samples seized in 1978 was known to be Domestic 6.3% of 221 samples seized in 1979 was known to be Domestic 153 samples seized in 1980 was known to be Domestic 22.9% of 51.6% of 250 samples seized in 1981 was known to be Domestic 29.0% of 482 samples seized in 1982 was known to be Domestic 31.5% of 1227 samples seized in 1983 was known to be Domestic 29.6% of 1118 samples seized in 1984 was known to be Domestic 52.2% of 1613 samples seized in 1985 was known to be Domestic 51.3% of 1554 samples seized in 1986 was known to be Domestic 32.2% of 1699 samples seized in 1987 was known to be Domestic 28.7% of 1823 samples seized in 1988 was known to be Domestic 40.1% of 1270 samples seized in 1989 was known to be Domestic 35.6% of 1260 samples seized in 1990 was known to be Domestic 37.5% of 2505 samples seized in 1991 was known to be Domestic 30.0% of 3409 samples seized in 1992 was known to be Domestic 25.0% of 284 samples seized in 1993 was known to be Domestic

\*\*34.3% of a total of 19858 samples seized was known to be Domestic

- \* Includes only those samples known to be domestically cultivated. In many cases, this is unknown; therefore, these figures probably represent a low estimate.
- \*\*Percentages given are of the number of <u>Cannabis</u> samples analyzed by the Project which were seized in the given year.

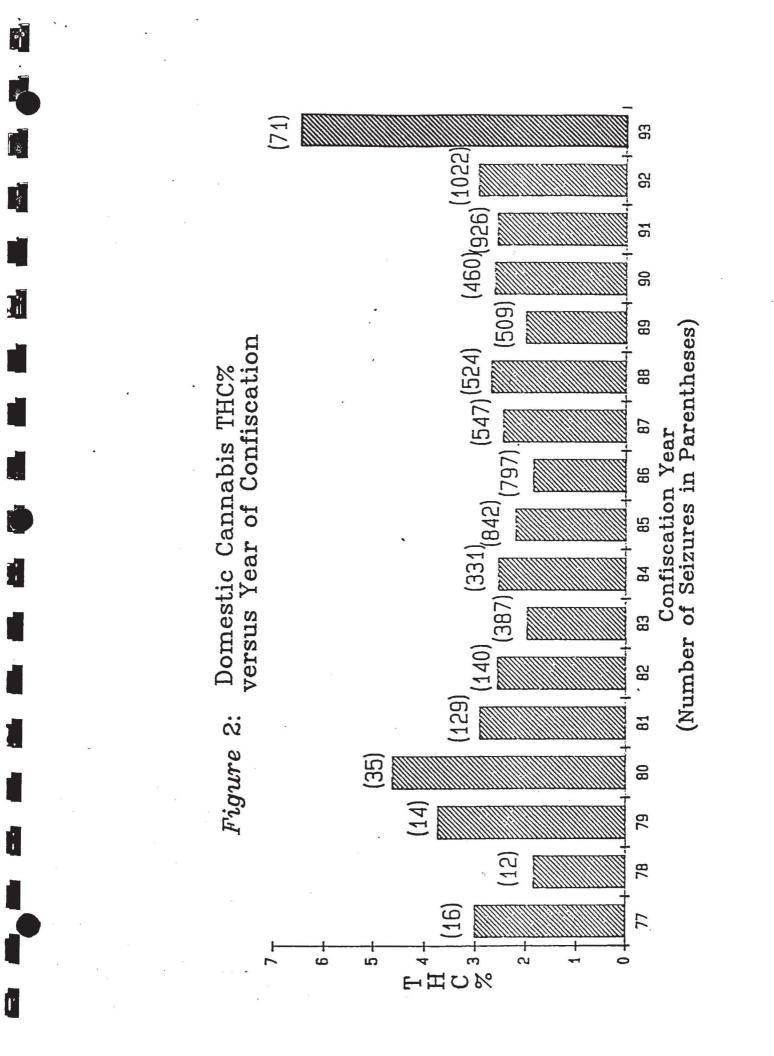
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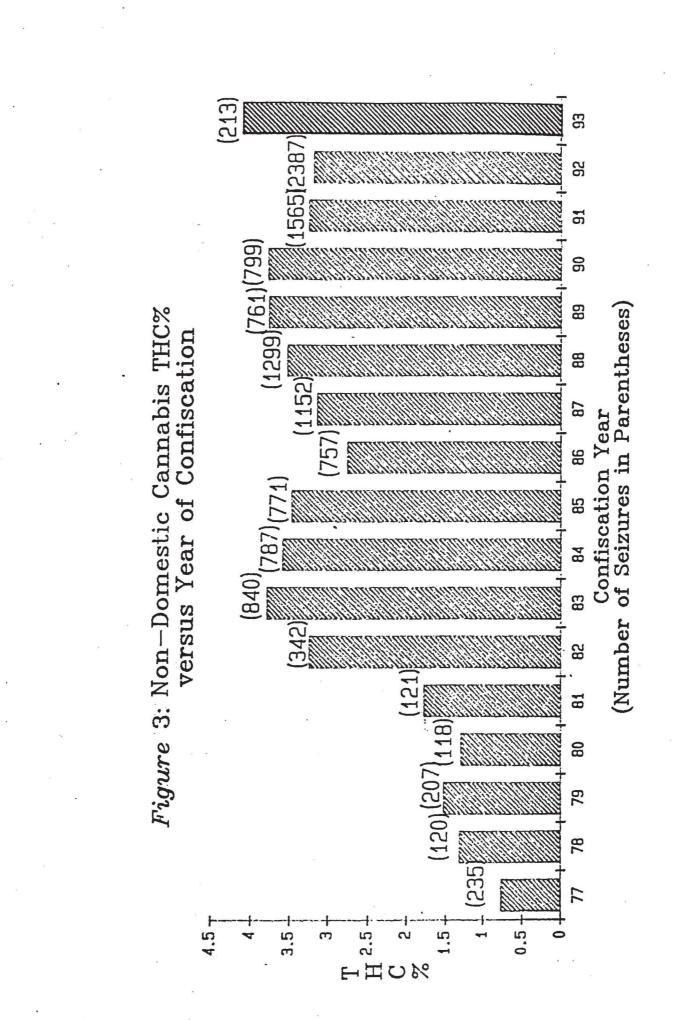
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Year	No. of <u>Seizures</u>	\$ <u>∆<sup>9</sup>-THC</u>	<u>% CBD</u>	<u>€</u> CBC	<u>% CBN</u>	
75	9	1.24	0.00	0.19	0.02	
77	16	3.02	1.18	0.25	0.19	
78	12	1.85	0.01	0.13	0.16	
79	14	3.74	0.22	0.20	0.19	
80	35	4.64	0.38	0.18	0.10	
81	129	2.92	0.62	0.18	0.07	
82	140	2.57	0.80	0.16	0.09	
83	387	1.98	0.46	0.14	0.07	
84	331	2.55	0.48	0.19	0.17	
85	842	2.21	0.44	0.15	0.10	
86	797	1.86	0.43	0.16	0.08	
87	547	2.46	0.62	0.21	0.12	
88	524	2.69	0.45	0.15	0.12	
89	509	2.01	0.59	0.12	0.08	
90	461	2.63	0.68	0.19	0.03	
91	940	2.58	0.87	0.21	0.03	
92	1022	2.95	0.45	0.30	0.03	
93	71	6.52	0.16	0.17	0.06	





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Table 7. △9-THC Averages (non-normalized\*) for Domestically Cultivated <u>Cannabis</u> Samples Analyzed through June 30, 1993 by Year Seized and Description

