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THE COMPOSITION OF
SOME COMMERCIAL INSECTICIDES,
FUNGICIDES, BACTERICIDES, RODENTICIDES
AND WEED KILLERS

A COMPILATION

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A COMPILATION

H. J. FISHER AND E. M. BAILEY

CONNECTICUT AGRICULTURAL EXPERIMENT STATION

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**The Composition of Some Commercial
Insecticides, Fungicides, Bactericides,
Rodenticides and Weed Killers.**

A Compilation.

171098

H. J. FISHER AND E. M. BAILEY.

Frequent requests for information as to the composition of commercial insecticides, fungicides and similar materials suggested the desirability of assembling the data on this subject to be found not only in various bulletins of this station but in those of institutions in other States where similar work is carried on. Designed at first for our own convenience, it was later felt that the information would be useful also to others interested. No pretense is made that the compilation is complete, but it is, at least, fairly comprehensive. For the most part the data were obtained from regular or special bulletins submitted by experiment stations or other state departments in response to our request for information on this subject. If any important sources of information are omitted it is because our requests were not referred to, or did not reach, the proper authorities.

In the case of insecticides which are definite compounds, sold under their own or well recognized names, such as arsenate of lead, Paris green, sulphur, etc., the publication of very old analyses did not seem to be warranted, and only those analyses reported from 1918 to the present are included in this index. In the case of products sold under proprietary names which do not make their composition readily evident, all analyses found are included however long ago they may have been published.

Only one analysis is given for each product except in those cases where different analyses have shown widely different composition. In such cases several analyses are included. An attempt was made to insert the latest analysis found in each case. When the latest publication found containing analyses of a certain insecticide or other product has given several analyses of that product, the figures in the index are usually averages.

It should be noted that the percentages given under "guaranteed" in the index represent maximum amounts in the case of water, inert matter and water-soluble arsenic, while the guaranties for other constituents are usually stated by the manufacturers as "not less than" the amount specified.

The index is arranged in alphabetical order by names of the products. Names beginning with arabic numerals are indexed as they would be if the numeral were spelled, - i.e., "20" is listed under "T". Certain common classes of insecticides are grouped together in tables alphabetically by the names of the manufacturers, but they are also cross-indexed by the names of the brands. An exception to this rule is made in the case of arsenate of calcium, arsenate of lead, Bordeaux mixture, lime-sulphur, London purple, Paris green and sulphur, which will not be found listed separately by the brand names, but only under the tables for these respective classes of insecticides.

Reference is made after each analysis to the source from which it was obtained. Some of the analyses are those made at this Station and not previously published. After such analyses the sample number and "Conn. Agr. Expt. Sta." is given in place of a publication reference.

No responsibility is assumed for the correctness of any analyses other than those made by this Station.

The following publications were abstracted:

California Department of Agriculture, Special Publications 34 (1923); 51 (1925); 58 (1925); 66 (1926); 75 (1927).

Canada Laboratory of the Inland Revenue Department, Bulletins 158 (1908); 205 (1910); 284 (1914); 303 (1915); Department of Agriculture, Division of Chemistry, Report of the Dominion Chemist (1928).

Colorado Sixteenth Annual Report of State Entomologist, Circular 47 (1925).

Connecticut Agricultural Experiment Station, Bulletins 157 (1907); 242 (1922); 258 (1924); 272 (1925).

Maine Agricultural Experiment Station, Bulletin 154 (1908); Official Inspections 110 (1923); 114 (1924); 118 (1925); 122 (1926); 126 (1927).

Michigan Agricultural College Experiment Station, Special Bulletin 74 (1915).

New Jersey Agricultural Experiment Stations, Bulletins 214 (1908); 222 (1909); 262 (1913); 273 (1914); 286 (1915); 301 (1916); 407 (1924); 424 (1925); 441 (1926); 459 (1927).

New York Agricultural Experiment Station, Bulletin 348 (1912); 384 (1914).

North Dakota Office of the State Food Commissioner and Chemist, Bulletin 17 (1927).

Oregon Agricultural College Experiment Station, Circular 64 (1925); 84 (1927)

Pennsylvania Department of Agriculture, Bureau of Chemistry, Bulletins 166 (1910); 192 (1909).

University of California College of Agriculture, Agricultural Experiment Station Bulletin 151 (1903).

U. S. Department of Agriculture, Bureau of Chemistry, Bulletin 68 (1902).

U. S. Department of Agriculture, Department Bulletin 1439 (1926).

U. S. Department of Agriculture Farmers' Bulletin 146 (1902).

A

Ace-Hy.

(GENERAL CHEMICAL CO., NEW YORK, N. Y.)

Guaranteed: Inert matter (water), not more than 40 per cent.

Found: The preparation is an emulsion in which a cyanide, equivalent to 2.29 grams CN per 100 cc was the chief active ingredient detected. The ash, 3.58 per cent, consisted chiefly of iron and copper oxides. Water and volatile matter (at 100° C), made up 77.3 per cent of the material.—*Conn. Agr. Expt. Sta. Bull.* 242, 161 (1922).

Acid Carbohc.

See "Phenol."

Acid Hydrocyanic.

See "Hydrocyanic Acid."

Acme Garden Guard.

(ACME WHITE LEAD & COLOR WORKS, DETROIT, MICH.)

	Guaranteed.	Found.
Copper.....	....	1.77
Total arsenic, metal.....	1.70	1.98
Water-soluble arsenic, metal.....	0.25	0.50
Copper aceto-arsenite.....	4.50	....
"Copper of bordo".....	0.50	....
Sulphur.....	4.00	3.90

Cal. Dept. Agr., Spec. Pub. 75, 44 (1927).

Acme Sheep and Cattle Dip.

See "Phenol-Soap Solutions."

Acme 2-way Spray.

See "Bordeaux Mixture—Lead Arsenate."

Acto.

See "Oils, Mineral."

Adheso Green Label.

(ANSBACHER INSECTICIDE CO., INC., NEW YORK, N. Y.)

	Guaranteed.	Found.
Moisture.....	....	58.39
Total arsenic, metal.....	5.50	5.56
Water-soluble arsenic, metal.....	0.50	0.05
Copper.....	4.00	4.15

N. J. Agr. Expt. Sta., Bull. 459, 10 (1927).

Adheso 7 O-Blue Dust.

(ANSBACHER INSECTICIDE CO., INC., NEW YORK, N. Y.)

	Guaranteed.	Found.
Copper.....	7.00	7.25

N. J. Agr. Expt. Sta., Bull. 459, 10 (1927).

Adheso-Yellow Label.

See "Concentrated Adheso."

A D S Rat and Roach Paste.

See "Phosphorus Preparations."

Aero Brand Hydrocyanic Acid.

See "Hydrocyanic Acid."

Aero Rodent Exterminator.

See "Calcium Cyanide."

Agricultural Sulphur Compound.

(TOYAH VALLEY SULPHUR CO., NEW ORLEANS, LA.)

Found: Sulphur 21.50 per cent.—*N. J. Agr. Expt. Sta., Bull. 441, 7* (1926).**Agri-Pax.**

(PAX MFG. CO., NEW YORK, N. Y.)

Declared: "A contact spray insecticide based on the extract of pyrethrum. Inert material water 77 per cent."

Found: Chloroform extract 20.54 per cent; fatty acids 18.83 per cent; moisture 74.2 per cent. Calculated composition: soap 21.37 per cent; pyrethrum extract 1.71 per cent; moisture 74.2 per cent; undetermined 2.72 per cent.—*Conn. Agr. Expt. Sta., Sample 9305.***Albatross Puritol.**

(GENERAL BASIC PRODUCTS CO.)

	Guaranteed.	Found.
Active Ingredients:	3.00	.....
Oils.....	.....	1.20
Phenols.....	.....	0.40
Inert Ingredients:		
Whiting.....	91.50	90.50
Glue.....	5.00	5.40
Volatile at 100° C.....	0.50	1.50

*Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).***Alcopol Oil.****Aleph Oil**

See "Oils, Mineral."

Alhambra Nico-Soap.

See "Nicotine Soaps."

Alhambra Spray.

See "Oil Emulsions, Mineral."

Allan's Lightning Roach Paste.

See "Phosphorus Preparations."

Allen's Kילו, Paste.

(W. A. ALLEN, PITTSTOWN, N. J.)

	Guaranteed.	Found.
Moisture.....	.....	55.17
Total arsenic, metal.....	6.52	4.73
Water-soluble arsenic, metal.....	0.50	0.08
Copper.....	4.00	5.02

N. J. Agr. Expt. Sta., Bull. 441, 10 (1926).

All in One.

See "Niagara All in One" and "No. 6 All in One Dust."

Altair Oil.

See "Oils, Mineral."

American Jazz Spray.

See "Oil Emulsions, Mineral."

Ammonia Spray.

(BEAR AMMONIA CO., RIVERSIDE, CAL.)

Found: Moisture 18.33 per cent; sodium carbonate 63.50 per cent; sodium chloride 3.20 per cent; soap 12.85 per cent; calcium carbonate 2.09 per cent.—*Cal. Dept. Agr., Spec. Pub. 51, 58 (1925).*

Anchor Brand Hellebore.

See "Hellebore."

An-Fo Disinfectant.

(AN-FO MFG. CO., OAKLAND, CAL.)

See "Phenol-Soap Solutions."

An-Fo Louse Powder.

(ANIMAL FOOD CO., OAKLAND, CAL.)

Not chemically analyzed.—*Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).*

An-Fo Nicotine Spray.

(AN-FO MFG. CO., OAKLAND, CAL.)

See "Nicotine Soaps."

An-Fo Round Worm Capsules.

(AN-FO MFG. CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Nicotine.....	15.00	16.36
<i>Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).</i>		

An-Fo Sheep Dip.

See "Phenol-Soap Solutions."

Ansbor Green.

(ANSBACHER INSECTICIDE CO., INC., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	12.50	16.14
Water-soluble arsenic, metal.....	3.00	0.27
Copper.....	.....	17.62
<i>N. J. Agr. Expt. Sta., Bull. 459, 10 (1927).</i>		

Ant Destroyer.

(PETER HENDERSON, NEW YORK, N. Y.)

Found: Borax 54.12 per cent; cane sugar 44.80 per cent.—*U. S. D. A., Bur. Chem., Bull. 68. 43 (1902).*

Ant Eater.

(AN-FO MFG. CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Total arsenic.....	0.17	0.16
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

Ant Foil Ant Poison.

(AN-FO MFG. CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.16
Arsenic, metal.....	0.10	0.12

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Anthracine Oil Emulsion.

(THE SHERWIN-WILLIAMS CO., CLEVELAND, OHIO.)

Guaranteed: Anthracene oil 75 per cent; fish oil soap 3 per cent; water 22 per cent.

