

**AD-753 300**

# **Hallucinogenic Drugs**

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**DECEMBER 1972**

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**AD-753 300**

# **HALLUCINOGENIC DRUGS**

## **A DDC BIBLIOGRAPHY**

**DDC-TAS-72-62**

**DECEMBER 1972**

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*Bibliographies *Hallucinogens Lysergic Acids Cannabis Amphetamines Psychotropic Agents Central Nervous System Reaction(Psychology) Pharmacology Drug Abuse Marijuana Psychopharmacology						

UNCLASSIFIED

Security Classification

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# **HALLUCINOGENIC DRUGS**

**A DDC BIBLIOGRAPHY**

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November 1955 - March 1972

**DECEMBER 1972**

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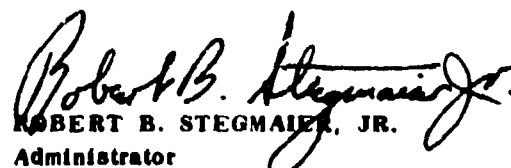
## F O R E W O R D

This bibliography is a compilation of references on *Hallucinogenic Drugs*. Entries were selected from references processed into the Defense Documentation Center's data bank from January 1953 to July 1972 and supersedes AD-839 850.

Corporate Author-Monitoring Agency, Subject, Title, Personal Author, Contract Number and Report Number Indexes are provided.

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ROBERT B. STEGMAIER, JR.  
Administrator  
Defense Documentation Center

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PERSONAL AUTHOR.....	P-1
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REPORT NUMBER.....	R-1

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DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /2AML2

AD-256 169

CALIFORNIA UNIV LOS ANGELES

INTERIM PROGRESS REPT. 1 OCTOBER 60-31 MARCH  
1961

(U)

APR 61 IV ALLES, GORDON A.; FAIRCHILD, M. DAVID;  
CONTRACT: DA19 108 405 CML 735

UNCLASSIFIED REPORT

DESCRIPTORS: •HALLUCINOGENS, •PHARMACOLOGY,  
AMPHETAMINES, ANHALONIUM ALKALOIDS, ANIMALS,  
BARBITURATES, BEHAVIOR, CEREBRAL CORTEX, DRUGS,  
ELECTRICAL PROPERTIES, ELECTRODES,  
ELECTROENCEPHALOGRAPHY, FREQUENCY ANALYZERS, TEST  
METHODS

(U)

THIS REPORT INCLUDES: METHYLENEDIOXY-AMPHETAMINE  
HALLUCINOGENIC SERIES OF COMPOUNDS. PART I. APR 61,  
10P. (CONTRACT DA 18-108-405-CML-735)  
CONDITIONED BEHAVIOR AND ELECTROENCEPHALOGRAPHIC TEST  
METHODS. PART II. APR 61, 10P. (CONTRACT DA 18-  
108-405-CML-735)

(U)



UNCLASSIFIED

DOC REPORT BIOLOGGRAPHY SEARCH CONTROL NO. /ZAML2

AD-265 110

CALIFORNIA UNIV LOS ANGELES

METHYLENEDIOXY-AMPHETAMINE HALLUCINOGENIC SERIES OF  
COMPOUND (I). CONDITIONED BEHAVIOR AND  
ELECTROENCEPHALOGRAPHIC TEST METHODS (II) (U)

OCT 61 1V ALLES, GORDON A.; FAIRCHILD, M. DAVID;  
CONTRACT: DAIR 108 405CML725

UNCLASSIFIED REPORT

DESCRIPTORS: •ANHALONIUM ALKALOIDS, •BRAIN, •CONDITIONED  
REFLEX, •HALLUCINOGENS, AMPHETAMINES, DOSAGE, ELECTRIC  
POTENTIAL, ELECTROENCEPHALOGRAPHY, LABORATORY ANIMALS,  
PHARMACOLOGY, PHYSIOLOGY, PRODUCTION (U)

APPROXIMATELY 10 GRAMS OF EACH OF THE SALTS OF FOUR  
3,4-METHYLENEDIOXY-AMPHETAMINE DERIVATIVES WERE  
SUBMITTED FOR FURTHER TESTING IN ANIMALS AND POSSIBLE  
EVALUATION OF THEIR RELATIVE HALLUCINOGENIC  
ACTIVITIES IN MAN. NO ORGANIZED REPORT AS TO WORK  
PROGRESS ON THESE COMPOUNDS IS YET AVAILABLE. THE  
BEHAVIORAL STUDIES INVOLVING AVOIDANCE-ESCAPE  
TRAINING IN SWISS ALBINO MICE HAS BEEN COMPLETED.  
ALL SIX TEST COMPOUNDS HAVE BEEN INJECTED INTO AT  
LEAST FIVE MICE IN AT LEAST TWO DOSE LEVELS. THE  
EFFECT OF THE DRUGS ON THE EXTINCTION OF THE  
CONDITIONED RESPONSE IN RELATIONSHIP TO A CONTROL  
GROUP RECEIVING ISOTONIC SALINE IS PRESENTED. WORK  
ON THE EEG TEST METHODS DURING THIS PAST SIX MONTHS  
HAS CONSISTED LARGELY OF THE CONSTRUCTION OF AN EIGHT  
CHANNEL FREQUENCY ANALYZER. DETAILS OF THIS  
INSTRUMENT ARE PRESENTED IN THE BODY OF THIS REPORT.  
(AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-267 257

JOHNS HOPKINS UNIV BALTIMORE MD SCHOOL OF MEDICINE

THE PHARMACOLOGICAL PROPERTIES OF AN EVOKED POTENTIAL  
IN THE MIDBRAIN RETICULAR FORMATION (U)

DESCRIPTIVE NOTE: REPT. FOR JUL 58-DEC 59  
AUG 61 23P LANGFITT, THOMAS W.:  
CONTRACT: DA-14-108-CML-6425  
MONITOR: CRDL SP-2-43

UNCLASSIFIED REPORT

DESCRIPTORS: BARBITURATES, BRAIN, DRUGS, ELECTRIC  
POTENTIAL, ELECTRICAL PROPERTIES,  
ELECTROENCEPHALOGRAPHY, LYSERGIC ACIDS, SPINAL CORD (U)

THIS STUDY WOULD TERMINATE BRAIN STIMULATION POTENTIAL COULD BE ALTERED BY A VARIETY OF PHARMACOLOGICAL AGENTS. EVOKED POTENTIALS IN THE MIDBRAIN RETICULAR FORMATION AND IN THE POSTERIOR LATERAL VENTRAL NUCLEUS OF THE THALAMUS (VPL) WERE STUDIED IN 31 CATS. THE RESULTS SHOW THAT THERE WAS NO CONSISTENT ALTERATION IN THE EVOKED POTENTIALS FOLLOWING THE ADMINISTRATION OF ANY DRUG OR ANESTHETIC. PHENORBUTOL DEPRESSES THE EVOKED POTENTIAL IN THE MIDBRAIN RETICULAR FORMATION OF THE CAT. THE LOCUS OF ACTION OF LYSERGIC ACID DIETHYLAMIDE (LSD) CHLORPROMAZINE, PHYSOSTIGMINE, ATROPINE, ADRENALINE, GAMMA AMINOBUTYRIC ACID (GABA), SUCCINYLCHOLINE, MECHOLYL, AND RESERPINE EITHER IS NOT AT THE RECORDING SITES INVESTIGATED IN THIS STUDY (MIDBRAIN RETICULAR FORMATION AND POSTERIOR LATERAL VENTRAL NUCLEUS OF THE THALAMUS), OR THE ALTERATIONS IN ELECTRICAL ACTIVITY PRODUCED BY THE DRUGS ARE TOO SUTLE TO BE DETECTED BY THE METHODS USED. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-289 261

KENT STATE UNIV OHIO

THE EFFECT OF DRUGS ON PHYSICAL PERFORMANCE IN  
ANIMALS

(U)

OCT 62 IV WILBER, CHARLES G.  
CONTRACT: DA49 193MD2216

UNCLASSIFIED REPORT

DESCRIPTORS: •BEHAVIOR, •DOSAGE, •HALLUCINOGENS,  
•MATHEMATICAL ANALYSIS, •PHARMACOLOGY, •TIME, •TOXICITY,  
AQUATIC ANIMALS, CANCER, CANNABINOLS, CHLORPROMAZINE,  
DRUGS, EQUATIONS, LABORATORY ANIMALS, LYSERGIC ACIDS,  
MAN, SWIMMING, TEMPERATURE

(U)

THIS REPORT INCLUDES: THE BIOLOGY OF WATER  
TOXICANTS IN SUBLETHAL CONCENTRATIONS, BY CHARLES  
G. WILBER. 1962, 28P. INCL. ILLUS. TABLES. SOME  
THOUGHTS ON PSYCHOTGENIC DRUGS, BY CHARLES G.  
WILBER. 1962, 70P. THE EFFECT OF LYSERGIC ACID  
DIETHYLAMIDE ON SWIMMING TIME IN ALBINO MICE, BY  
CHARLES G. WILBER AND J. A. BURKE. 1962, 10P.  
INCL. TABLES. CONTENTS: THE EFFECTS OF DRUGS ON  
PHYSICAL PERFORMANCE IN ANIMALS; THE BIOLOGY OF  
WATER TOXICANTS IN SUBLETHAL CONCENTRATIONS; SOME  
THOUGHTS ON PSYCHOTGENIC DRUGS; AND THE EFFECT OF  
LYSERGIC ACID DIETHYLAMIDE ON SWIMMING TIME IN ALBINO  
MICE.

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-291 057

WASHINGTON UNIV SEATTLE

SOME BIOCHEMICAL STUDIES ON PSILOCYBIN AND  
PSILOCIN

(U)

OCT 62 1V HORITA, A. I  
CONTRACT: DA19 108CML6264

UNCLASSIFIED REPORT

DESCRIPTORS: •HALLUCINOGENS, ANTIMETABOLITES, CYTOCHROME  
OXIDASE, DISTRIBUTION, INTESTINE, KIDNEYS, LABORATORY  
ANIMALS, OXIDOREDUCTASES, PHARMACOLOGY, PHOSPHORIC  
MONOESTER HYDROLASES, SEROTONIN

(U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-294 958

CALIFORNIA UNIV LOS ANGELES

I. METHYLENEDIOXY-AMPHETAMINE HALLUCINOGENIC SERIES  
OF COMPOUNDS. II. CONDITIONED BEHAVIOR AND  
ELECTROENCEPHALOGRAPHIC TEST METHODS (U)

UFC 62 IV ALLES, GORDON A.; FAIRCHILD, M. DAVID;  
CONTRACT: DA19 108 405CML795

UNCLASSIFIED REPORT

DESCRIPTORS: •HALLUCINOGENS, ALKOXY RADICALS, AMIDES,  
ANHALONIUM ALKALOIDS, BENZEDRINE SULFATE, CATS,  
CONDITIONED REFLEX, DIOXIDES, ELECTRIC POTENTIAL,  
ELECTROENCEPHALOGRAPHY, MAN, METHANES (1 C), MICE,  
PHARMACOLOGY, PHENYL RADICALS, PROPYL RADICALS,  
STIMULATION, TEST EQUIPMENT, TEST METHODS, TOXICITY (U)

FOUR METHOXY AND METHYLENEDIOXY DERIVATIVES OF  
AMPHETAMINE, AMPHETAMINE, AND Mescaline HAVE  
BEEN TESTED FOR THEIR EFFECT ON THE  
TRANSCALLOSAL EVOKED POTENTIAL, ON A DISTINCTIVE WAVE  
FORM IN THE EEG ANESTHETIZED AND UNANESTHETIZED CATS  
AND ON THE CONDITIONED AVOIDANCE RESPONSE IN MICE IN  
AN ATTEMPT TO FIND A TEST METHOD GIVING RESULTS THAT  
CORRELATE WITH THE HALLUCINOGENIC ACTIVITY IN MAN.

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DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-299 879

KENT STATE UNIV OHIO

SOME EFFECTS OF BUFOTENINE ON PHYSICAL PERFORMANCE IN  
MICE (U)

DEC 63 IV WILBER, CHARLES G.;  
CONTRACT: DA49 193MD2216

UNCLASSIFIED REPORT

DESCRIPTORS: •HALLUCINOGENS, •ORGANIC COMPOUNDS;  
ALKANES, ALKANES (NONTERMINAL), ALKANES (POLY USAGE),  
ALKANES (TERMINAL), AMIDES, BENZENE (FUSED), BENZENE  
(MONOSUBSTITUTED), ETHANES (2 C), EXERCISE, HYDROXYL  
(OH), HYDROXYL, MERCAPTO RADICALS, INHIBITION, METHANES  
(1 C), MICE, NITROGEN HETEROCYCLICS (1 N), NITROGEN  
HETEROCYCLICS (5 M), NITROGEN HETEROCYCLICS (FUSED),  
PERFORMANCE TESTS, PHARMACOLOGY, STIMULATION, SWIMMING,  
TERTIARY AMINES (-N ) (U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-342 332

CHEMICAL RESEARCH AND DEVELOPMENT LABS EDGEWOOD ARSENAL  
MO

SUMMARY REPORT ON EA 1476 AND EA 2233

(U)

AUG 63 45P

REPT. NO. CRDL-SPECIAL PUB-1-44

PROJ: DA-4-C-0802024, DA-4C-0803016

TASK: 4-C-080202401, 4-C-0803016017

UNCLASSIFIED REPORT

DESCRIPTORS: (•CHEMICAL WARFARE AGENTS,  
CANNABIS), (•PSYCHOTROPIC AGENTS, EFFECTIVE  
NESS), (•PHARMACOLOGY, CANNABIS),  
(•PHYSIOLOGY, CANNABIS), (•CANNABIS,  
EFFECTIVENESS).

(U)

IDENTIFIERS: 1943, EA 1476, EA 2233.

(U)

THE ACTIONS OF EA 1476 AND EA 2233 ARE  
GENERALLY SIMILAR TO OTHER PSYCHOTROPIC COMPOUNDS OF  
MILITARY INTEREST; I.E., THEY YIELD VARYING DEGREES  
OF INCAPACITATION, BOTH PHYSICAL AND MENTAL. BOTH  
COMPOUNDS, HOWEVER, ARE UNIQUE IN ELICITING AN  
UNEQUIVOCAL ORTHOSTATIC HYPOTENSION AT DOSE LEVELS  
FAR BELOW THOSE REQUIRED TO PRODUCE MILD MENTAL  
INCAPACITATION. NO HUMAN STUDIES HAVE YET BEEN MADE  
ON ISOMERS 2 AND 4. PRIMATE DATA DO INDICATE,  
HOWEVER, THAT THESE SPECIFIC STEREOISOMERS POSSESS A  
DEGREE OF PHARMACOLOGIC POTENCY, AT LEAST EQUIVALENT  
TO THAT OF THE RACEMIC MIXTURES STUDIED IN HUMAN  
SUBJECTS. SECONDLY, NO HUMAN OR ANIMAL DATA ARE  
AVAILABLE ON THE EFFECTS OF THE AEROSOLIZED AGENTS.  
IT IS BELIEVED THAT DATA SHOULD YET BE OBTAINED  
FROM THE FOLLOWING STUDIES: (1) EXPOSURE OF  
ANIMAL AND HUMAN SUBJECTS TO THE AEROSOLIZED  
RACEMATE. (2) EXPOSURE OF HUMAN SUBJECT TO  
ORAL DOSES OF STEREOISOMERS 2 AND 4. (AUTHOR)

(U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-35, 911

CHEMICAL RESEARCH AND DEVELOPMENT LABS EDGEMOOD ARSENAL  
MO

THE INCAPACITATING EFFECTS OF CERTAIN COMPOUNDS,  
MEASURED BY THE RESPONSES OF FLY LARVAE. (U)

DESCRIPTIVE NOTE: REPT. FOR JAN-OCT 61;

JUN 64 JJP SNYDER, F. M. ; HASSETT, C. C. ;

REPT. NO. CRDL-7208

PROJ: DA-4-C-0802023

TASK: 4-C-080202301

UNCLASSIFIED REPORT

DESCRIPTORS: (•) INCAPACITATING AGENTS, LARVAE; TESTS;  
ANALYSIS, DIPTERA, MEASUREMENT, CHEMICAL COMPOUNDS, V  
AGENTS, STATISTICAL ANALYSIS, RECOVERY (U) BIOLOGICAL  
ASSAY, ATROPINE (U)

IDENTIFIERS: TETRAHYDROCANNABINOL, ATROPINE SULFATE,  
BZ AGENTS, SARCOPHAGA BULLATA, VX AGENTS, PROPYLENE  
GLYCOL (U)

THE METHOD OF BIOASSAY USING LARVAE OF THE FLESH  
FLY, SARCOPHAGA BULLATA, DESCRIBED IN THIS REPORT,  
CAN DISCLOSE BOTH THE KNOCK-DOWN EFFECT OF A CHEMICAL  
AND THE DURATION OF THE EFFECT. IT SHOULD BE  
CONSIDERED AS A POSSIBLE ROUTINE SCREENING METHOD  
FOR TOXIC OR INCAPACITATING COMPOUNDS. THE  
FOLLOWING ARE THE RELATIVE POTENCIES OF THE COMPOUNDS  
TESTED: VX, 1000; EA 1476  
(TETRAHYDROCANNABINOL), 83; LSD, 50; BZ, 16;  
AND ATROPINE SULFATE, 4. LSD, BZ, AND ATROPINE  
SULFATE WERE JUDGED TO HAVE SIMILAR ACTIONS, WHICH  
DIFFER FROM THOSE OF VX AND EA 1476. (AUTHOR)

(U)



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DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-366 934

CHEMICAL RESEARCH AND DEVELOPMENT LABS EDGEWOOD ARSENAL  
MO

TETRAHYDROCANNABINOLS II. SYNTHESIS OF EIGHT ISOMERS  
OF A SYNTHETIC TETRAHYDROCANNABINOL. (U)

DESCRIPTIVE NOTE: TECHNICAL REPT. SEP 58-FEB 63,  
SEP 65 79P FERGUSON, C. PARKER; AARON,  
HERBERT S.;

REPT. NO. CRDLR-3314

PROJ: DA1C522701A060

TASK: 4C08 03 016 07

UNCLASSIFIED REPORT

DESCRIPTORS: (•O-HETEROCYCLIC COMPOUNDS;  
STEREOCHEMISTRY), (•MOLECULAR ISOMERISM, O-  
HETEROCYCLIC COMPOUNDS), SYNTHESIS(CHEMISTRY),  
HYDROXIDES, AROMATIC COMPOUNDS, POLYCYCLIC  
COMPOUNDS, SPECTRA(INFRARED), NUCLEAR MAGNETIC  
RESONANCE, CHROMATOGRAPHIC ANALYSIS, MOLECULAR  
ROTATION, PHYSICAL PROPERTIES, MELTING, OPTICAL  
PROPERTIES, PHARMACOLOGY (U) (•CHEMICAL WARFARE  
AGENTS) (U)  
IDENTIFIERS: CANNABINOLS, EA 1476, EA 2233,  
TETRAHYDROCANNABINOL (U)

EIGHT INDIVIDUAL ISOMERS OF A SYNTHETIC  
TETRAHYDROCANNABINOL WERE PREPARED FOR  
PHARMACOLOGICAL EVALUATION. FOUR THREO ISOMERS  
WERE OBTAINED OPTICALLY PURE, WHEREAS FOUR ERYTHRO  
ISOMERS WERE OBTAINED AS PARTIALLY RESOLVED MATERIALS  
OF UNCERTAIN OPTICAL PURITY. (AUTHOR) (U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-411 385

CHEMICAL RESEARCH AND DEVELOPMENT LABS EDGEWOOD ARSENAL  
MD

SYNTHESIS OF AN ISOMER OF TETRAHYDROCANNABINOL;

(U)

MAR 63 R3P HIVEY, RICHARD L.; STEELE,  
ROGER; HOFFMAN, F.W.;  
REPT. NO. CRDL-SPECIAL PUB-1-41  
PROJ: DA-4-C-0803016  
TASK: 4-C-080301607

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: WORK STARTED JAN 61 AND COMPLETED  
MAR 62.

DESCRIPTORS: (•ORGANIC COMPOUNDS; SYNTHESIS  
(CHEMISTRY)), (•MOLECULAR ISOMERISM, MOLECULAR  
STRUCTURE), MOLECULAR STRUCTURE; SPECTRA  
(INFRARED), SPECTRA (VISIBLE +  
ULTRAVIOLET), NUCLEAR MAGNETIC RESONANCE, O-  
HETEROCYCLIC COMPOUNDS, STEREOCHEMISTRY.  
IDENTIFIERS: TETRAHYDROCANNABINOL, 1963.

(U)

(U)

STRUCTURE OF TETRAHYDROCANNABINOL DERIVED FROM  
NATURAL SOURCES IS KNOWN EXCEPT FOR THE POSITION OF  
THE ISOLATED ALICYCLIC DOUBLE BOND AND THE  
CONFIGURATION ABOUT THE 6 OD 10A-CARBON ATOMS. THE  
FINAL RESOLUTION OF THE STRUCTURE OF NATURAL  
TETRAHYDROCANNABINOL DEPENDS ON THE SYNTHESIS OF THE  
SEVERAL POSSIBLE ISOMERS. AN ATTEMPT TO FIND A  
METHOD FOR THE PREPARATION OF THE TWO PAIRS OF  
DIASTEREOMERIC CIS- AND TRANS-1-HYDROXY-3-N-AMYL 6,  
6, 9-TRIMETHYL-6A, 7, 10, 10A-TETRAHYDRO-6-  
DIBENZOPYRANS BY A DIELS-ALDER CONDENSATION OF  
ISOPRENE WITH AN APPROPRIATELY SUBSTITUTED COUMARIN  
IS REPORTED. RESULTS OF THE CONDENSATION OF  
ISOPRENE WITH 3-CARBOXYCOUMARIN, 3-ACETYLCOUMARIN, 3-  
CARBOXY-5-HYDROXY-7-AMYLCOUMARIN, AND 3-CARBOXY 5-  
HYDROXY-6-CARBOETHOXY-7-AMYLCOUMARIN AND THE PRE-  
PARATION OF TRANS-1-HYDROXY-3-N-AMYL-6, 6, 9  
TRIMETHYL-6A, 7, 10, 10A-TETRAHYDRO-6-DIBENZOPYRAN ARE  
DESCRIBED. TRANS-1-HYDROXY-3-N-AMYL-6, 6, 9  
TRIMETHYL-6A, 7, 10, 10A-TETRAHYDRO-6-DIBENZOPYRAN IS  
NOT IDENTICAL WITH A TETRAHYDROCANNABINOL ISOLATED  
FROM HASHISH. WORK IS IN PROGRESS ON THE SYNTHESIS  
AND OPTICAL RESOLUTION OF THE CIS- AND TRANS-1-  
HYDROXY-3-N-AMYL-6, 6, 9-TRIMETHYL-6A, 7, 10, 10A-  
TETRAHYDRO-6-DIBENZOPYRANS. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-414 045

ISTITUTO SUPERIORE DI SANITA ROME (ITALY)

EFFECT OF DRUGS ON CENTRAL NERVOUS SYSTEM NEURONES.