YR B	D KI	3 MH	SM	Т	S YR/TOTAL
$\begin{array}{ccccccc} 75 & 0.00\\ 77 & 0.00\\ 78 & 1.68\\ 79 & 0.00\\ 80 & 0.00\\ 81 & 2.87\\ 82 & 11.30\\ 83 & 4.14\\ 84 & 3.04\\ 85 & 4.31\\ 86 & 6.64\\ 87 & 4.32\\ 88 & 4.20\\ 89 & 2.03\\ 90 & 3.14 \end{array}$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(9)       0.00         (1)       3.20         (10)       6.28         (4)       3.66         (11)       6.44         (80)       6.42         (127)       7.48		$ \begin{array}{ccccc} (0) & 1.24 & (9) \\ (0) & 3.02 & (16) \\ (0) & 1.85 & (12) \\ (0) & 3.74 & (14) \\ (0) & 4.64 & (35) \\ (0) & 2.92 & (129) \\ (0) & 2.57 & (140) \\ (0) & 1.98 & (387) \\ (0) & 2.55 & (331) \\ (0) & 2.55 & (331) \\ (0) & 2.21 & (842) \\ (0) & 1.86 & (797) \\ (0) & 2.46 & (547) \\ (0) & 2.69 & (524) \\ (0) & 2.63 & (461) \\ (0) & 2.58 & (940) \\ (0) & 2.95 & (1022) \\ \end{array} $
*4.46	(638) 3.67	(9) 1.83	(5680) 7.60	(473) 0.00	(0) 2.48 (6805)

#### Description Key:

Description; code for the physical description of samples as follows:

- MH Marijuana; marijuana in the form of loose <u>Cannabis</u> plant material with leaves, stems and seeds; includes cigarettes and those samples which cannot be described otherwise.
- BD Buds; marijuana in the form of buds of flowering tops of the <u>Cannabis</u> plant with seeds.
- SM Sinsemilla; marijuana in the form of sinsemilla; i.e., flowering tops of the female <u>Cannabis</u> plant with no seeds.
- \* Weight of Seizure not known. Figures are percent by dry weight.
- \*\* Averages include 19 samples which were seized prior to 1975. The number in parentheses indicates the number of samples analyzed.

### Table 8. $\triangle^9$ -THC averages (non-normalized\*) for Non-Domestically Cultivated <u>Cannabis</u> Samples Analyzed through June 30, 1993 by Year Seized and Description

YR	BD	KB	MH	SM	TS	YR/TOTAL
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.47 (88) 0.54 (182) 0.53 (165) 0.96 (60) 0.79 (18) 0.63 (5) 0.78 (3) 0.00 (0) 4.07 (22) 3.80 (73) 2.98 (97) 3.32 (188) 3.53 (139) 3.85 (54) 3.78 (110) 3.11 (507) 3.07 (1037) 4.06 (117)	1.00 (50) 1.87 (27) 1.29 (62) 1.49 (33) 1.51 (177) 1.05 (103) 1.37 (102) 2.89 (283) 3.54 (706) 3.50 (603) 3.15 (614) 2.42 (590) 2.88 (861) 3.19 (1025) 3.34 (551) 3.49 (614) 2.82 (866) 2.94 (1191) 4.17 (92)	$\begin{array}{c} 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \\ 6.11 & (3) \\ 5.71 & (2) \\ 4.83 & (2) \\ 6.59 & (12) \\ 5.87 & (6) \\ 7.95 & (12) \\ 8.50 & (13) \\ 8.14 & (18) \\ 8.30 & (29) \\ 7.13 & (29) \\ 9.17 & (17) \\ 11.20 & (29) \\ 9.67 & (33) \\ 2.52 & (1) \end{array}$	$\begin{array}{c} 0.00 & (0) \\ 0.00 & (0) \\ 4.91 & (1) \\ 0.49 & (3) \\ 0.13 & (1) \\ 0.05 & (1) \\ 0.00 & (0) \\ 4.60 & (8) \\ 4.17 & (7) \\ 5.71 & (3) \\ 6.26 & (1) \\ 4.22 & (6) \\ 4.45 & (3) \\ 3.36 & (2) \\ 0.00 & (0) \\ 0.12 & (1) \\ 0.00 & (0) \\ 0.00 & (0) \\ 0.00 & (0) \end{array}$	0.68 (141) 0.72 (210) 0.77 (235) 1.32 (120) 1.53 (207) 1.30 (118) 1.78 (121) 3.25 (342) 3.80 (840) 3.60 (787) 3.48 (771) 2.77 (757) 3.15 (1152) 3.54 (1299) 3.78 (761) 3.78 (799) 3.26 (1565) 3.20 (2387) 4.13 (213)
	**4.82(1170)	2.72(2923)	2.95 (8715)	8.52 (206)	3.74 (38)	

### Description Key:

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Description; code for the physical description of samples as follows:

- MH Marijuana; marijuana in the form of loose <u>Cannabis</u> plant material with leaves, stems and seeds; includes cigarettes and those samples which cannot be described otherwise.
- BD Buds; marijuana in the form of buds of flowering tops of the <u>Cannabis</u> plant with seeds.
- SM Sinsemilla; marijuana in the form of sinsemilla; i.e., flowering tops of the female <u>Cannabis</u> plant with no seeds.
- \* Weight of Seizure not known. Figures are percent by dry weight.
  \*\* Averages include 19 samples which were seized prior to 1975. The
- number in parentheses indicates the number of samples analyzed.

Table 9. △<sup>9</sup> -THC averages (non-normalized\*) for Domestically Cultivated <u>Cannabis</u> Samples Analyzed through March 31, 1993 by Year Seized and Source of Confiscation

YR	FG	PD	PM	PS	ST	YR/TOTAL
75 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92	$\begin{array}{c} 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 3.48 & (11) \\ 6.48 & (20) \\ 1.79 & ( \ 1 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 $	$\begin{array}{c} 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.74 & ( \ 1 ) \\ 4.71 & ( \ 3 ) \\ 1.56 & (10) \\ 0.00 & ( \ 0 ) \\ 2.04 & ( \ 7 ) \\ 1.40 & ( \ 2 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.00 & ( \ 0 ) \\ 0.$	1.24 (9) 3.20 (15) 1.68 (1) 0.00 (0) 3.33 (88) 5.12 (15) 1.11 (1) 0.00 (0) 3.21 (2) 5.98 (3) 3.15 (15) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.00 (0) 0.83 (2)	0.00 (0) 0.31 (1) 1.98 (10) 0.00 (0) 2.67 (1) 0.00 (0) 0.00	0.00 (0) 0.00 (0) 0.00 (0) 3.62 (4) 2.04 (40) 2.28 (118) 1.99 (384) 2.55 (331) 2.21 (840) 1.85 (794) 2.44 (532) 2.69 (524) 2.69 (524) 2.01 (509) 2.63 (461) 2.58 (940) 2.95 (1020)	1.24 (9) 3.02 (16) 1.85 (12) 3.74 (14) 4.64 (35) 2.92 (129) 2.57 (140) 1.98 (387) 2.55 (331) 2.21 (842) 1.86 (797) 2.46 (547) 2.69 (524) 2.01 (509) 2.63 (461) 2.58 (940)
93	0.00 ( 0)	0.00 ( 0) 2.26 (25)	6.85 (51) 4.23 (202)	0.00 (0); 1.90 (12)	5.67 (20)	6.52 (71)
		2.20 (25)	4.23 (202)	1.50 (12)	2.42 (6518)	2.40 (0005)

#### Description Key:

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State.

