



MICROGRAM

Laboratory Division
Office of Scientific Support

BUREAU OF NARCOTICS & DANGEROUS DRUGS / U.S. DEPARTMENT OF JUSTICE / WASHINGTON, D.C. 20537

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March, 1972

Hashish has been found in cans of "Vata" brand vegetables packed in the Middle East. Although marked only for sale in the country of origin, several cans were found in Western Europe. The label of the can was apparently removed, a hole cut in the side of the can, the vegetable (in this case, beans) was removed, the hashish was put in and the label was replaced.

Heroin diluted with baking soda and flour has been reported in Kentucky.

LSD in Protein Capsules has been reported in Virginia. Reportedly, the capsules are separated, a portion of the ingredient is removed and LSD is substituted. The capsule is then put back together.

LSD plastic discs, called "Soapers" are being reported from the Pennsylvania area. Each small disc is said to contain 50-100 micrograms of LSD. If a suspect carrying a disc is approached by a police officer, the disc is dropped, making it difficult to find.

LSD "Matchbook Acid" is reportedly being encountered in Maryland. Two matches are torn from the book, the stems are dipped in LSD solution, then re-inserted in the match cover with the phosphorus head down. Two books sell for \$5.00.

Methadone, proprionic acid and acetic acid, according to a recent report from California, are being combined and heated in a pressure cooker for two hours. The product is then allegedly injected intravenously. The effect is claimed to be equal to or stronger than that obtained from heroin.

LSD, PCP and procaine in combination are being encountered in the Milwaukee, Wisconsin area. Each reddish-purple tablet measures 3/16 inch in diameter, and contains 59 micrograms of LSD and 1.75 milligrams of PCP. (The procaine was not quantitated.)

Analytical methods in **Microgram** do not have official status. Use of funds for printing this publication approved by the Bureau of the Budget, April 8, 1969. **CAUTION:** Use of this publication is re-

Secobarbital sodium in white cylindrical tablets is being encountered in Iowa. The tablets are flat, without bevel, 6.5 millimeters in diameter and 5.3 millimeters thick. They are poorly made, possibly using a triturate board.

Secobarbital sodium in No. 3, standard shape, clear, hard gelatin capsules are being encountered. Seizures by BNDD and U.S. Customs totaled about six million capsules in the past year and a half. All capsules have been red-orange, or similar, in color. Excipients have been either talc and crystalline material, gelatinized starch and talc, cornstarch and talc, talc alone, lactose alone or cornstarch alone.

BNDD needs information on any of these or similar secobarbital capsules that you encounter. We would like the capsule size, shape and color, date and place of collection, and the police department case or file number. We would also appreciate any other information about the capsules that you may have. Information on past occurrences is also desired, if available.

Information can be sent or telephoned to:

W. Wayne Bohrer
Billy F. Hopkins or
Donald W. Johnson
Laboratory Division - SCIL(I)
Bureau of Narcotics & Dangerous Drugs
Washington, D. C. 20537
Telephone: (202) 382-4575

EDUCATION & TRAINING COURSES

Courses for crime laboratory personnel will be offered by Georgetown University in late spring and summer, 1972. The program includes nine courses of one and two weeks duration each for graduate credit in chemistry. These forensic science courses are: Chromatographic Techniques in Analysis, Document Microscopy, Analysis of Writing Inks, Analysis of Ethyl Alcohol, Microscopy of Human and Animal Hairs and Fibers, Microscopic Analysis of Inorganic Ions, Optical Microscopy, and Fluorescence and Phosphorescence in Forensic Analysis.

Also, a course of lecture and laboratory work leading to certification in the field of Document Examination is being offered in three one-year sections.

For details, contact: The Director, Forensic Sciences Center, 9 Reiss Science Building, Georgetown University, Washington, D. C. 20007.

The George Washington University Graduate School offers an M.S. degree in Forensic Science. The program of study consists of 36 semester hours of approved graduate level courses with or without a thesis (equivalent to 6 semester hours.) The courses include: Serology, Microscopy and Mineralogy, Instrumental Methods of Analysis, Criminal Procedures, Criminal Justice and Criminal Evidence.

For information, contact: Professor T. P. Perros, Chairman of the Department of Forensic Science, George Washington University, Washington, D. C. 20006.

Bachelor's and Master of Science in Forensic Science. For details, contact: Director, Forensic Science Program, John Jay College of Criminal Justice, 315 Park Avenue South, New York, New York 10010.

The Chemistry Department of the University of Pittsburgh and the Allegheny County Crime Laboratory combined academic principles and their forensic application in a curriculum leading to a Master's Degree. For information, contact: Chairman, Department of Chemistry, University of Pittsburgh, Pittsburgh, Pennsylvania 15213.

NOTE: Listing of schools and their courses does not constitute an endorsement by the federal government. Listings are for information purposes only. Space permitting, additional courses will be shown when information is received.

MEETINGS

Western Conference on Criminal and Civil Problems, May 25, 26, & 27, 1972, at the Broadview Hotel, Wichita, Kansas. Contact: William G. Eckert, M.D., P.O. Box 8282 (Tele: 316-262-6211, Ext. 131), or Maj. Clyde E. Bevis, Wichita Police Department, P.O. Box 8282, Wichita, Kansas 67208.