(U)

DESCRIPTIVE NOTE: FINAL TECHNICAL REPT.,  
JUL 63 16P LONGO, VINCENZO G.  
CONTRACT: AF 61(052)-399  
MONITOR: AFOSR 5107

UNCLASSIFIED REPORT

DESCRIPTORS: (NERVOUS SYSTEM, CNS DEPRES  
SANTS), SCOPOLAMINE, AMPHETAMINES, LYSERGIC  
ACIDS, PHYSIOLOGY, CEREBRAL CORTEX,  
ELECTROENCEPHALOGRAPHY.

(U)

IDENTIFIERS: ELECTRICAL ACTIVITY, ESERINE,  
TRYPTAMINE, 1963.

(U)

THE PRESENT REPORT EXPOSES THE RESULTS OBTAINED DURING AN INVESTIGATION ON THE EFFECTS OF DRUGS ON THE ELECTRICAL ACTIVITY OF SINGLE CORTICAL NEURONES. DURING THE COURSE OF THIS INVESTIGATION THE FOLLOWING DRUGS WERE INJECTED: ESERINE, SCOPOLAMINE, AMPHETAMINE, TRYPTAMINE AND LYSERGIC ACID DIETHYLAMIDE (LSD). ALTHOUGH IT IS NOT POSSIBLE WITH THE PRESENT LIMITED DATA TO ARRIVE AT ANY CLEAR-CUT CONCLUSION, SOME COMMENTS AND INDICATIONS IN REGARD TO FUTURE DEVELOPMENT OF THE RESEARCH ARE THE FOLLOWING: (1) IN THE SENSORIMOTOR CORTEX THERE SEEMS TO BE SOME LAYERS THAT HAVE MANY CELLS RESPONDING WITH INCREASED FIRING RATE AFTER APPLICATION OF EXTERNAL STIMULI; (2) BOTH ESERINE AND AMPHETAMINE PROVOKE AN INCREASE IN FIRING OF SINGLE NEURONES; AND (3) THE "FLATTENING OF THE EEG TRACING PROVOKED BY TRYPTAMINE AND LSD SEEMS TO BE RELATED AT LEAST WHERE IT IS CONCERNED WITH THE LIMBIC CORTEX, WITH A DIMINUTION OF CELLULAR ACTIVITY. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-422 413

JEFFERSON MEDICAL COLL PHILADELPHIA PA

NEUROPHARMACOLOGIC PROFILE OF PSYCHOTOMIMETIC  
ACTIVITY.

(U)

DESCRIPTIVE NOTE: CUMULATIVE PROGRESS REPT. 1 APR 62-30  
SEP 63,

SEP 63 IV BAKER, WALTER W. ;

CONTRACT: DAIR 108CML7069

UNCLASSIFIED REPORT

DESCRIPTORS: (•HALLUCINOGENS, PHYSIOLOGY); STIMULATION;  
PHARMACOLOGY, BEHAVIOR, MOTOR REACTIONS; AUTONOMIC  
NERVOUS SYSTEM, EXCITATION, STRYCHNOS ALKALOIDS;  
REFLEXES  
IDENTIFIERS: ELECTROPHYSIOLOGY; RAGE, 1963

(U)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-446 700

CHEMICAL RESEARCH AND DEVELOPMENT LABS EDGEWOOD ARSENAL  
MD

ACUTE TOXICITY OF TETRAHYDROCANNABINOL TO MICE IN  
ALTERED ENVIRONMENTS.

(U)

SEP 64 4P FROCHLICH, HARRY L. I  
REPT. NO. 3230  
TASK: IC522301A07901

UNCLASSIFIED REPORT

DESCRIPTORS: (DRUGS, TOXICITY), ENVIRONMENTAL TESTS,  
SURVIVAL, HYPOTHERMIA, MICE, PHYSIOLOGY, PHARMACOLOGY,  
LETHAL DOSAGE, STRESS (PHYSIOLOGY), ABDOMEN, INJECTION  
(MEDICINE), BIOCHEMISTRY, TEMPERATURE (U)  
IDENTIFIERS: TETRAHYDROCANNABINOL (U)

A DOSE RANGE STUDY AND AN ACUTE INTRAPERITONEAL  
TOXICITY STUDY WERE PERFORMED WITH  
TETRAHYDROCANNABINOL. THE PURPOSE WAS TO DETERMINE  
WHETHER ANY DIFFERENCES IN PHYSIOLOGICAL ACTIVITY OR  
ACUTE INTRAPERITONEAL TOXICITY (LD50) COULD BE  
OBSERVED IN MICE HOUSED AT ROOM TEMPERATURES OF 70  
DEGREES AND 40 DEGREES F. MICE RECEIVING  
TETRAHYDROCANNABINOL AT A ROOM TEMPERATURE OF 40 F  
EXHIBITED THE SAME PHYSIOLOGICAL EFFECTS AS MICE  
RECEIVING TETRAHYDROCANNABINOL AT A ROOM TEMPERATURE  
OF 70 DEGREES F. THE ACUTE INTRAPERITONEAL LD50  
OF TETRAHYDROCANNABINOL IN MICE AT 70 F WAS 125-  
37 MG/KG. THE ACUTE INTRAPERITONEAL LD50 OF  
TETRAHYDROCANNABINOL IN MICE AT 40 F WAS 14-2MG/  
KG. TETRAHYDROCANNABINOL IS NINE TIMES MORE TOXIC  
IN MICE SUBJECTED TO THE ADDED STRESS OF COLD.  
(AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-481 832 6/15 6/20  
OFFICE OF NAVAL RESEARCH LONDON (ENGLAND)

SYMPOSIUM ON DRUGS AND SENSORY FUNCTIONS. (U)

DESCRIPTIVE NOTE: TECHNICAL REPT.,  
APR 66 5P MILLER, CHARLES H. ;  
REPT. NO. ONRL-P-6-66

UNCLASSIFIED REPORT

DESCRIPTORS: (•SYMPOSIA; •DRUGS), (•SENSORY  
PERCEPTION, DRUGS), TOXICITY, SENSORY MECHANISMS,  
PSYCHOPHYSIOLOGY, SMELL, TASTE, AMPHETAMINES,  
APPETITE, EAR, AUDITORY PERCEPTION, NYSTAGMUS,  
SENSORY DEPRIVATION, ANOXIA, LYSERGIC ACIDS, CNS  
STIMULANTS, LIGHT, OXYGEN, COLOR VISION,  
MEMORY, PERCEPTION, PHARMACOLOGY, CODING,  
GREAT BRITAIN, STRESS (PHYSIOLOGY) (U)  
IDENTIFIERS: KANAMYCIN (U)

THIS REPORT REVIEWS PRESENTATIONS AT THE SYMPOSIUM  
ON DRUGS AND SENSORY FUNCTIONS, HELD 23-24  
MAR 1966 AT THE ROYAL COLLEGE OF PHYSICIANS,  
LONDON, WHICH WAS SUPPORTED BY SIX BRITISH AND  
TWO INTERNATIONAL SCIENTIFIC ORGANIZATIONS.  
APPROXIMATELY 250 ATTENDED, MOSTLY FROM FIELDS OF  
PHARMACOLOGY, PHYSIOLOGY, AND PSYCHOLOGY. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-486 326 7/3  
FOGWOOD ARSENAL MD

SYNTHESIS AND ISOLATION OF TETRAHYDROCANNABINOL  
ISOMERS.

(U)

DESCRIPTIVE NOTE: TECHNICAL REPT. JAN 63-MAR 65,  
JUL 66 119P HIVELY, RICHARD L. I  
HOFFMANN, FRIDRICH W. I  
REPT. NO. EA-TR-4002  
PROJ: DA-1C522301A060

UNCLASSIFIED REPORT

DESCRIPTORS: (CANNABINOLS,  
SYNTHESIS(CHEMISTRY)), PLASTICS, DIENE  
SYNTHESIS, HYDROLYSIS, PHENOLS, ULTRAVIOLET  
SPECTROSCOPY, MOLECULAR ISOMERISM, TEST METHODS,  
NUCLEAR MAGNETIC RESONANCE, CHEMICAL BONDS, THIN  
LAYER CHROMATOGRAPHY, DEGRADATION, AROMATIC  
COMPOUNDS, MELTING POINT, PROTONS, OXIDATION,  
ABSORPTION, HYDROCARBONS  
IDENTIFIERS: MARIJUANA

(U)

(U)

IN ADDITION TO CANNABINOL, CANNABIDIOL, AND TRANS-  
1-HYDROXY-3-N-AMYL-6, 6, 9 TRIMETHYL-6A, 7, 8, 10A-  
TETRAHYDRO-6-DIBENZOPYRAN (TETRAHYDROCANNABINOL  
A), A NEW MARIJUANA CONSTITUENT, TRANS-1-HYDROXY-3-  
N-AMYL-6, 6, 9-TRIMETHYL-6A, 7, 10, 10A-TETRAHYDRO 6-  
DIBENZOPYRAN (TETRAHYDROCANNABINOL B), WAS  
ISOLATED FROM MARYLAND AND MEXICAN MARIJUANA.  
TRACES OF TETRAHYDROCANNABINOL B WERE ALSO FOUND  
IN EGYPTIAN HASHISH. WEST VIRGINIA MARIJUANA  
CONTAINED ONLY CANNABIDIOLIC ACID. A SECOND SAMPLE  
OF MEXICAN MARIJUANA FURNISHED ONLY  
TETRAHYDROCANNABINOL A AND CANNABINOL, WHILE A  
SPANISH SAMPLE CONTAINED AN ADDITIONAL AMOUNT OF  
CANNABIDIOL. THE STRUCTURE OF TETRAHYDROCANNABINOL  
B WAS ELUCIDATED BY CHEMICAL AND SPECTRAL EVIDENCE.  
THE PARTIAL SYNTHESSES OF FOUR ISOMERIC  
TETRAHYDROCANNABINOLS (A, B, AND THEIR CIS-  
ISOMERS) AND THE TOTAL SYNTHESIS OF THE RACEMIC  
CIS-ISOMER OF TETRAHYDROCANNABINOL B ARE ALSO  
DESCRIBED. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-632 636

RAVCO CORP SANTA MONICA CALIF

HALLUCINOGENIC DRUGS: A PERSPECTIVE WITH SPECIAL  
REFERENCE TO PEYOTE AND CANNABIS;

(U)

JUL 64 R4P MCGLOTHLIN, WILLIAM H. I  
REPT. NO. -2937

UNCLASSIFIED REPORT

DESCRIPTORS: (+HALLUCINOGENS, ANHALONIUM ALKALOIDS),  
(+ANHALONIUM ALKALOIDS, ADDICTION), (+ADDICTION,  
ANHALONIUM ALKALOIDS), (+CANNABIS, TOLERANCES  
(PHYSIOLOGY), DRUGS, PSYCHOPHYSIOLOGY, RELIGION,  
CULTURE, LYSERGIC ACIDS, PSYCHOTROPIC AGENTS,  
BIBLIOGRAPHIES

(U)

IDENTIFIERS: PEYOTISM

(U)

THE EXTENSIVE LITERATURE ON PEYOTE AND CANNABIS  
SATIVA (MARIHUANA), WITH PARTICULAR EMPHASIS ON  
REDUCING THE UNCERTAINTY ABOUT THE BENEFITS OR PERILS  
INHERENT IN THE USE OF LSD AND OTHER RECENT  
ADDITIONS TO THE HALLUCINOGEN FAMILY IS REVIEWED:  
(1) INTRODUCTION, (2) ADDICTION AND  
HABITUATION, (3) PEYOTE, (4) CANNABIS, AND  
(5) THE LSD CONTROVERSY.

(U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-604 802

RAND CORP SANTA MONICA CALIF

LONG-LASTING EFFECTS OF LSD ON CERTAIN ATTITUDES IN  
NORMALS: AN EXPERIMENTAL PROPOSAL, (U)

MAY 62 66P MCGLOTHLIN, WILLIAM H. ;  
REPT. NO. P-2575

UNCLASSIFIED REPORT

DESCRIPTORS: (•LYSERGIC ACIDS; REACTION (PSYCHOLOGY)),  
(•REACTION (PSYCHOLOGY); LYSERGIC ACIDS); DRUGS; DOSAGE;  
CHEMOTHERAPY; PSYCHOMETRICS; PERSONALITY; EMOTIONS;  
ATTITUDES; BEHAVIOR; MEMORY; SOCIAL COMMUNICATION;  
PSYCHOPHYSIOLOGY; PSYCHIATRY; ABNORMAL PSYCHOLOGY;  
PSYCHOSES; NEUROSES; ADJUSTMENT (PSYCHOLOGY); PERCEPTION  
(PSYCHOLOGY); TOLERANCES (PHYSIOLOGY); CENTRAL NERVOUS  
SYSTEM (U)

RESEARCH INTO THE LONG-LASTING EFFECTS OF  
ADMINISTERING D-LYSERGIC ACID DIETHYLAMIDE (LSD) TO  
NORMALS IS DISCUSSED. IN ADDITION TO ITS USE IN  
PSYCHOTHERAPY, THERE WERE SOME REPORTS OF  
EXPERIMENTAL SUBJECTS WHO CLAIM LASTING BENEFICIAL  
EFFECTS ATTRIBUTABLE TO THE LSD EXPERIENCE. IN  
PARTICULAR, TWO FOLLOW-UP QUESTIONNAIRE STUDIES  
INDICATED THAT NORMAL SUBJECTS FREQUENTLY CLAIM  
CHANGES IN PERSONALITY RESULTING FROM ONLY ONE OR TWO  
ADMINISTRATIONS OF LSD; AND THESE CLAIMS WERE  
MAINTAINED AFTER PERIODS OF A YEAR OR MORE. THESE  
RESULTS ARE SUBJECT TO THE WEAKNESSES OF THE  
QUESTIONNAIRE METHOD; BUT, WHEN CONSIDERED ALONG WITH  
SOME OF THE LITERATURE ON THE USE OF LSD IN  
PSYCHOTHERAPY, THEY APPEAR TO BE SUFFICIENTLY  
SUGGESTIVE TO WARRANT MORE CONTROLLED EXPERIMENTS IN  
THIS AREA. AN EXPERIMENT IS SUGGESTED WHICH WOULD  
ATTEMPT TO MEASURE ANY LONGLASTING CHANGES IN  
ATTITUDES, VALUES, AND COMMUNICATIVE ABILITY  
RESULTING FROM THE ADMINISTRATION OF LSD. IN  
PARTICULAR, THE MEASURES WOULD CONCENTRATE ON CHANGES  
IN CLOSED-MINDNESS AS REFLECTED BY SCALES OF  
DOGMATISM, OPINIONATION, AND ETHNOCENTRICITY. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-607 167

CORNELL UNIV ITHACA N Y

SEROTONIN BINDING TO PREPARATIONS FROM RAT BRAIN,

(U)

DESCRIPTIVE NOTE: TECHNICAL REPT., NO. 6,  
AUG 64 197P MARCHBANKS, R. M. ;  
CONTRACT: NONR-ND1(40), NSF-GP-971

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: REPT. ON COGNITIVE SYSTEMS  
RESEARCH PROGRAM. DOCTORAL THESIS.

DESCRIPTORS: (+SEROTONIN, REACTION KINETICS), (+NERVE  
CELLS, SEROTONIN), (+BRAIN, SEROTONIN), NERVE IMPULSES,  
ENZYMES, OXIDOREDUCTASES, NERVOUS SYSTEM, LYSERGIC  
ACIDS, RESERPIN, INHIBITION, CHLORPROMAZINE,  
ACETYLCHOLINE, FATTY ACIDS, LEVARTERENOL, LEARNING,  
MEMORY, PERMEABILITY, MEMBRANES (BIOLOGY), MITOCHONDRIA,  
MORPHOLOGY (BIOLOGY), CENTRAL NERVOUS SYSTEM, DRUG,  
CHEMICAL BONDS, EQUATIONS, BIOCHEMISTRY, PHYSIOLOGY (U)  
IDENTIFIERS: ELECTROPHYSIOLOGY (U)

THE BINDING OF SEROTONIN TO ELEMENTS FROM THE  
SYNAPSE HAS BEEN INVESTIGATED IN AN ATTEMPT TO  
DEVELOP METHODS FOR THE INVESTIGATION OF SYNAPTIC  
EVENTS BY BIOCHEMICAL METHODS. CHEMICAL  
INTERACTIONS ARE KNOWN TO BE IMPORTANT FOR THE  
TRANSMISSION OF IMPULSES ACROSS THE SYNAPSE; THE  
IMPORTANCE OF THESE INTERACTIONS IN CONNECTION WITH  
BRAIN MECHANISMS IS DISCUSSED. THE PHYSIOLOGY OF  
THE NEUROHUMORAL AGENT, SEROTONIN, IS DISCUSSED; IT  
HAS A ROLE IN BRAIN FUNCTION, BUT ITS EXACT FUNCTION  
REMAINS OBSCURE. METHODS OF EVALUATING THE AMOUNT  
OF A PARTICULAR BINDING COMPONENT AND ITS EQUILIBRIUM  
CONSTANT ARE DISCUSSED; THESE INVOLVE THE MEASUREMENT  
OF THE AMOUNT BOUND AS A FUNCTION OF SEROTONIN  
CONCENTRATION. BINDING COMPONENTS ARE  
DISTINGUISHED BY THE ASSOCIATION CONSTANT OF THE  
BINDING REACTION. FUNCTIONAL SIGNIFICANCE IS  
ASSIGNED TO THE BINDING COMPONENTS BY INVESTIGATION  
OF THEIR PROPERTIES, AND PARTICULARLY, BY EXAMINATION  
OF THE EFFECTS OF INHIBITORS ON THE BINDING  
COMPONENT. THE AMOUNT BOUND BY A HOMOGENATE IS  
DETERMINED BY EQUILIBRIUM DIALYSIS, CENTRIFUGAL  
SEPARATION OF THE MACROMOLECULE PHASE, AND A METHOD  
INVOLVING THE MACROMOLECULAR EXCLUSION PROPERTIES OF  
SEPHADEX.

19

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UNCLASSIFIED

/ZAML2

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-606 402

DUKE UNIV DURHAM N C SCHOOL OF MEDICINE

PSYCHOPHYSIOLOGICAL MECHANISMS OF STRESS  
RESPONSIVITY.

(U)

DESCRIPTIVE NOTE: ANNUAL REPT,  
JUN 61 46P COHEN, SANFORD I. SILVERMAN,  
ALBERT J. ;  
CONTRACT: AF49 638 354  
MONITOR: AFOSR , 1515

UNCLASSIFIED REPORT

DESCRIPTORS: (•STRESS (PHYSIOLOGY), REACTION  
(PSYCHOLOGY)), (•PSYCHOPHYSIOLOGY, STRESS (PSYCHOLOGY)),  
CENTRAL NERVOUS SYSTEM, SENSORY PERCEPTION, ANXIETY,  
SENSORY DEPRIVATION, CONFINEMENT (PSYCHOLOGY),  
PERSONALITY, PSYCHOCHEMICAL AGENTS, LYSERGIC ACIDS,  
DRUGS, ENDOCRINE GLANDS, PERCEPTION (PSYCHOLOGY),  
THRESHOLDS (PHYSIOLOGY), TOLERANCES (PHYSIOLOGY),  
ELECTROENCEPHALOGRAPHY, PAIN, PROJECTIVE TECHNIQUES,  
GALVANIC SKIN RESPONSE, PSYCHOMETRICS

(U)

RESEARCH IS SUMMARIZED ON WORK IN THE FOLLOWING  
FOUR AREAS: (1) CENTRAL NERVOUS SYSTEM,  
PERIPHERAL PHYSIOLOGICAL ENDOCRINOLOGICAL AND  
PSYCHOLOGICAL RESPONSES OF BODY AND FIELD ORIENTED  
SUBJECTS TO EXPERIMENTAL SITUATIONS CHARACTERIZED BY  
UNCERTAINTY, SOCIAL AND SENSORY ISOLATION AND  
LIMITATION OF MOVEMENT; (2) ANALYSIS OF  
PERSONALITY, PHYSIOLOGICAL AND CENTRAL NERVOUS SYSTEM  
CORRELATES OF BODY AND FIELD PERCEPTUAL MODES AND THE  
EXPLORATION OF OTHER INDIVIDUAL DETERMINANTS OF THE  
RESPONSE TO LOW SENSORY INPUT EXPERIMENTS; (3) A  
STUDY OF THE INFLUENCE OF DRUGS ACTING ON CENTRAL  
NERVOUS SYSTEM IN BODY AND FIELD ORIENTED SUBJECTS IN  
LOW SENSORY INPUT EXPERIMENTS; AND (4) AN  
EXPLORATORY STUDY OF THE INFLUENCE OF A  
PSYCHOCHEMICAL (LSD) ON RESPONSE TO TWO HOUR LOW  
SENSORY INPUT EXPERIMENTAL CONDITIONS.