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Description; code for the physical description of samples as follows:

- PM Potency Monitoring; designates those samples received through the DEA under the scope of the Potency Monitoring Program.
- PS Psychiatric; received through a psychiatrist or other MD from a patient having psychiatric or medical problems related to marijuana use.
- PD Police Department; designates those samples received from police department; e.g., samples received from the Gulfport, Miss., police chief would be classified as PD; place seized would be Gulfport, Miss.
- ST State Crime Labs; designates those samples received from state crime labs or other state agencies. In the overall printout, samples received from state agencies will be classified by the state's 2-letter abbreviation as used by the U.S. Postal Service.
- FG Fugitive; designates samples received when no arrests were made.
  - \* Weight of seizures not known. Figures are percent by dry weight.
  - \*\* Averages include 19 samples analyzed which were seized prior to 1975. The number in parentheses indicated the number of samples analyzed.

Table 10. △<sup>9</sup> -THC averages (non-normalized\*) for Non-Domestically Cultivated <u>Cannabis</u> Samples Analyzed through June 30, 1993 by Year Seized and Source of Confiscation

YR	FG		PD	)	Pl	4	PS		ST		YR/	TOTAL
75 77 78 80 82 83 85 86 88 89 91 92 93	2.96 0.78 0.78 1.54	(11) (5) (5) (151) (11) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0	0.00 0.00 0.42 0.00 0.66 0.71 2.40 3.03 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.000 0.0000	( 0) ( 1) ( 0) ( 11) ( 11) ( 6) (123) (11) ( 0) ( 0) ( 0) ( 0)	0.67 0.76 1.24 1.20 1.27 1.72 3.77 3.82 3.60 3.48 2.78 3.20 3.59 3.75	(1264) (751) (771) (1562) (2386)	0.00 0.00 3.82 3.04 4.28 2.29 1.73 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.00	(0) (1)	0.00 1.00 0.29 0.63 2.96 2.53 1.73 0.00 1.88 1.44 0.75 1.62 5.69 3.70 0.16	(3) (0) (2) (7) (10) (8) (6) (0) (3) (8)	0.68 0.72 1.32 1.53 1.30 1.78 3.25 3.80 3.60 3.60 3.48 2.77 3.15 3.54 3.78 3.78 3.26 3.20 4.13	(210) (235) (120) (207) (118) (121) (342) (840) (787) (771) (757) (1152) (1299) (761) (799) (1565)
	**1.58 (2	242)	2.04	(182)	3.22	(12402)	2.52	(42)	2.08	(185)	3.15	(13053)

#### Description Key:

Description; code for the physical description of samples as follows:

- PM Potency Monitoring; designates those samples received through the DEA under the scope of the Potency Monitoring Program.
- PS Psychiatric; received through a psychiatrist or other MD from a patient having psychiatric or medical problems related to marijuana use.
- PD Police Department; designates those samples received from police department; e.g., samples received from the Gulfport, Miss., police chief would be classified as PD; place seized would be Gulfport, Miss.
- ST State Crime Labs; designates those samples received from state crime labs or other state agencies. In the overall printout, samples received from state agencies will be classified by the state's 2-letter abbreviation as used by the U.S. Postal Service.
- FG Fugitive; designates samples received when no arrests were made.
  - \* Weight of seizures not known. Figures are percent by dry weight.
  - \*\* Averages include 19 samples analyzed which were seized prior to 1975. The number in parentheses indicated the number of samples analyzed.

Table 11. Average Concentrations\* of Four Cannabinoids Found in All Hashish Samples Analyzed by the Project through June 30, 1993

	Year	Seizures	<u>%∆9-THC</u>	<u>%CBD</u>	<u>%CBC</u>	*CBN
	74	53	0.86	1.99	0.28	2.28
	75	88	2.31	2.60	0.38	1.67
	76	52	3.28	3.23	0.37	2.54
	77	44	1.81	2.94	0.22	1.72
	78	51	2.15	4.03	0.23	2.07
	79	43	2.32	5.45	0.16	1.76
	80	37	2.58	7.58	0.38	1.88
	81	13	2.91	6.51	0.28	1.90
	82 •	32	2.69	6.73	0.10	1.45
	83	47	5.47	6.15	0.13	1.62
	84	59	5.75	3.25 .	0.31	1.59
	85	41	6.49	2.30	0.34	1.33
	86	53	2.63	1.10	0.30	1.27
	87	63	2.62	1.63	0.19	1.24
	88	43	3.35	2.22	0.21	1.70
	89	19	7.06	5.08	0.32	1.56
	90	38	5.30	4.90	0.42	1.50
	91	31	5.21	3.58	0.50	1.78
	92	44	6.18	2.60	0.68	3.72
	93***				•	
		×				
TOTAL		**887	3.43	3.50	0.30	1.83

\*

All figures are given as percent by dry weight. Averages include 36 samples analyzed which were confiscated \*\* prior to 1974.

No 1993 hashish seizures. \*\*\*

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The above averages are not normalized.

Table 12. Average Concentrations\* of Four Cannabinoids Found in All Hash Oil Samples Analyzed by the Project through June 30, 1993

	Year	No. Of <u>Seizures</u>	<u> </u>	<u>% CBD</u>	<u>%</u> CBC	8 CBN
	74	19	15.88	10.87	1.41	3.91
	75	29	13.09	6.71	0.86	4.21
	76	18	18.82	10.25	1.16	5.07
	77	17	18.89	6.83	0.57	4.98
	78	9	21.31	6.06	1.39	5.07
	79	9.	20.91	0.57	1.54	6.00
	80	8	16.56	8.67	1.02	5.30
	81	5	17.45	10.16	1.35	3.63
	82	8	19.88	8.128	1.58	4.34
•	83	30 -	21.36	3.25	1.47	4.57
	84	33	16.75	1.36	1.06	4.31
	85	25	15.08	0.42	0.96	5.08
	86	23	16.51	2.10	1.52	3.18
	87	22	13.36	0.29	0.99	3.95
	88	16	\$.52	1.46	0.65	2.22
	89	9	11.96	1.59	0.85	4.85
	90	12	16.60	0.86	0.74	1.81
	91	10	13.07	3.26	0.95	2.25
	92	19	14.36	1.08	1.46	4.25
	93	1	26.78	0.00	0.00	2.65
TOTAL		**331	16.52	4.01	1.11	4.18

\* All figures are given as percent by dry weight.
\*\* Averages include 9 samples analyzed which were seized prior to 1974.

The above averages are not normalized.