Found: Total oil 72.63 per cent; water 25.08 per cent; soap and undetermined 2.29 per cent.—*Conn. Agr. Expt. Sta., Bull. 272, 148 (1925).*

Anti-Ant Argentine Ant Poison.

(BRUNSWIG DRUG CO., LOS ANGELES, CAL.)

Guaranteed: Arsenic metal 0.20 per cent.

Found: Arsenious oxide 0.76 per cent; arsenic metal 0.057 per cent; dextrose 45.36 per cent; maltose 5.87 per cent; dextrin 0.54 per cent; moisture 46.61 per cent.—*Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).*

Antiseptic Sheep Dip.

See "Phenol Soap Solutions."

Ant Poison.

(ALDERMAN CO., INC., PASADENA, CAL.)

Found: Arsenious oxide 0.19 per cent; arsenic metal 0.14 per cent.—*Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).*

Antrol Argentine Ant Syrup.

(ANTROL LABORATORIES, INC., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Arsenic, metal.....	0.10	0.12

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

Ant Syrup.

(SMALLS SEED CO., RIVERSIDE, CAL.)

	Guaranteed.	Found.
Arsenic, metal.....	0.10	0.17

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

A-1 Dust Mixture.

See "Nicotine Dusts."

Aphid Spray.

(RADIUM SPECIALTIES MFG. CO., SAN FRANCISCO, CAL.)

Found: Light rosin oil 95.4 per cent; water 4.6 per cent.—*Cal. Dept. Agr., Spec. Pub. 34, 58 (1923).*

Aphine.

(APHINE MFG. CO., MADISON, N. J.)

Guaranteed: Nicotine 0.90 per cent.

Found: Nicotine 1.07 per cent. Cedar and pine oils and potassium hydroxide present.—*N. J. Agr. Expt. Sta., Bull. 407, 10 (1924)*—*N. Y. Agr. Expt. Sta., Bull. 384, 301 (1914).*

Aphis Getter.

(WALNUT CREEK SPRAY CO., WALNUT CREEK, CAL.)

	Guaranteed.	Found.
Water.. .. .	92.00	69.20

Cal. Dept. Agr., Spec. Pub. 66, 36 (1926).

Aphistrogen.

(CHEMICAL PRODUCTS DIVISION, ROSE MFG. CO., PHILADELPHIA, PA.)

Guaranteed: $C_{25}H_{46}O_{10}$ about $\frac{3}{4}$ -1 per cent; "trioxymethaline" about $\frac{3}{4}$ -1 per cent; available nitrogen about 0.4 per cent; "inert remedial substances" about 94 per cent. "Aphistrogen is the active glucoside content of a vegetable substance. Aphistrogen being highly concentrated goes 60 times farther than the amount you pay for. Aphistrogen is prepared after the famous Rosenbluth formula, combined with a fertilizer as used with unprecedented success at the nationally known Rose Gardens at Wallingford, Pa."

Found: The preparation is a soap emulsion. Total nitrogen 0.14 per cent; water 80.9 per cent; formaldehyde recovered by steam distillation 0.05 per cent.—*Conn. Agr. Expt. Sta., Sample 9306.*

Apricot Oil.

See "Oil Emulsions, Mineral."

Arcol.

See "Phenol Soap Solutions."

Arctic Whale Oil Soap.

See "Soaps."

Argentine Ant Poison.

(COFFIN-REDINGTON CO., SAN FRANCISCO, CAL.)

Guaranteed: Arsenious oxide 0.20 per cent; arsenic metal 0.15 per cent. Found: Arsenious oxide 0.26 per cent; arsenic metal 0.20 per cent; invert sugar 10.79 per cent; cane sugar 17.47 per cent; dextrin, etc., 11.53 per cent. water 59.94 per cent.—*Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).*

Argentine Ant Poison

(FEDERAL DRUG CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.11
Arsenic, metal.....	0.25	0.08

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Argentine Ant Poison.

(C. W. HILL CHEMICAL CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Total arsenic, metal.....	0.10	0.097
Water-soluble arsenic, metal.....	0.10	0.097

Cal. Dept. Agr., Spec. Pub. 34, 18 (1923).

Argentine Ant Poison.

(LOS ANGELES CHEMICAL CO., LOS ANGELES, CAL.)

Guaranteed: Arsenic metal 0.10 per cent. Found: Arsenious oxide 0.13 per cent; arsenic metal 0.099 per cent; invert sugar 8.64 per cent; cane sugar 39.66 per cent; dextrin, etc. 0.21 per cent; water 51.64 per cent.—*Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).*

Argentine Ant Poison.

(PHILIP & PHILIP, OAKLAND, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.16
Arsenic, metal.....	0.11	0.12

Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).

Argentine Ant Poison.

(ROSE WATERMAN DRUG CO.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.20
Arsenic, metal.....	0.20	0.15

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Argentine Ant Poison.

(TOWNE ALLISON DRUG CO., SAN BERNARDINO, CAL.)

Found: Total arsenious oxide 0.60 per cent; water-soluble arsenious oxide 0.60 per cent.—*Cal. Dept. Agr., Spec. Pub. 34, 18 (1923).*

Argentine Ant Poison.

(WEBB & SEWARD, PASADENA, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.09
Arsenic, metal.....	0.20	0.07

Cal. Dept. Agr., Spec. Pub. 58, 17 (1925)

Argo Ant Poison.

(BOWMAN DRUG CO.)

	Guaranteed.	Found.
Arsenic, metal.....	0.11	0.15

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

A. R. M. Liquid Lice Killer.

(ARTHUR R. MAAS CHEMICAL CO.)

Guaranteed: Water 5.00 per cent.

Found: Phenols 14.50 per cent; coal-tar oils 84.80 per cent; water 0.40 per cent.—*Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).*

Arsenate of Calcium. Arsenate of Lead.

See Tables I and II.

Arsenate of Barium.

See "White Arsenoid."

Arsenite of Lead.

See "Pink Arsenoid."

Arsenite of Zinc.

See Table III.

Arsenoid, Pink.

See "Pink Arsenoid."

Arsenoid, Soluble.

See "Watson."

Arsenoid White.

See "White Arsenoid."

Arsite.

(MORRIS HERRMANN & CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	28.8	31.05
Water-soluble arsenic, metal.....	28.8	31.05

Mich. Agr. College, Expt. Sta., Spec., Bull. 74, 10 (1915).

At-Ko Brand Sheep Dip.

See "Phenol Soap Solutions."

Atlas "A" Weed Killer.

(CHIPMAN CHEMICAL CO., NEW YORK, N. Y.)

Guaranteed: Sodium arsenite 45 per cent.
 Found: Total arsenic metal 23.67 per cent; sodium arsenite (Na_2HAsO_3) 53.64 per cent.—*Conn. Agr. Expt. Sta., Bull. 272, 149 (1925).*

Atlas Weed Killer.

(CHIPMAN CHEMICAL ENGINEERING CO., INC. NEW YORK, N. Y.)

Found: Sodium chlorate 19.22 per cent; sodium chloride 18.73 per cent; water 57.59 per cent.—*Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).*

Avenarius Carbolineum.

(CARBOLINEUM WOOD PRESERVING CO.)

	Guaranteed.	Found.
Water.....	1.50	1.43
Carbon.....	0.50	0.97

Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).

Avon Brown Neutral.

See "Oils, Mineral."

Axfixo.

See "Nicotine Dusts."

B.

B. A. Cartridges.

See "Key Brand B. A. Cartridges."

Bacili-Kil.

See "B-K Bacili-Kil."

Barium Arsenite.

See "White Arsenoid."

Lucas-Kil-Tone Co., Vineland, N. J., Green Cross.....	39.87 20.14	40.61	0.77	0.21 0.82	70.32	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927). Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).
Manufacturer unknown.....						
Mechling Bros. Chemical Co., Camden, N. J.....	39.87	39.10	1.00	0.12	67.72	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).
Michel & Pelton Co., San Francisco, Cal.	40.00	43.47	1.15	0.69	75.20	Cal. Dept. Agr., Spec. Pub. 75, 21 (1927).
National Chemical Co. of California, El Centro, Cal. Flag.....	40.00	41.53	0.77	0.43	71.85	Cal. Dept. Agr., Spec. Pub. 75, 21 (1927).
Niagara Sprayer Co., Middleport, N. Y.	40.00	41.04	0.77	0.49	70.99	Cal. Dept. Agr., Spec. Pub. 75, 21 (1927).
Niagara.....						
Nitrate Agencies Co., New York, N. Y.	40.02	42.76	0.75	0.74	74.05	N. J. Agr. Expt. Sta., Bull. 424, 9 (1925).
Naco.....						
Pittsburgh Plate Glass Co., Newark, N. J.	40.00	40.71	1.15	0.46	70.42	Cal. Dept. Agr., Spec. Pub. 75, 21 (1927).
Corona Calsenate.....						
Riches, Piver & Co., New York, N. Y.	39.87	44.70	1.15	0.72	77.42	N. J. Agr. Expt. Sta., Bull. 424, 9 (1925).
Ceres.....	40.00	41.49	0.77	0.44	71.78	Cal. Dept. Agr., Spec. Pub. 75, 22 (1927).
Sherwin-Williams Co., Cleveland, Ohio...						
Vreeland Chemical Mfg. Co., Little Falls, N. J. Electro.....	39.87	42.33	1.15	0.06	73.30	N. J. Agr. Expt. Sta., Bull. 441, 6 (1926).
Western Wholesale Drug Co., Los Angeles, Cal. Devoc.....	40.00	41.01	0.77	1.66	70.95	Cal. Dept. Agr., Spec. Pub. 75, 22 (1927).