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-613 764

WALTER REED ARMY INST OF RESEARCH WASHINGTON D C

DIFFERENTIAL EFFECT OF LSD UPON HABITUATING AND  
EXTINGUISHING EVOKED RESPONSES,

(U)

APR 64 BP SHEATZ, GUY C. ; BOGDANSKI,  
DONALD F. ;

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN JOURNAL OF NEUROPSYCHIATRY  
(U. S.) V5 N8 P85-92 NOV-DEC 1964 (COPIES NOT  
AVAILABLE TO DDC OR CLEARINGHOUSE CUSTOMERS).

DESCRIPTORS: (•LYSERGIC ACIDS; CONDITIONED REFLEX),  
(•CONDITIONED REFLEX, LYSERGIC ACIDS), BEHAVIOR,  
ELECTROENCEPHALOGRAPHY, AUDITORY PERCEPTION,  
OSCILLATION, BARBITURATES, CENTRAL NERVOUS SYSTEM,  
DRUGS, DOSAGE, NERVOUS SYSTEM, PHYSIOLOGY

(U)

LSD, IN SMALL DOSES (10 MICROGRAMS/KG) WHICH  
AFFECT BEHAVIOR ONLY IN THE ABSENCE OF AN ACTIVE  
ENVIRONMENT AND WHICH ONLY MINIMALLY ALTER THE  
SPONTANEOUS EEG, DRAWS A CLEAR DISTINCTION BETWEEN  
HABITUATING AND EXTINGUISHING EVOKED AUDITORY  
RESPONSES BY PREFERENTIALLY FACILITATING THE LATTER.  
IT ALSO ESTABLISHES A CONDITION FAVORABLE TO  
PROLONGATION OR OSCILLATION OF THE RESPONSE.  
RESPONSE COMPONENTS MAY BE VISIBLE AS LONG AS 5  
SEC. FOLLOWING THE CLICK. LSD POTENTIATED  
RESPONSES DO NOT FOLLOW THE USUAL FAST EXTINCTION  
CURVE, BUT THEY ARE EASILY REDUCED BY DISTRACTION AND  
BY SMALL DOSES OF NEMBUTAL. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-615 698

TUFTS UNIV MEDFORD MASS

VISUAL IMAGERY PRODUCED BY RHYTHMIC PHOTIC  
STIMULATION: PERSONALITY CORRELATES AND  
PHENOMENOLOGY;

(U)

NOV 63 18P FREEDMAN, SANFORD J. ; MARKS,  
PATRICIA A. ;  
CONTRACT: AF AFOSR62 11  
MONITOR: AFOSR ; 65-0711

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN BRITISH JOURNAL OF  
PSYCHOLOGY V56 N1 P95-112 1963 (COPIES AVAILABLE ONLY TO  
DDC USERS).

DESCRIPTORS: (+PSYCHOPHYSIOLOGY; OPTICAL IMAGES;  
(+PERSONALITY; SENSORY PERCEPTION); (+VISION;  
STIMULATION); PERCEPTION (PSYCHOLOGY); REACTION  
(PSYCHOLOGY); PROJECTIVE TECHNIQUES; SENSORY  
DEPRIVATION; ANHALONIUM ALKALOIDS;  
ELECTROENCEPHALOGRAPHY; MOTIVATION; EMOTIONS; GEOMETRIC  
FORMS; COLORS; LIGHT; CORRELATION TECHNIQUES (U)  
IDENTIFIERS: HALLUCINATIONS; HYPNOSIS;  
IMAGINATION (U)

THIS STUDY IS CONCERNED WITH RELATIONSHIPS BETWEEN  
DESCRIPTIONS OF VISUAL IMAGERY PRODUCED BY RHYTHMIC  
PHOTIC STIMULATION AND A NUMBER OF PERSONALITY TESTS.  
INDIVIDUALS WHO MANIFESTED THE ABILITY TO SUSPEND  
THEIR GENERALIZED REALITY-ORIENTATION DESCRIBED MORE  
IMAGERY; IMAGINATION AND SUGGESTIBILITY ALSO SEEMED  
TO BE IMPORTANT. SUBJECTS' EXPECTATIONS ABOUT WHAT  
THEY WOULD SEE INFLUENCED THEIR REPORTS, ALTHOUGH  
COMPREHENSION OF THE EXPERIMENTAL DESIGN, FATIGUE AND  
MOTIVATION WERE NOT RELEVANT. THE CORRELATED  
PERSONALITY VARIABLES INDICATE A CLOSE RELATIONSHIP  
WITH OTHER TYPES OF VISUAL IMAGERY; THE PHENOMENOLOGY  
FITS A SYNTHESIZED DESCRIPTION OF SENSORY  
DEPRIVATION, MISCALINE, AND HYPNAGOGIC IMAGERY.  
(AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-618 802

TEXAS UNIV GALVESTON MEDICAL BRANCH

EFFECT OF A CHEMICALLY DEPRESSED AMYGDALA ON THE  
BEHAVIORAL MANIFESTATIONS PRODUCED IN CATS BY LSD-25 (U)

DEC 64 6P BARRATT, ERNEST S. SPRAY,  
SIDNEY L. ;  
CONTRACT: NONR159806

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN EXPERIMENTAL NEUROLOGY V12  
N2 P173-8 JUN 1965 (COPIES NOT AVAILABLE TO DDC OR  
CLEANINGHOUSE CUSTOMERS).

DESCRIPTORS: (•LYSERGIC ACIDS, INHIBITION),  
SKELETAL MUSCLE RELAXANTS, CEREBELLUM,  
THRESHOLDS (PHYSIOLOGY), DOSAGE, NERVOUS SYSTEM,  
PHYSIOLOGY, CONVULSIVE DISORDERS, CENTRAL NERVOUS  
SYSTEM, BEHAVIOR, CATS (U)  
IDENTIFIERS: AMYGDATA (U)

THE DRUG, SQ 10,496, AN EXPERIMENTAL  
ANTI-DEPRESSANT, RAISED THE THRESHOLD FOR ELECTRICALLY  
INDUCED AMYGDALOID SEIZURES. IT ALSO BLOCKED OR  
DIMINISHED THE BEHAVIORAL EFFECTS OF LSD-25. THE  
BLOCKING EFFECT OF SQ 10,496 IS RELATED TO  
NEUROPHYSIOLOGICAL MECHANISMS WHICH ARE POSSIBLE THE  
BASES FOR THE BEHAVIORAL EFFECTS OBTAINED WITH LSD-  
25. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-622 846

CALIFORNIA UNIV LOS ANGELES BRAIN RESEARCH INST

PROLONGED EFFECTS OF LSD ON EEG RECORDS DURING  
DISCRIMINATIVE PERFORMANCE IN CAT: EVALUATION BY  
COMPUTER ANALYSIS, (U)

MAY 64 JIP ADEY, W. R. ; PORTER, R. ; WALTER,  
D. O. ; BROWN, T. S. ;  
CONTRACT: AF AFOSR246 63 , NSG203 62  
MONITOR: AFOSR , 65-0940

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN ELECTROCEPHALOGRAPHY AND  
CLINICAL NEUROPHYSIOLOGY V18 P25-35 1965 (COPIES  
AVAILABLE ONLY TO DDC USERS). PREPARED IN COOPERATION  
WITH VETERANS ADMINISTRATION HOSPITALS, LONG BEACH  
AND LOS ANGELES, CALIF.

DESCRIPTORS: (•LYSERGIC ACIDS, BEHAVIOR),  
(•ELECTROENCEPHALOGRAPHY, LYSERGIC ACIDS),  
TOLERANCES (PHYSIOLOGY), BRAIN,  
TISSUES (BIOLOGY), PSYCHOTROPIC AGENTS, CEREBRAL  
CORTEX, TRAINING, DATA PROCESSING SYSTEMS, CATS (U)

THE EFFECTS OF LSD WERE STUDIED IN RELATION TO  
CHANGES INDUCED IN COMPUTED AVERAGES OF EPOCHS OF  
EEG RECORDS DURING A DISCRIMINATIVE TASK  
PERFORMANCE IN A SERIES OF SIX CATS REPEATEDLY  
EXPOSED TO LSD OVER A PERIOD OF MANY MONTHS.  
COMPUTED AVERAGES WERE PREPARED FROM DAILY TRAINING  
TESTS OF 20 AND 40 TRIALS. LSD (75 MICROGRAMS/  
KG) WAS GIVEN IN SINGLE DOSES BY INTRAPERITONEAL  
INJECTION AT INTERVALS OF NOT LESS THAN 2 WEEKS.  
THE FINDINGS INDICATE PERSISTENT  
ELECTROPHYSIOLOGICAL EFFECTS OF LSD BEYOND THE  
PERIOD OF ACUTE DRUG ACTION. HOWEVER, THESE  
CHANGES RAN A SHORTER COURSE THAN THE TOLERANCE TO  
LSD EXHIBITED BY MAN AND ANIMALS. THEY SHOWED A  
DIFFERENTIAL DISTRIBUTION IN DIFFERENT BRAIN REGIONS,  
WITH MAXIMAL CHANGES IN THE HIPPOCAMPUS, AND SMALLER  
EFFECTS IN THE ENTORHINAL CORTEX AND THE ROSTRAL  
MIDBRAIN RETICULAR FORMATION. EVIDENCE IS PRESENTED  
OF HIGHLY FOCAL DIFFERENCES IN LATE RESPONSES WITHIN  
THE HIPPOCAMPUS. DIFFERENTIAL SUSCEPTIBILITY OF  
HIPPOCAMPAL TISSUE IS DISCUSSED IN RELATION TO A  
SIMILAR SENSITIVITY TO THE ACUTE EFFECTS OF BOTH  
LSD AND PSYCHOTOMIMETIC CYCLOHEXAMINES, AND TO THE  
PATTERN OF PROPAGATION OF HIPPOCAMPAL AFTER-  
DISCHARGES. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-623 060

CALIFORNIA UNIV LOS ANGELES BRAIN RESEARCH INST

HIPPOCAMPAL MECHANISMS IN PROCESSES OF MEMORY;  
THOUGHTS ON A MODEL OF CEREBRAL ORGANIZATION IN  
LEARNING, (U)

64 46P ADEY, W. ROSS ;

CONTRACT: AF-AFOSR-61-61

PROJ: AF-7164

TASK: 716402

MONITOR: AFOSR ; 65-1502

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PROCEEDINGS OF CONFERENCE (2ND)  
LOS ANGELES, CALIF. 1962 UNIV. CALIF. PRESS  
BRAZIER M A B V2 P233-76 UCLA FORUM MED SCI N2.  
(COPIES NOT AVAILABLE TO DDC OR CLEARINGHOUSE  
CUSTOMERS).

DESCRIPTORS: (\*BRAIN, LEARNING); (\*MEMORY,  
BRAIN); (\*LEARNING, BRAIN); PERFORMANCE TESTS;  
HALLUCINOGENS, DRUGS, COMPUTERS; ANALYSIS,  
REACTION (PSYCHOLOGY); TRAINING; ELECTRICAL  
IMPEDANCE; ELECTROENCEPHALOGRAPHY (U)  
IDENTIFIERS: HIPPOCAMPUS (U)

A DISCUSSION IS PRESENTED OF THE ABLATION AND DRUG  
STUDIES OF THE SYSTEM ORGANIZATION OF THE HIPPOCAMPUS  
IN ANIMALS. THESE STUDIES SUPPORT THE IDEA THAT  
THE HIPPOCAMPAL SYSTEM IS VITALLY CONCERNED IN THE  
CONTINUED CAPABILITY TO MAKE A DISCRIMINATIVE  
PERFORMANCE INVOLVING THE INTEGRITY OF BOTH RECENT  
AND LONG-TERM MEMORY FUNCTIONS. COMPUTER ANALYSES  
OF VARIOUS ASPECTS OF WAVE PROCESSES DURING  
DISCRIMINATIVE LEARNING INDICATED STRONG SUPPORT OF  
THE HYPOTHESIS OF CONVEYANCE OF INFORMATION ON THE  
BASIS OF GRADED ANALOG WAVE PROCESSES.  
PHYSICOCHEMICAL CHANGES IN LEARNING WERE DIRECTLY  
MONITORED BY APPLICATION OF IMPEDANCE MEASURING  
TECHNIQUES TO THE LEARNING PROCESS. (AUTHOR) (U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-622 367

BUENOS AIRES UNIV (ARGENTINA) INSTITUTO DE ANATOMIA  
GENERAL Y FISIOLOGIA

5-HYDROXYTRYPTAMINE RECEPTORS AND SYNAPTIC  
TRANSMISSION IN MOLLUSCAN NEURONES,

(U)

65 6P GERSCHENFELD, H. M. STEFANI,

E. ;

CONTRACT: AF AFOSR656 64

MONITOR: AFOSR , 65-1942

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN NATURE V205 N4977 P1216-8 20  
MAR 1965 (COPIES AVAILABLE ONLY TO DDC USERS).

DESCRIPTORS: (•MOLLUSCA; NERVOUS SYSTEM),  
(•GASTROPODA, NERVOUS SYSTEM), (•NERVE CELLS,  
PHYSIOLOGY), (•SEROTONIN, NERVE IMPULSES),  
AMINES, ALCOHOLS, CHEMORECEPTORS,  
MEMBRANES(BIOLOGY), ACETYLCHOLINE, ENZYMES,  
BIOSYNTHESIS, GANGLIA, LYSERGIC ACIDS,  
ARGENTINA

(U)

THE HIGH 5-HYDROXYTRYPTAMINE (5-HT) MOLLUSC  
GANGLIA (WHICH IS HERE CONFIRMED FOR THE  
ARGENTINE LAND SNAIL CRYPTOMPHALLUS ASPERSA),  
THE PRESENCE OF ENZYMES FOR THE SYNTHESIS AND  
INHIBITION OF 5-HT, THE SPECIFIC EFFECTS OF THE  
AMINE ON THE MEMBRANE CONDUCTANCE OF CELLS WITH  
INHIBITION OF LONG DURATION (CILDA), AND THE  
PRESENCE OF SPECIFIC 5-HT RECEPTORS ON THE MEMBRANE  
OF THE SAME NEURON TYPE FILL SOME OF THE CRITERIA  
REQUIRED TO CONSIDER THE SUBSTANCE AS A SYNAPTIC  
TRANSMITTER. THE BLOCKING OF 5-HT RECEPTOR SITES  
BY LYSERGIC ACID DIETHYLAMIDE AND BY BROMOLYSERGIC  
ACID WAS CONFIRMED ON THE CELLULAR LEVEL WITH CILDA  
NEURONES. ADDITIONAL EVIDENCE INDICATES THAT 5-  
HT MAY BE THE NATURAL EXCITATORY TRANSMITTER FOR  
THESE NEURONES.

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-621 375

OXFORD UNIV (ENGLAND) DEPT OF PHARMACOLOGY

HYDROXYINDOLE OXIDASE IN THE CRYSTALLINE STYLE OF  
PINNA NOBILIS,

(U)

MAY 65 12P BLASCHKO, HERMANN ;  
CONTRACT: AF EOAR12 64  
PROJ: 9777  
TASK: 977701  
MONITOR: AFOSR ; 65-1549

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN RIVISTA DI BIOLOGIA V58  
PT1 P27-36 JAN-MAR 1965 (COPIES AVAILABLE ONLY TO  
DDC USERS).

DESCRIPTORS: (•MOLLUSCA; ENZYMES), (•GASTROPODA,  
OXIDOREDUCTASES), (•OXIDOREDUCTASES, GASTROPODA),  
DIGESTIVE SYSTEM, ORGANIC PIGMENTS, PSILOCIN,  
OXIDATION, GREAT BRITAIN

(U)

IDENTIFIERS: CRYSTALLINE STYLE; HYDROXYINDOLE  
OXIDASE, PINNA NOBILIS

(U)

EXPERIMENTS WERE CONDUCTED ON THE HYDROXYINDOLE  
OXIDASE ACTIVITY OF AN ENZYME PRESENT IN CRYSTALLINE  
PINNA NOBILIS. IT IS SHOWN THAT A HOMOGENATE OF  
THE CRYSTALLINE STYLE OXIDIZES PSILOCINE WITH THE  
FORMATION OF A BLUE PIGMENT. THIS ACTIVITY WAS  
ALSO OBSERVED IN THE GILL PLATES OF MYTILUS EDULIS  
AND IS DESCRIBED AS AN EXPRESSION OF THE PHENOL  
OXIDASE ACTIVITY IN THESE TISSUES. THIS FINDING IS  
DISCUSSED IN RELATION TO EARLIER OBSERVATIONS ON THE  
PRESENCE OF A PHENOLOXIDASE IN MOLLUSKS. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-622 497

CALIFORNIA UNIV LOS ANGELES BRAIN RESEARCH INST

COMPUTER ANALYSIS OF HIPPOCAMPAL EEG ACTIVITY AND  
IMPEDANCE IN APPROACH LEARNING: EFFECTS OF  
PSYCHOTOMIMETIC AND HALLUCINOGENIC DRUGS,

(U)

63 31P ADEY, W. R. ;  
CONTRACT: AF AFOSR61 81 , PHS B1882  
MONITOR: AFOSR , 63-1572

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PUB. IN PHARMACOLOGY OF  
CONDITIONING, LEARNING AND RETENTION. PROCEEDINGS  
OF THE INTERNATIONAL PHARMACOLOGICAL MEETING  
(2ND), PRAGUE, 20-22 AUG 1962 (COPIES AVAILABLE  
ONLY TO DDC USERS).

DESCRIPTORS: (\*LEARNING, ELECTROENCEPHALOGRAPHY),  
(\*PSYCHOTROPIC AGENTS, BEHAVIOR), BRAIN,  
HALLUCINOGENS, LYSERGIC ACIDS, DATA PROCESSING  
SYSTEMS, COMPUTERS, CATS

(U)

REPRINT: COMPUTER ANALYSIS OF HIPPOCAMPAL EEG ACTIVITY  
AND IMPEDANCE IN APPROACH LEARNING: EFFECTS OF  
PSYCHOTOMIMETIC AND HALLUCINOGENIC DRUGS.

UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-622 671

UNIVERSIDAD DE LA REPUBLICA MONTEVIDEO (URUGUAY)  
INSTITUTO DE NEUROLOGIA

EFFECTS OF PSYCHOPHARMACOLOGIC DRUGS UPON SENSORY  
INFLOW IN NORMAL SUBJECTS, PSYCHIATRIC PATIENTS AND  
IN ANIMALS. (U)

DESCRIPTIVE NOTE: FINAL TECHNICAL REPT. FOR 1 OCT 64-30  
SEP 65,

SEP 65 16P AUSTT, ELIO GARCIA ;

CONTRACT: DA AR049 092 64G40

PROJ: DA2ND14501B710

UNCLASSIFIED REPORT

DESCRIPTORS: (•PSYCHOTROPIC AGENTS, SENSORY  
PERCEPTION), (•PSYCHOSES, PSYCHOTROPIC AGENTS),  
BARBITURATES, LYSERGIC ACIDS, NEUROSES,  
NEUROLOGY, PHYSIOLOGY, PSYCHIATRY, DRUGS,  
ELECTROENCEPHALOGRAPHY, VISUAL PERCEPTION, DATA  
PROCESSING SYSTEMS, RATS, GUINEA PIGS, CATS (U)  
IDENTIFIERS: SCHIZOPHRENIA, URUGUAY (U)

THE OBJECTIVES OF THE RESEARCH WERE: (1) TO  
ESTABLISH CHANGES OBSERVED IN SENSORY EVOKED  
POTENTIAL IN NORMAL SUBJECTS BY BARBITURATES,  
LYSERGIC ACID, OTHER PSYCHOTROPIC DRUGS IN DIFFERENT  
ATTENTIONAL LEVELS AND DURING HABITUATION AND  
CONDITIONING. (2) TO DETERMINE THE CHANGES  
EVOKED IN PSYCHOTIC PATIENTS, ESPECIALLY  
SCHIZOPHRENICS. (3) TO OBSERVE THE EFFECT OF  
THESE DRUGS ON ATTENTION, HABITUATION, AND  
CONDITIONING IN RAT, GUINEA PIG, AND CAT. IN THE  
FIRST YEAR A BEGINNING WAS MADE ON OBJECTIVES 1 AND 2  
ADDING SENSORY INFORMATION ON COMATOSE AND STUPOROUS  
PATIENTS. THE CAT COMPUTER SYSTEM WAS MODIFIED  
TO AUTOMATE RECORDING PROCEDURES ALLOWING  
ACCUMULATION FOR PRESENT TIME, READOUT, ERASE AND  
RESET WITHOUT OPERATOR ACTION. STUDY OF DRUG  
ACTION WAS BEGUN WITH LSD-25 ON VISUAL SENSORY  
INFLOW. RESULTS: (1) MULTIPLICATION OF  
WAVES, PARTICULARLY FIRST COMPONENTS, (2)  
INCREASE IN AMPLITUDE, PARTICULARLY LAST COMPONENTS.  
EXPERIMENTS WITH DRUGS ON NEUROTIC AND PSYCHOTIC  
PATIENTS ARE NOT YET DEFINITIVE. CHANGES OF VER  
IN COMA PATTERN OF RESPONSE ARE SIMILAR TO THAT OF  
NEWBORN INFANT. IN STUPOROUS SUBJECT CHANGES WERE  
OBSERVED INDICATIVE OF CHANGE IN LEVEL OF AWARENESS.  
(AUTHOR)

29

(U)

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/ZAML2

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-628 294 6/6 2/1 6/15 6/17  
8/17

AEROSPACE TECHNOLOGY DIV LIBRARY OF CONGRESS WASHINGTON D  
C

CBE FACTORS: MONTHLY SURVEY NO. 1. (U)

DESCRIPTIVE NOTE: ATD WORK ASSIGNMENT NO. 50.

66 71P

REPT. NO. ATD-66-4,

MONITOR: TT , 66-60574

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: INCLUDES TRANSLATIONS FOR JAN-APR  
65.