All and a second s

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-	Table 13. Number of Seizures and Received from each DEA Labo	of Seizures an om each DEA Lab	13. Number of Seizures and Normalized Average Received from each DEA Laboratory and Analyzed		Delta-9-THC Concentrations of All Samples by the Project through June 30, 1993	of All Samples e 30, 1993	
	Cannabis	1.B	Hashish		Hash Oil	Oil	Total
LAB	No. of Of Seizures	%∆ <sup>9</sup> -THC Content	No. of Seizures	\$∆ <sup>9</sup> -THC Content	No. of Seizures	\$∆ <sup>9</sup> -THC Content	No. of Seizures
STRL	168	3.56	153	<b>U</b>	26	5.33	347
NERL	599	2.64	155	2.78	49	20.10	803
MARL	77	2.82	12	0.48	ч	16.15	06
SERL	2253	3.05	157	2.32	161	18.56	2571
NCRL	743	2.68	46	2.96	21	20.70	810
SCRL	3289	3.18	42	1.51	18	16.06	3349
SWRL	4311	2.94	139	3.94	21,	11.13	4471
WRL	958	5.93	163	5.56	27	24.32	1148
OTHER	7460	1.34	20	0.94	7	28.09	7487
		·	,				
TOTAL	19858	×	887		165	×	9/017

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KEY: STRL - Special Testing and Research Laboratory NERL - Northeast Regional Laboratory MARL - Mid-Atlantic Regional Laboratory SERL - Southeast Regional Laboratory WRL - Western Regional Laboratory SCRL - South Central Regional Laboratory NCRL - North Central Regional Laboratory SWRL - Southwest Regional Laboratory

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	Cannabis		Hashish		Hash Oil	oil	Total
LAB	No. of Of Seizures	%∆ <sup>9</sup> -THC Content	No. of Seizures	%∆ <sup>9</sup> -THC Content	No. of Seizures	%∆ <sup>9</sup> -THC Content	No. of Seizures
STRL	0	0.00	ω	5.42	1	3.91	6
NERL	103	2.38	С	1.68	0	0.00	106
SERL	175	4.09	20	4.44	6	32.51	204
NCRL	88	2.62	0	0.00	0	0.00	88
SCRL	404	3.60	Т	0.22	0	0.00	405
SWRL	199	4.05	0	0.00	ч	15.72	800
WRL	120	3.65	Э	5.58	0,	00.00	123
OTHER	254	1.70	<b>`</b>	0.00	o	0.00	254
TOTAL	1943		35		11	•	1989

KEY: STRL - Special Testing and Research Laboratory NERL - Northeast Regional Laboratory SERL - Southeast Regional Laboratory WRL - Western Regional Laboratory SCRL - South Central Regional Laboratory NCRL - North Central Regional Laboratory SWRL - Southwest Regional Laboratory

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Table 14. Number of Seizures and Normalized Average Delta-9-THC Concentrations of Samples Received from Each DEA Laboratory and Analyzed by the Project April 1, 1993 through June 30, 1993



# COMMENT ON U.S. SENTENCING GUIDELINE PROPOSALS March 24, 1994

# Amendment 33: Drug Trafficking (Sec. 2D1.1)

## 33(B). Changing the marijuana ratio from 1000 grams per plant.

Families Against Mandatory Minimums (FAMM) urges the Sentencing Commission to adopt the weight of 100 grams per marijuana plant regardless of number, eliminate the inclusion of male plants, and make both changes retroactive.

## <u>Historical precedence</u>

In its original sentencing scheme, the U.S. Sentencing Commission recognized that marijuana plants should be treated separately from harvested marijuana for sentencing purposes. The 1987 Sentencing Commentaries Drug Quantity Table shows that marijuana plants were ascribed a weight of 100 grams each. (See attached copy.) Under the 1987 guidelines, a defendant convicted of growing 200-399 plants received the same sentence as a defendant convicted of possessing 20-39 kilos of harvested marijuana. Both defendants were sentenced at level 18. In other words, it was understood that marijuana plant yield is one tenth the weight of a kilo of harvested marijuana.

By 1989, the U.S. Sentencing Guideline tables reflect the change in sentencing that the Commission adopted to correspond to the statutory sentencing change of 1,000 grams per plant. The change undermined the honesty in sentencing sought by the Commission and introduced a number of new disparities into the sentencing guidelines.

## <u>Scientific evidence</u>

The best-known expert in marijuana yield is professor Mahmoud ElSohly from the University of Tennessee, who grows marijuana for the government. Dr. ElSohly's research since 1975 proves that it is impossible to grow a marijuana plant that produces 1000 grams of useable product.

In his most recent research done between 1990-91, Dr. ElSohly's 24 marijuana plants averaged a yield of 222.37 for one type of marijuana and 273.7 grams for another. Dr. ElSohly's plants were grown outside and situated three feet apart. His research showed that the farther apart the marijuana was planted, the greater the yield.

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Dr. ElSohly also found that the average weight of all dry leaves (the smokeable product) amounted to 27 percent of the weight of a dry plant. The rest of the weight is stems and stalk, which are not consumed.

Dr. ElSohly does not grow male marijuana plants. His most recent report makes it clear that male marijuana plants are inconsequential to marijuana cultivation: "At approximately ten weeks from planting, male plants began to appear in the field and were removed as a matter of routine." (emphasis added)

Dr. ElSohly has testified for the government in a number of drug cases, and has testified for the defense in 4-5 cases. In one of those cases, (U.S. v. Osborn 2:90 CR-13-WCO) Dr. ElSohly testified that he had never seen or grown a marijuana plant that produced one kilogram. The biggest single plant he grew produced about 2 pounds. But even under ideal conditions, ElSohly testified that he would not expect to get an average yield of 1 kilogram of marijuana per plant because that would mean some plants would weigh as much as 5 pounds which, he concluded, is not possible.

At the Osborn trial, ElSohly stated that "a sentencing scheme based on 100 grams per plant would be reasonable, but a scheme based on one kilogram or 1,000 grams per plant would be very unreasonable."

## Marijuana cultivation

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There are a number of ways to grow marijuana that result in varying yields. The yield of a plant is increased by the amount of growing room it has and the individual attention it receives. It is also effected by the type of seed used, the length of the growing season, and whether it is grown indoors or outdoors. The goal of the grower is to cultivate female plants with flowering tops, known as "buds." At harvest, the buds and the leaves are collected and dried, to be smoked.

Female marijuana plants are genetically programmed to fruit, or bud, when the amount of daily light falls below 12 hours, which in nature occurs in the autumn. Indoors, the budding process can be initiated early, or delayed, by artificially altering the duration of the light. If a plant receives 18 hours or more of light per day, it continues to grow but does not bud. In this way, a grower can keep his plants in the vegetative state until the plants become quite large, before reducing the duration of light to initiate the budding process. Conversely, a grower can initiate the budding process while the plants are still relatively small, simply by reducing the amount of light the plants receive.

The budding process begins after the plants have grown large enough to exhibit their sex, roughly 4-6 weeks after planting. At that point the males plants are discarded, and the female plants are either encouraged to grow taller or to bud. Depending on the method of cultivation, a plant may be anywhere from a few weeks old and 6 inches tall, to 12-16 weeks old and 6 feet tall, before the budding process is initiated by the grower. The budding process takes between 7 and 10 weeks to produce harvestable yield.

Some growers "clone" their female marijuana plants to reach the budding stage more quickly. The clone is a leafy stem of the female marijuana plant that is stuck into a growing medium (often rock wool) that quickly roots and begins to bud. Although the clones bud more quickly than plants grown from seeds, they remain small and the total yield from cloned plants is significantly less than that from seeded plants.

## Disparity caused by 1,000 gram weight

Assigning a weight of one kilogram to each marijuana plant over the number 49, introduces unintended disparity into the sentencing guidelines.

The most obvious disparity caused by the 1 kilo/l plant ratio affects the defendant who is arrested with 50 plants and is subject to a 33 month sentence, at level 20. If he had had one plant less, he would have received a sentence of 10 months, at level 12. Should one marijuana plant be responsible for a 23 month difference in sentence? This kind of sentencing "cliff" is exactly what the Commission has tried to avoid in it's calibrated sentencing grid. The Commission has criticized a similar cliff caused by the 5 year mandatory minimum for 5 grams of crack cocaine, where 1/100 of a gram less results in a sentence of one year.

Another unintended disparity caused by the unrealistic weight of 1,000 grams per plant, occurs because of the timing of the arrest. If John is growing 102 marijuana plants in his garden when he is arrested, he is subject to a 63 month guideline sentence, at level 26. However, if John is arrested one week after harvesting his marijuana, with a total yield of 11 kilograms of dried marijuana, he is subject to a 21 month sentence, at level 16. The Commission could not have intended the timing of an arrest to be a determining factor in the defendant's sentence.