TABLE II. ARSENATE OF LEAD

Manufacturer or Distributor and Brand	Water		Arsenic Oxide, As ₂ O ₅				Lead Oxide, PbO		Publication
	Guaranteed	Found	Total		Water-Soluble		Guaranteed	Found	
			Guaranteed	Found	Guaranteed	Found			
Acme White Lead & Color Works, Detroit, Mich. Acme	30.00	33.12	1.00	0.14	.....	63.65	Conn. Agr. Expt. Sta., Bull. 242, 151 (1922).
Ansbacher Insecticide Co., New York, N. Y.	30.00	32.22	1.00	0.59	.....	65.16	N. J. Agr. Expt. Sta., Bull. 459, 5 (1927).
The James Blanchard Co., New York, N. Y.	30.80	.....	0.23	.....	66.90	Ore. Agr. Expt. Sta., Cir. 64, 8 (1925).
Bowker Insecticide Co., Boston, Mass.	50.00	49.45	15.00	15.60	0.60	0.09	.....	32.37	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
Bowker's	30.00	30.59	0.77	0.38	.....	66.31	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
Bowker Insecticide Co., Boston, Mass.	30.00	31.51	0.77	0.45	.....	64.50	Cal. Dept. Agr., Spec. Pub. 75, 14 (1927).
California Rex Spray Co., Benicia, Cal. NuRexform	30.00	31.51	0.77	0.45	.....	64.50	Cal. Dept. Agr., Spec. Pub. 75, 14 (1927).
California Rex Spray Co., Benicia, Cal. Rex Basic	22.00	22.23	0.77	0.21	.....	74.93	Cal. Dept. Agr., Spec. Pub. 75, 17 (1927).
California Rex Spray Co., Benicia, Cal. Rex Neutral Dry	24.00	32.77	0.77	0.46	.....	64.70	Cal. Dept. Agr., Spec. Pub. 66, 16 (1926).
California Rex Spray Chemical Co., Wat- sonville, Cal. Ortho Spray Basic	22.00	22.62	.....	0.12	.....	75.19	Cal. Dept. Agr., Spec. Pub. 75, 17 (1927).
California Spray Chemical Co. Wat- sonville, Cal. Ortho Spray Standard	30.00	31.97	.....	0.23	.....	65.25	Cal. Dept. Agr., Spec. Pub. 75, 14 (1927).
Chipman Chemical Engineering Co., New York, N. Y. Chipman	30.00	31.00	1.07	0.21	.....	63.95	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
Corona Chemical Co., Milwaukee, Wis. Corona Dry	30.00	32.20	0.77	0.18	.....	64.25	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).

Deloro Chemical Co., Deloro, Ont., Canada	0.28	31.71	0.08	64.80	Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).
Detroit White Lead Works, Detroit, Mich. Rogers	30.00	31.51	1.00	63.23	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922).
Devoc & Reynolds Co., Inc., New York, N. Y. Devoc Standard	31.00	32.66	1.00	63.65	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922).
John Dorland, Cobalt, Ont., Canada ¹	30.00	31.59	0.99	64.03	Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).
The Dow Chemical Co., Midland, Mich. Dow	30.00	31.74	1.50	65.07	Cal. Dept. Agr., Spec. Pub. 75, 14 (1927).
General Chemical Co., New York, N. Y. Orchard	22.00	22.35	0.38	72.73	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922).
General Chemical Co., New York, N. Y. Orchard Basic	15.00	15.48	0.38	31.16	Cal. Dept. Agr., Spec. Pub. 75, 17 (1927).
General Chemical Co., New York, N. Y. Orchard Paste	25.00	26.80	0.38	69.90	Cal. Dept. Agr., Spec. Pub. 75, 20 (1927).
General Chemical Co., New York, N. Y. Orchard Tri Plumbic	12.50	12.99	0.38	33.51	Cal. Dept. Agr., Spec. Pub. 66, 16 (1926).
General Chemical Co., New York, N. Y. Orchard Tri Plumbic, Paste	52.00	52.93	0.77	63.46	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922).
The Glidden Co., Cleveland, Ohio. Glidden	31.00	31.97	0.44	62.65	Conn. Agr. Expt. Sta., Bul. 272, 145 (1925).
The Grasselli Chemical Co., New York, N. Y. Grasselli	31.00	31.00	1.15	74.10	Cal. Dept. Agr., Spec. Pub. 66, 16 (1926).
The Grasselli Chemical Co., New York, N. Y. Basic Powder	23.00	23.57	0.75	36.47	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922).
The Grasselli Chemical Co., Cleveland, Ohio. Grasselli Paste	15.00	17.80	0.50	64.84	Cal. Dept. Agr., Spec. Pub. 34, 15 (1922).
C. W. Hill Chemical Co., Los Angeles, Cal. Misston	0.18	31.28	0.33	63.18	Conn. Agr. Expt. Sta., Bul. 242, 150 (1922) and Bul. 272, 145 (1925).
Interstate Chemical Co., Jersey City, N. J. Key-Dry	30.00	30.88	0.75	35.16	N. J. Agr. Expt. Sta., Bul. 424, 8 (1925).
Interstate Chemical Co., Jersey City, N. J. Key Brand Paste	15.50	17.04	0.60	63.55	Conn. Agr. Expt. Sta., Bul. 272, 145 (1925).
The Kil-Tone Co., Vineland, N. J.	30.00	30.24	1.15		

¹Found to be ground gypsum.

TABLE II. ARSENATE OF LEAD—Concluded.

Manufacturer or Distributor and Brand	Water		Arsenic Oxide, As ₂ O ₅				Lead Oxide, PbO		Publication
	Guaranteed	Found	Total		Water-Soluble		Guaranteed	Found	
			Guaranteed	Found	Guaranteed	Found			
	%	%	%	%	%	%	%	%	
Latimer-Goodwin Chemical Co., Latimer	50.00	44.23	28.38	30.94	0.77	0.32	64.07	64.07	Cal. Dept. Agr., Spec. Pub. 75, 15 (1927).
Leggett & Bro., New York, N. Y.	50.00	44.23	14.00	18.03	0.75	0.11	30.00	36.43	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
Leggett & Bro., New York, N. Y.	50.00	44.23	30.00	32.66	1.00	0.28	61.00	64.50	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
John Lucas & Co., Inc., Philadelphia, Pa.	50.00	44.23	30.00	32.31	1.15	0.40	61.00	64.40	Cal. Dept. Agr., Spec. Pub. 75, 15 (1927).
Lucas Kil-Tone Co., Vineland, N. J.	50.00	44.23	30.00	30.30	1.01	0.58	61.00	66.25	Cal. Dept. Agr., Spec. Pub. 75, 20 (1927).
Green Cross, Berkeley, Cal.	50.00	44.23	30.00	30.38	1.01	0.38	61.00	63.50	Cal. Dept. Agr., Spec. Pub. 34, 15 (1922).
Mechling Bros. Chemical Co., Camden, N. J.	50.00	44.23	10.00	9.89	0.75	0.07	61.00	20.94	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).
Mechling Bros. Chemical Co., Camden, N. J.	50.00	44.23	31.00	31.80	0.75	0.21	61.00	65.20	N. J. Agr. Expt. Sta., Bull. 459, 5 (1927).
Merrimac Chemical Co., Boston, Mass.	50.00	44.23	12.50	14.61	0.75	0.26	61.00	33.48	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
Montgomery Ward & Co., Portland, Ore.	50.00	44.23	30.00	31.50	1.00	0.20	61.00	65.10	Ore. Agr. Expt. Sta., Cir. 84, 8 (1927).
National Chemical Co., Pittsburg, Pa.	50.00	44.23	30.00	31.39	0.77	0.27	61.00	64.26	Cal. Dept. Agr., Spec. Pub. 75, 15 (1927).
National Chemical Co., Pittsburg, Pa.	50.00	44.23	22.00	22.16	0.77	0.11	61.00	74.36	Cal. Dept. Agr., Spec. Pub. 75, 18 (1927).

Niagara Sprayer Co., Middleport, N. Y.	30.00	31.54	1.15	0.18	.....	64.35	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
Niagara Sprayer Co., Middleport, N. Y.	22.00	22.52	0.77	0.11	.....	75.28	Cal. Dept. Agr., Spec. Pub. 75, 18 (1927).
Niagara Sprayer Co., Middleport, N. Y.	30.00	31.17	0.77	0.29	.....	66.20	Cal. Dept. Agr., Spec. Pub. 75, 15 (1927).
Nitrate Agencies Co., New York, N. Y.	30.00	30.59	1.53	1.10	62.00	65.50	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
The Oderberg Chemical Works, Ltd., Oderberg, Czechoslovakia.	.....	27.06	.....	2.16	.....	59.96	Conn. Agr. Expt. Sta., Sample 420.
Pittsburgh Plate Glass Co., Newark N. J.	.....	31.86	.....	0.14	.....	65.65	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
Powers-Weightman-Rosengarten Co., Philadelphia, Pa.	30.00	32.78	2.30	0.77	.....	64.59	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922).
Riches, Piver & Co., New York, N. Y.	50.00	20.02	0.50	0.18	31.00	41.80	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
Riches, Piver & Co., New York, N. Y.	.....	30.80	1.53	1.20	62.00	64.61	Cal. Dept. Agr., Spec. Pub. 51, 15 (1925).
R. P. & Co., New York, N. Y.	0.12	30.00	.....	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 441, 6 (1926).
Schiefelin & Co., New York, N. Y.	.....	31.93	1.00	0.20	.....	63.50	Cal. Dept. Agr., Spec. Pub. 34, 15 (1922).
Powder	0.21	30.00	1.00	0.29	.....	63.50	Conn. Agr. Expt. Sta., Bull. 242, 150 (1922) and Bull. 272, 145 (1925).
W. M. Sheldon, Vacaville, Cal.	.....	30.00	1.00	0.23	.....	64.48	Cal. Dept. Agr., Spec. Pub. 75, 19 (1927).
The Sherwin-Williams Co., Cleveland, Ohio.	.....	31.46	1.00	0.23	.....	73.38	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
The Sherwin-Williams Co., Cleveland, Ohio.	.....	21.95	0.77	0.13	.....	63.30	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).
D. B. Smith & Co., Utica, N. Y.	.....	31.05	0.77	0.18	.....	64.47	N. J. Agr. Expt. Sta., Bull. 424, 8 (1925).
Lightening Standard Chemical Works, Reading, Pa.	.....	32.86	0.46	0.22	.....	34.20	Cal. Dept. Agr., Spec. Pub. 34, 15 (1922).
Toledo Rex Spray Co., Toledo, Ohio.	.....	17.45	1.15	0.73	.....	63.45	Conn. Agr. Expt. Sta., Bull. 272, 145 (1925).
U. S. Smelting, Refining & Mining Co., Redding, Cal.	.....	32.95	0.75	0.36	63.00	64.40	.....
Vreeland Chemical Mfg. Co., Little Falls, N. Y.	0.20	30.00	0.77	0.18	.....	.....	.....
.....	.....	30.24	.....	.....	.....	.....	.....

TABLE III. ARSENITE OF ZINC

Manufacturer or Distributor and Brand	Arsenic, Metal				Publication
	Total		Water-Soluble		
	Guaranteed	Found	Guaranteed	Found	
	%	%	%	%	
California Spray Chemical Co., Watsonville, Cal. Ortho.....	30.31	30.75	0.38	0.07	Cal. Dept. Agr., Spec. Pub. 34, 16 (1923).
General Chemical Co., New York, N. Y. Orchard.....	30.50	32.03	1.00	0.24	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).
Interstate Chemical Co., Jersey City, N. J. Key	30.00	31.44	1.00	0.20	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).
The Kil-Tone Co., Vineland, N. J. Dry Powdered	29.00	30.80	0.75	0.20	N. J. Agr. Expt. Sta., Bull. 407, 13 (1924).
Lucas Kil-Tone Co., Vineland, N. J. Green Cross	28.40	29.98	0.75	0.16	N. J. Agr. Expt. Sta., Bull. 459, 6 (1927).