DESCRIPTORS: (•PESTICIDES, ABSTRACTS), (•DISEASES,  
MICROORGANISMS), (•AGRICULTURE, PESTICIDES),  
(•SOIL MECHANICS, ABSTRACTS), FUNGICIDES,  
HERBICIDES, INSECTICIDES, FERTILIZERS,  
HALLUCINOGENS, AEROSOLS, ECOLOGY,  
MICROMETEOROLOGY, TOXICITY, VACCINES, VIRUSES,  
IMMUNITY, DISEASE VECTORS (U)

THE REPORT IS A SURVEY BY A TEAM OF ANALYSTS  
COVERING THE FOLLOWING AREAS: CHEMICAL FACTORS:  
PESTICIDES; HERBICIDES; FERTILIZERS;  
PSYCHOTOMIMETICS; OTHER CHEMICALS. BIOLOGICAL  
FACTORS: PATHOGENS. ENVIRONMENTAL FACTORS:  
AEROSOLS; ECOLOGY; MICROMETEOROLOGY; SOIL  
SCIENCE. THIS COMBINED REPORT, THE FIRST OF A  
SERIES OF MONTHLY SURVEYS, INCLUDES ITEMS SELECTED  
FOR CATCH-UP PURPOSES, AS WELL AS CURRENT MATERIALS.  
THE PROPORTION OF CURRENT MATERIAL WILL TEND TO  
INCREASE IN FUTURE REPORTS. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-642 973

6/15

UNIVERSIDAD CENTRAL DEL ECUADOR QUITO DEPARTAMENTO DE  
FARMACOLOGIA

ESTUDIO DE UNA ESPECIE PSICOTOMIMETICA; IPOMOEA  
CARNEA (STUDY OF A PSYCHOTOMIMETIC PLANT; IPOMOEA  
CARNEA),

(U)

66 20P NARANJO, PLUTARCO (NARANJO,  
ENRIQUETA DE ; LASCANO, CARMEN ;  
CONTRACT: AF-AFOSR-845-65  
PROJ: AF-9777  
TASK: 977701  
MONITOR: AFOSR 66-2085

UNCLASSIFIED REPORT

AVAILABILITY: PUBLISHED IN ARCHIVOS DE  
CRIMINOLOGIA V14 N53 19P JAN-MAR 1966.

SUPPLEMENTARY NOTE: TEXT IN SPANISH; ATTACHED SUMMARY IN  
ENGLISH.

DESCRIPTORS: (\*HALLUCINOGENS, \*PLANTS (BOTANY));  
SEEDS, ECUADOR, ALKALOIDS, MOTOR REACTIONS,  
LYSERGIC ACIDS, TOXICITY, HYPNOTICS + SEDATIVES;  
BARBITURATES, CHROMATOGRAPHIC ANALYSIS  
IDENTIFIERS: IPOMOEA CARNEA

(U)

(U)

IT HAS BEEN FOUND THAT THE SEEDS OF THE PLANT  
IPOMOEA CARNEA WHICH SPONTANEOUSLY GROWS IN THE  
SEMI-ARID AREAS OF THE COASTAL REGION OF ECUADOR,  
CONTAIN SOME ALKALOIDS RELATED TO THE ERGOT GROUP OF  
ALKALOIDS. THE EXTRACTS FROM THIS PLANT PRODUCED  
ON MICE A RESPONSE CONSISTING FIRST OF AN INTENSE  
PSYCHOMOTOR EXCITATION FOLLOWED BY A SECOND STAGE  
CHARACTERIZED BY DEPRESSION WITH FAILURE OF THE  
HINDLEGS AND WALKING WITH THE HELP OF THE TAIL.  
ANOTHER PERSISTING SIGN IS THE PROTRUSION OF THE  
TESTES. THE EXCITATION SYNDROME IS VERY SIMILAR TO  
THAT PRODUCED BY LYSERGIC ACID DIETHYLAMIDE. THE  
ALKALOIDS FROM I. CARNEA ALSO PRODUCED HYPERTHERMIA  
ON RABBITS AND HYPOTHERMIA ON RATS. THE  
PSYCHOMOTOR EFFECTS WERE ANTAGONIZED BY 2-BROM LDS  
WHEREAS THE HYPNOTIC AND TOXIC EFFECTS OF  
PENTOBARBITAL WERE POTENTIATED. BY PAPER AND THIN  
LAYER CHROMATOGRAPHY AT LEAST THREE ALKALOID SPOTS  
WERE IDENTIFIED AND PROBABLY ERGINE IS THE MAIN  
ALKALOID OF I. CARNEA. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-643 985 6/15 6/5  
UNIVERSIDAD DE LA REPUBLICA MONTEVIDEO (URUGUAY)  
INSTITUTO DE NEUROLOGIA

EFFECTS OF PSYCHOPHARMACOLOGIC DRUGS UPON SENSORY  
INFLOW IN NORMAL SUBJECTS, IN PSYCHIATRIC PATIENTS  
AND IN ANIMALS. (U)

DESCRIPTIVE NOTE: ANNUAL REPT. NO. 2, 1 OCT 65-30 SEP  
66.

NOV 66 12P AUSTT, ELIO GARCIA ;  
CONTRACT: DA-ARO-49-092-66-G100  
PROJ: DA-2N014501B71D-00-017-LA

UNCLASSIFIED REPORT

DESCRIPTORS: (PSYCHOTROPIC AGENTS, VISUAL  
PERCEPTION); VISION, HUMANS, ANIMALS, RESPONSES;  
STIMULATION, CHLORPROMAZINE, SLEEP, LYSERGIC  
ACIDS, ELECTROENCEPHALOGRAPHY (U)  
IDENTIFIERS: WAKEFULNESS, PSYCHOPHARMACOLOGY,  
URUGUAY (U)

AVERAGED VISUAL EVOKED POTENTIALS ARE BEING STUDIED  
IN MAN AND ANIMALS BY MEANS OF A COMPUTER OF AVERAGE  
TRANSIENTS (CAT). MODIFICATIONS INCORPORATED TO  
THIS COMPUTER ARE DESCRIBED. EFFECTS OF  
PSYCHOTROPIC DRUGS UPON THE AVERAGED VISUAL EVOKED  
RESPONSE (VER) IN NORMAL SUBJECTS ARE STUDIED.  
LSD 25 DETERMINED MULTIPLICATION OF THE WAVES.  
THE RESPONSE AMPLITUDE INCREASED DURING CONTINUOUS  
FLICKER STIMULATION INSTEAD OF DECREASING AS OBSERVED  
IN CONTROLS. CHLORPROMAZINE REDUCED VER  
AMPLITUDE BOTH IN WAKEFULNESS AND SLEEP. STUPOUR  
AND COMA VER WAS SIMPLE, LOWER AMPLITUDE THAN  
NORMALS. STUPOROUS SUBJECTS IMPORTANT CHANGES WERE  
OBSERVED GENERALLY IN CONJUNCTION WITH MODIFICATIONS  
IN BACKGROUND ACTIVITY INDICATIVE OF CHANGES IN THE  
LEVEL OF AWARENESS. EFFECTS OF SAME DRUGS UPON  
VISUAL INFLOW ALONG PRIMARY AND SECONDARY VISUAL  
PATHWAYS WERE STUDIED IN CATS. LSD 25 VER  
CHANGED IN PATTERN AS WELL AS IN AMPLITUDE. AN  
INCREASE IN LATENCY OF SECONDARY WAVES WAS EVIDENT.  
CHLORPROMAZINE PROVOKED AN INCREASE OF PRIMARY  
RESPONSE WITH SMALL DOSES. LARGER DOSES TENDED TO  
DECREASE IT AND TO REACH NORMAL AMPLITUDE.  
(AUTHOR) (U)

UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-647 123 6/15 5/10  
STANFORD RESEARCH INST MENLO PARK CALIF

DISRUPTION OF SIZE DISCRIMINATION IN SQUIRREL MONKEYS  
(SAIMIRI SCIUREUS) BY LSD-25, (U)

66 2P SHARPE, LAWRENCE G. ; OTIS,  
LEON S. ; SCHUSTERMAN, RONALD J. ;  
CONTRACT: NONR-2992(00)

UNCLASSIFIED REPORT

AVAILABILITY: PUBLISHED IN PSYCHON SCI V7 N3  
P102-4 1967.

DESCRIPTORS: (\*VISUAL ACUITY, \*LYSERGIC ACIDS),  
(\*MONKEYS, VISION), PSYCHOPHYSIOLOGY,  
INTERFERENCE, PERFORMANCE TESTS, DRUGS (U)

A 'DIFFICULT' SIZE DISCRIMINATION (RATIO  
1.12:1) WAS DISRUPTED IN FOUR OF FIVE SQUIRREL  
MONKEYS BY 10 TO 40 MICROGRAM/KG LSD-25 WHEREAS AN  
'EASY' DISCRIMINATION (RATIO 1.96:1) WAS  
RELATIVELY UNAFFECTED. DISRUPTION LASTED FROM 4-6  
MONTHS POSTINJECTION IN TWO OF THE MONKEYS.  
NEITHER THE DIFFICULT NOR THE EASY DISCRIMINATION  
WAS AFFECTED IN THREE MONKEYS BY UP TO 100 MICROGRAM/  
KG BOL-148. (AUTHOR) (U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-647 796 6/5 6/15 5/10  
MINNESOTA UNIV MINNEAPOLIS

CEREBRAL INTEGRATION AND ITS ASSESSMENT BY DRUGS,

(U)

67 4P MARRAZZI, AMEDEO S. ; MEISCH,  
RICHARD A. ; SCHIELE, BURTRUM C. ;  
CONTRACT: AF-AFOSR-764-65  
PROJ: AF-9777  
TASK: 977701  
MONITOR: AFOSR 67-0547

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PROCEEDINGS OF INTERNATIONAL  
COLLEGE OF NEUROPSYCHOPHARMACOLOGY INTERNATIONAL  
CONGRESS (5TH), WASHINGTON, D. C., MARCH 30,  
1966.

DESCRIPTORS: (MENTAL DISORDERS, DIAGNOSIS),  
(LYSERGIC ACIDS, PSYCHIATRY), CENTRAL NERVOUS  
SYSTEM, PERCEPTION (PSYCHOLOGY), PSYCHOSES,  
NEUROSES, BEHAVIOR, VISUAL PERCEPTION,  
PERSONALITY, PERSONALITY TESTS

(U)

NORMAL BEHAVIOR IS THE HOMEOSTATIC RESPONSE OF THE  
ORGANISM. IT OPERATES TO PRESERVE LIFE AND  
GENERALLY BY PRESERVING EQUILIBRIUM IN RELATION TO  
ITS ENVIRONMENTS, INTERNAL AND EXTERNAL, TO ACHIEVE  
SATISFACTION THROUGH THE REDUCTION OF THE SIGNAL  
OVERLOAD THAT WOULD OTHERWISE RESULT. REGULATORY  
CONTROL ULTIMATELY REQUIRES CENTRAL REPRESENTATION OF  
ALL EVENTS AND THE RESPONSES TO THEM - PROPOSED OR  
ACTUAL - AS INPUT AND OUTPUT SIGNALS. SUCH  
MONITORING, INTERNAL DISPLAY AND COMMAND SIGNALING  
GOES ON IN THE CENTRAL NERVOUS SYSTEM WHERE TOTAL  
HOMEOSTASIS CAN BE ACHIEVED THROUGH THE INTEGRATIVE  
INTERACTION OF ITS SIGNALS, THE NEURAL IMPULSES.  
THE RECORDING OF SUCH SIGNALS AFFORDS A MEANS OF  
IDENTIFYING SOME OF THE ELEMENTS OF INTEGRATIVE  
INTERACTIONS, AND DRUGS OFFER AN EXTREMELY USEFUL  
TOOL FOR ANALYSIS OF THESE INTERACTIONS. IN THIS  
WAY IT IS SHOWN THAT EXOGENOUS PSYCHOTOGENS, LIKE  
LYSERGIC ACID DIETHYLAMIDE (LSD) TEND TO DISRUPT  
INTEGRATION AS A CONSEQUENCE OF THE HIGH SENSITIVITY  
OF CEREBRAL ASSOCIATION AREAS TO THE GENERAL SYNAPTIC  
INHIBITORY ACTION THESE SUBSTANCES EXERCISE.  
(AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-693 423 5/10 6/19  
TEXAS UNIV GALVESTON MEDICAL BRANCH

THE EFFECTS OF THIAZESIM, LSD-25, AND BILATERAL  
LESIONS OF THE AMYGDALAE ON THE RELEASE OF A  
SUPPRESSED RESPONSE, (U)

67 12P BARRATT, ERNEST S. I  
CONTRACT: NONR-1598(06)

UNCLASSIFIED REPORT  
AVAILABILITY: PUBLISHED IN RECENT ADVANCES IN  
BIOLOGICAL PSYCHIATRY V9 P229-40 1967.

DESCRIPTORS: (\*CONDITIONED REFLEX, \*CENTRAL NERVOUS  
SYSTEM), BRAIN, PSYCHOTROPIC AGENTS, LYSERGIC  
ACIDS, AMPHETAMINES, INHIBITION, CONTROL,  
REACTION(PSYCHOLOGY), BEHAVIOR, CEREBELLUM,  
MONKEYS (U)  
IDENTIFIERS: THIAZESIM, AMYGDALA (U)

THE PURPOSE OF THESE EXPERIMENTS WAS TO TEST THE  
HYPOTHESIS THAT THE AMYGDALAE ARE INVOLVED IN THE  
RELEASE OF A SUPPRESSED RESPONSE ON A SCHEDULE  
INVOLVING A POSITIVE REWARD (FOOD) AND RESPONSE-  
CONTINGENT SHOCK. THE FOLLOWING TWO EXPERIMENTAL  
TEST CONDITIONS CONSISTENTLY CAUSED RELEASE OF A  
SUPPRESSED BAR-PULLING RESPONSE: (1) THE  
ADMINISTRATION OF THIAZESIM AND (2) BILATERAL  
LESIONS OF THE AMYGDALAE. POSSIBLE MECHANISMS  
UNDERLYING THESE CHANGES ARE DISCUSSED.  
(AUTHOR) (U)

UNCLASSIFIED

DDC REPORT R1RL10GRAPHY SEARCH CONTROL NO. /ZAML2

AD-653 680

6/15

6/16

CALIFORNIA UNIV LOS ANGELES BRAIN RESEARCH INST

NEUROPHARMACOLOGICAL STUDIES AND POSTULATES ON  
EXCITATION AND DEPRESSION IN THE CENTRAL NERVOUS  
SYSTEM,

(U)

67

75P

WINTERS, WALLACE D. ;

CONTRACT: AF 49(638)-1287

PROJ: AF-9777

TASK: 977701

MONITOR: AFOSR 67-1316

UNCLASSIFIED REPORT

AVAILABILITY: PUBLISHED IN RECENT ADVANCES IN  
BIOLOGICAL PSYCHIATRY V9 CHAP22 P313-45 1967.

DESCRIPTORS: (\*ANESTHESIA,  
ELECTROENCEPHALOGRAPHY); (\*ANESTHETICS,  
PHARMACOLOGY); NERVOUS SYSTEM, PHYSIOLOGY; CNS  
DEPRESSANTS, CNS STIMULANTS, ELECTROPHYSIOLOGY;  
BRAIN, SLEEP, RESPONSES, DRUGS, HALLUCINOGENS,  
ETHERS, EPILEPSY, LYSERGIC ACIDS, PSYCHIATRY

(U)

RHOMBENCEPHALIC SLEEP (RPS) IS MORE SIMILAR TO  
THE AWAKE DISTRACTED OR HALLUCINATORY STATE THAN TO  
SLOW-WAVE SLEEP. CNS DEPRESSION OR EXCITATION  
CANNOT BE ASSESSED ONLY BY EVALUATING THE  
RESPONSIVENESS OF THE SUBJECT, I.E., THE LESS  
RESPONSIVE THE GREATER THE DEPRESSION. THE SUBJECT  
THAT IS UNRESPONSIVE DURING RPS IS NO LESS  
RESPONSIVE THAN IT IS DURING EPILEPTIC,  
HALLUCINATORY, OR ANESTHETIC STATES. LOSS OF THE  
AROUSAL RESPONSE IS NOT NECESSARILY CORRELATED WITH A  
CNS DEPRESSION, SINCE IT CAN ALSO OCCUR DURING  
HYPEREXCITABILITY. ANY AGENT WHICH CAN INDUCE A  
REDUCTION IN RESPONSIVENESS AND LOSS OF MEMORY CAN BE  
CONFUSED WITH, AND CONSIDERED TO BE, AN ANESTHETIC  
AGENT. GHB, THOUGH REPORTED TO BE AN ANESTHETIC  
AGENT, HAS PROPERTIES LIKE ALPHA-CHLORALOSE,  
PHENCYCLIDINE, AND TRICHLORETHYLENE, ALL OF WHICH  
APPEAR TO BE HALLUCINATORY AND EPILEPTOID AGENTS.  
A CONTINUUM OF INCREASING EXCITABILITY MAY EXIST  
BEGINNING WITH INCREASED MOTOR ACTIVITY,  
HALLUCINATORY BEHAVIOR, AND FINALLY GENERALIZED  
SEIZURES. THE HALLUCINATORY 'AURA' PRECEDING GRAND  
MAL SEIZURES IS A POSSIBLE EXAMPLE OF THIS CONTINUUM.  
NITROUS OXIDE APPEARS TO BE PURELY AN HALLUCINATORY  
AGENT. ETHER INDUCES AN INITIAL HALLUCINATORY  
STATE FOLLOWED BY CNS DEPRESSION. THE PROPOSED  
MODEL INDICATES THAT SENSORY-INPUT SYSTEMS HAVE AN  
INCREASED MODULATION DURING EXCITED STATES,

(U)

UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-660 447 7/3 6/19  
HEBREW UNIV JERUSALEM (ISRAEL) DEPT OF ORGANIC  
CHEMISTRY

SYNTHESIS OF ALPHA-HYDROXY-ALPHA-AMINO ACIDS AND  
ERGOT ALKALOIDS. (U)

DESCRIPTIVE NOTE: FINAL TECHNICAL REPT. JUL 65-MAY 67;  
JUN 67 44p LIWSCHITZ, Y. I  
CONTRACT: DA-91-591-EUC-3799  
PROJ: DA-1C522301A060  
MONITOR: ARDG(E) E-994

UNCLASSIFIED REPORT

DESCRIPTORS: (AMINO ACIDS,  
SYNTHESIS(CHEMISTRY)), (ERGOT ALKALOIDS,  
SYNTHESIS(CHEMISTRY)), PEPTIDES, ORGANIC  
NITROGEN COMPOUNDS, AMINES, ALCOHOLS, CONDENSATION  
REACTIONS, HYDROLYSIS, LYSERGIC ACIDS,  
PSYCHOTROPIC AGENTS, ISRAEL (U)  
IDENTIFIERS: ERGOTAMINES, HYDROXY ALANINES (U)

SEVERAL DIFFERENT APPROACHES FOR THE SYNTHESIS OF  
THE PEPTIDIC SIDE-CHAIN OF ERGOTAMINE, BASED ON THE  
DIRECT USE OF A SUITABLE PROTECTED ALPHA-  
HYDROXYALANINE, DID NOT YIELD THE INTENDED RESULTS.  
THE ETHYL (I) OR T-BUTYL ESTER OF N-  
BENZYLOXYCARBONYL-O-BENZYL-ALPHA-HYDROXYALANINE  
WHEN EXPOSED TO ALKALINE OR ACIDIC HYDROLYSIS,  
RESPECTIVELY, UNDER A VARIETY OF CONDITIONS,  
DISINTEGRATED INTO BENZYL CARBAMATE AND PYRUVIC ACID  
AMONG OTHER PRODUCTS. ENZYMATIC HYDROLYSIS WAS  
ALSO UNSUCCESSFUL. DIRECT CONDENSATION OF I WITH  
T-BUTYL GLYCINATE OR L-PHENYLALANYL-L-PROLINE-  
LACTAM IN THE PRESENCE OF IMIDAZOLE AND OTHER  
CATALYSTS COULD NOT BE REALIZED. THE N-  
CARBOXYANHYDRIDE OF O-BENZYL-ALPHA-HYDROXYALANINE  
WAS PREPARED FROM ETHYL HYDROGEN O-BENZYL-DL-  
METHYL TARTRONATE, VIA THE HYDRAZIDE AND THE AZIDE  
WHICH FINALLY UNDERWENT THE CURTIUS REARRANGEMENT.  
SEVERAL REACTIONS CARRIED OUT WITH THIS NCA IN  
ORDER TO OBTAIN SUITABLE DERIVATIVES OF ALPHA-  
HYDROXYALANINE DID NOT TAKE THE EXPECTED COURSE AND  
UNDER CERTAIN CONDITIONS THIS SUBSTANCE TRIMERIZED TO  
YIELD DEHYDROALANYL-ALPHA-HYDROXYALANYL-  
DEHYDROALANINE. THE N-T-BUTYLOXYCARBONYL  
DERIVATIVE OF ETHYL O-BENZYL-ALPHA-HYDROXYALANINATE  
WAS SYNTHESIZED, ASSUMING IT TO BE MORE STABLE TOWARD  
ALKALINE HYDROLYSIS THAN THE BENZYLOXYCARBONYL  
COMPOUND.

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-675 719 6/15  
DIRECTORATE OF SCIENTIFIC INFORMATION SERVICES OTTAWA  
(ONTARIO)

PSYCHOTOMIMETIC AGENTS WITH ANTICHOLINERGIC ACTIVITY;  
(U)

JUL 68 10P BANSCHIKOV, V. M. ;  
STOLIAKOV, G. V. ;  
REPT. NO. T-501-R

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: TRANS. OF ZHURNAL NEVROPATOLOGII I  
PSIKHIATRII (USSR) V66 N3 P464-468 1966, BY E. R.  
HOPE.