Nor could the Commission have intended to punish growers ten times more harshly than possessors of harvested marijuana. If Mary is growing 75 marijuana plants for her own use and is arrested, she can be sentenced to 51 months, at level 24. The total realistic yield of her marijuana patch (assuming all plants were female) could be 8 kilos of marijuana. If Bill is arrested with 75 kilos of packaged marijuana in his trunk, he can receive the same 51 month sentence, even though his actual yield was 67

## kilos greater than Mary's.

The one kilo per plant ratio also exaggerates the disparity in sentence for growers who employ different methods of cultivation. For instance, Bob might use the "sea of green" method that involves growing 1,000 little plants or clones that will yield 25 grams per plant, for a total of 25 kilos. Dave may grow 300 larger plants that yield 100 grams per plant, for a total of 30 kilos. Bob's sentence will be 121 months, while Dave's sentence will be 63 months, even though Dave's plants would have produced more useable yield than Bob's. This problem would not be eliminated by changing the ratio because Bob still grew more plants, but the difference in their sentences would be narrower.

## SOLUTIONS

The U.S. Sentencing Commission can address the disparities outlined above by adopting the 100 gram uniform weight for all marijuana plants regardless of number. The 100 gram weight continues the existing guideline structure for 49 plants or less which, as the Commission recognized in 1987, is a more realistic estimate of actual marijuana plant yield.

The Commission can also exclude male marijuana plants from the total count, because male plants are never used. If the marijuana is in seedling stage at the time of arrest and the sex cannot be determined, 50 percent of the plants should be excluded.

The rationale behind excluding male plants is the same as for excluding the waste water from the total weight of the methamphetamine, for sentencing purposes. The Commission recognized that the defendant should not be sentenced for a nonconsumable by-product of the drug. The same is true of the male marijuana plants. No one grows male plants to harvest and smoke. Dr. ElSohly stated that "as a matter of routine" the male plants were weeded out. Yet, growers who are arrested before the plant sex has been determined, are sentenced for a by-product of the drug that is not consumed.

Lastly, the Commission should make these changes retroactive to effect defendants currently serving guideline sentences based on the unrealistic and unfair sentencing ratio of one plant equals one kilo, after plant number 49.

The retroactivity of last year's LSD amendment did not overwhelm the courts, nor did it release from prison anyone who is a danger to society. The same would be true of the retroactive application of a change in the marijuana guidelines. Many of the people serving marijuana sentences are restricted by the mandatory minimum sentence and would not be eligible for a reduction in any case.

# SENTENCING COMMENTARIES

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# DRUG QUANTITY TABLE

Controlled Substances and Quantity*	Base Offense Level
10 KG Heroin or equivalent Schedule I or II Opiates, 50 KG Cocaine or equivalent Schedule I or II Stimulants, 500 G Cocaine Base, 10 KG PCP or 1 KG Pure PCP, 100 G LSD or equivalent Schedule I or II Hallucinogens, 4 KG Fentanyl or 1 KG Fentanyl Analogue, 10,000 KG Marihuana, 100,000 Marihuana Plants, 2000 KG Hashish, 200 KG Hashish Oil (or more of any of the above)	Level 36
3-9.9 KG Heroin or equivalent Schedule I or II Opiates, 15-49.9 KG Cocaine or equivalent Schedule I or II Stimulants, 150-499 G Cocaine Base, 3-9.9 KG PCP or 300-999 G Pure PCP, 30-99 G LSD or equivalent Schedule I or II Hallucinogens, 1.2-3.9 KG Fentanyi or 300-999 G Fentanyi Analogue, 3000-9999 KG Marihuana, 30,000-99,999 Marihuana Plants, 600-1999 KG Hashish, 60-199 KG Hashish Oil	Level 34
1-2.9 KG Heroin or equivalent Schedule I or II Opiates, 5-14.9 KG Cocaine or equivalent Schedule I or II Stimulants, 50-149 G Cocaine Base, 1-2.9 KG PCP or 100-299 G Pure PCP, 10-29 G LSD or equivalent Schedule I or II Hallucinogens, 4-1.1 KG Fentanyl or 100-299 G Fentanyl Analogue, 1000-2999 KG Marihuana, 10,000-29,999 Marihuana Plants, 200-599 KG Hashish, 20-59.9 KG Hashish Oil	Level 32**
700-999 G Heroin or equivalent Schedule I or II Opiates, 3.5-4.9 KG Cocaine or equivalent Schedule I or II Stimulants, 35-49 G Cocaine Base, 700-999 G PCP or 70-99 G Pure PCP, 7-9.9 G LSD or equivalent Schedule I or II Hallucinogens, 280-399 G Fentanyl or 70-99 G Fentanyl Analogue, 700-999 KG Marihuana, 7000-9999 Marihuana Plants, 140-199 KG Hashish, 14-19.9 KG Hashish Oil	Level 30
400-699 G Heroin or equivalent Schedule I or II Opiates, 2-3.4 KG Cocaine or equivalent Schedule I or II Stimulants, 20-34.9 G Cocaine Base, 400-699 G PCP or 40-69 G Pure PCP, 4-6.9 G LSD or equivalent Schedule I or II Hallucinogens, 160-279 G Fentanyl or 40-69 G Fentanyl Analogue, 400-699 KG Marihuana, 4000-6999 Marihuana Plants, 80-139 KG Hashish, 8.0-13.9 KG Hashish Oil	Level 28
100-399 G Heroin or equivalent Schedule I or II Opiates, 5-1.9 KG Cocaine or equivalent Schedule I or II Stimulants, 5-19 G Cocaine Base, 100-399 G PCP or 10-39 G Pure PCP, 1-3.9 G LSD or equivalent Schedule I or II Hallucinogens, 40-159 G Fentanyl or 10-39 G Fentanyl Analogue, 100-399 KG Marihuana. 1000-3999 Marihuana Plants, 20-79 KG Hashish, 2.0-7.9 KG Hashish Oil	Level 26**
80-99 G Heroin or equivalent Schedule I or II Opiates, 400-499 G Cocaine or equivalent Schedule I or II Stimulants, 4-4.9 G Cocaine Base, 80-99 G PCP or 8-9.9 G Pure PCP, 800-999 MG LSD or equivalent Schedule I or II Hallucinogens, 32-39 G Fentanyl or 8-9.9 G Fentanyl Analogue, 80-99 KG Marihuana, 800-999 Marihuana Plants, 16-19.9 KG Hashish, 1.6-1.9 KG Hashish Oil	Level 24
60-79 G Heroin or equivalent Schedule I or II Opiates, 300-399 G Cocaine or equivalent Schedule I or II Stimulants, 3-3.9 G Cocaine Base, 60-79 G PCP or 6-7.9 G Pure PCP, 600 -799 MG LSD or equivalent Schedule I or II Hallucinogens, 24-31.9 G Fentanyl or 6-7.9 G Fentanyl Analogue, 60-79 KG Marihuana, 600-799 Marihuana Plants, 12-15.9 KG Hashish, 1.2-1.5 KG Hashish Oil	Level 22
40-59 G Heroin or equivalent Schedule I or II Opiates, 200-299 G Cocaine or equivalent Schedule I or II Stimulants, 2-2.9 G Cocaine Base, 40-59 G PCP or 4-5.9 G Pure PCP, 400-599 MG LSD or equivalent Schedule I or II Hallucinogens, 16-23.9 G Fentanyl or 4-5.9 G Fentanyl Analogue, 40-59 KG Marihuana, 400-599 Marihuana Plants, 8-11.9 KG Hashish, 8-1.1 KG Hashish Oil, 20 KG+ Schedule III or other Schedule I or II controlled substances	Level 20