Barium Tetrasulphide.

B. T. S. Manufacturer not stated. *Cal. Dept. Agr., Spec. Pub. 34,34* (1923).

Orchard Brand B. T. S. General Chemical Co., San Francisco, Cal. *Cal. Dept. Agr., Spec. Pub. 34, 34* (1923).

Solbar. The Bayer Co., New York, N. Y. *Conn. Agr. Expt. Sta., Bull. 258, 371* (1924).

Analyses:	Orchard Brand		Solbar.
	B.T.S.	B.T.S.	
	Found.	Guaranteed.	Found.
WATER-SOLUBLE.			
Total.....	96.10	.....	58.95
Sulphide sulphur.....	40.05	.....	29.10
Thiosulphate.....	3.50	.....	1.42
Total sulphur.....	43.80	.....	30.52
Barium.....	.....	.....	.....
Barium sulphide.....	.....	38-44	57.38
Barium thiosulphate.....	.....	1-4	5.54
WATER-INSOLUBLE.			
Total.....	.....	.....	40.51
Silica (SiO ₂).....	.....	.....	9.77
Iron and Aluminum Oxide (Fe ₂ O ₃ +Al ₂ O ₃).....	.....	.....	1.98
Ferrous sulphide (FeS).....	.....	.....	0.15
Barium sulphite (BaSO ₃).....	.....	.....	1.01
Barium sulphate (BaSO ₄).....	.....	.....	7.60
Free sulphur (S).....	.....	.....	13.61
Barium oxide (BaO).....	.....	.....	6.39
Carbon dioxide, carbon, etc.....	.....	.....	traces
Total sulphur.....	.....	.....	6.13
Total barium.....	.....	.....	9.35

Barnes Worm Emulsion.¹

(S. O. BARNES & SON).

	Guaranteed.	Found.	Guaranteed.	Found.
Water.....	50.00	94.00	94.00	93.60

Cal. Dept. Agr., Spec. Pub. 75, 64 (1927).

Bayer Dipdust.

Guaranteed: Hydroxymercurichlorphenol sulphate 6.00 per cent;
hydroxymercurinitrophenol sulphate 2.00 per cent.

Found: Mercury 5.17 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).

Bean's Bug-Go; Crude.

See "Oil Emulsions, Mineral."

Beck's Flea Powder.

(CHAS. H. BECK MFG. CO., LOS ANGELES, CAL.)

Guaranteed: Talc. 17.50 per cent.

Found: Ash 10.43 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

Beetle Mort.

See "Green Cross".

¹ Two grades.

Be-Health.

(GENERAL LABORATORIES, MADISON, WIS.)

Guaranteed: Active ingredients 8.50 per cent; inert matter 91.50 per cent.

Found: (grams per 100 cc.) Available chlorine 3.77; total chlorine 3.81; sodium hypochlorite 3.96. Trace of sulphate, no calcium.—*Conn. Agr. Expt. Sta., Bull.* 258, 376 (1924).**Bejo Orchard Spray.**

See "Oil Emulsions, Mineral."

B-K Bacili-Kil.

(GENERAL LABORATORIES, MADISON, WIS.)

Guaranteed: Inert matter; calcium chloride 1.71 per cent; water 89.64 per cent.

Found: Available chlorine 3.20 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).**Black Death.**

(BLACK DEATH CO., BINGHAMTON, N. Y.)

Found: Carbon 17.11 per cent; sand 5.86 per cent; moisture 10.18 per cent; carbon dioxide 12.39 per cent; sulphur trioxide 23.15 per cent; arsenic trioxide 0.97 per cent; cupric oxide 0.59 per cent; ferric oxide 0.46 per cent; calcium oxide 24.97 per cent; magnesium oxide 5.03 per cent.—*U. S. D. A., Bur. Chem., Bull.* 68, 28 (1902).**Black Leaf 40.**

See "Nicotine Sulphate Solutions."

Black Leaf F-2 Nicotine Dust.

See "Nicotine Dusts."

Bleaching Water.

See "Wescoco."

Bleach-It.

(GILT EDGE PACKING CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Available chlorine.....	4.00	4.99

Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).

Bliss's Bedbug Exterminator.

(FRANK BLISS, ST. LOUIS, MO.)

Found: Borax 20.00 per cent; ether extract 6.79 per cent. A mixture of borax and pyrethrum.—*U. S. D. A., Bur. Chem., Bull.* 68, 43 (1902).**Bliss's Cockroach Exterminator.**

(FRANK BLISS, ST. LOUIS, CHICAGO AND CINCINNATI.)

Found: Borax 81.89 per cent. The balance is pyrethrum and pink coloring matter.—*U. S. D. A., Bur. Chem., Bull.* 68, 43 (1902).**Blue Dust.**

See "Adheso" and "Sanders."

Blue Label Tonicide.

(MORRIS HERRMANN & CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Water.....	.....	57.25
Total arsenic, metal.....	3.70	5.48
Water-soluble arsenic, metal.....	0.25	0.15
Lead oxide.....	.....	13.51
Copper oxide.....	.....	5.65

N. J. Agr. Expt. Sta., Bull. 301, 13 (1916).

Blue Ribbon Orchard Spray.

See "Oil Emulsions, Mineral."

Borco.

See "Bordeaux Mixture."

Bordeaux Cal-Arsenate, Powdered.

(RICHES, PIVER & CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	15.00	16.07
Water-soluble arsenic, metal.....	0.50	0.18
Copper.....	5.00	4.99

N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).

Bordeaux Dust with Poison.

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	6.00	7.46
Water-soluble arsenic, metal.....	1.00	0.20
Copper.....	6.00	7.50

N. J. Agr. Expt. Sta., Bull. 459, 12 (1927).

Bordeaux-Green Powder.

(ANSBACHER INSECTICIDE CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	11.00	13.82
Water-soluble arsenic, metal.....	2.25	2.06
Copper.....	16.00	19.44

N. J. Agr. Expt. Sta., Bull. 286, 11 (1915).

Bordeaux Mixture.

See Table IV.

Bordeaux Mixture—Lead Arsenate.

See Table V.

Bordeaux-Paris Green.

(LIGGETT & BRO., NEW YORK, N. Y.)

(See also "Naco-Bordeaux-Paris Green.")

	Guaranteed	Found.
Copper oxide, CuO.....	17.50	17.37
Total arsenious oxide, As ₂ O ₃	16.50	17.69
Water-soluble arsenious oxide, As ₂ O ₃	2.64	2.72

Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).

TABLE IV. BORDEAUX MIXTURE

Manufacturer or Distributor and Brand	Copper		Calcium Hydroxide— Pound	Calcium Carbonate— Pound	Inert Calcium Compounds— Pound	Publication
	Guaranteed	Found				
	%	%				
Acme White Lead & Color Works, Detroit, Mich.						
Acme	12.75	12.72	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Ansbacher Insecticide Co., Inc., New York, N. Y.	16.00	16.27	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
James A. Blanchard Co., New York, N. Y.	11.00	14.43	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).
Bowker Chemical Co., New York, N. Y.	13.00	12.73	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 441, 7 (1927).
California Rex Spray Co., Benicia, Cal.	17.00	19.63	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
California Rex Spray Co., Benicia, Cal.	25.00	26.06	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
California Rex Spray Co., Benicia, Cal.	.....	.....	91.91	4.30	.....	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
California Rex Spray Co., Benicia, Cal.	12.75	13.08	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
California Rex Spray Co., Benicia, Cal.	12.75	13.58	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
California Spray Chemical Co., Watsonville, Cal.	12.50	12.50	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Chipman Chemical Engineering Co., Bound Brook, N. J.	18.00	11.15	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Devoe & Raynolds, New York, N. Y.	25.00	24.99	.....	.....	75.00	Cal. Dept. Agr., Spec. Pub. 34, 22 (1922).
Dow Chemical Co., Midland, Mich.	15.30	11.86	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).
Dow Powdered Magnesium Bordo.	3.50	4.48	.....	.....	90.00	Cal. Dept. Agr., Spec. Pub. 34, 23 (1922).
E-Z Way Co., Oakland, Cal.	2.54	2.84	.....	.....	90.00	Cal. Dept. Agr., Spec. Pub. 34, 23 (1922).
F. A. Frazier Co., Pt. Richmond, Cal.	24.00	24.49	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).
F. A. Frazier Co., Pt. Richmond, Cal.	24.50	24.64	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).

F. A. Frazier Co., Pt. Richmond, Cal.	12.50	93.96	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).
Bordo "B"	12.31	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
General Chemical Co., New York, N. Y. Orchard	16.00	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
The Glidden Co., Cleveland, Ohio. Glidden	22.00	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
The Glidden Co., Cleveland, Ohio. Glidden Dry Powdered.	13.00	.....	Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).
The Grasselli Chemical Co., Cleveland, Ohio.	5.50	.....	N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).
Hammond's Paint & Slug Shot Works, Beacon, N. Y. Pulp ¹	24.00	.....	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Hood River Spray Co., Hood River, Ore. ²	19.80	.....	Cal. Dept. Agr., Spec. Pub. 34, 23 (1922).
J. H. Howell, Planada, Cal. Dried Bordeaux Paste	12.50	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
Interstate Chemical Co., Jersey City, N. J. Key	8.00	.....	N. J. Agr. Expt. Sta., Bull. 407, 9 (1924).
The Kil-Tone Co., Vineland, N. J. Modified Kil-Tone ³	22.50	.....	N. J. Agr. Expt. Sta., Bull. 407, 9 (1924).
The Kil-Tone Co., Vineland, N. J. Modified Kil-Tone, Dry Form.	4.50	.....	Cal. Dept. Agr., Spec. Pub. 51, 19 (1925).
Kirk, Geary & Co., Sacramento, Cal. Paste ⁴	25.00	.....	Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).
Leggett & Bro., New York, N. Y. Anchor ⁵	16.00	.....	N. J. Agr. Expt. Sta., Bull. 407, 9 (1924).
John Lucas & Co., Inc., Philadelphia, Pa. Bordo Mixture Dry Powder 25%	21.50	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
John Lucas & Co., Inc., Philadelphia, Pa. Lucas Dry Powdered ⁴	22.00	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
Lucas-Kil-Tone Co., Vineland, N. J. Green Cross	12.50	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
Lucas-Kil-Tone Co., Vineland, N. J. Green Cross Dry Bordo.	16.00	.....	N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).
Mechling Bros. Chemical Co., Camden, N. J.	24.00	.....	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Mechling Bros. Chemical Co., Camden, N. J. Powder	14.00	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Miller Products Co., Portland, Ore. ²	24.00	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
Montgomery, Ward & Co., Portland, Ore.	24.00	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
National Chemical Co., Pittsburg, Pa. National Bordo "A"	24.00	.....	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).

¹ 68.64% water.