DESCRIPTORS: (•PSYCHOTROPIC AGENTS, CHOLINESTERASE  
INHIBITORS), NEUROSES, PSYCHOSES, CHEMOTHERAPY,  
DOSAGE, ELECTROENCEPHALOGRAPHY, USSR (U)  
IDENTIFIERS: •PSYCHOTOMIMETIC AGENTS,  
•BENACTYZINE, •DITRAN, TRANSLATIONS (U)

IN RECENT YEARS THE ATTENTION OF RESEARCH WORKERS  
HAS BEEN DRAWN TO A GROUP OF SUBSTANCES THAT ARE  
CAPABLE OF EVOKING PSYCHIC DISTURBANCES WHEN  
ADMINISTERED TO HEALTHY PERSONS AND TO PERSONS WITH  
MENTAL ILLNESSES (NEUROSES AND PSYCHOSES).  
COMMON TO ALL THIS GROUP OF SUBSTANCES IS THEIR  
MARKED ANTICHOLINERGIC (ATROPINE-LIKE)  
ACTIVITY). THE DRUGS CONSIDERED HERE ARE  
BENACTYZINE AND DITRAN. (AUTHOR) (U)

UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-682 511 6/5 5/10  
SCHOOL OF AEROSPACE MEDICINE BROOKS AFB TEX

PROCEEDINGS OF THE ANNUAL CONFERENCE OF AIR FORCE  
BEHAVIORAL SCIENTISTS (15TH), SHEPPARD AIR FORCE  
BASE, WICHITA FALLS, TEXAS, 21 JANUARY TO 2  
FEBRUARY 1968,

(U)

SEP 63 258P MCKENZIE, RICHARD E. ;

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO CONFERENCE NO. 14, AD-665  
846.

DESCRIPTORS: (•PSYCHIATRY, SYMPOSIA), MILITARY  
PSYCHOLOGY, GROUP DYNAMICS, THERAPY, CHILDREN,  
EFFICIENCY, AIR FORCE PERSONNEL, MEDICAL  
PERSONNEL, MENTAL DISORDERS, TRAINING, BEHAVIOR,  
PERCEPTION (PSYCHOLOGY), LYSERGIC ACIDS,  
AVIATION MEDICINE, EVACUATION, NEUROSES,  
PROJECTIVE TECHNIQUES, INTELLIGENCE TESTS,  
SOCIOLOGY

(U)

IDENTIFIERS: GROUP THERAPY, MENTAL HEALTH,  
THERAPEUTIC ABORTION

(U)

CONTENTS: SOME COMMENTS ON BEHAVIORAL  
MODIFICATION; GOALS OF TREATMENT; BEHAVIOR  
THERAPY IN 1968; THERAPISTS' AWARENESS OF HOW GROUP  
THERAPY PATIENTS PERCEIVE THEM; A COMMUNITY MENTAL  
HEALTH APPROACH IN A MILITARY SETTING; A CHAP CHILD  
GUIDANCE CLINIC IN A USAF HOSPITAL; IMPROVING THE  
MANAGEMENT OF CHILDREN BY GROUP BEHAVIOR THERAPY OF  
THEIR PARENTS; THE DEFINITIVE CARE UNIT; A NEW  
APPROACH TO AN OLD PROBLEM; THE EFFICIENCY OF GROUP  
PSYCHOTHERAPY WITH FIRST-TERM AIRMEN AT AN AIR  
FORCE TECHNICAL TRAINING CENTER; DEVELOPMENT OF A  
FAMILY THERAPY PROGRAM AT AN OVERSEAS PSYCHIATRIC  
FACILITY; PSYCHIATRIC PRACTICE AND PSYCHOPATHOLOGY  
IN A LARGE AIR FORCE CLINIC; A HUMAN RELATIONS  
TRAINING PROGRAM AT A USAF HOSPITAL; DETERMINISM  
VERSUS FREE WILL IN HUMAN BEHAVIOR;  
CONCEPTUALIZATION AS REFLECTED IN SOCIAL PERCEPTION  
BEHAVIOR; A PRELIMINARY REPORT; DIMINISHED MALE  
ORIENTATION IN SUICIDAL BASIC TRAINEES; LSD AND  
SOCIALIZATION; THERAPEUTIC ABORTION OF MILITARY  
DEPENDENTS FOR PSYCHIATRIC REASONS; A DISCUSSION OF  
SOME PSYCHIATRIC ASPECTS OF THERAPEUTIC ABORTION;  
THE PSYCHIATRIST ON TRIAL; MILITARY AEROMEDICAL  
EVACUATION AND PSYCHIATRIC PATIENTS; THE  
RORSCHACH PROTOCOLS OF TWO CASES OF TRAUMATIC  
NEUROSIS OF WAR

39

(U)

UNCLASSIFIED

/ZAML2

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-686 593 6/15 6/16  
MINNESOTA UNIV MINNEAPOLIS DEPT OF PHARMACOLOGY

CEREBRAL SYNAPTIC TRANSMISSION AND BEHAVIORAL  
EFFECTS OF DIMETHOXY PHENYLETHYLAMINE: A POTENTIAL  
PSYCHOTOGEN, (U)

68 3P VACCA, LUCIO; FUJIMORI,  
MASEMOTO; DAVIS, SCOTT H.; MARRAZZI, AMEDEO S.

CONTRACT: AF-AFOSR-1224-67  
PROJ: AF-9777  
TASK: 977701  
MONITOR: AFOSR 69-1077TR

UNCLASSIFIED REPORT

AVAILABILITY: PUB. IN JNL. SCIENCE, V160 P95-96, 5  
APR 68.

DESCRIPTORS: (\*NERVE IMPULSES, PSYCHOTROPIC  
AGENTS), (\*PSYCHOTROPIC AGENTS, BEHAVIOR),  
(\*AMINES, PSYCHOTROPIC AGENTS), INHIBITION,  
HALLUCINOGENS, BRAIN, CATS, CHLORPROMAZINE,  
DOSAGE, PERCEPTION (U)

IDENTIFIERS: PHENETHYLAMINE=PHENYLETHYLAMINE,  
\*PHENYLETHYLAMINE/DIMETHOXY, MESCALIN=  
PHENYLETHYLAMINE/3-4-5-TRIMETHOXY, \*CEREBRAL  
SYNAPTIC TRANSMISSION, \*SYNAPSES,  
PHENYLETHYLAMINE/3-4-5-TRIMETHIOXY (U)

DIMETHOXYPHENYLETHYLAMINE, LIKE MESCALINE WHICH IT  
RESEMBLES, IMPAIRS CEREBRAL SYNAPTIC TRANSMISSION AND  
BEHAVIOR IN CATS. IT HAS PROPERTIES ASSOCIATED  
WITH HALLUCINOGENS AND, ON THIS SCORE, QUALIFIED AS A  
POTENTIAL INDUCER OF PSYCHOSIS. THE IDEA OF SUCH  
AN ENDOGENOUS INDUCER IS THUS REAFFIRMED BY THE  
CANDIDACY OF DIMETHOXYPHENYLETHYLAMINE.

(AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAM1.2

AD-686 595

6/15

MINNESOTA UNIV MINNEAPOLIS DEPT OF PHARMACOLOGY

PRIMATE CEREBRAL SYNAPTIC INHIBITION BY DRUGS, (U)

SEP 65

3P

TANAKA, KUNIO ; MARRAZZI,

AMEDEO S. ;

CONTRACT: AF-AFOSR-764-65

PROJ: AF-9777

TASK: 977701

MONITOR: AFOSR 69-1078TR

UNCLASSIFIED REPORT

AVAILABILITY: PUB. IN SOCIETY FOR EXPERIMENTAL  
BIOLOGY AND MEDICINE, V120 P669-670 1965.

DESCRIPTORS: (•NERVE IMPULSES, INHIBITION),  
(•CHLORPROMAZINE, PROTECTION), LYSERGIC ACIDS;  
SEROTONIN, MONKEYS, STIMULATION, CONDUCTIVITY,  
RESPONSES, PHARMACOLOGY (U)  
IDENTIFIERS: SYNAPSES, SPIKE POTENTIAL (U)

CORTICAL EVOKED POTENTIAL STUDIES SHOW THAT THE  
SYNAPTIC INHIBITION BY SEROTONIN AND LYSERGIC ACID  
DIETHYLAMIDE OBSERVED IN THE RAT, CAT AND DOG CAN  
ALSO BE OBTAINED IN THE MONKEY. SPECIFICITY OF  
ACTION IS INDICATED BY THE PROTECTION AFFORDED BY  
CHLORPROMAZINE. COMPARISON OF THE SYNAPTIC AND  
BEHAVIORAL EFFECTS SUGGESTS AN ORDERLY, PARALLEL  
RELATION IN A SERIES THAT PROGRESSES THROUGH A  
SUBHUMAN PRIMATE TO MAN. (AUTHOR) (U)

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/ZAML2



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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-686 793 6/5 6/15  
MINNESOTA UNIV MINNEAPOLIS DEPT OF PHARMACOLOGY

QUANTIFIED LSD EFFECTS ON EGO STRENGTH, (U)

66 24P MARRAZZI, AMEDEO S. ; MEISCH,  
RICHARD A. ; PEW, WILLIAM L. ; BIETER, THOMAS  
G. ;

CONTRACT: AF-AFOSR-764-65  
PROJ: AF-9777  
TASK: 977701  
MONITOR: AFOSR 69-1070TR

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: PRESENTED AT SOCIETY FOR  
BIOLOGICAL PSYCHIATRY, WASHINGTON, D. C., JUN  
66.

DESCRIPTORS: (\*LYSERGIC ACIDS, \*MENTAL DISORDERS),  
HALLUCINOGENS, NEUROSES, PSYCHOSES, MEASUREMENT,  
DIAGNOSIS, THERAPY, PERCEPTION (U)  
IDENTIFIERS: EGO (U)

IT WAS FOUND, IN SUPPORT OF THE POSTULATED NATURE  
OF HALLUCINATION AS AN INADEQUATE INTEGRATION OF NEW  
WITH STORED INFORMATION RESULTING IN ABERRANT  
PERCEPTION, THAT SUBCLINICAL DOSES OF LSD BRING OUT  
A LATENT OR ACCENTUATE AN EXISTING DIFFICULTY IN  
RESOLVING THE PERCEPTUAL CONFLICT EXPERIMENTALLY  
INDUCED IN PSYCHOTICS AS DISTINGUISHED FROM IN  
NEUROTICS AND NORMALS, BUT ADD LITTLE IF THIS  
CONFLICT IS SO GREAT THAT ACTIVE HALLUCINATION  
ALREADY EXISTS AT THE TIME OF LSD ADMINISTRATION.  
IT IS FELT THAT THIS KIND OF DRUG EVALUATION OF  
CEREBRAL INTEGRATION CAN HELP IDENTIFY AND MEASURE  
ABNORMALITY CHARACTERISTIC OF THE FORMS OF MENTAL  
DISTURBANCE IN WHICH A DISSOCIATIVE PROCESS IS A  
FUNDAMENTAL FEATURE, CONTINGENT ON FURTHER  
SUBSTANTIATION, THE PROPOSED LSD INDEX HOLDS  
PROMISE OF SUPPLYING THE 'CLINICAL YARDSTICK' TO HELP  
IN DIAGNOSIS AND IN FOLLOWING THE COURSE OF MENTAL  
ILLNESS AND THE EFFICACY OF THERAPY.  
(AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-691 531 6/15 5/11  
UNIVERSIDAD CENTRAL DEL ECUADOR QUITO

ETNOFARMACOLOGIA DE LAS PLANTAS PSICOTROPICAS DE  
AMERICA (ETHNOPHARMACOLOGY OF THE PSYCHOTROPIC  
PLANTS OF AMERICA);

(U)

69 61P NARANJO, PLUTARCO ;  
CONTRACT: AF-AFOSR-1426-68  
PROJ: AF-9777  
TASK: 977701  
MONITOR: AFOSR 69-1912TR

UNCLASSIFIED REPORT  
AVAILABILITY: PUB. IN TERAPIA, V24 P5-62  
1969.  
SUPPLEMENTARY NOTE: TEXT IN SPANISH.

DESCRIPTORS: (•PLANTS(BOTANY), •PSYCHOTROPIC  
AGENTS), ANTHROPOLOGY, NORTH AMERICA,  
HALLUCINOGENS, SOUTH AMERICA, PHARMACOLOGY,  
DRUGS  
IDENTIFIERS: ETHNOLOGY

(U)

(U)

THIS IS A GENERAL REVIEW OF THE PLANTS IN NORTH  
AND SOUTH AMERICA WHICH HAVE BEEN USED FOR THEIR  
HALLUCINOGENIC AND RELATED PROPERTIES. SIXTY-ONE  
PAGES WITH ILLUSTRATIONS OF PEOPLE, PLANTS, AND  
ARTIFACTS. EIGHTY REFERENCES IN THE BIBLIOGRAPHY.  
(AUTHOR)

(U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-696 947 5/10  
TEXAS UNIV AUSTIN DEPT OF PSYCHOLOGY

OPINION CHANGE IN THE ADVOCATE AS A FUNCTION OF THE  
PERSUASIBILITY OF HIS AUDIENCE: A CLARIFICATION OF  
THE MEANING OF DISSONANCE. (U)

DESCRIPTIVE NOTE: TECHNICAL REPT.,  
JUN 69 26P NEL, ELIZABETH ; HELMREICH,  
ROBERT ; ARONSON, ELLIOT ;  
REPT. NO. TR-8  
CONTRACT: N00014-67-A-0126  
PROJ: NR-171-804

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: REPORT ON HUMAN REACTIONS TO  
PSYCHOLOGICAL STRESS.

DESCRIPTORS: (\*ATTITUDES, TRANSFORMATIONS),  
(\*STRESS(PSYCHOLOGY), \*SCIENTIFIC RESEARCH),  
MOTIVATION, APPLIED PSYCHOLOGY, TEST METHODS,  
CANNABIS, BEHAVIOR, PERFORMANCE(HUMAN),  
CORRELATION TECHNIQUES (U)  
IDENTIFIERS: OPINION CHANGE,  
DISSONANCE(PSYCHOLOGY), SELF ESTEEM,  
COUNTERATTITUDINAL BEHAVIOR (U)

SUBJECTS WERE ENTICED TO MAKE A VIDEO RECORDING OF  
A STRONGLY COUNTERATTITUDINAL STATEMENT (FAVORING  
LEGALIZATION OF MARIJUANA); ONE-HALF OF THE  
SUBJECTS WERE PAID \$.50 AND ONE-HALF WERE PAID \$5  
FOR THEIR COUNTERATTITUDINAL BEHAVIOR. THE  
SUBJECTS WERE TOLD THAT THEIR VIDEO TAPE WOULD BE  
USED TO ATTEMPT TO CHANGE THE ATTITUDES OF (A) A  
GROUP OPPOSED TO THE LEGALIZATION OF MARIJUANA,  
(B) A GROUP IN FAVOR OF THE LEGALIZATION OF  
MARIJUANA, OR (C) A GROUP WITH NO OPINION ON THE  
ISSUE. AS PREDICTED, A SIGNIFICANT DISSONANCE  
EFFECT (MORE ATTITUDE CHANGE FOR LOW FINANCIAL  
INCENTIVE) WAS FOUND WHEN THE AUDIENCE WAS NOT  
COMMITTED ON THE ISSUE. THE RESULTS WERE  
INTERPRETED AS SUPPORTING A VIEW THAT DISSONANCE IS  
AROUSSED AS A FUNCTION OF DISCREPANCY BETWEEN SELF-  
CONCEPT AND THE CONSEQUENCES OF BEHAVIOR.  
(AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-701 170 6/13 6/1  
EDGEWOOD ARSENAL MD

EFFECT OF LYSERGIC ACID DIETHYLAMIDE ON ESCHERICHIA  
COLI, STRAIN B/R(LAMBDA). (U)

DESCRIPTIVE NOTE: TECHNICAL REPT. JAN 68-FEB 69;  
FEB 70 22P DOWLER, MICHAEL J. WOLPERT,  
JACK S. i

REPT. NO. EA-TP-4329  
PROJ: DA-1-B-562602-AD-19  
TASK: 1-B-562602-AD-1904

UNCLASSIFIED REPORT

DESCRIPTORS: (\*LYSERGIC ACIDS, \*ESCHERICHIA COLI),  
GROWTH, CHROMOSOMES, DAMAGE, DOSAGE, PURINE  
ALKALOIDS, ULTRAVIOLET RADIATION, DESOXYRIBONUCLEIC  
ACIDS, INHIBITION, HALLUCINOGENS, CHEMICAL WARFARE  
AGENTS, BIOLOGICAL ASSAY (U)  
IDENTIFIERS: \*LYSERGIC ACID DIETHYLAMIDE (U)

THE EFFECT OF LSD ON E. COLI WAS EXAMINED AS A  
TEST SYSTEM FOR DAMAGE TO GENETIC MATERIAL. LSD HAD  
A DOSE-DEPENDENT EFFECT ON BACTERIAL GROWTH RATE.  
THIS EFFECT WAS NOT AMPLIFIED BY THE DNA-REPAIR  
INHIBITOR CAFFEINE. THE LOWERING OF THE GROWTH RATE  
BY LSD WAS SHOWN TO BE COMPLETELY REVERSIBLE UPON  
DILUTION. LSD WAS SHOWN TO CAUSE A DOSE DEPENDENT  
EXTENSION OF THE GROWTH RECOVERY LAG DUE TO UV  
DAMAGE. CAFFEINE CAUSED A MUCH LARGER EXTENSION OF  
THIS LAG TIME. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-701 171 6/13 6/1  
EDGEWOOD ARSENAL MD

LYSERGIC ACID DIETHYLAMIDE: PHOTODYNAMIC  
INACTIVATION OF REPAIR DEFICIENT E. COLI AND  
T(1) BACTERIOPHAGE. (U)

DESCRIPTIVE NOTE: TECHNICAL REPT. MAR-MAY 69,  
FEB 70 14P PAPIRMEISTER, BRUNO ; WOLPERT,  
JACK S. ;  
REPT. NO. EA-TR-4340  
PROJ: DA-1-B-562602-AD-19  
TASK: 1-B-562602-AD-1904

UNCLASSIFIED REPORT

DESCRIPTORS: (\*LYSERGIC ACIDS, \*ESCHERICHIA COLI),  
(\*BACTERIOPHAGES, LYSERGIC ACIDS),  
(\*PHOTOSENSITIVITY(BIOLOGICAL), LYSERGIC  
ACIDS), DESOXYRIBONUCLEIC ACIDS, INHIBITION,  
DOSAGE, PURINE ALKALOIDS, DAMAGE, CHROMOSOMES,  
HALLUCINOGENS, CHEMICAL WARFARE AGENTS, BIOLOGICAL  
ASSAY (U)  
IDENTIFIERS: \*LYSERGIC ACID DIETHYLAMIDE (U)

E. COLI B DERIVATIVES DIFFERING IN ABILITY TO  
REPAIR DEOXYRIBONUCLEIC ACID (DNA) DAMAGES PRODUCED  
BY ULTRAVIOLET RADIATION SHOWED CORRESPONDING  
RESPONSES TO PHOTO EFFECTS SUSTAINED IN LYSERGIC ACID  
DIETHYLAMIDE (LSD)-SENSITIZED ORGANISMS. THE  
EXCISION-REPAIR SYSTEM (HCR) WAS A MOST  
SIGNIFICANT DETERMINANT FOR ALLOWING RECOVERY OF BOTH  
TREATED BACTERIA AND T(1) BACTERIOPHAGE.  
CAFFEINE, A KNOWN INHIBITOR OF THE HCR SYSTEM,  
PREVENTED THIS RECOVERY. ALTHOUGH THESE FINDINGS  
SUGGEST AN ASSOCIATION OF LSD WITH DNA IN VIVO,  
THE RELATIVELY HIGH DOSE OF LSD EMPLOYED FAILED TO  
PRODUCE DETECTABLE DNA DAMAGES IN THE ABSENCE OF  
RADIANT ENERGY. THE RELEVANCE OF THE OBSERVED  
PHOTOEFFECTS TO THE REPORTED CHROMOSOME-DAMAGING  
PROPERTIES OF LSD IS NOT KNOWN. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-707 667 6/15 6/20  
MICHIGAN UNIV ANN ARBOR DEPT OF PHARMACOLOGY

THE CHEMISTRY AND PHARMACOLOGY OF CERTAIN COMPOUNDS  
AFFECTING THE CENTRAL NERVOUS SYSTEM OF ANIMALS AND  
MAN. A PHARMACOLOGICAL COMPARISON OF EA 1476  
(TETRAHYDROCANNABINOL) ISOMERS. (U)

DESCRIPTIVE NOTE: PROGRESS REPT.,  
DEC 56 10P HARDMAN, HAROLD F. ; SEEVERS,  
MAURICE H. ;  
CONTRACT: DA-18-108-CML-5663

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO AD-707 668 AND AD-707  
669.

DESCRIPTORS: (\*CANNABIS, \*CENTRAL NERVOUS SYSTEM),  
MOLECULAR ISOMERISM, BEHAVIOR, TOXICITY, DOSAGE,  
PATHOLOGY, PHYSIOLOGY, CARDIOVASCULAR SYSTEM,  
MORTALITY RATES, ANIMALS, HUMANS, PHARMACOLOGY,  
DOGS, NERVOUS SYSTEM, SLEEP (U)

EA 1476 (OS) AND EA 1476 (4018) PRODUCE A  
SIMILAR BEHAVIORAL RESPONSE IN THE UNANESTHETIZED DOG  
WITH COMPARABLE INTRAVENOUS DOSES. EA 1476  
(4018) PRODUCED DEATH BY CARDIAC ARREST RESULTING  
FROM VENTRICULAR FIBRILLATION IN TWO OUT OF FIVE DOGS  
WHO RECEIVED INTRAVENOUS DOSES OF 1.0 MGM./KGM. EA  
1476 (OS) APPEARS TO BE MORE TOXIC NOW THAN WHEN IT  
WAS FIRST EVALUATED IN THIS LABORATORY TWO YEARS AGO.  
EA 1476 (4018) MAY BE SLIGHTLY MORE TOXIC THAN  
EA 1476 (OS) WITH INTRAVENOUS DOSES OF 1.0 MGM./  
KGM. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-707 668 6/15 6/20  
MICHIGAN UNIV ANN ARBOR DEPT OF PHARMACOLOGY

THE CHEMISTRY AND PHARMACOLOGY OF CERTAIN COMPOUNDS  
AFFECTING THE CENTRAL NERVOUS SYSTEM OF ANIMALS AND  
MAN. (U)

DESCRIPTIVE NOTE: PROGRESS REPT. NO. 1;  
NOV 55 35P HARDMAN, HAROLD F. ; DOMINO,  
EDWARD F. ; SEEVERS, MAURICE H. ;  
CONTRACT: DA-18-108-CML-5663

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO AD-707 669 AND AD-707  
667.