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#### GUIDELINES

20-39 G Heroin or equivalent Schedule I or II Opiates, 100-199 G Cocaine or equivalent Schedule I or II Level 18 Stumulants, 1-1.9 G Cocaine Base, 20-39 G PCP or 2-3.9 G Pure PCP, 200-399 MG LSD or equivalent Schedule I or II Hallucinogens, 8-15.9 G Fentanyl or 2-3.9 G Fentanyl Analogue, 20-39 KG Marihuana, 200-399 Marihuana Plants, S-7.9 KG Hashish, 500-799 G Hashish Oil, 10-19 KG Schedule III or other Schedule I or II controlled substances 10-19 G Heroin or equivalent Schedule I or II Opiates, 50-99 G Cocaine or equivalent Schedule I or II Level 16 Stimulants, 500-999 MG Cocaine Base, 10-19.9 G PCP or 1-1.9 G Pure PCP, 100-199 MG LSD or equivalent Schedule I or II Hallucinogens, 4-7.9 G Fentanyi or 1-1.9 G Fentanyi Analogue, 10-19 KG Marihuana, 100-199 Marihuana Plants, 2-4.9 KG Hashish, 200-499 G Hashish Oil, 5-9.9 KG Schedule III or other Schedule I or II controlled substances 5.9.9 G Heroin or equivalent Schedule I or II Opiates, 25-49 G Cocaine or equivalent Schedule I or II Level 14 Stimulants, 250-499 MG Cocaine Base, 5-9.9 G PCP or 500-999 MG Pure PCP, 50-99 MG LSD or equivalent Schedule I or II Hallucinogens, 2-3.9 G Fentanyl or 5-.9 G Fentanyl Analogue, 5-9.9 KG Marihuana, 50-99 Marihuana Plants, 1-1.9 KG Hashish, 100-199 G Hashish Oil, 2.5-4.9 KG Schedule III or other Schedule I or II controlled substances Less than the following: 5 G Heroin or equivalent Schedule I or II Opiates, 25 G Cocaine or equivalent Level 12 Schedule I or II Stimulants, 250 MG Cocaine Base, 5 G PCP or 500 MG Pure PCP, 50 MG LSD or equivalent Schedule I or II Hallucinogens, 2 G Fentanyl or 500 MG Fentanyl Analogue; 2.5-4.9 KG Marihuana, 25-49 Marihuana Plants, 500-999 G Hashish, 50-99 G Hashish Oil, 1.25-2.4 KG Schedule III or

1-2.4 KG Marihuana, 10-24 Marihuana Plants, 200-499 G Hashish, 20-49 G Hashish Oil, 50-1.24 KG Level 10 Schedule III or other Schedule I or II controlled substances, 8-19 KG Schedule IV

250-999 G Marihuana, 3-9 Marihuana Plants, 50-199 G Hashish, 10-19 G Hashish Oil, 125-449 G Level 8 Schedule III or other Schedule I or II controlled substances, 2-7.9 KG Schedule IV, 20 KG+ Schedule V

Less than the following: 250 G Marihuana, 3 Marihuana Plants, 50 G Hashish, 10 G Hashish Dil, 125 G Level 6 Schedule III or other Schedule I or II controlled substances, 2 KG Schedule IV, 20 KG Schedule V

The scale amounts for all controlled substances refer to the total weight of the controlled substance. Consistent with the provisions of the Anti-Drug Abuse Act, if any mixture of a compound contains any detectable amount of a controlled substance, the entire amount of the mixture or compound shall be considered in measuring the quantity. If a mixture or compound contains a detectable amount of more than one controlled substance, the most serious controlled substance shall determine the categorization of the entire quantity.

Statute specifies a mandatory minimum sentence.

other Schedule I or II controlled substances, 20 KG+ Schedule IV

#### **Commentary**

Statutory Provisions: 21 U.S.C. §§ 841, 960.

#### Application Notes:

"Similar drug offense" as used in §2D1.1(a)(1) means a prior conviction as described in 1. 21 U.S.C. §§ 841(b) or 962(b).

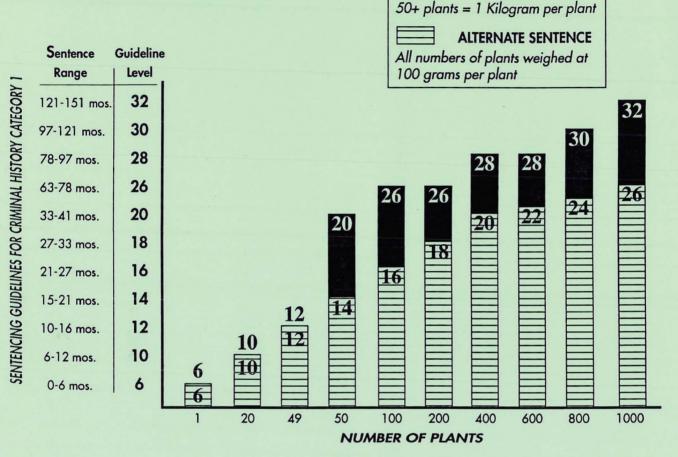
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# GUIDELINE CHANGES FOR MARIJUANA



**CURRENT SENTENCE** 

1-49 plants =100 grams per plant

Comparison of Guideline Weights and Sentencing Ranges for Selected Numbers of Marijuana Plants

	Current guideline weight	Current offense level	Current sentencing range	Proposed sentencing range
1	100 grams	6	0-6 mos	
10-20	1-2 kgs	10	6-12 mos	
40-49	4-4.9 kgs	12	10-16 mos	
50-59	50-59 kgs	20	33-41 mos	15-21 mos
80-99	80-99 kgs	24	51-63 mos	15-21 mos
100-399	100-399 kgs	26	63-78 mos	21-27 mos
400-699	400-699 kgs	28	78-97 mos	33-41 mos
700-999	700-999 kgs	30	97-121 mos	41-51 mos
1,000 to 3,000	1000 to . 3,000 kgs	32	121-151 mos	63-78 mos

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## Marijuana Cases

Robert Evans was convicted for aiding and abetting the manufacture of 90 marijuana plants. Robert's sentence started at level 24, but was dropped to level 17 after factoring in acceptance of responsibility and minimal role deductions. He is now serving a 24 month sentence. If the marijuana guideline changes retroactively, Robert will be eligible for a reduction in sentence to probation. He is 30 years old, a first offender, and has a high school education.

Harold Prentzel was convicted for growing 80 marijuana plants in his home in Alaska. At sentencing, the judge followed the guidelines and sentenced him at level 22, to 50 months in prison. If the guidelines change to 100 grams per plant, Harold would be eligible to be resentenced to 15 months. Harold is 35 years old, married, and has a 7 month old baby. He attended college but did not graduate.

Dan Bolger plead guilty to growing 36 marijuana plants, but was convicted of growing 149 plants. On a motion from the government, the judge sentenced Dan at level 25, for 57 months in prison. If the guidelines change, Dan will be eligible for a reduction in sentence to 21 months. Dan is a 28 year old, first offender. Before his incarceration he taught music at the VA Hospital in Pennsylvania, was engaged, and had attended college for three years.