² A two powder preparation. One package contains partially dehydrated copper sulphate, the other hydrated lime. Copper is reported as found in the copper sulphate package.

³ 50.71% water.

⁴ Decomposed.

⁵ 58.03% water.

TABLE IV. BORDEAUX MIXTURE—Concluded.

Manufacturer or Distributor and Brand	Copper		Calcium Hydroxide Found	Calcium Carbonate Found	Inert Calcium Compounds— Guaranteed	Publication
	Guaranteed	Found				
	%	%				
National Chemical Co., Pittsburg, Pa.						
Bordo "B".....			93.70 ⁶	%	%	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Chas. C. Navlet Co., Inc., San Jose, Cal.	12.75	10.79	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
Chas. C. Navlet Co., Inc., San Jose, Cal.	24.00	24.35	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
Home-made Bordeaux.....	24.00	24.26	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
Chas. C. Navlet Co., Inc., San Jose, Cal.	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
Home-mixed Bordeaux Package No. 1.....	13.00	14.14	93.91	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
Home-mixed Bordeaux Package No. 2.....	.....	.....	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
Nitrate Agencies Co., Bayonne, N. J.	.....	.....	.....	.....	.....	.....
Pittsburgh Plate Glass Co., Newark, N. J.	.....	.....	.....	.....	.....	.....
Corona Dry.....	18.00	20.34	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Riches, Piver & Co., New York, N. Y.	15.00	17.50	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 407, 9 (1924).
San Jose Spray Mfg. Co., San Jose, Cal.	12.75	11.51	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).
San Jose Spray Mfg. Co., San Jose, Cal.	.....	.....	.....	.....	.....	.....
Twin Bordeaux, Package 1.....	24.00	25.09	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
San Jose Spray Mfg. Co., San Jose, Cal.	.....	.....	.....	.....	.....	.....
Twin Bordeaux, Package 2.....	.....	.....	.....	83.32	12.70	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
Sherwin-Williams Co., Cleveland, Ohio.	.....	.....	.....	.....	.....	.....
Fungi- Bordo.....	12.75	12.90	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Sherwin-Williams Co., Cleveland, Ohio.	.....	.....	.....	.....	.....	.....
Hemming- way Dry.....	12.75	13.13	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
Sterling Chemical Co., Cambridge, Mass.	.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).
Sterling- worth.....	10.00	11.96	.....	.....	.....	.....
Vreeland Chemical Mfg. Co., Little Falls, N. J.	.....	.....	.....	.....	.....	.....
Electro.....	18.00	19.78	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 424, 9 (1925).

⁶ Includes casein spreader. Guaranteed hydrated lime with casein spreader, 100 per cent.

Bordeaux Zinc.

(THOMSEN CHEMICAL CO., BALTIMORE, MD.)

	Guaranteed.	Found.
Water.....	.....	53.02
Total arsenic, metal.....	7.63	7.53
Water-soluble arsenic, metal.....	0.57	0.08
Copper.....	4.50	4.57

*N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).***Bordeth.**

(KILTONE CO., NEWARK, N. J.)

	Guaranteed.	Found.
Total arsenic oxide.....	20.00	18.01
Water-soluble arsenic oxide.....	1.00	0.28
Copper hydroxide.....	15.00	15.44

*N. J. Agr. Expt. Sta., Bull. 273, 12 (1914).***Borecide.**

(MASON DRUG & CHEMICAL CO., HANCOCK, MD.)

Found: Ash 58.14 per cent; loss on ignition 41.86 per cent; insoluble in boiling water 65.35 per cent; melting-point of sublimate, 31.0° C. The substance had the odor of naphthalene, and the sublimate combined with picric acid, but the melting-point was nearer that of methyl naphthalene.—*Conn. Agr. Expt. Sta., Bull. 242, 160 (1924).*

Boxal.

(BOWKER INSECTICIDE CO., BOSTON, MASS.)

Found: Copper 12.08 per cent; arsenious oxide 13.52 per cent.—*N. Y. Agr. Expt. Sta., Bull. 384, 289 (1914).*

Brazilian Insecticide Powder.

(I. MAJORA CO. ALA MARA, BRAZIL.)

Found: Borax 8.84 per cent; sodium carbonate 37.52 per cent; sulphur 13.57 per cent. Balance pyrethrum and ultramarine.—*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).*

Brininstool's Coal Tar Creosote.

(THE BRININSTOOL CO.)

Found: Oils 94.80 per cent, phenols 3.90 per cent, trace of water and ash, no rosin. Baumé gravity of separated oil, 17.3; per cent unsulphonated oil, 24.60—*Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).*

Brown's Pink Powder Insecticide.

(BROWN'S INSECTICIDE CO., SYRACUSE, N. Y.)

Found: Borax 88.55 per cent. Balance cloves and pink coloring matter.—*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).*

Brunswig Squirrel Annihilator.

See "Strychnine Preparations".

Bug and Blight Dust.

(LEGGETT & BRO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	16.00	16.21
Water-soluble arsenic, metal.....	3.00	2.25
Copper.....	6.00	6.44

N. J. Agr. Expt. Sta., Bull. 273, 12 (1914).

TABLE V. BORDEAUX MIXTURE—LEAD ARSENATE

Manufacturer or Distributor and Brand	Arsenic Oxide, As ₂ O ₃				Copper, (Cu)		Lead Oxide, (PbO)		Water		Publication		
	Total		Water-Soluble		Guaranteed		Found		Guaranteed			Found	
	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found		Guaranteed	Found
	%	%	%	%	%	%	%	%	%	%		%	%
Acme White Lead & Color Works, Detroit, Mich. Acme 2-way Spray	4.29	5.11	0.46	0.31	11.00	11.25	....	9.28	....	....	....	Cal. Dept. Agr., Spec. Pub. 75, 44 (1927).
Bowker Chemical Co., New York, N. Y. Bowker's Dry Powdered Bordeaux Arsenate	7.96	8.11	0.77	0.41	15.00	14.62	....	....	....	....	....	N. J. Agr. Expt. Sta., Bull. 407, 12 (1924).
Bowker Chemical Co., New York, N. Y. Pyrox.	5.00	5.57	0.46	0.06	....	6.70	....	1.28	....	65.95	....	Conn. Agr. Expt. Sta., Bull. 272, 146 (1925).
California Sprayer Co. Calispray Dust No. 86.	13.46	13.92	1.15	0.44	3.80	4.45	....	27.67	....	....	....	Cal. Dept. Agr., Spec. Pub. 75, 44 (1927).
Chipman Chemical & Engineering Co., New York, N. Y. Bordo-Lead	7.29	8.73	0.38	0.18	....	16.47	....	15.24	....	....	....	Conn. Agr. Expt. Sta., Bull. 272, 146 (1925).
General Chemical Co., New York, N. Y. Orchard Bordeaux Lead.	9.37	10.25	1.50	0.06	15.00	15.95	....	....	....	....	....	N. J. Agr. Expt. Sta., Bull. 459, 10 (1927).
The Glidden Co., Cleveland, Ohio, Glidden Bordo-Arsenate	15.50	17.54	0.50	0.20	....	9.32	....	31.71	....	....	....	Conn. Agr. Expt. Sta., Bull. 242, 154 (1922).
The Glidden Co., Cleveland, Ohio. Glidden Bordo-Arsenate	5.90	14.77	0.50	0.18	....	13.31	....	26.64	....	....	....	Conn. Agr. Expt. Sta., Bull. 272, 146 (1925).
Interstate Chemical Co., Jersey City, N. J. Key Bordo-Lead	4.45	6.65	0.77	0.60	....	6.05	....	13.76	....	60.85	....	Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).
Interstate Chemical Co., Jersey City, N. J. Key Bordo-Lead	7.67	7.82	0.77	0.09	....	2.99	....	....	....	60.83	....	Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).
Interstate Chemical Co., Jersey City, N. J. Key-Cide	4.22	5.75	....	0.18	10.00	10.06	....	9.90	....	....	....	Conn. Agr. Expt. Sta., Bull. 242, 158 (1922).

Bug Death.

(DANFORTH CHEMICAL CO., LEOMINSTER, MASS.)

	Guaranteed.	Found.
Zinc oxide.....	47.00	54.15
Lead oxide.....	5.00	14.11

Conn. Agr. Expt. Sta., Bull. 242, 159 (1922).

Bug Death Alpha.

(DANFORTH CHEMICAL CO., LEOMINSTER, MASS.)

	Guaranteed.	Found.
Nicotine.....	0.05	trace
Sulphur.....	20.00	18.20
Zinc oxide.....	15.00	16.50
Lead oxide.....	1.00	4.80

Ore. Agr. Expt. Sta., Cir. 84, 11 (1927).

Bug Death Aphis.

(DANFORTH CHEMICAL CO., LEOMINSTER, MASS.)

	Guaranteed.	Found.
Nicotine.....	0.05	present
Sulphur.....	20.00	19.29
Zinc oxide.....	15.00	23.63
Lead oxide.....	1.00	5.69

Maine Agr. Expt. Sta., Official Inspections 110, 55 (1923).

Bug Dope.

(H. J. SMITH & CO., UTICA, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	0.37	0.62
Water-soluble arsenic, metal.....	2.70	0.23
Copper.....	....	0.30

N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).

Buhack Insect Powder.

See "Pyrethrum".

Buker's Sheep Dip.

See "Phenol Soap Solutions".

By-Sul.

(GEO. H. CORSE, JR. & CO., SAN FRANCISCO, CAL.)

Two samples:

Sample 1:

Guaranteed: Carbon disulphide 41.00 per cent; inert matter 52.00 per cent.

Found: Carbon disulphide 37.98 per cent; water 50.82 per cent; calcium carbonate 4.06 per cent; calcium polysulphide 6.06 per cent.

Sample 2:

Guaranteed: Carbon disulphide 41.48 per cent; inert matter 52.59 per cent.

Found: Carbon disulphide 46.20 per cent; water 46.00 per cent; clay and oil 6.18 per cent; calcium polysulphide none.

Cal. Dept. Agr., Spec. Pub. 51, 60 (1925).

Caascu.

(HEMINGWAY & CO., INC., BOUND BROOK, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	16.00	18.23
Water-soluble arsenic, metal.....	4.00	0.12
Copper.....	....	7.73

*N. J. Agr. Expt. Sta., Bull. 459, 11 (1927).***Caasen.**

(HEMINGWAY LONDON PURPLE CO., LONDON & NEW YORK).

Found: Arsenious oxide 34.13 per cent; copper 8.10 per cent.

*N. Y. Agr. Expt. Sta., Bull. 384, 301 (1914).***Cabot's Gypsy Moth Creosote.**

(SAMUEL CABOT, INC., BOSTON, MASS.)

Guaranteed: Not more than 10 per cent inert matter.

Found: Substance is composed of tarry matter like gas-house wastes.