DESCRIPTORS: (\*PSYCHOTROPIC AGENTS, PHARMACOLOGY),  
(\*CANNABIS, CENTRAL NERVOUS SYSTEM),  
(\*RESERPINE, CENTRAL NERVOUS SYSTEM), TOXICITY,  
BEHAVIOR, HYPOTENSION, CARDIOVASCULAR SYSTEM,  
RESPIRATION, ELECTROENCEPHALOGRAPHY, HYPOTHERMIA,  
DOSAGE, PATHOLOGY, PHYSIOLOGY, PHARMACOLOGY,  
ANIMALS, HUMANS, MORTALITY RATES, DOGS,  
NERVOUS SYSTEM (U)

EA 1476, EA 1477 AND RESERPINE HAVE NUMEROUS  
SIMILAR PHARMACOLOGICAL EFFECTS IN THE DOG WHEN  
ADMINISTERED BY THE ORAL OR INTRAVENOUS ROUTE. EA  
1476 AND EA 1477 HAVE QUALITATIVELY SIMILAR EFFECTS  
UPON THE CARDIOVASCULAR SYSTEM OF THE DOG. EA 1476,  
EA 1477 AND RESERPINE PRODUCE A STATE OF  
TRANQUILIZATION IN THE UNANESTHETIZED DOG FOLLOWING  
INTRAVENOUS ADMINISTRATION. EA 1476 LIKE RESERPINE  
CAN PROLONG THE SLEEPING TIME OF WHITE MICE INDUCED  
BY THE INTRAPERITONEAL INJECTION OF HEXOBARBITAL.  
THE ELECTROENCEPHALOGRAPHIC RESPONSE OF THE  
UNANESTHETIZED CURARIZED DOG TO 0.10 MGM./KGM. OF  
EA 1476 ADMINISTERED INTRAVENOUSLY IS CHARACTERIZED  
BY HIGH VOLTAGE SLOW WAVES WITH SOME TENDENCY TO  
SPINDLING. HYPOTHERMIA IS AN OUTSTANDING SIGN  
FOLLOWING INTRAVENOUS ADMINISTRATION OF 1.0 MGM./KGM.  
OF EA 1476. EA 1476 AS WELL AS RESERPINE  
DEPRESSES RESPIRATORY RATE FOLLOWING INTRAVENOUS  
ADMINISTRATION TO UNANESTHETIZED DOGS. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-707 669 6/19 6/20  
MICHIGAN UNIV ANN ARBOR DEPT OF PHARMACOLOGY

THE CHEMISTRY AND PHARMACOLOGY OF CERTAIN COMPOUNDS  
AFFECTING THE CENTRAL NERVOUS SYSTEM OF ANIMALS AND  
MAN. (U)

DESCRIPTIVE NOTE: SUMMARY PROGRESS REPT. NO. 2,  
JAN 27 54P HARDMAN, HAROLD F. ; DOMINO,  
EDWARD F. ; SEEVERS, MAURICE H. ;  
CONTRACT: DA-18-108-CML-5663  
MONITOR: CWL TM-27-2

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO AD-707 668 AND AD-707  
667.

DESCRIPTORS: (•PSYCHOTROPIC AGENTS, PHARMACOLOGY),  
(•CANNABIS, •CENTRAL NERVOUS SYSTEM),  
(•RESERPINE, CENTRAL NERVOUS SYSTEM),  
CARDIOVASCULAR SYSTEM, BEHAVIOR, TOXICITY,  
PATHOLOGY, PHYSIOLOGY, PHARMACOLOGY, DOSAGE,  
ANIMALS, HUMANS, NERVOUS SYSTEM, SLEEP, DOGS (U)

THE EXTENSIVE ACTIONS OF TETRAHYDROCANNABINOL  
DERIVATIVES UPON THE CARDIOVASCULAR SYSTEM SUGGEST  
THAT THESE AGENTS ACT BY INHIBITION OF THE AFFERENT  
TO EFFERENT AREAS OF THE CENTRAL COMPONENTS OF THE  
SYMPATHETIC NERVOUS SYSTEM. BEHAVIORAL CHANGES  
CHARACTERIZED BY CNS DEPRESSION, ATAXIA, ANALGESIA  
AND ENHANCED TENDON REFLEXES HAVE BEEN DESCRIBED.  
THE GENERAL TOXICITY OF THE TETRAHYDROCANNABINOL  
DERIVATIVES IS DISCUSSED AS WELL AS THE EFFECTS OF  
DRUGS WHICH ANTAGONIZE OR POTENTIATE THEIR  
PHARMACOLOGICAL ACTIONS. AN ANALYSIS OF STRUCTURE  
ACTIVITY RELATIONSHIP IS PRESENTED FOR THE  
TETRAHYDROCANNABINOL DERIVATIVES EVALUATED IN THIS  
STUDY. (U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 378 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 2; 1 OCT 61-21

MAR 62,

MAR 62 43P DONAHOE, HUGH B. ;

CONTRACT: DA-18-108-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 1,  
AD-715 377 AND SEMI-ANNUAL REPT. NO. 3, AD-715 379.

DESCRIPTORS: (\*ANALGESICS + ANTIPYRETICS,  
MOLECULAR STRUCTURE), (\*ANTISPASMODIC AGENTS,  
\*MOLECULAR STRUCTURE), (\*N-HETEROCYCLIC COMPOUNDS,  
SYNTHESIS(CHEMISTRY)), (\*PIPERIDINES,  
SYNTHESIS(CHEMISTRY)), NARCOTICS, MUSCLE  
RELAXANTS, TROPANE ALKALOIDS, MORPHINE, POLYCYCLIC  
COMPOUNDS, BIOLOGICAL ASSAY, X-RAY DIFFRACTION  
ANALYSIS, ELECTRON DIFFRACTION ANALYSIS, CRYSTAL  
STRUCTURE, HALLUCINOGENS (U)  
IDENTIFIERS: \*PHENCYCLIDINE, \*QUINOXALINE/  
TETRAHYDRO, \*EPHEDRINE (U)

THE WORK COVERED BY THE REPORT IS DIVIDED INTO FOUR  
AREAS: CHEMICAL STUDIES WHICH WERE UNDERTAKEN TO  
PREPARE MODEL COMPOUNDS INCLUDING PHENCYCLIDINE TYPE  
COMPOUNDS, TETRAHYDROQUINOXALINES,  
DIAZABIOCYCLOALKANES, AND PIPERIDINES; X-RAY AND  
ELECTRON DIFFRACTION STUDIES OF SELECTED AND/OR  
SYNTHESIZED COMPOUNDS WHICH ARE DIRECTED TOWARDS THE  
ELUCIDATION OF STRUCTURE ACTIVITY RELATIONSHIPS IN  
THE FIELD OF NEUROPHARMACOLOGY; BIOLOGICAL  
EVALUATION OF SPECIFICALLY SELECTED COMPOUNDS BY  
SPECIAL METHODS; AND CUSTOM SYNTHESIS OF  
COMPOUNDS. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 379 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 2, 1 APR-30  
SEP 62,

SEP 62 50P DONAHOE, HUGH B. ;  
CONTRACT: DA-18-109-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 2,  
AD-715 378 AND SEMI-ANNUAL REPT. NO. 4, AD-715 380.

DESCRIPTORS: (•ANALGESICS + ANTIPYRETICS,  
MOLECULAR STRUCTURE), (•ANTISPASMODIC AGENTS,  
•MOLECULAR STRUCTURE), (•N-HETEROCYCLIC COMPOUNDS,  
SYNTHESIS(CHEMISTRY)), NARCOTICS, MUSCLE  
RELAXANTS, TROPANE ALKALOIDS, MORPHINE, POLYCYCLIC  
COMPOUNDS, BIOLOGICAL ASSAY, X-RAY DIFFRACTION  
ANALYSIS, ELECTRON DIFFRACTION ANALYSIS, CRYSTAL  
STRUCTURE, HALLUCINOGENS

(U)

IDENTIFIERS: •PHENCYCLIDINE, •QUINOXALINE/  
TETRAHYDRO, •BENZODIAZEPINE/TETRAHYDRO,  
•EPHEDRINE

(U)

THE WORK COVERED BY THIS REPORT IS DIVIDED INTO  
THREE AREAS: CHEMICAL STUDIES WHICH WERE  
UNDERTAKEN TO PREPARE MODEL COMPOUNDS WHICH ARE OF  
INTEREST INCLUDING PHENCYCLIDINE TYPE  
COMPOUNDS(SERNYL), TETRAHYDROQUINOXALINES, AND  
DIAZABIOCYCLOALKANES, AND PIPERIDINES; X-RAY AND  
ELECTRON DIFFRACTION STUDIES OF PHENCYCLIDINE AND  
EPHEDRINE HYDROCHLORIDE; BIOLOGICAL EVALUATION OF  
SPECIFICALLY SELECTED COMPOUNDS BY SPECIAL METHODS. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 380 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 4, 1 OCT 62-31  
MAR 63,

MAR 63 36P DONAHOE, HUGH B. ;  
CONTRACT: DA-18-108-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 3,  
AD-715 379 AND SEMI-ANNUAL REPT. NO. 5, AD-715 381.

DESCRIPTORS: (\*ANTISPASMODIC AGENTS; \*MOLECULAR  
STRUCTURE); (\*ANALGESICS + ANTIPYRETICS;  
MOLECULAR STRUCTURE); (\*N-HETEROCYCLIC COMPOUNDS;  
SYNTHESIS(CHEMISTRY)); MUSCLE RELAXANTS;  
NARCOTICS; POLYCYCLIC COMPOUNDS; X-RAY DIFFRACTION  
ANALYSIS; CRYSTAL STRUCTURE; ELECTRON DIFFRACTION  
ANALYSIS; HALLUCINOGENS

(U)

IDENTIFIERS: \*PHENCYCLIDINE; \*QUINOXALINE/  
TETRAHYDRO; \*ETHANOQUINOLINE/DIHYDRO-1-4;  
\*EPHEDRINE; \*ETHANONAPHTHALENE DICARBOXYLIC  
ANHYDRIDE/DIHYDRO-2-3-DIMETHYL-1-4

(U)

DURING THE PERIOD COVERED BY THE REPORT, PRIMARY  
EMPHASIS HAS BEEN PLACED ON THE INVESTIGATION OF  
SYNTHETIC ROUTES TO SELECTED BICYCLOALKANES.  
STUDIES WERE STARTED DURING THE PERIOD AIMED AT  
PREPARING STRUCTURES OF THE 2,3-BENZOQUINUCLIDINE AND  
THE APPROPRIATELY SUBSTITUTED  
BONZO(2.2.2)BICYCLOALKANES. THE REACTION OF 2,  
3-DIMETHYLNAPHTHALENE WITH MALEIC ANHYDRIDE WAS  
STUDIED, AND THE REDUCTION OF THE RESULTING 2,3-  
DIMETHYL-1,4-DIHYDRONAPHTHALENE-1,4-ENDO- ALPHA, BETA  
SUCCINIC ANHYDRIDE TO THE DIOL WAS ACCOMPLISHED.  
IN THE 2,3-BENZOQUINUCLIDINE SERIES, THE SYNTHESIS  
HAS BEEN CARRIED AS FAR AS THE PREPARATION OF 1,2,3,  
4-TETRAHYDRO-L-CARBOMETHOXY-METHYL-4-  
CARBOMETHOXYQUINOLINIUM BROMIDE. WORK HAS  
CONTINUED ON THE STUDY OF L-(DIALKYLAMINOACETYL)-  
3-KETO- 1,2,3,4-TETRAHYDROQUINOXALINE AND  
DERIVATIVES. ALSO STUDIED WAS THE X RAY  
DIFFRACTION OF PHENCYCLIDINE(SERNYL).

(U)

UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 381 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 5; 1 APR-30  
SEP 63,  
SEP 62 46P DONAHOE, HUGH B. ;  
CONTRACT: DA-18-109-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 4,  
AD-715 380 AND SEMI-ANNUAL REPT. NO. 6, AD-715 382.

DESCRIPTORS: (\*ANTISPASMODIC AGENTS; \*MOLECULAR  
STRUCTURE), (\*ANALGESICS + ANTIPIRETTICS;  
MOLECULAR STRUCTURE), (\*N-HETEROCYCLIC COMPOUNDS;  
SYNTHESIS(CHEMISTRY)), MUSCLE RELAXANTS,  
NARCOTICS, POLYCYCLIC COMPOUNDS, X-RAY DIFFRACTION  
ANALYSIS, ELECTRON DIFFRACTION ANALYSIS,  
HALLUCINOGENS

(U)

IDENTIFIERS: \*ETHENOBENZISOINDOLINE/4-9,  
\*PHENCYCLIDINE, \*ETHANOBENZISOINDOLINOL/4-9,  
\*ETHANOANTHRACENE/DIHYDRO-9-10, \*ETHANOQUINOLINE/  
DIHYDRO-1-4, \*ANILINE/N-METHYL,  
ETHANONAPHTHALENE DARCBOXIMIDE/DIHYDRO-2-3-  
DIMETHYL-1-4

(U)

THE REPORT DISCUSSES THE SYNTHESIS AND BIOLOGICAL  
EFFECTS OF THE FOLLOWING COMPOUNDS: PHENCYCLIDIEN  
TYPE COMPOUNDS(1-(1-  
PHENYLCYCLOHEXYL)PIPERIDINES); 4-9-ETHENO-1H-  
BENZ(F)ISOINDOLINE; 4-9-ETHANO-1H-  
BENZ(F)ISOINDOLIN-10-OL; 11-AMINOMETHYL-9-10-  
DIHYDRO-9-10-ETHANOANTHRACENE; 1-4-DIHYDRO-1-4-  
ETHANOQUINOLINE. ALSO STUDIED WAS ALKYLATION USING  
N-METHYLANILINE AND THE X RAY DIFFRACTION AND  
ELECTRON DIFFRACTION ANALYSIS OF PHENCYCLIDINE  
(SERNYL).

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 382 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 6, 1 OCT 63-31  
MAR 64,  
MAR 64 68P DONAHOE, HUGH B. ;  
CONTRACT: DA-18-108-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 5,  
AD-715 381 AND SEMI-ANNUAL REPT. NO. 7, AD-715 383.

DESCRIPTORS: (\*ANTISPASMODIC AGENTS, \*MOLECULAR  
STRUCTURE), (\*ANALGESICS + ANTIPYRETICS,  
MOLECULAR STRUCTURE), (\*N-HETEROCYCLIC COMPOUNDS,  
SYNTHESIS(CHEMISTRY)), MUSCLE RELAXANTS,  
POLYCYCLIC COMPOUNDS, X-RAY DIFFRACTION ANALYSIS,  
ELECTRON DIFFRACTION ANALYSIS, CRYSTAL STRUCTURE,  
FLUORENES, NAPHTHALENES, PHENOLS, IMIDES,  
BIOLOGICAL ASSAY, HALLUCINOGENS

(U)

IDENTIFIERS: \*PHENCYCLIDINE, \*QUINOXALINE/  
TETRAHYDRO, \*ETHANOQUINOLINE/DIHYDRO-1-4,  
\*ETHANOBENZISOINDOLINE/4-9, \*ETHANONAPHTHALENE  
DICARBOXIMIDE/DIHYDRO-1-4, \*FLUORENOL/NITRO-2,  
NITRO COMPOUNDS

(U)

THE REPORT DISCUSSES THE SYNTHESIS AND BIOLOGICAL  
EFFECTS OF THE FOLLOWING COMPOUNDS: 4-9-ETHENO-  
1H-BENZ(F) ISOINDOLINE; 1-4-DIHYDRO-1-4-  
ETHANONAPHTHALENE DICARBOXIMIDE; 1-4-DIHYDRO-1-4-  
ETHANOQUINOLINE; 1-2-3-4-TETRAHYDROQUINOXALINE.  
ALSO SYNTHESIZED WAS 3-NITRO FLUOREN-2-OL.  
FURTHER STUDIES ON THE CRYSTAL STRUCTURE OF  
PHENCYCLIDINE (SERNYL) USING X RAY DIFFRACTION  
ANALYSIS AND ELECTRON DIFFRACTION ANALYSIS ARE  
DISCUSSED.

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UNCLASSIFIED

DOC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 382 6/15 7/2  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: SEMI-ANNUAL REPT. NO. 7, 1 APR-30  
SEP 64,  
SEP 64 64P DONAHOE, HUGH B. ; HUFKER,  
WILLIAM J. ;  
CONTRACT: DA-18-108-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 6,  
AD-715 382 AND SEMI-ANNUAL REPT. NO. 8, AD-715 384.

DESCRIPTORS: (\*ANTISPASMODIC AGENTS, \*MOLECULAR  
STRUCTURE), (\*ANALGESICS + ANTIPIRETTICS,  
MOLECULAR STRUCTURE), (\*N-HETEROCYCLIC COMPOUNDS,  
SYNTHESIS(CHEMISTRY)), MUSCLE RELAXANTS,  
POLYCYCLIC COMPOUNDS, X-RAY DIFFRACTION ANALYSIS,  
ELECTRON DIFFRACTION ANALYSIS, CRYSTAL STRUCTURE,  
NAPHTHALENES, ANTHRACENES, IMIDES, ANHYDRIDES,  
HALLUCINOGENS

(U)

IDENTIFIERS: \*PHENCYCLIDINE,  
\*ETHENOBENZISOINDOLINE/4-9, \*BENZOBENZISOINDOLINE/  
4-9, \*ETHANOANTHRACENE DICARBOXIMIDE/DIHYDRO-9-10

(U)

THE REPORT DISCUSSES THE SYNTHESIS AND BIOLOGICAL  
EFFECTS OF THE FOLLOWING COMPOUNDS: 4-9-ETHENO-  
1H-BENZ(F)ISOINDOLINES; 4-9-0-  
BENZOBENZ(F)ISOINDOLINES; 9-10-DIHYDRO-9-  
10-ETHANOANTHRACENE-11-12-DICARBOXIMIDE; 9-10-  
DIHYDRO-9-10-ETHANOANTHRACENE-11-12-DICARBOXYLIC  
DIANHYDRIDE. ALSO REPORTED IS THE X RAY  
DIFFRACTION AND ELECTRON DIFFRACTION ANALYSIS OF THE  
HYDROCHLORIDE AND HYDROBROMIDE OF PHENCYCLIDINE  
(SERNYL).

(U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-715 385 6/15 7/3  
SAINT LOUIS UNIV MO

NEUROTROPIC EFFECTS IN RELATION TO CHEMICAL  
STRUCTURE.

(U)

DESCRIPTIVE NOTE: FINAL REPT. 1 APR 61-31 MAY 65,  
MAY 65 76P DONAHOE, HUGH B. HUFKER,  
WILLIAM J. ;  
CONTRACT: DA-18-108-CML-6601

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO SEMI-ANNUAL REPT. NO. 8,  
AD-715 384 AND QUARTERLY REPT. NO. 1, AD-715 386.

DESCRIPTORS: (\*ANTISPASMODIC AGENTS, \*MOLECULAR  
STRUCTURE), (\*ANALGESICS + ANTIPIRETTICS,  
MOLECULAR STRUCTURE), (\*N-HETEROCYCLIC COMPOUNDS,  
SYNTHESIS(CHEMISTRY)), MUSCLE RELAXANTS,  
MORPHINE, NARCOTICS, ANTHRACENES, AMINES,  
BIOLOGICAL ASSAY, CRYSTAL STRUCTURE,  
HALLUCINOGENS, ELECTRON DIFFRACTION ANALYSIS, X-  
RAY DIFFRACTION ANALYSIS, ALCOHOLS

(U)

IDENTIFIERS: \*PHENCYCLIDINE,  
\*BENZOBENZISOINDOLINE/4-9, \*ETHANOANTHRACENE  
METHYLAMINE/DIHYDRO-9-10, \*ETHENOBENZISOINDOLINE/4-  
9, \*QUINOXALINE/TETRAHYDRO, \*ETHANOQUINOLINE/  
DIHYDRO-1-4

(U)

THE REPORT DESCRIBES A STUDY OF THE RELATIONSHIP  
BETWEEN THE STRUCTURE OF CERTAIN BICYCLIC COMPOUNDS,  
WHOSE GROSS STRUCTURE RESEMBLES THAT OF MORPHINE, AND  
MORPHINE-LIKE AND ANTISPASMODIC ACTIVITY.  
APPROXIMATELY TWO HUNDRED AND FIFTY DERIVATIVES OF  
4-9-0-BENZOBENZ(F)ISOINDOLINE, 9-10-DIHYDRO-9,10-  
ETHANOANTHRACENE-11-METHYLAMINE, AND 4-9-ETHENO-1H-  
BENZ(F)ISOINDOLINE ARE LISTED. ALSO PREPARED  
WERE SERIES OF 1,2,3,4-TETRAHYDROQUINOXALINE AND 1,2,  
3,4-TETRAHYDROQUINOLINE DERIVATIVES. BIOLOGICAL  
DATA INCLUDE ACUTE TOXICITIES, ANALGESIC AND  
ANTISPASMODIC ACTIVITY OF SELECTED TEST COMPOUNDS.  
AS AN ANALGESIC, 4-9-0-BENZOBENZ(F)ISOINDOLINE  
WAS OBSERVED TO BE STATISTICALLY INDISTINGUISHABLE  
FROM DARVON. DERIVATIVES OF 11-AMINOMETHYL-9,10-  
ETHANO-9,10-DIHYDROANTHRACENE WERE THE MOST ACTIVE  
ANTISPASMODICS, BEING UP TO 330 TIMES AS ACTIVE AS  
PAPAVERINE AGAINST HISTAMINE AND 8.8 TIMES AS ACTIVE  
AS HEXAMETHONIUM AS A GANGLIONIC BLOCKING AGENT.  
EVIDENCE FOR THE CRYSTAL STRUCTURE OF THE  
HALLUCINOGEN SERNYL BY X-RAY DIFFRACTION STUDIED  
IS ALSO PRESENTED. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-716 977 6/15 6/20 15/2  
LITTLE (ARTHUR D) INC CAMBRIDGE MASS

NEW INCAPACITATING AGENTS, SUPPLEMENT 3.  
PRECLINICAL PHARMACOLOGY AND TOXICOLOGY OF  
CANDIDATE AGENT 226,169.