**Donald Clark** is serving a life sentence for a marijuana growing conspiracy involving 1 million plants. Of the 11 defendants charged in the case, he was the only one to take his case to trial. The others plead guilty and received between 3 and 11 years in prison. If the guideline ratio for marijuana plants changes, Donald will be eligible for a reduction in sentence to 24 years, at level 40. Donald is 52 years old. In 1985 he was arrested by the state of Florida for the same offense for which the federal government indicted him in 1990. He owned a watermelon farm in Myakka, Florida at the time of his arrest. Amendment 33(A) Changing the crack cocaine/powder cocaine ratio.

Families Against Mandatory Minimums (FAMM) urges the Sentencing Commission to adopt a one to one ratio for crack and powder cocaine, retroactively. At a minimum, FAMM proposes that crack and powder cocaine sentences be addressed in the same manner as ice and methamphetamine. Because ice is a derivative form of methamphetamine, but arguably more potent, the guidelines require a two level increase for ice from the original sentence for methamphetamine. The same formula could easily be applied to crack cocaine sentencing.

## Scientific evidence

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The Commission has heard copious evidence from experts across the country about the pharmacological similarity between crack cocaine and powder cocaine. At the Sentencing Commission hearing on crack cocaine last year, a criminologist, a pharmacologist, and a D.C. narcotics officer all testified that crack is the same drug as cocaine. Other scientists in other forums have come to the same conclusion. The question is settled over whether powder cocaine and crack cocaine are the same drug.

## Does crack create more violence?

Law enforcement agents argue that crack cocaine is a more dangerous drug, so it should be penalized more severely than powder cocaine. It is true that the neighborhoods in which crack cocaine is dealt are often more dangerous than the suburbs in which powder cocaine thrives. However, if the defendant is involved in a violent offense in conjunction with his crack offense, the sentencing guidelines provide ample enhancement to adequately punish him for his violent behavior.

Clearly, not all crack cocaine offenses involve violence. According to a Bureau of Justice Statistics 1991 survey of state prison inmates, prisoners who had used crack before their offense were less likely to be in prison for a violent offense than those who had used other drugs or no drug. The survey found that of the percentage of the prisoners who used crack in the month before their offense, 33 percent were incarcerated for a violent offense, compared with 39 percent who used powder cocaine, and 48 percent who used any other drug.

To use the 100 to 1 ratio for all defendants arrested for crack cocaine, because some of the defendants are violent, is to insist that the unjustness of a sentence in particular circumstances be ignored.

# Racial disparity caused by application of 100 to 1 ratio

There is no doubt about the racial make-up of the defendants most often convicted of crack cocaine offenses. In 1992, 91.3 percent of those sentenced for crack offenses were African-American. Of the hundreds of crack cases that FAMM has on file, only four defendants are White.

In a nation in which the achievement of racial justice is not only a goal but a necessity, the evidence of sentencing disparity caused by the crack cocaine/powder cocaine ratio, is disconcerting and alarming. Although the Commissioners cannot correct the racial inequity of the statutory mandatory minimums for crack cocaine, they can alleviate the extreme disparity caused by the additional years the guidelines add to the defendants mandatory sentence.

## Court decisions

Judges who recognized the inequity of the crack cocaine sentencing laws are trying to find ways to circumvent them. Two recent court decisions about crack cocaine held that the sentences were unconstitutional.

On January 26, 1994, Senior Judge Louis Oberdorfer of the U.S. District court for the District of Columbia declared that the mandatory crack sentences as applied to two defendants before him, violated the Eight Amendment's proscription against cruel and unusual punishment. On February 11, 1994, Judge Clyde S. Cahill of the U.S. District Court for the Eastern District of Missouri used the 14th Amendment's guarantee of equal protection under the law, as grounds for holding the sentencing disparity unconstitutional.

Two other judicial milestones occurred earlier when the Minnesota Supreme Court in 1991 held that the distinction in penalty between crack and powder cocaine violated that state's constitution on equal protection grounds. And on July 29, 1993, federal judge Lyle Strom from Omaha, Nebraska departed downwards from the sentencing guidelines on grounds that he did not deem Congress contemplated such a disparate impact of harsher sentences for Blacks.

It's clear that the courts are seeking means to bring crack cocaine sentences in line with the culpability of the defendant. The Commission can provide that tool for judges by changing the crack cocaine ratio under the guidelines.

## Crack Cases

Derrick Curry is serving a 19 1/2 year sentence for a conspiracy involving two kilos of crack cocaine. The FBI admitted that Derrick was a "flunky" in the operation that was run by his friend. At his sentencing, Derrick was given a two-point reduction for being a "minor" participant and a two-point increase for obstruction of justice (the government argued that he perjured himself on the stand when he denied any involvement in the offense.) Derrick was sentenced at level 38. If the crack cocaine guideline ratio changes, Derrick will be eligible for a reduction in sentence to 78 months, at level 28. However, because the mandatory minimum sentence trumps the quideline sentence, Derrick's sentence cannot go below 10 years. The change would effectively reduce his sentence by 9 1/2 years. Derrick is 20 years old, a first offender, and was in college when arrested.

Joseph Felton is serving a 30 month sentence for distributing 1.2 grams of crack cocaine. Undercover agents purchased crack three times from Joseph before arresting him. If the guidelines for crack cocaine changes, Joseph will be eligible for a reduction in sentence to at least 10 months, at level 12, and likely he could go below that. Joseph is 52 years old, a first offender, and has an 8th grade education.

**Steven Cook** is serving a 19 1/2 year sentence for a crack cocaine conspiracy involving 32 kilos. Steven was responsible for between 500 grams and 1.5 kilos, and was sentenced at the top of the guideline range at level 36. Of his 32 codefendants, Steven was one of 10 who went to trial. If the sentencing guidelines change for crack cocaine, Steven will be eligible for a reduction in sentence to 78 months at level 26. However, the 10 year mandatory minimum sentence for 50 grams or more of crack cocaine will prevent Steven's sentence from dropping below 10 years. The change would effectively reduce his sentence by 9 1/2 years. Steven is 25 years old, a first offender, and was in college prior to his arrest.

**Preston Gilyard** is serving a 12 year, 7 month sentence for possession with intent to distribute 250 grams of crack cocaine. If the guideline sentence for crack changes, Preston will be eligible for a reduction in sentence to 33 months. However, the 10 year mandatory minimum sentence prevents him from receiving a sentence below 10 years. The change would effectively reduce his sentence by 2 years and 7 months. Preston is 27 years old, a first offender, and has a high school degree.

## Amendment 16: Aging and Infirm Prisoners

Families Against Mandatory Minimums urges the Commission to include age and infirmity as extraordinary and compelling reasons to depart from the sentencing guidelines.

FAMM has received dozens of letters from inmates who are elderly or infirm who ask why they are required to die in prison. Many of them ask simply to die at home with their families. Human decency dictates that old and sick individuals who are not a threat to society, be sentenced to home confinement in lieu of incarceration. The Commission can show tremendous compassion and common sense by including age and infirmity in the list of compelling reasons for judges to depart from the guidelines.

## Medical cases

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Zodenta McCarter is a 65-year old, first offender, serving a sentence of 97 months for conspiracy to manufacture and distribute marijuana. Zodenta is illiterate and grew up in the back woods of Tennessee. She was convicted on the testimony of two informants who were arrested with the marijuana but received immunity for their testimony. Zodenta suffers from high blood pressure, arterial blockage, incipient diabetes, arthritis, and intermittent bleeding from a partial hysterectomy. She is also on medication for a recent exposure to tuberculosis in the prison.