There are no oils present.

*Maine Agr. Expt. Sta., Official Inspections 114, 88 (1924).***Calcium Arsenate.**

See "Arsenate of Calcium".

Calcium Caseinate.

See Table VI.

Calcium Cyanide.

See Table VII.

Calcium Fluosilicate Compound.

(VICTOR CHEMICAL WORKS, NEW YORK, N. Y.)

Guaranteed: Calcium fluosilicate not less than 15 per cent; inert matter not over 85 per cent.

Found: Phosphorus pentoxide 28.37 per cent; calcium oxide 21.80 per cent; iron and aluminum oxides 20.60 per cent; silica 11.00 per cent; fluorine 11.95 per cent.

*Conn. Agr. Expt. Sta., Bull. 272, 149 (1925).***Calco-Green.**

(Manufacturer not stated).

Found: Total arsenious oxide 30.0 per cent; water-soluble arsenious oxide 7.0 per cent.

*Univ. of Cal., Coll. of Agr., Expt. Sta., Bull. 151, 24 (1903).***Calcyco Braun Gas.****Calcyco Hydrocyanic Acid.**

See "Hydrocyanic Acid".

California C & G Brand Bleaching Water.

(CALIFORNIA BLEACHING WATER CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Available chlorine.....	4.00	5.17

Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).

TABLE VI.—CALCIUM CASEINATE

Manufacturer or Distributor and Brand	Nitrogen %	Casein N x 6.38 %	Calcium Oxide CaO %	Publication
California Central Creameries, San Francisco, Cal. Kayso.....	3.28	20.93	46.29	Conn. Agr. Expt. Sta., Bull. 258, 369 (1924); 272, 149 (1925).
Casein Mfg. Co., New York, N. Y. A-7-ML.....	7.92	50.53	27.27	Conn. Agr. Expt. Sta., Bull. 258, 369 (1924).
Rosin & Co., Philadelphia, Pa. Red Diamond.....	3.31	21.12	50.64	Conn. Agr. Expt. Sta., Bull. 258, 369 (1924).

TABLE VII. CALCIUM CYANIDE

Manufacturer or Distributor and Brand	Cyanogen, CN		Calcium, Ca. %	Chlorine, Cl. %	Calcium Cyanide, Ca (CN) ₂		Publication
	Guaranteed %	Found %			Guaranteed %	Found %	
American Cyanamid Co., New York, N. Y. G Grade.....	40.00	40.30	.....	.....	.....	71.35	N. J. Agr. Expt. Sta., Bull. 424, 12 (1925).
American Cyanamid Co., New York, N. Y. Cyanogas.....	.....	.....	.....	.....	40.00	43.17	Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).
California Cyanide Co., Southgate, Cal. Calcanide Fumigant Grade No. 1.....	.....	.....	.....	.....	88.00	91.73	Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).
California Cyanide Co., Southgate, Cal. Cal-Sy.....	.....	.....	.....	.....	25.00	27.73	Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).
California Cyanide Co., Southgate, Cal. Citrofume Citrus Fumigant...	.....	.....	.....	.....	53.00	54.30	Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).
L. E. Neville, Los Angeles, Cal. Acro Rodent Exterminator.....	20.00	23.71	32.77	43.68	.....	41.98	Cal. Dept. Agr., Spec. Pub. 34, 57 (1923).

California Spray.

(UNITED STATES SPRAY CO., SAN BERNARDINO, CAL.)

Guaranteed: Inert matter 65.00 per cent.
 Found: Oils 29.00 per cent; inert matter 69.00 per cent. Sodium
 fluoride and rosin present.

*Cal. Dept. Agr., Spec. Pub. 34, 37 (1923).***Calispray Combined Insecticide and Fungicide Dust No. 3.**

See "Nicotine-Sulphur Dusts".

Calispray Complete Garden Dust No. 83.

(CALIFORNIA SPRAYER CO.)

	Guaranteed.	Found.
Nicotine.....	1.25	0.85
Total arsenic, metal.....	1.76	1.69
Water-soluble arsenic, metal.....	0.50	0.26
Lead oxide.....	.....	8.17
Sulphur.....	50.00	46.95

*Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).***Calispray Dust No. 1.****Calispray Dust No. 2.**

See "Nicotine-Sulphur Dusts".

Calispray Dust No. 12.

See "Nicotine Dusts".

Calispray Dust No. 86.

See "Bordeaux Mixture-Lead Arsenate".

Calispray Insecticide Dust No. 11.**Calispray Insecticide Dust No. 15.**

See "Nicotine Dusts".

Calispray Insecticide Dust No. 81.¹

(CALIFORNIA SPRAYER CO.)

	Guaranteed.	Found.	Guaranteed.	Found.
Nicotine.....	2.00	2.21	2.00	2.28
Total arsenic, metal.....	3.50	3.39	3.80	4.06
Water-soluble arsenic, metal.....	0.50	0.18	0.50	0.29
Lead oxide.....	.....	13.87	.....	13.02

*Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).***Calispray Nico-Dust No. 82**

(CALIFORNIA SPRAYER CO.)

	Guaranteed.	Found.
Nicotine.....	2.50	1.22
Total arsenic, metal.....	3.50	4.30
Water-soluble arsenic, metal.....	0.50	0.46
Lead oxide.....	.....	12.76
Copper.....	5.00	4.85

*Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).*¹Two samples.

Calite.

(MORRIS HERRMANN & CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	11.40	11.55
Water-soluble arsenic, metal.....	0.5	0.45
Water.....		67.07

*Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 10 (1915).***Calox.**

See "Oil Emulsions, Mineral".

Calpest Garden Dust.

See "Nicotine Dusts".

Calpest Sow Bug Killer.

(CALIFORNIA PEST CONTROL CO., BURLINGAME, CAL.)

Guaranteed: Copper aceto-arsenite, 8.00 per cent.

Found: Arsenious oxide, 11.04 per cent.

*Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).***Calpest Summer Spray.**

See "Oil Emulsions, Mineral".

Calpest Weed Killer.

(CALIFORNIA PEST CONTROL CO., BURLINGAME, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	30.00	31.30

*Cal. Dept. Agr., Spec. Pub. 75, 25 (1927).***Calpest Whale Oil Soap.**

See "Soaps".

Calpro Ant Syrup.

(THE CALPRO SALES CO., LOS ANGELES CAL.)

	Guaranteed.	Found.
Arsenic, metal.....	0.10	0.22

*Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).***Cal-Sy.**

See "Calcium Cyanide".

Cann's Ant Exterminator.

(ARTHUR CANN CO., SAN JOSE, CAL.)

Guaranteed: Inert matter 10.00 per cent.

Found: Phenols 12.20 per cent, inert matter 9.60 per cent. Rosin present.

*Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).***Cann's Canco.**

See "Phenol Soap Solutions".

Cann's Carco.

(ARTHUR CANN CO., SAN JOSE, CAL.)

Found: Phenols 7.30 per cent. Rosin present.

Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).

Capital Sheep Dip and Cattle Wash.

See "Phenol Soap Solutions".

Capital Squirrel Poison.

See "Strychnine Preparations".

Carboleine, Pratt's.

See "Oil Emulsions, Mineral".

Carbolic Acid.

See "Phenol".

Carbolicide.

See "Hockwald".

Carbolineum.

See "Avenarius Carbolineum".

Carbon Disulphide.

See Table VIII.

Carbon Disulphide Emulsion.

(I. P. THOMAS & SON CO., PHILADELPHIA, PA.)

Found: Carbon Disulphide 68.62 per cent.

Conn. Agr. Expt. Sta., Sample 3893.**Carbo-White Disinfectant.**

(R. L. STEVENS BROKERAGE CO., SAN FRANCISCO, CAL.)

Found: Phenols 1.40 per cent; organic matter, partly glue and water, 6.50 per cent; mineral matter, mostly calcium carbonate, 92.10 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 58 (1925).***Carco.**

(SUNSET SALES CO., TACOMA, WASH.)

Carco.

(See also "Cann's Carco".)

Claimed phenols, soap and hydrocarbons present.

*Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).***Carco Natholeum Dip.**

See "Phenol Soap Solutions".

Caustic Soda Arctic Whale Oil Soap.

See "Soaps".

Cedar Blocks.

See "Paradichlorbenzene".

"Cee-Pee-Dee" Carbolyzed Petroleum Distillate.

See "Oil Emulsions, Mineral".

Cenol Ant Destroyer.

(CENTRAL CITY CHEMICAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Sodium fluoride.....	25.00	30.82
Ash.....	.....	1.00

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

TABLE VIII. CARBON DISULPHIDE

Manufacturer or Distributor	Carbon Disulphide, CS ₂		Residue on Evaporation	Hydrogen Sulphide	Publication
	Guaranteed	Found			
Brunswig Drug Co.	% 99.00	% 99.56	% 0.02	% none	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).
Sun Drug Co., Pasadena, Cal.	97.00	98.50	0.02	none	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).
Herbert F. Dugan, San Francisco, Cal. Kilmol Squirrel-gophene ¹	99.22	99.23	....	....	Cal. Dept. Agr., Spec. Pub. 66, 36 (1926).
Towne-Allison Drug Co., San Bernardino, Cal. ....	....	99.90	0.00 ²	none	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).
Western Wholesale Drug Co., Los Angeles, Cal.	97.00	99.94	0.03 ³	none	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).
Wheeler, Reynolds & Stauffer, San Francisco, Cal.	99.98	99.97	....	none	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).
Wheeler, Reynolds & Stauffer, San Francisco, Cal.	97.00	97.18	2.25	present	Cal. Dept. Agr., Spec. Pub. 51, 47 (1925).

¹ Free sulphur guaranteed 0.08 per cent; found 0.10 per cent. Irritant chemicals dissolved in oil, guaranteed 0.70 per cent; found 0.67 per cent.

² Chiefly ferric oxide.

³ Guaranteed not more than 3.00 per cent.

Cenol Argentine Ant Poison.

(CENTRAL CITY CHEMICAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Arsenic, metal	0.11	0.17
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

Cespi Poisoned Barley.**Cespi Poisoned Wheat.**

See "Strychnine Preparations".

Cespi Rat Poison.

(SCOTT & GILBERT CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Barium carbonate.....	95.00	98.06
<i>Cal. Dept., Agr., Spec. Pub. 75, 66 (1927).</i>		

Chemco Insect & Germ Destroyer.

See "Oils, Mineral".

Chlorafectant.

(AMERICAN OIL CO., NEW YORK.)

	Guaranteed.	Found.
Sodium hypochlorite.....	4.0	3.55
<i>Conn. Agr. Expt. Sta., Sample 516.</i>		

Chloride of Lime.

(GREAT WESTERN ELECTRO CHEMICAL CO.)