Northwest Association of Forensic Scientists, April 6, 7, & 8, 1972 at the Holiday Inn, Spokane, Washington. Contact: John Anderson, Drug Control Lab., Public Safety Bldg., Spokane, Washington. This is the initial meeting of the new group. There are no geographic restrictions on membership. Emphasis is directed at the scientist in the laboratory.

California Association of Criminalists, Semi-annual seminar, May 18-20, 1972, Pierpont Inn, Ventura, California. For further information, contact:

Forrest Letterly
Ventura County Sheriff's Office
501 Poli Street
Ventura, California 93001

Sixth International Meeting of Forensic Sciences, Edinburgh, Scotland--
September 21-26, 1972. For further information, write to:

The Secretariat
Sixth International Meeting of Forensic Sciences
Institute of Pathology
Grosvenor Road
Belfast, BT 12 6BL
Northern Ireland

Southern Association of Forensic Chemists, April 21-22, 1972, Raleigh,
North Carolina. For further information, write to: Ralph Keeton,
State Bureau of Investigation, 421 N. Blount Street, Raleigh, North
Carolina 27601.

BNDD LABORATORY NOTES

DATE February 8, 1972

NO. 31

DRUG TYPE

METHODOLOGY

-28-

COLOR TEST TO DIFFERENTIATE BETWEEN COCAINE AND PROCAINE

Richard Ruybal
Forensic Chemist
Bureau of Narcotics and Dangerous Drugs
Dallas Regional Laboratory

Using the present cobalt thiocyanate reagent, blue colors are obtained with both Cocaine and Procaine as well as with many other drugs. The Sanchez reagent gives a positive reaction with Procaine and other primary amines.

As screening field tests, especially to the agent in the field, the combination of the two reagents affords no real indication that Cocaine is present.

The following reagent is submitted for a color test to differentiate between Cocaine and Procaine in illicit samples. Other drugs were also tested and results are noted.

Stock Solutions

- A. Cobalt Thiocyanate - a 2% solution in H₂O
- B. Phosphoric Acid - Syrupy H₃PO₄
- C. Platinum Chloride - 1 gram H₂PtCl₆·6H₂O in 20 ml H₃PO₄ (1+3)

Reagent

Mix by volume 9 parts of A, 3 parts of B, and 1 part of C for test reagent.

Test

Place small amount of sample on a spot plate, add 3-4 drops of reagent and stir with glass rod.

DRUG

RESULTS

1. Cocaine.....Blue, flaky ppt. remaining undissolved.
2. Procaine.....No ppt. or blue color forms.
3. Benzocaine.....No ppt. or blue color forms.
4. Butacaine.....Green color forms, but fades away.
5. Dibucaine.....Slight green color and ppt. forms, but fades away.
6. Lidocaine.....Blue, flaky ppt. remaining undissolved.
7. Mepivacaine.....Blue ppt. forms, but fades away.
8. Tetracaine.....Blue color forms, but fades away.
9. Quinine.....Green ppt. and color remaining undissolved, but different from Cocaine.
10. Methapyrilene.....Green ppt. and color, but fades away.
11. Heroin.....Blue ppt. and color, but fades away.
12. Methadone.....Blue ppt. and color, but fades away.
13. Demerol.....Blue ppt. and color, but fades away.
14. Phencyclidine HCl (PCP).....Blue-green ppt. remaining undissolved.

The only similarity of any of the above drugs tested to Cocaine was Lidocaine. It was the only other one that formed a blue, flaky ppt. which remained unchanged. All others forming blue ppts. or blue colors lost all blue color within a few minutes leaving either a pink-orange or a yellowish color. Quinine formed a green ppt. and color which is quite easily discernible from Cocaine.

The drugs listed above were also tested with a mixture of Stock Solutions (A) and (B) in a ratio of 9.3. The drugs that gave a blue, flaky ppt. in addition to Cocaine and Lidocaine were Dibucaine, Mepivacaine, Heroin, Methadone, and PCP. Demerol gave a blue color.

Dimethoxy Methyl Nitro Styrene

V.S. Vasan
Chicago Police Crime Lab.

Our laboratory has received samples in the past which sometimes behave somewhat like opium alkaloids in field tests, but on close examination, were found to be methylenedioxy or methoxy substituted phenylethylamines. Some of these exhibits also contained yellow material. In one particular case, we were able to extract and purify this compound. Extensive spectroscopic examination, primarily based upon, IR, NMR and Mass spectral data, has identified this compound to be beta methyl beta nitro dimethoxy nitro styrene.

This compound came to us originally as yellow chips. On recrystallization, using acetone or chloroform, fine yellow needles are obtained. On standing, the top layer quickly turns dark. XRD crystalline data, along with UV, IR and NMR spectra are given in the following pages. The compound is not readily soluble in aqueous hydrochloric or sodium hydroxide solutions. A good IR spectrum, in the form of a KBr pellet, is difficult to obtain.

On reduction, this compound yields a product, whose UV spectrum corresponds to that of 2,5dimethoxy amphetamine. Therefore, the original compound is likely to be 2,5 dimethoxy beta methyl beta nitro styrene.