James Dodd is a 66-year old, first offender serving a 24 year sentence for possession and importation of cocaine. James had open heart surgery in 1992 (before his incarceration) replacing his aortic valve with a St. Jude mechanical valve. He suffers from arthritis and other difficulties related to his surgery. James is a retired Pan Am pilot. He is incarcerated at FCI Ft. Worth.

Louis Nash is a 75-year old man serving a 21 year, 8 month sentence for a marijuana conspiracy. He has two prior offenses for loan-sharking and a state drug charge. He suffers from heart trouble, hyper-tension, hernias, an ulcer, and has had pneumonia since his incarceration. His hearing is extremely poor and he is confined to a wheelchair. His daughter is concerned at the lack of medical attention he receives in prison, "If the government is unwilling to provide this care, then release him to us to care for him." He is incarcerated at FCI Ft. Worth. **DeWayne Murphy** is a 35-year old, first offender serving a 48 month sentence for possession with intent to distribute 500 grams of methamphetamine. At the time of his sentencing, DeWayne was on a heart transplant list. The BOP does not provide heart transplants as part of its medical program, so DeWayne's condition continues to deteriorate. He now spends 14 hours a day in the hospital wearing an oxygen mask. He has been denied a compassionate release. DeWayne is incarcerated at FMC Rochester.

Robert Lee Edward is a 53-year old, first offender serving a 97 month sentence for a cocaine conspiracy. In 1989 Robert had a heart attack and was on several different medications which he was unable to take during his initial three days of custody. Six days later, after he was released on bond, he had another heart attack, which required open-heart surgery and a double by-pass. Before his incarceration, Robert ran a junk yard and raised 9 kids. He is now incarcerated at FCI Talladega.

Hector Alvarez is a 64-year old inmate at FCI Talladega. His own words speak louder than FAMM's:

"On January 29, 1991, at about 2:30 p.m., as I had just finished performing my duty in the dining hall, I began feeling a bad pain in my chest, so I sat down and took a Nitrostat pill to relieve the pain from my heart which has given me the same problems for a long time.

I kept feeling bad so I took another pill with the hope that my pain would stop. Even so, the pain did not stop and I began feeling nausea and my head was spinning.

Although I had already performed my duty, the officer on duty ordered me to clean the cart covers. I told the lady officer that I was feeling bad, and as I was talking to her I reached in my pocket and showed her the doctor's written statement saying: 'Only light work.' (I am 64 years old and ill.)

The lady officer, without saying a word, she radioed through her walkie-talky to have some guards come get me and lock me up in segregation. But the other officer who was nearby, he realized I was really ill, so he got a wheelchair and rushed me to the institution hospital where, after ascertaining that I was feeling really bad, I was rushed to the 'citizen hospital' in down town Talladega where I had several tests and radiocardiograms and where I was under close care.

On April 28th, 1991, I felt bad again because of my heart, so I was rushed to the 'citizen hospital' in Talladega where I went through lots of tests, radio-cardiograms, etc...where I was under intensive care for five days. In the ten months that I have been at Talladega, I went to the hospital four time for the same problems.

Some of the officers in the dining hall they keep telling me to do work I cannot do, and they stop such harassment only when they see me turning pale and falling down. How long can I last? At this point, I only hope in a 'miracle' from 'God,' since my fellow men seem so inclined to destroy me."

# Members of the Sentencing Committee

My name is Peggy Edmundson, I live in rural southwest Missouri and most of my life in N.W. Arkansas. My husband, Eric, and I own 40 acres with an older home, to which we have done extensive remodeling on. Doing most of the work ourselves. The past 12 years we have worked diligently to establish a secure home and surround ourselves with the things we enjoy doing the most. Including, gaining the respect of our friends and neighbors. All of whom know they can call on us any time they need help. From pulling a calf at 3:00 A.M. to keeping watch on their home while they are away.

My husband, Eric, was a respected electronics and design engineer with Clarke Industries in Springdale AR making \$45,000. a year. Designing from the ground up Clarke's most profitable floor polishing machine to date, along with Clarke's main line of marble finishing and polishing machines. Being frugal by nature Eric devoted all his time and money into our future and our farm. Eric grew up in Boy Scouts and received the high rank of Life Scout. He has always maintained high morals. Honesty, helpfulness, and kindness were second nature to him.

In the Summer of 1993, it seemed everything was going our way. Eric was going to China to confirm a deal with a company to make handles for the machines he designed. I was able to stay home and care for the farm, working our garden, orchard, and honey bee's. Also, helping my mother care for my father who 5 years ago was disabled by a stroke which left him unable to speak or care for himself, and is now bed fast.

On the afternoon of August 18, 1993, our world was turned upside down. A confidential informant, for reasons we will never understand or know, gave information to local authorities that we grew marijuana. After 4 months of investigation with no results the DEA was called in with their thermal imaging technology. With this covert information and the information from their confidential informant a search warrant was obtained.

We were not home at the time the search warrant was served. Thanks to our good neighbors and friends, who informed us of what was going on and we were not arrested at the scene. We were unable to go home for two days, while we retained an attorney and arranged to turn ourselves in.

Local and State police and DEA agents, including helicoptors, did an intensive search of our property. They discovered our wine cellar and behind it Eric's small ( $9 \times 10$ ) grow room in which 47 marijuana plants, in various stages of growth, were taken. Along with 4 plants that had been grown outside. A total of 51 marijuana plants. Why our case was selected for Federal prosecution was a question our attorney asked often, and has yet to hear an explanation. Despite repeated requests the U.S. Attorney declined to permit Eric and our attorney to examine the evidence

alleged to have been taken. We would have liked to known the actual weight since so many of the plants were very small with only 6-8 leaves. Because Eric cloned his plants he always had mature, adolescent, and infant plants.

Always having more infant plants due to mortality. This process seemed better than buying it on the street as Eric did not believe in buying or selling marijuana. He grew only for himself. Due to his very demanding and high stress job, Eric chose marijuana over alcohol and tobacco or going to doctors for legal drugs such as tranquilizers or sleeping pills.

Federal Sentencing Guide lines call for the infliction of mandatory prison terms for cultivation of 50 or more plants. Cultivation of 49 or fewer results in eligibility for probation and a lesser prison term. In Eric's case just two small plants were responsible for Eric receiving a sentence of 24 months in the U.S. Federal Penitentiary in Leavenworth Kansas. Two less plants he could have been sentenced to 10 months or less. Those two plants made a fourteen month difference in my husbands sentence. The guidelines should be changed so that all plants are weighted at 100 grams and this unfair cliff would be eliminated. Eric's sentence would have been no more than ten months. If all plants were weighted at 100 grams.

I personally don't choose to smoke marijuana or use any other drugs, which was proven through drug tests. However, I plead guilty to a misdemeanor charge of possession in a plea bargain agreement, because it was in my home. I, too, could have been sent to prison if I had not plea bargained for probation. I am now faced with living alone without Eric's income for the next 24 months, along with the financial burden of of a \$10,000 loan we borrowed to clear the criminal forfeiture that was brought against our property. Unfortunately the cost of upkeep, utilities, insurance, and taxes, did not go down along with our income. The closest neighbor is a quarter mile down the winding dirt road and I am left feeling alone and cheated by the judicial system.

Who has benefited from this? Society has lost a productive, intelligent, hard working individual and our overcrowded prison system has gained a non-violent marijuana grower, who grew for personal use only. The DEA and it's war on drugs along with local and state authorities lost 4 months of investigative time and money to stop one personal use marijuana grower. Please consider the lives of the real productive people, like Eric and myself, that your decisions affect. Please help to restore the principals of freedom and justice our country was founded on. Please explain to me why two small plants would make a 14 month difference in a sentence?

Thank You.