Available chlorine.....	30.00	35.26
(WESTERN WHOLESALE DRUG COMPANY)		

	Guaranteed.	Found.
Available chlorine	34.30
<i>Cal. Dept. Agr., Spec. Pub. 51, 53 (1925).</i>		

Chloro Naptholeum.

(WEST DISINFECTING CO., NEW YORK, N.Y.)

A creosote oil and naphthalene soap emulsion.

*U. S. D. A., Bur. Chem., Bull. 68, 58 (1902).***Citro-Mulsion.**

See "Oil Emulsions, Mineral".

Citrospray.

(CITROSPRAY CHEMICAL CO. LTD., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Total arsenic, metal.....	4.50	4.31
Water-soluble arsenic, metal.....	1.00	1.48
Lead oxide.....	12.50	12.89
Sulphur.....	20.00	19.17
Sodium oxide.....	13.00	.....
Sodium carbonate.....	.....	27.56
Sodium oleate.....	16.50	8.20
Sodium phosphate.....	10.00	7.16
Water.....	.....	19.58
Inert matter.....	23.50	.....
<i>Cal. Dept. Agr., Spec. Pub. 58, 19 (1925).</i>		

Citrus Washing Powder.

See "Soaps".

Clay.

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

The clay used in the manufacture of "Collodite" sprays.

Found: Water 9.60 per cent; silica 60.90 per cent; aluminum oxide 19.77 per cent; ferric oxide 1.15 per cent; calcium oxide 0.22 per cent; magnesium oxide 0.57 per cent; sulphur trioxide 0.22 per cent; sodium and potassium oxides 0.77 per cent; water of constitution 6.80 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 61 (1923).***Clensel.**

See "Soaps".

Clorox Liquid Cleaning Compound.

(CLOROX CHEMICAL CORPORATION, OAKLAND, CAL.)

	Guaranteed.	Found.
Available chlorine.....	4.50	5.50

*Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).***Clumina.**

(L. S. B. A. I., ROME, ITALY).

Found: Free chlorine 0.004 per cent; total chlorine 1.08 per cent.

*Cal. Dept. Agr., Spec. Pub. 66, 35 (1926).***C. N.**

See "Coro Noleum".

Coal Tar Insecticide Oil.

(SCOTT & GILBERT CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Phenols.....	40.00	39.00
Coal-tar oils.....	55.00	59.30
Water.....	2.00	1.60

*Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).***Collodite Arsenical Spray.**

(COLLODITE SPRAY MFG. CO., LOS ANGELES, CAL.)

Found: Total arsenic oxide 8.87 per cent; water-soluble arsenic oxide 1.89 per cent. Contains calcium arsenate.

*Cal. Dept. Agr., Spec. Pub. 34, 61 (1923).***Collodite Copper Spray.**

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

Found: Copper 5.26 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 62 (1923).***Collodite Nicotine Spray.**

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

Found: Nicotine 2.93 per cent; sodium carbonate 37.10 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 62 (1923).

Collodite Rosin Paste.

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Water.....	36.00	29.40

Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).

Collodite Scale Spray.

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

Found: Sodium carbonate 28.19 per cent; soap 4.50 per cent; sulphur 2.16 per cent.
Cal. Dept. Agr., Spec. Pub. 34, 61 (1923).

Collodite Sulfur Spray.

(COLLODITE MFG. CO., LOS ANGELES, CAL.)

Found: Sulphur 25.44 per cent; soda ash large.
Cal. Dept. Agr., Spec. Pub. 34, 26 (1923).

Columbian Insecticide.

(COLUMBIAN INSECTICIDE CO., BOSTON, MASS.)

Found: Borax 94.74 per cent; sand 2.52 per cent; cloves 3.28 per cent.
 Blue coloring matter present.
U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).

Common Sense Rat Exterminator.

See "Phosphorus Preparations".

Concentrated Adheso Yellow Label.

(ANSBACHER INSECTICIDE CO., INC., NEW YORK, N.Y.)

	Guaranteed.	Found.
Copper.....	10.38	13.84
Water.....	....	52.02

N. J. Agr. Expt. Sta., Bull. 441, 10 (1926).

Condensed Rosin Spray.

See "Soap".

Conkey's Noxicide.

See "Phenol Soap Solutions".

Conkey's Poultry Worm Remedy.

(THE G. E. CONKEY CO., CLEVELAND, OHIO.)

Guaranteed: Pelletierine 0.200 per cent; arecoline 0.020 per cent; nicotine 0.100 per cent; oil of chenopodium 0.120 per cent.
 Found: Nicotine 0.22 per cent.
Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).

Cooper's Sheep Dipping Powder.

(S. COOPER & NEPHEWS, CHICAGO, ILL.)

	Guaranteed.	Found.
Total arsenic, metal.....	16.75	14.00
Water-soluble arsenic, metal.....	17.48	14.18

Maine Agr., Expt. Sta., Official Inspections 114, 88 (1924).

Copodust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper sulphate.....	14.0	12.0
<i>Ore. Agr. Expt. Sta., Cir. 64, 11 (1925).</i>		

Copotex.

See "Niagara Copotox".

Copper-Calcium Arsenate Dust, 13-8-79.

(DORCH CHEMICAL CO., LOUISVILLE, KY.)

	Guaranteed.	Found.
Total arsenic oxide.....	3.00	1.39
Water-soluble arsenic, metal.....	0.50	.....
Copper.....	4.40	5.20
<i>Conn. Agr. Expt. Sta., Bull. 242, 152 (1925).</i>		

Copper Carbonate.

See Table IX.

Copper Sulphate.

See Table X.

Coreco Argentine Ant Poison.

(COFFIN-REDINGTON CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Arsenic, metal.....	0.15	0.21
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

Coro Natholeum Dip.

(WEST DISINFECTING CO., SAN FRANCISCO, CAL.)

Found: Phenols 9.00 per cent; water 11.20 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).***Coro Noleum and C. N. Disinfectant.**

(WEST DISINFECTING CO., SAN FRANCISCO, CAL.)

Found: Phenols 28.00 per cent; water 8.80 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).***Cot Oil.**

See "Oil Emulsions, Mineral".

Coulson's Poultry Spray.

See "Oil Emulsions, Mineral".

County Farm Bureau Mixture.**County Squirrel Poison (Barley).**

See "Strychnine Preparations".

C. P. Lice and Mite Liquid.

See "Lime-Sulphur".

C. P. Lice and Mite Tablets.

(CHICKEN PHARMACY, PETALUMA, CAL.)

Found: Calcium sulphide 16.13 per cent; silica 7.38 per cent; iron and aluminum oxides 0.14 per cent; gypsum 6.47 per cent; sugar 57.80 per cent; starch 11.63 per cent.

Cal. Dept. Agr., Spec. Pub. 51, 11 (1925).

TABLE IX. COPPER CARBONATE

Manufacturer or Distributor and Brand	Copper, Cu.		Publication
	Guaranteed	Found	
Braun-Knecht-Heimann Co., San Francisco, Cal.	50.00	52.10	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
California Spray Chemical Co., Watsonville, Cal. Ortho.....	51.92	52.40	Cal. Dept. Agr., Spec. Pub. 51, 19 (1925).
Miller Products Co., Portland, Ore..	53.00	55.50	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Montgomery, Ward & Co., Port- land, Ore.	54.00	54.00	Ore. Agr. Expt. Sta., Cir. 64, 12 (1925).
The Mountain Copper Co., San Francisco, Cal.	54.00	54.10	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Nichols Copper Co., New York, N.Y.	53.00	54.00	Ore. Agr. Expt. Sta., Cir. 84, 12 (1927).
Pittsburgh Plate Glass Co., Newark, N. J. Corona Copper-carb Dry..	18.00	20.09	Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).
Roessler & Hasslacher Chemical Co., New York, N. Y.	53.00	49.30	Ore. Agr. Expt. Sta., Cir. 64, 12 (1925).
San Jose Spray Mfg. Co., San Jose, Cal. ....	.....	53.30 ¹	Cal. Dept. Agr., Spec. Pub. 51, 19 (1925).
Sherwin-Williams Co., Emeryville, Cal.	50.00	51.30	Ore. Agr. Expt. Sta., Cir. 64, 12 (1925).
Wheeler, Reynolds & Stauffer, San Francisco, Cal. Stauffer's.....	50.00	50.13	Cal. Dept. Agr., Spec. Pub. 58, 22 (1925).

¹ 99.90 per cent passes a 200 mesh sieve.

TABLE X. COPPER SULPHATE

Manufacturer or Distributor and Brand	Copper, Cu.		Copper Sulphate		Publication
	Guaranteed	Found	Guaranteed	Found	
California Spray Chemical Co., Watsonville, Cal. Ortho Instant Bluestone.....	% 23.00	% 24.41	%	%	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
California Spray Chemical Co., Watsonville, Cal. Ortho Powdered Bluestone, Package B.	24.00	23.06	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 21 (1925).
Manufacturer unknown. Monohydrated Copper Sulphate ¹.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 6913 (1928).
Mountain Copper Co., San Francisco, Cal. Mococo Bluestone.....	.....	25.30	99.00	99.38	Cal. Dept. Agr., Spec. Pub. 66, 20 (1926).
Nichols Copper Co., New York, N. Y.....	.....	.....	25.20	24.90	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).

¹ 94 per cent passed a 300-mesh sieve.

Edward I. Creeley's Insect Powder.

(ARBURUA & MC INNES, SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Nicotine.....	0.002	0.04
Naphthalene.....	3.00	3.20
Sulphur.....	5.00	5.60
Phenols.....	1.00	0.40
Pyrethrum.....	6.00	.....

*Cal. Dept. Agr., Spec. Pub. 75, 40 (1927).***Creo Fenol Sheep Dip.**

See "Phenol Soap Solutions".

Creolineum.

(H. S. FAWCETT, RIVERSIDE, CAL.)

Found: Light oils 17.10 per cent; medium oils 27.20 per cent; heavy oils 49.00 per cent; total oils 93.30 per cent; phenols 2.90 per cent; inert matter 3.80 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 39 (1923).***Creosote.**

See "Brininstool".

Creosote Oil.

(AN-FO MFG. CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Phenols.....	25.00	26.70
Coal-tar oils.....	.....	72.10
Water.....	10.00	1.20

*Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).***Cresol.**

(WESTERN WHOLESALE DRUG CO., LOS ANGELES, CAL.)

Found: Phenols 45.30 per cent; water 21.80 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).***Cresolite Sheep Dip.**

See "Phenol Soap Solutions".

Crestall Dip.

(BAIRD & MC GUIRE, HOLBROOK, MASS.)

Found: Phenols 51.90 per cent; water 12.40 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).***Cresylic Acid, Pure.**

(PURITY CHEMICAL PRODUCTS CO., SANTA ROSA, CAL.)

	Guaranteed.	Found.
Phenols.....	98.00	96.85
Water.....	2.00	3.20

*Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).***Cresy-Lol.**

See "Phenol Soap Solutions".