(U)

DESCRIPTIVE NOTE: QUARTERLY REPT. 15/16, 1 SEP 66-10  
JUL 67.

NOV 67 144P  
REPT. NO. ADL-C-65401-QR-15/16-SUPPL-3  
CONTRACT: DA-18-108-AMC-103(A)

UNCLASSIFIED REPORT

DESCRIPTORS: (•INCAPACITATING AGENTS,  
•PHARMACOLOGY), (•CANNABINOLS, PHARMACOLOGY),  
TOXICITY, N-HETEROCYCLIC COMPOUNDS, O-HETEROCYCLIC  
COMPOUNDS, CANNABIS, SYNTHESIS(CHEMISTRY),  
ALKYNES, PHENOLS, MOLECULAR STRUCTURE,  
HEMATOLOGY, BIOLOGICAL ASSAY, PHYSIOLOGY,  
PSYCHOPHYSIOLOGY, ELECTROPHYSIOLOGY, BEHAVIOR,  
PATHOLOGY

(U)

IDENTIFIERS: •BENZOPYRANOPYRIDINES,  
•TETRAHYDROCANNABINOL

(U)

THE PROPOSED AGENT, 226,169, HAS BEEN VARIOUSLY  
REFERRED TO AS A NITROGEN OR ALKALOIDAL ANALOG OF  
TETRAHYDROCANNABINOL, AN AZATETRAHYDROCANNABINOL,  
'THE 3,4-D ISOMER,' OR BY ITS PYRIDINE-DERIVED  
CHEMICAL NAME, 5,5-DIMETHYL-10-HYDROXY-8-(3-METHYL-  
2-OCTYL)-2-(2-PROPYNYL) -1,2,3,4-TETRAHYDRO-  
5H-(1)BENZOPYRANO(3,4-D)PYRIDINE. IT WAS  
SYNTHESIZED AS PART OF AN EFFORT TO DETERMINE THE  
EFFECT OF INTRODUCING A HETEROCYCLIC NITROGEN ATOM  
INTO THE RING OF A CARBOCYCLIC TETRAHYDROCANNABINOL--  
WOULD IT RESULT IN AGENTS SIMILAR TO EA 1476 OR,  
POSSIBLY, MORE POTENT ONES. ALTHOUGH BOTH COMPOUNDS  
HAVE SIMILAR PROFILES, IN WHICH THE PRINCIPAL  
ACTIVITY INDICATES DEPRESSION OF THE CENTRAL NERVOUS  
SYSTEM, 226,169 IS MORE POTENT THAN EA 1476 IN  
VIRTUALLY ALL PHARMACOLOGICAL PARAMETERS. THE  
NITROGEN ANALOG IS SOMEWHAT MORE SOLUBLE THAN ITS  
CARBOCYCLIC COUNTERPART, BUT POLY(ETHYLENE  
GLYCOL) REMAINS THE VEHICLE OF CHOICE FOR  
PARENTERAL ADMINISTRATION.

(U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-719 083 6/15  
FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY  
BETHESDA MD LIFE SCIENCES RESEARCH OFFICE

A REVIEW OF THE BIOMEDICAL EFFECTS OF  
MARIHUANA ON MAN IN THE MILITARY  
ENVIRONMENT.

(U)

DESCRIPTIVE NOTE: TECHNICAL REPT.

DEC 70 100P

CONTRACT: DAMC19-71-C-0006

UNCLASSIFIED REPORT

DESCRIPTORS: (•CANNABIS, REVIEWS),  
(•HALLUCINOGENS, REVIEWS), (•DRUGS, •MILITARY  
PERSONNEL), (•NARCOTICS, MILITARY PERSONNEL),  
PHARMACOLOGY, PLANTS(BOTANY), CHEMICAL  
PROPERTIES, ANIMALS, PHYSIOLOGY, PATHOLOGY,  
CENTRAL NERVOUS SYSTEM, DOSAGE, CANNABINOLS,  
BEHAVIOR, HUMANS

(U)

IDENTIFIERS: •MARIHUANA, CANNABIS SATIVA,  
•TETRAHYDROCANNABINOL, HASHISH

(U)

THE REVIEW DOCUMENTS IN DETAIL THE CURRENT STATE OF  
KNOWLEDGE OF THE EFFECTS OF MARIHUANA ON MAN. THE  
STUDY EXAMINES THE RELATIONSHIPS BETWEEN MARIHUANA  
USE AND PERFORMANCE OF THE MAN IN A MILITARY  
ENVIRONMENT AND IDENTIFIES OPPORTUNITIES FOR FUTURE  
RESEARCH BY THE ARMY IN THIS FIELD. THE SCOPE OF  
THE STUDY INCLUDES THE BOTANY AND PHYTOCHEMISTRY OF  
CANNABIS SATIVA, ISOLATION, CHARACTERIZATION, AND  
SYNTHESIS OF THE PLANT CONSTITUENTS, THE PHARMACOLOGY  
OF THESE COMPOUNDS, AND THE NEED FOR QUANTITATIVE  
ESTIMATION OF THE TETRAHYDROCANNABINOLS AND THEIR  
DERIVATIVES IN BIOLOGICAL SAMPLES. THE REVIEW  
INCLUDES A DESCRIPTION OF BEHAVIORAL TESTS USED TO  
MEASURE MARIHUANA EFFECTS, THE INFLUENCE OF AN  
INDIVIDUAL'S EXPECTATIONS, AND EFFECTS OF  
ENVIRONMENTAL SETTING ON HUMAN SUBJECTS. THE  
ANECDOTAL LITERATURE ON MARIHUANA IS BEING REPLACED  
BY REPORTS OF CONTROLLED LABORATORY STUDIES; HOWEVER,  
INVESTIGATIONS THAT MEASURE PERFORMANCE IN REAL-LIFE  
SITUATIONS ARE REQUIRED TO ANSWER CRUCIAL MILITARY  
QUESTIONS ON MARIHUANA EFFECTS. INFORMATION ON THE  
CHEMISTRY, PHARMACOLOGY, AND BEHAVIORAL EFFECTS OF  
MARIHUANA THAT IS NECESSARY FOR THESE FUTURE STUDIES  
IS BEING DEVELOPED AT THE PRESENT TIME.

(AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-718 136

6/5

FRIENDS MEDICAL AND SCIENTIFIC RESEARCH INST BALTIMORE MD  
LAB OF NEUROLOGICAL SCIENCES

THE ROLE OF THE CENTRAL NERVOUS SYSTEM  
CHOLINERGIC MECHANISMS IN BEHAVIOR AND  
LEARNING.

(U)

DESCRIPTIVE NOTE: REPT. NO. 7 (FINAL);  
SEP 66 25P BLACK, PERRY ; SPYROPOULOS,  
PERICLES ;  
CONTRACT: DA-18-035-AMC-253(A)

UNCLASSIFIED REPORT

DESCRIPTORS: (•LYSERGIC ACIDS, NEUROLOGY),  
(•REACTION(PSYCHOLOGY), LYSERGIC ACIDS),  
MONKEYS, TEST METHODS, TIME, DOSAGE, BEHAVIOR,  
CORRELATION TECHNIQUES, TOLERANCES(PHYSIOLOGY)  
IDENTIFIERS: TASK ANALYSIS, DELAYED RESPONSE

(U)

(U)

THE PRINCIPAL PURPOSE OF THIS STUDY WAS TO  
INVESTIGATE THE POSSIBLE DIFFERENTIAL EFFECTS OF  
LSD AS A FUNCTION OF PROCEDURAL VARIATIONS IN  
PERFORMANCE OF DELAYED RESPONSE TASKS. IN GENERAL,  
LSD WAS FOUND TO IMPAIR DELAYED RESPONSE  
PERFORMANCE IN THE MONKEY. FROM THE STANDPOINT OF  
DOSE-EFFECT RELATIONSHIPS, THE RESULTS SUGGEST A  
POSITIVE CORRELATION BETWEEN MAGNITUDE OF DOSE AND  
EXTENT OF FUNCTIONAL IMPAIRMENT. A TENDENCY TOWARD  
RAPIDLY DEVELOPING TOLERANCE WAS OBSERVED. A  
'PLACEBO EFFECT' IN RESPONSE TO THE CONTROL AGENT  
(STERILE WATER) WAS ENCOUNTERED IN A SIGNIFICANT  
NUMBER OF MONKEYS.

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-720 279 6/15 6/5  
TULANE UNIV NEW ORLEANS LA SCHOOL OF MEDICINE

EFFECTS OF LYSERGIC ACID AND ITS  
DERIVATIVES ON RHINENCEPHALIC ELECTROGRAMS. (U)

DESCRIPTIVE NOTE: FINAL REPT. ON PART 1,  
MAY 59 29P MONROE, RUSSELL R. ;  
CONTRACT: DA-18-108-CML-5596

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO PART 2, AD-720 280.

DESCRIPTORS: (\*LYSERGIC ACIDS, \*BRAIN);  
(\*ELECTROENCEPHALOGRAPHY, LYSERGIC ACIDS),  
(\*HALLUCINOGENS, ELECTROENCEPHALOGRAPHY),  
ELECTROPHYSIOLOGY, PHARMACOLOGY, MENTAL DISORDERS,  
BEHAVIOR, MONKEYS, HUMANS, NEUROLOGY (U)  
IDENTIFIERS: \*RHINENCEPHALON (U)

SIX MACACA MULATTA MONKEYS HAD CHRONICALLY  
IMPLANTED ELECTRODES OVER THE FRONTAL AND OCCIPITAL  
CORTEX, AND IN THE SEPTAL, CAUDATE, AND HIPPOCAMPAL  
REGIONS. THIRTY-TWO STUDIES WERE DONE ON LYSERGIC  
ACID DERIVATIVES AS D-LSD-25, ALD-52, MLD-41,  
LSM, DAM, LPD, 1-LSD-25, BOL AND UML TO  
DETERMINE POSSIBLE CORRELATIONS BETWEEN THE  
PSYCHOTOGENIC EFFECT OF THESE DRUGS AND THE EFFECT ON  
THE SUBCORTICAL ELECTROGRAM. NO CORRELATION WAS  
FOUND BETWEEN THE PSYCHOTOGENIC, ANTISEROTONIN OR  
PSYCHOTOGENIC EFFECT AS FOUND BY ISBELL STUDYING  
THESE SAME DRUGS ON HUMANS. HOWEVER, THERE DID  
APPEAR TO BE A GOOD CORRELATION BETWEEN THE  
BEHAVIORAL EFFECT ON MONKEYS AND RHINENCEPHALIC  
PAROXYSMAL HYPERSYNCHRONOUS ACTIVITY, PARTICULARLY IN  
THE SEPTAL REGION. FIVE STUDIES WITH Mescaline  
ALSO REVEALED A SIMILAR CORRELATION. IT WOULD SEEM  
THAT EVEN TAKING INTO ACCOUNT SPECIES DIFFERENCES,  
RHINENCEPHALIC PAROXYSMAL HYPERSYNCHRONOUS  
ABNORMALITY IS A GOOD INDICATION OF PSYCHOTOGENIC  
EFFECTS OF A DRUG. (AUTHOR) (U)

UNCLASSIFIED

SDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-720 280 6/15 6/20 6/3  
TULANE UNIV NEW ORLEANS LA SCHOOL OF MEDICINE

REPORT ON THE SPECIAL AGENT EA-1476.

(U)

DESCRIPTIVE NOTE: FINAL REPT. ON PART 2;  
MAY 59 22P MONROE, RUSSELL R. ;  
CONTRACT: DA-18-108-CML-5596

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO PART 1, AD-720 279.

DESCRIPTORS: (\*LYSERGIC ACIDS, \*TOXICITY),  
(\*ELECTROENCEPHALOGRAPHY, LYSERGIC ACIDS),  
ELECTROPHYSIOLOGY, PHARMACOLOGY, NEUROLOGY,  
MENTAL DISORDERS, BEHAVIOR, LABORATORY ANIMALS,  
DOSAGE  
IDENTIFIERS: \*PSYCHOPHARMACOLOGY

(U)

(U)

PRELIMINARY TESTS TO DETERMINE THE TOXICITY OF THE  
DRUG LYSERGIC ACID, WERE PERFORMED ON CATS.  
DEFINITE CONCLUSIONS COULD NOT BE DERIVED FROM THE  
LIMITED DATA GATHERED. HOWEVER, SEVERAL THINGS WERE  
NOTICED PARTICULARLY AS EXEMPLIFIED BY ONE MONKEY.  
THE DRAMATIC IMMEDIATE SLOWING IN  
ELECTROENCEPHALOGRAM, THE DEFINITE SPIKE AND SLOW  
WAVE THAT APPEARED IN THE SEPTAL REGION WHICH IS MORE  
CHARACTERISTIC OF THE 'SCHIZOPHRENIC SPIKE' THAN  
RECORDINGS WITH D-LSD AND Mescaline, AND PROLONGED  
ELECTROENCEPHALOGRAPHIC EFFECTS STILL DRAMATIC 72  
HOURS AFTER THE DRUG WAS GIVEN. ALSO STRIKING IS  
THE CHRONIC DEBILITATION THE ANIMALS SHOW AFTER  
MINIMAL DOSES OF THIS DRUG WHICH ULTIMATELY LEADS TO  
THEIR DEATH. PERHAPS WITH BETTER 'NURSING' CARE,  
THESE ANIMALS MIGHT HAVE SURVIVED.

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-720 281 6/15  
TULANE UNIV NEW ORLEANS LA SCHOOL OF MEDICINE

PROGRESS REPORT, ARMY CHEM L CONTRACT  
DA-18-108-CML-5596.

(U)

59 6P MONROE, RUSSELL R. I  
CONTRACT: DA-18-108-CML-5596

UNCLASSIFIED REPORT

DESCRIPTORS: (\*DRUGS, BRAIN), (\*LYSERGIC ACIDS,  
\*BRAIN), (\*BEHAVIOR, LYSERGIC ACIDS),  
PHARMACOLOGY, ELECTROENCEPHALOGRAPHY,  
ELECTROPHYSIOLOGY, PHYSIOLOGY, RESPONSES,  
DOSAGE, LABORATORY ANIMALS  
IDENTIFIERS: \*PSYCHOPHARMACOLOGY

(U)

(U)

ONE PHASE OF THE PROJECT WAS TO TEST THE EFFECT OF  
D-LSO-25 AND RELATED COMPOUNDS ON THE SUBCORTICAL  
ELECTROGRAMS TO SEE WHETHER THERE COULD BE  
DEMONSTRATED CORRELATIONS BETWEEN PAROXYSMAL  
HYPERSYNCHRONOUS ACTIVITY IN THE SEPTAL AND/OR  
HIPPOCAMPAL REGION AND KNOWN PSYCHOTOMIMETIC  
EFFECT. A SECOND PHASE OF THIS STUDY WAS TO TEST  
THE EFFECT OF SEROTONIN ON THE ANIMAL BY GIVING A  
MONOAMINEOXIDASE INHIBITOR  
(PHENYLISOPROPYLHYDROSINE) COMBINED WITH A  
SEROTONIN PRECURSOR 5-HYDROXYTRYPTOPHANE WHICH  
CROSSES THE BLOOD BRAIN BARRIER. THREE STUDIES WERE  
ALSO DONE GIVING ANIMALS EA-1476 IN DOSES RANGING  
FROM 125 TO 500 GAMMA PER KILO.

(U)

UNCLASSIFIED

/ZAML2

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-720 793 6/15  
TULANE UNIV NEW ORLEANS LA SCHOOL OF MEDICINE

LYSERGIC ACID DERIVATIVES.

(U)

DESCRIPTIVE NOTE: PROGRESS REPT.,  
JUN 58 4P MONROE, RUSSELL R. ;  
CONTRACT: DA-18-108-CML-5596

UNCLASSIFIED REPORT

DESCRIPTORS: (\*LYSERGIC ACIDS, \*BRAIN), DRUGS;  
PHARMACOLOGY, PHYSIOLOGY, ELECTROPHYSIOLOGY,  
DOSAGE, MENTAL DISORDERS  
IDENTIFIERS: \*RHINENCEPHALON,  
PSYCHOPHARMACOLOGY

(U)

(U)

PRELIMINARY STUDIES SUGGEST THAT THERE IS A  
CORRELATION BETWEEN PSYCHOTOMIMETIC DRUGS AND  
RHINENCEPHALIC PAROXYSMAL ACTIVITY. ONE IMPORTANT  
OBSERVATION IS THAT IN TWO OF THE THREE STUDIES DONE  
THUS FAR THERE OCCURRED DRAMATIC SEPTAL 'SPIKING', AS  
SEEN IN SCHIZOPHRENIC PATIENTS AFTER THEY HAVE  
RECEIVED 250 GAMMA PER KILO EA-1476.  
(AUTHOR)

(U)

UNCLASSIFIED

DLG REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-728 449 5/10  
EDGEWOOD ARSENAL MD

STUDIES OF THE EFFECT OF PERSONALITY ON  
REACTIVITY TO LSD.

(U)

DESCRIPTIVE NOTE: TECHNICAL REPT. FOR 1962-1966;  
JUL 71 16P KLAPPER, JACK A.; KETCHUM,  
JAMES S.; MCCOLLOCH, MICHAEL A.; KYSOR, KRAGG  
P.; SIM, VAN M.;  
REPT. NO. EA-TR-4536  
PROJ: DA-1-B-662706-AD-25  
TASK: 1-B-662706-AD-2503

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: REPORT ON PROPHYLAXIS AND THERAPY  
FOR INCAPACITATING AGENTS.

DESCRIPTORS: (\*HALLUCINOGENS, PERSONALITY),  
(\*PERSONALITY, \*LYSERGIC ACIDS),  
(\*PSYCHOPHYSIOLOGY, \*LYSERGIC ACIDS),  
REACTION(PSYCHOLOGY); SENSITIVITY, ARMY,  
PERSONNEL, PERFORMANCE(HUMAN), CORRELATION  
TECHNIQUES

(U)

CASE RECORDS OF 52 ARMY VOLUNTEERS GIVEN FROM 1.1  
TO 2.0 MICROGRAMS/KG OF LSD ORALLY BETWEEN 1962 AND  
1966 WERE STUDIED. SINCE 1966 NO FURTHER STUDIES  
HAVE BEEN PERFORMED. SIGNIFICANT RELATIONSHIPS  
WERE FOUND BETWEEN PERSONALITY (AS MEASURED BY THE  
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY  
AND ARMY GENERAL INTELLIGENCE TEST) AND  
PERFORMANCE FOLLOWING ADMINISTRATION OF LSD.  
RESISTANT SUBJECTS AT LOWER DOSES WERE FOUND TO BE  
MORE INTELLIGENT, ENERGETIC, AND OUTGOING.  
SENSITIVE SUBJECTS WERE LESS INTELLIGENT,  
CONSTRICTED, MORE ANXIOUS, OVER-CONTROLLED, AND  
DEPENDENT. AT THE HIGHER DOSES THE PICTURE WAS NOT  
AS CLEAR, BUT PERSONALITY FACTORS WERE STILL HIGHLY  
CORRELATED WITH PERFORMANCE. THE PA  
(PARANOID) SCALE HAD A HIGHER CORRELATION WITH  
PERFORMANCE THAN DID DOSE. THE K (POSITIVE TEST-  
TAKING ATTITUDE), HS (HYPOCHONDRIASIS), AND  
SI (SOCIAL INTROVERSION) SCALES WERE POSITIVELY  
CORRELATED WITH PERFORMANCE AT LOWER DOSES AND  
NEGATIVELY CORRELATED WITH PERFORMANCE AT HIGHER  
DOSES. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-732 905 5/10 6/15  
EDGWOOD ARSENAL MD

THE EFFECT OF PERSONALITY ON REACTIVITY TO A  
TETRAHYDROCANNABINOL.

(U)

DESCRIPTIVE NOTE: TECHNICAL REPT. 1963-1968,  
SEP 61 14P KLAPPER, JACK A. ;  
MCCOLLOCH, MICHAEL A. ; SIDELL, F. R. ;  
REPT. NO. EA-TR-4554  
PROJ: DA-1-B-662706-AD-25  
TASK: 1-B-662706-AD-2503

UNCLASSIFIED REPORT

DESCRIPTORS: (\*CANNABIS, REACTION(PSYCHOLOGY)),  
(\*PERSONALITY, CANNABIS), PSYCHOTROPIC AGENTS,  
DOSAGE, PERFORMANCE(HUMAN), DRUGS  
IDENTIFIERS: \*PSYCHONEUROPHARMACOLOGY, DRUG ABUSE,  
MARIJUANA

(U)

(U)

CASE RECORDS OF 40 US ARMY VOLUNTEERS GIVEN A  
SYNTHETIC TETRAHYDROCANNABINOL (THC) COMPOUND  
SIMILAR IN STRUCTURE AND PHYSIOLOGICAL ACTIVITY TO  
THE ACTIVE COMPONENT OF MARIJUANA WERE REVIEWED.  
SIGNIFICANT RELATIONSHIPS WERE FOUND BETWEEN THE  
PERSONALITIES OF THESE VOLUNTEERS, AS MEASURED BY THE  
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY  
(MMPI) AND THE ARMY GENERAL INTELLIGENCE  
TEST (GT), AND PERFORMANCE FOLLOWING  
ADMINISTRATION OF THIS COMPOUND ON COGNITIVE TESTS.  
THE HS (HYPOCHONDRIASIS) AND PD  
(PSYCHOPATHIC DEVIAT) SCALE SCORES AND THE GT  
SCORE WERE MORE STRONGLY CORRELATED WITH PERFORMANCE  
THAN WAS THE DOSE LEVEL. MMPI AND GT TEST  
INTERPRETATION OF SUBJECTS RESISTANT TO THE COGNITIVE  
IMPAIRMENT CAUSED BY THIS COMPOUND SHOWED THEM TO BE  
MORE INTELLIGENT AND ADVENTUROUS BUT MORE HOSTILE AND  
AGGRESSIVE THAN SENSITIVE SUBJECTS. A POSSIBLE  
EXPLANATION FOR CONTINUED USE OF MARIJUANA BY CERTAIN  
PERSONALITY TYPES IS OFFERED. (AUTHOR)

(U)



UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-734 407 6/15 6/16  
TEXAS UNIV MEDICAL SCHOOL SAN ANTONIO DEPT OF  
PHARMACOLOGY

CARDIOVASCULAR SYSTEM.

(U)

DESCRIPTIVE NOTE: FINAL REPT.,  
OCT 71 316P BRIGGS, ARTHUR H. ;  
CONTRACT: F44620-70-C-0059  
PROJ: AF-9777  
MONITOR: AFOSR TR-71-2599

UNCLASSIFIED REPORT

DESCRIPTORS: (\*CARDIOVASCULAR SYSTEM,  
•PHARMACOLOGY), STRESS(PHYSIOLOGY),  
PHYSIOLOGY, AUTONOMIC NERVOUS SYSTEM, BLOOD  
PRESSURE, BLOOD CIRCULATION, HYPOXIA, DRUGS,  
HYPERTENSION, RESERPINE, CEREBELLUM,  
HALLUCINOGENS, BRAIN, ENZYMES,  
ACETYLCHOLINESTERASE, HEART, BARBITURATES,  
ELECTROLYTES(PHYSIOLOGY), TEMPERATURE,  
INSECTICIDES (U)  
IDENTIFIERS: PROSTAGLANDINS, BICUCULLINE,  
PENTOBARBITAL, DISULFOTON (U)

THE FOLLOWING SIGNIFICANT FINDINGS MADE DURING THE  
PAST YEAR ARE SUMMARIZED. THE ABILITY OF THE HEART  
TO ADAPT TO STRESS REQUIRES AN INTACT AUTONOMIC  
NERVOUS SYSTEM. ACUTE INCREASES IN ARTERIAL  
PRESSURE MAY CAUSE DETRIMENTAL EFFECTS TO THE SYSTEM  
BY DIRECT ACTION ON THE HEART, PARTICULARLY IF  
UNDERLYING MYOCARDIAL DISEASE IS PRESENT. THE  
ABILITY OF THE HEART TO ADAPT TO DIFFERENT HEART  
RATES APPEARS TO BE AN IMPORTANT FACTOR IN EXERCISE  
OR PROLONGED HYPOXIA. RELAXING SYSTEMS ARE  
IMPORTANT IN THE ACTION OF ANTIHYPERTENSIVE DRUGS AND  
PERHAPS IN THE ETIOLOGY AND MAINTENANCE OF ABNORMAL  
BLOOD PRESSURE STATES. RESERPINE MEDIATED  
ELECTROLYTE LOSS FROM VASCULAR TISSUE IS THE RESULT  
OF URINARY EXCRETION OF SODIUM, POTASSIUM AND CALCIUM  
AND CALCIUM EXCRETION INTO THE GUT. A NEW TYPE OF  
SUPPERSENSITIVITY WAS DISCOVERED AND CHARACTERIZED IN  
VASCULAR SMOOTH MUSCLE INITIATED BY COLD TEMPERATURE.  
PROSTAGLANDINS AUGMENT MYOCARDIAL CONTRACTILITY BY  
INCREASING INTRACELLULAR CALCIUM STORES.  
CEREBELLAR INHIBITORY MECHANISMS, BUT NOT RETICULAR  
OR SPINAL INHIBITORY MECHANISMS, WERE MARKEDLY  
SUPPRESSED BY HALLUCINOGENIC DRUGS. BICUCULLINE  
SUPPRESSED CEREBELLAR INHIBITION, BUT ALSO SUPPRESSED  
RETICULAR AND PRESYNAPTIC INHIBITION. (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-735 102 5/10 5/11  
NAVAL AEROSPACE MEDICAL RESEARCH LAB PENSACOLA FLA

THE RELATIONSHIP BETWEEN PAST BACKGROUND AND  
DRUG USE,

(U)

JUN 71 28P BUCKY, STEVEN F. ;  
REPT. NO. NAMRL-1135  
PROJ: MR-MR011-01-01  
MONITOR: NAVMED MR011-01-01-9

UNCLASSIFIED REPORT

DESCRIPTORS: (•NARCOTICS, •SOCIAL PSYCHOLOGY),  
CULTURE, EDUCATION, HISTORY, PERSONALITY,  
BEHAVIOR, CORRELATION TECHNIQUES, CANNABIS,  
AMPHETAMINES, DRUGS  
IDENTIFIERS: 28DRUG ADDICTION, HEROIN

(U)

(U)

THE PURPOSE OF THE PRESENT STUDY WAS TO DETERMINE WHETHER SOCIAL-HISTORY VARIABLES DISCRIMINATE AMONG NO-DRUG, MARIJUANA, AMPHETAMINE, LSD, AND HEROIN USERS. A QUESTIONNAIRE WITH ITEMS ON SPECIFIC DRUG USE, FAMILY BACKGROUND, SCHOOL AND MILITARY HISTORY WAS ANONYMOUSLY ADMINISTERED TO 1508 NAVY ENLISTED MEN. APPROXIMATELY 13.6 PER CENT REFUSED TO FILL OUT THE FORM. THERE WERE SIGNIFICANT DIFFERENCES AMONG THE GROUPS. ALTHOUGH LITTLE DIFFERENCE BETWEEN THE NO-DRUG AND MARIJUANA GROUPS WAS OBSERVED, IN GENERAL THERE WAS A PROGRESSION FROM THE NO-DRUG TO THE MARIJUANA, AMPHETAMINE, LSD, AND HEROIN GROUPS IN TERMS OF FAMILY DIFFICULTIES, TROUBLE IN SCHOOL, AND DISCIPLINARY ACTION IN THE NAVY. THE VAST MAJORITY OF THE MARIJUANA GROUP HAD NOT TAKEN OTHER DRUGS, WHEREAS THE MAJORITY OF THE OTHER DRUG GROUPS HAD TAKEN MARIJUANA. MULTIPLE CORRELATIONS OF .47 AND .66 SING NO DRUG AND HEROIN USE AS THE CRITERIA SUGGEST THAT PREDICTION FOR THESE GROUPS IS POSSIBLE. MULTIPLE CORRELATIONS RANGING FROM .23 TO .29 FOR THE MARIJUANA, AMPHETAMINE, AND LSD GROUPS MAKE PREDICTION OF SUCH DRUG USE VIRTUALLY IMPOSSIBLE. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-737 671 6/1 6/15  
ARMY AEROMEDICAL RESEARCH LAB FORT RUCKER ALA

STUDIES OF FLUOROMETRIC ASSAY PROCEDURES FOR  
LYSERGIC ACID DIETHYLAMIDE, (U)

FEB 72 16P KASVINSKY, PETER J. ;  
REPT. NO. USAARL-72-9  
PROJ: DA-3-A-062110-A-819

UNCLASSIFIED REPORT

DESCRIPTORS: (•LYSERGIC ACIDS, •BLOOD CHEMISTRY),  
(•HALLUCINOGENS, BLOOD CHEMISTRY), FLUORESCENCE,  
IN VITRO ANALYSIS, EXCITATION, BLOOD PLASMA,  
MICROANALYSIS (U)  
IDENTIFIERS: •LYSERGIC ACID DIETHYLAMIDE,  
•FLUOROMETRIC ANALYSIS, •CLINICAL CHEMISTRY (U)

STUDIES OF THE AVAILABLE FLUOROMETRIC ASSAY  
PROCEDURES FOR LSD-25 ARE DESCRIBED FOR POSSIBLE  
CLINICAL APPLICATION. VARIABILITY OF PLASMA  
'BLANK' BACKGROUND FLUORESCENCE VALUES WERE FOUND TO  
PROHIBIT THE USE OF STANDARD FLUOROMETRIC PROCEDURES  
WITHOUT MODIFICATION. A LITTLE KNOWN FLUOROMETRIC  
PROCEDURE IS DESCRIBED WHICH MINIMIZES THIS PROBLEM  
AND MAINTAINS THE SENSITIVITY OF THE ASSAY AT THE  
NANOGRAM LEVEL. MODIFICATIONS OF THIS METHOD ARE  
SUGGESTED WHICH COULD INCREASE THE SENSITIVITY OF  
THIS METHOD TO THE SUBNANOGRAM LEVEL. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-737 758 6/5 6/15  
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT SAN DIEGO  
CALIF

CLINICAL ASPECTS OF MARIJUANA AND AMPHETAMINE  
USE,

(U)

69 28P RUBIN, ROBERT T. ;  
REPT. NO. NMNPU-69-4  
PROJ: MK011.01

UNCLASSIFIED REPORT  
AVAILABILITY: PUB. IN ANNALS OF INTERNAL  
MEDICINE, V70 N3 P591-614 MAR 69.

DESCRIPTORS: (+CANNABIS, ADDICTION),  
(+AMPHETAMINES, ADDICTION), (+PSYCHOTROPIC  
AGENTS, ADOLESCENTS), (+DRUGS, ADOLESCENTS),  
MENTAL DISORDERS, THERAPY, PSYCHIATRY, ANXIETY  
IDENTIFIERS: +PSYCHONEUROPHARMACOLOGY, +DRUG  
ADDICTION, +MARIJUANA

(U)

(U)

THE MAJOR ROLE OF MARIJUANA AMONG ADOLESCENTS, MANY  
OF WHOM HAVE LOW SELF-ESTEEM AND FORM INTERPERSONAL  
RELATIONSHIPS ONLY WITH DIFFICULTY, APPEARS TO BE AS  
A MEDIUM FOR EASING PEER-GROUP TENSIONS AND AIDING  
PEER-GROUP INTERACTION, SIMILAR TO THE DRINK-IN-HAND  
AT A COCKTAIL PARTY. TREATMENT OF THESE PERSONS IS  
PRIMARILY PSYCHOTHERAPEUTIC. THE USE OF HEAVY  
USERS OF MARIJUANA ARE MUCH FEWER IN NUMBER AND  
GENERALLY HAVE MORE SEVERE UNDERLYING PSYCHOLOGICAL  
DISTURBANCES. THE PSYCHOPHARMACOLOGICAL SEQUELS OF  
THE USE OF REPEATED HIGH DOSES OF MARIJUANA SUCH AS  
OCCASIONAL ANXIETY REACTIONS MAY REQUIRE  
PHENOTHIAZINE MEDICATION. (AUTHOR)

(U)

UNCLASSIFIED

DUC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-749 430 6/13 5/10  
MINNESOTA UNIV MINNEAPOLIS DEPT OF PHARMACOLOGY

HALLUCINOGEN-TRANQUILIZER INTERACTION: ITS  
NATURE,

(U)

FER 69 5P HALASZ, MICHAEL F. ; FORMANEK,  
JAROSLAV ; MARRAZZI, AMEDEO S. ;  
CONTRACT: AF-AFOSR-1334-67  
PROJ: AF-9777  
MONITOR: AFOSR TR-72-0825

UNCLASSIFIED REPORT

AVAILABILITY: PUB. IN SCIENCE, V164 P569-571, 2  
MAY 69.

SUPPLEMENTARY NOTE: REVISION OF REPORT DATED 30 JUL  
68.

DESCRIPTORS: (\*HALLUCINOGENS, PHARMACOLOGY),  
(\*TRANQUILIZERS, PHARMACOLOGY), (\*PSYCHOTROPIC  
AGENTS, INTERACTIONS), CENTRAL NERVOUS SYSTEM,  
DRUGS, BEHAVIOR, RESPONSES, INHIBITION,  
DOSAGE, EFFECTIVENESS

(U)

IDENTIFIERS: \*PSYCHONEUROPHARMACOLOGY

(U)

STUDY OF THE COMPETITION BETWEEN HALLUCINOGENS AND  
TRANQUILIZERS AT CEREBRAL SYNAPSES AND ON BEHAVIOR IN  
VARIOUS SPECIES OF ANIMALS INDICATES A CONTINUUM OF  
EFFECTS FROM PROTECTION TO DOMINANCE OF TRANQUILIZER  
TOXICITY AS THE DOSE OF TRANQUILIZER INCREASES.  
DATA ON CAT AND MONKEY BEHAVIOR, SUPPLEMENTING THAT  
ON THE RAT, SHOW THAT IT IS POSSIBLE TO ARRIVE AT A  
TRANQUILIZER DOSE THAT CAN AGGRAVATE INSTEAD OF  
PROTECT, IN ACCORD WITH THE COMPETITIVE INHIBITORY  
NATURE OF THE INTERACTION OF HALLUCINOGEN AND  
TRANQUILIZER. (AUTHOR)

(U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-741 431 5/10  
MISSOURI UNIV ST LOUIS INST OF PSYCHIATRY

PERCEPTUAL CHALLENGE TO MEASURE ILLNESS AND  
THERAPY, (U)

72 8P MARRAZZI, AMEDEO S. ;  
WOODRUFF, SHARON ; KENNEDY, DENIS ;  
CONTRACT: AF-AFOSR-1821-69  
PROJ: AF-9777  
MONITOR: AFOSR TR-72-0826

UNCLASSIFIED REPORT

AVAILABILITY: PUB. IN AMERICAN JNL. OF  
PSYCHIATRY, V128 N7 P886-890 JAN 72.  
SUPPLEMENTARY NOTE: PRESENTED AT THE ANNUAL MEETING OF  
THE AMERICAN PSYCHIATRY ASSOCIATION (124TH) HELD  
IN WASHINGTON, D. C. ON 3-7 MAY 71.

DESCRIPTORS: (•MENTAL DISORDERS, •AUDITORY  
PERCEPTION), DIAGNOSIS, MEASUREMENT, THERAPY,  
INSTRUMENTATION, LYSERGIC ACIDS, CHLORPROMAZINE,  
DRUGS, PERCEPTION (U)

THE DISSOCIATION PRODUCED IN THE AUDITORY MODALITY  
BY A CHALLENGE WITH LSD CAN BE QUANTITATED BY AN  
INSTRUMENTAL PERCEPTION TEST. CHLORPROMAZINE CAN  
PROTECT AGAINST THIS DISSOCIATION, AND ITS EFFICACY  
CAN BE MEASURED BY CHANGES IN AUDITORY PERCEPTION.  
THE AUTHOR DESCRIBES THIS QUANTITATIVE INSTRUMENTAL  
PROCEDURE, WHICH IS BEING DEVELOPED INTO A 'CLINICAL  
YARDSTICK' TO MEASURE DISSOCIATIVE MENTAL DYSFUNCTION  
AND ILLNESS, ITS INTENSITY, AND ITS RESPONSE TO  
THERAPY. (AUTHOR) (U)

UNCLASSIFIED

DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-740 685 6/5

LETTERMAN GENERAL HOSPITAL SAN FRANCISCO CALIF

PRESENT CONCEPTS IN INTERNAL MEDICINE.  
VOLUME IV, NUMBER 9. NEPHROLOGY SYMPOSIUM,

(U)

SEP 71 122P CHOJNACKI, RICHARD E. ;  
APPLEWHITE, LOTTIE ;

UNCLASSIFIED REPORT

SUPPLEMENTARY NOTE: SEE ALSO VOLUME 4, NO. 8, AD-740  
684 AND VOLUME 4, NO. 10, AD-740 686.

DESCRIPTORS: (KIDNEYS, DISEASES), SYMPOSIA,  
PATHOLOGY, PHYSIOLOGY, DIAGNOSIS, PARENTERAL  
INFUSIONS, ELECTROLYTES (PHYSIOLOGY), IMMUNOLOGY,  
HYPERTENSION, BLOOD PRESSURE, URINARY SYSTEM,  
INFECTIONS, POISONING, DRUGS, LYSERGIC ACIDS,  
BARBITURATES, NARCOTICS, THERAPY

(U)

IDENTIFIERS: NEPHROLOGY, IMMUNOLOGIC DISEASES,  
GLOMERULONEPHRITIS, DRUG ABUSE, PYELONEPHRITIS,  
HEROIN

(U)

THE PAPERS IN THIS ISSUE OF PRESENT CONCEPTS  
OFFER INSIGHT INTO BOTH BROAD AND SPECIALIZED AREAS  
OF NEPHROLOGY. IN SEVERAL PRESENTATIONS,  
COMPREHENSIVE REVIEWS, NOT ELSEWHERE AVAILABLE, ARE  
PRESENTED. THE FIRST ARTICLE IS ANOTHER APPROACH  
TO THE PROBLEM OF FLUID AND ELECTROLYTE BALANCE  
CORRECTION OF PATHOLOGIC DEVIATIONS. THE  
PHYSICIAN'S PRESENTATION OF HIS EXPERIENCE IN CARING  
FOR ACUTE RENAL FAILURE PATIENTS OFF THE COAST OF  
VIETNAM IS BOTH REWARDING AND DISILLUSIONING SINCE  
POST-TRAUMATIC RENAL FAILURE IS ASSOCIATED WITH  
EXCESSIVE MORTALITY. THE EXCELLENT REPORT ON THE  
PATHOGENESIS OF GLOMERULAR DISEASE IS A TIMELY FACT-  
BASED DISSERTATION WITH IMMEDIATE VALUE FOR  
UNDERSTANDING THE IMMUNOLOGIC EVENTS OCCURRING IN  
PATIENTS WITH GLOMERULONEPHRITIS, LUPUS NEPHRITIS,  
AND GOODPASTURE'S SYNDROME. AN ARTICLE ON  
MALIGNANT HYPERTENSION PROVIDES OBJECTIVE EVIDENCE  
WHICH SOLIDIFIES THE NEED FOR TREATMENT TO  
NORMOTENSIVE LEVELS EVEN IF GLOMERULAR FILTRATION  
RATE FALLS, ALBEIT TRANSIENTLY. THE DISCUSSION OF  
PYELONEPHRITIS PRESENTS NEW FACETS OF DIAGNOSIS WHICH  
SHOULD BE BENEFICIAL TO EVERY CLINICIAN. THE LAST  
ARTICLE IS A PAPER ON DRUG ABUSE AND IS PUBLISHED AS  
A NEEDED AID IN DIAGNOSIS AND TREATMENT OF THIS  
EXTENSIVE CONTEMPORARY PROBLEM.

(U)

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DDC REPORT BIBLIOGRAPHY SEARCH CONTROL NO. /ZAML2

AD-741 338 6/15 6/5 6/20  
ARMY LAND WARFARE LAB ABERDEEN PROVING GROUND MD

DRUG IDENTIFICATION, PROPERTIES AND  
CHARACTERISTICS: NARCOTICS, STIMULANTS,  
DEPRESSANTS, MARIJUANA AND HALLUCINOGENS. (U)

DESCRIPTIVE NOTE: FINAL REPT.,  
MAR 72 250P SANSONETTI, CRAIG J. O'REILLY,  
HUGH T. J.  
REPT. NO. LWL-TR-72-04

UNCLASSIFIED REPORT

DESCRIPTORS: (•DRUGS, IDENTIFICATION),  
(•NARCOTICS, CHEMICAL ANALYSIS), (•PSYCHOTROPIC  
AGENTS, CHEMICAL ANALYSIS), (•ADDICTION,  
DRUGS), BIOCHEMISTRY, HALLUCINOGENS, CNS  
DEPRESSANTS, CNS STIMULANTS, CANNABIS, PHYSIOLOGY,  
PSYCHOLOGY, PHARMACOLOGY, TOXICITY, THERAPY,  
BODY FLUIDS, DETECTION (U)  
IDENTIFIERS: •DRUG ABUSE, CLINICAL CHEMISTRY,  
PRESCRIPTION DRUGS (U)

A GENERAL SURVEY OF THE LITERATURE REGARDING DRUG  
ABUSE AND DRUG IDENTIFICATION HAS BEEN CONDUCTED.  
ILLEGAL DRUGS IN FIVE CATEGORIES--NARCOTICS,  
STIMULANTS, DEPRESSANTS, MARIJUANA, AND  
HALLUCINOGENS--ARE LISTED AND DESCRIBED. IN EACH  
CATEGORY THE HISTORY OF THE DRUG TYPE, ITS CLINICAL  
USE, AND THE PHYSICAL AND PSYCHOLOGICAL EFFECTS OF  
ITS ABUSE ARE DISCUSSED. ANALYTICAL DATA SUCH AS  
MELTING POINT, SOLUBILITY, COLOR AND MICROCRYSTAL  
TESTS, CHROMATOGRAPHY DATA, AND SPECTRA ARE PROVIDED  
FOR APPROXIMATELY 125 INDIVIDUAL DRUGS. GENERAL  
ANALYTICAL TECHNIQUES BOTH FOR PHARMACEUTICAL  
PREPARATIONS AND FOR DRUGS IN BODY FLUIDS ARE BRIEFLY  
SUMMARIZED. NUMEROUS REFERENCES ARE PROVIDED FOR  
ADDITIONAL DATA. (AUTHOR) (U)



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