Crude Oil.

See "Oils, Mineral".

Crude Oil Emulsion.

See "Oil Emulsions, Mineral".

Cut Worm and Grub Destroyer.

(CARPENTER-UDELL CHEM. CO., GRAND RAPIDS, MICH.)

	Guaranteed.	Found.
Arsenic, metal.....	0.95	0.83

Mich. Agr. Coll. Expt. Sta., Spec. Bull. 75, 9 (1915).

Cyanide-Chloride Marl Dust Mixture.

(J. S. MUNROE, SAN JOSE, CAL.)

Found: Pounds per ton: sodium cyanide, 4.24; sodium chloride 4.7.
Cal. Dept. Agr., Spec. Pub. 34, 57 (1923).

D.**D. C. Dust No. 3**

See "Niagara D. C. Dust No. 3".

Dead Shot Squirrel and Gopher Killer.

See "Strychnine Preparations".

Death Dust for Insects.

See "Pyrethrum".

D 18 Dust Mixture.

See "Niagara D 18 Dust Mixture".

De Lapp's Improved Lice Powder.

(W. C. DE LAPP).

	Guaranteed.	Found.
Nicotine.....	0.10	0.11
Naphthalene.....	3.00	1.02
Sulphur.....	15.00	12.40
Phenols.....	0.50	0.60
Hydrocarbons.....	7.00	4.20
Sodium Fluoride.....	7.00	3.44

Cal. Dept. Agr., Spec. Pub. 75, 40 (1927).

Del Monte Bleaching Fluid.

(DEL MONTE BLEACHING FLUID CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Available chlorine.....	5.00	4.82

Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).

Delousing Grease.

(PETALUMA AVIAN PATHOLOGY, LABORATORY, PETALUMA, CAL.)

	Guaranteed.	Found.
Sodium fluoride.....	50.00	55.93

Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).

Dendrol.

See "Oils, Mineral".

Derrisol

(WILLIAM COOPER & NEPHEWS, INC., CHICAGO, ILL.)

Guaranteed: Derris extract 5 per cent; fatty acid 50 per cent; inert matter 45 per cent.

Found: Non-volatile chloroform extract 60.45 per cent; water 18 per cent; ash 8.08 per cent; combined fatty acids (calculated from alkalinity of soluble ash) 0.62 per cent. The fatty acids if present must be present in the free form and not as soap.

Conn. Agr. Expt. Sta., Sample 8931.

Derris Root.

(MANUFACTURER UNKNOWN)

Found: Moisture 6.48 per cent; ether extract 8.79 per cent; methoxyl content 14.90 per cent; alcohol extract after ether extraction 14.25 per cent; passing 20 mesh, 100 per cent; 40 mesh, 100 per cent; 60 mesh, 91 per cent; 80 mesh, 79 per cent; 100 mesh, 72 per cent.

Canada Dept. Agr., Div. Chem., Rept., Dominion Chemist (1928).

Destroyer, Argentine Ant Syrup.

(TOWNE-ALLISON DRUG CO., SAN BERNARDINO, CAL.)

Found: Arsenious oxide 0.11 per cent; total arsenic, metal 0.083 per cent; invert sugar 32.10 per cent; cane sugar 20.86 per cent; water 47.25 per cent.

Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).

Destroxol.

(PARAGON CHEMICAL CO.)

	Guaranteed.	Found.
Nicotine.....	12.00	18.54
Sodium cyanide.....	8.00	15.67
Carbolic acid.....	2.00	2.39
Wood creosote oils.....	20.00	17.27
Water.....	.....	27.36

Cal. Dept. Agr., Spec. Pub. 75, 42 (1927).

Dethol Fly Spray.

(DETHOL MFG. CO., RICHMOND, VA.)

Not analyzed.

Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).

Di-Fli Home Spray.

See "Oils, Mineral".

Dr. Baker's Liquid Death Drops.

(JAMES AINSLIE, BROOKLYN, N.Y.)

Found: The substance is gasoline.

U. S. D. A., Bur. Chem., Bull. 68, 57 (1902).

Dipdust.

See "Bayer Dipdust".

Dips.

See "Phenol Soap Solutions".

Dr. David Robert's Poultry Louse Powder.

(DR. DAVID ROBERTS VETERINARY CO., INC.)

	Guaranteed.	Found.
Nicotine.....	0.04	0.28
Naphthalene.....	9.00	9.98
Sulphur.....	18.00	19.80
Sodium fluoride.....	5.00	0.54

Cal. Dept. Agr. Spec. Pub. 75, 40 (1927).

Dr. G. Z. Wait's Sheep Dip.

Dr. Hess Dip & Disinfectant.

Dr. Le Gear's Dip & Disinfectant.

See "Phenol Soap Solutions".

Dr. Pierce's Bug Killer.

(THE KELLEY ISLAND LIME & TRANSPORT CO., CLEVELAND, OHIO.)

	Guaranteed.	Found.
Total arsenic (metallic).....	0.56	1.33
Water-soluble arsenic (metallic).....	0.03	0.30
Copper.....	.....	0.53

N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).

Dormant Dust.

(NIAGARA SPRAYER CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Sodium polysulphide.....	40.00	22.3

Ore. Agr. Expt. Sta., Cir. 84, 11 (1927).

Dormant Soluble Oil.

See "Oil Emulsions, Mineral".

Dosch B-12 Green Copper Arsenic Dust.

(DOSCH CHEMICAL CO., LOUISVILLE, KY.)

	Guaranteed.	Found.
Copper.....	5.75	5.79
Arsenic, metal.....	2.75	3.39

The arsenic is present as calcium arsenate.

Conn. Agr. Expt., Sta., Bull. 258, 370 (1924).

Dosch 85-15 Sulfur-Lead Arsenate.

(DOSCH CHEMICAL CO., LOUISVILLE, KY.)

Found: Moisture 0.50 per cent; free sulphur none; lead oxide 8.60 per cent; arsenic oxide 4.80 per cent; silica 0.50 per cent; sodium sulphate 2.33 per cent; calcium carbonate 0.23 per cent; calcium hydroxide 79.52 per cent; magnesium carbonate 2.41 per cent; iron and aluminum oxides, none.

Cal. Dept. Agr., Spec. Pub. 34, 56 (1923).

Dosch Nicotine-Sulfur Dust.

See "Nicotine-Sulphur Dusts".

Dosch No. 6 Nicotine Dust.

Dosch No. 10 Nico-Dust.

See "Nicotine Dusts".

Dosch Sulfur-Arsenate Dust.

(DOSCH CHEMICAL CO., LOUISVILLE, KY.)

	Guaranteed.	Found.
Sulphur.....	84.00	84.00
Lead Arsenate	14.70	14.80

Cal. Dept. Agr., Spec. Pub. 34, 56 (1923).

Dosch Tobacco Dust.

See "Tobacco Dusts".

Double Nico-Dust.**Double Nicotine Dust.**

See "Nicotine Dusts".

Dry Mix Sulfur-Lime.

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

See also "New Jersey Dry Mix Sulfur-Lime", and "Niagara Dry Mix."

	Guaranteed.	Found.
Sulphur.....	62.00	62.80

N. J. Agr. Expt. Sta., Bull. 424, 10 (1925).

D 6 Dust.

See "Niagara D 6 Dust".

D 20 Dust.

See "Niagara D 20 Dust".

D 25 Potato Dust.

See "Niagara D 25 Potato Dust".

Du Pont Semesan, Jr.

(E. J. DU PONT DE NEMOURS & CO., INC., WILMINGTON, DEL.)

Guaranteed: Hydroxymercurichlorphenol 10.00 per cent.

Found: Mercury 6.59 per cent.

*Cal. Dept. Agr. Spec. Pub. 75, 62 (1927).***Dustall No. 3.****Dustall No. 6.****Dustall No. 8.****Dustall No. 10.**

See "Nicotine Dusts".

Dust Mixture No. 3, Niagara.

See "Nicotine Dusts".

Dust Mixture with Sulphur and Nicotine, Niagara.

See "Nicotine-Sulphur Dusts".

Dyke's Louse Paint.

(RAYMOND & CO., LAWRENCE, KANSAS)

Found: Petroleum, coal-tar, and carbon in suspension.

U. S. D. A., Bur. Chem., Bull. 68, 58 (1902).

E.

Earwig Bait.

(CITY OF PORTLAND, PORTLAND, ORE.)

	Guaranteed.	Found.
Sodium fluoride.....	4.3	4.9
<i>Ore. Agr. Expt. Sta., Cir. 64, 14 (1925).</i>		

Earwig Bait.

(HARDY MFG. CO., PORTLAND, ORE.)

	Guaranteed.	Found.
Sodium fluoride.....	4.3	4.8
<i>Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).</i>		

Earwig Bait.

(MILLER PRODUCTS CO., PORTLAND, ORE.)

	Guaranteed.	Found.
Sodium fluoride.....	4.3	4.7
<i>Ore. Agr. Expt., Sta., Cir. 64, 14 (1925).</i>		

Economy Germicide Dip.

See "Phenol Soap Solutions".

85-15 Dusting Mixture.**80-10-10 Mixture.**

See "Nicotine Dusts".

80 Sulphur-20 Lime.

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Sulphur.....	79.00	77.99
<i>N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).</i>		

80-20.

(J. R. GILLAM & BRO., BURLINGTON, N. J.)

	Guaranteed.	Found.
Sulphur.....	78.00	74.60
<i>N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).</i>		

80-20 Mixture.

See "Niagara 80-20 Mixture".

80-20 Sulphur-Lime Dust.

(LUCAS KIL-TONE CO., VINELAND, N. J.)

Guaranteed: Sulphur 80.00 per cent.

Found: Sulphur 76.49 per cent. Fineness: coarser than 100 mesh, 0.80; passes 100 mesh, 99.2; 200 mesh, 77.1; 300 mesh, 24.60.

*N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).***80-20 Sulfur-Lime Mixture.**

(LUCAS KIL-TONE CO., VINELAND, N. J.)

Guaranteed: Sulphur 80.00 per cent.

Found: Sulphur 77.84 per cent. Fineness: passes 100 mesh, 55.50; 200 mesh, 37.80; 300 mesh, 6.70.

N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).

Electric Rat & Roach Paste.

See "Phosphorus Preparations".

Electric Vermin Exterminator.

(F. B. SMITH, CANTON, OHIO.)

Found: Sand 0.69 per cent; carbon dioxide 5.22 per cent; phenol anhydride 2.25 per cent; calcium oxide 58.28 per cent; magnesium oxide 12.77 per cent; water and pink dye, by difference, 20.79 per cent. Material is partially air-slaked lime treated with crude phenol and dyed pink.

U. S. D. A., Bur. Chem., Bull. 68, 51 (1902).

Electro Micro.

(VREELAND CHEMICAL MFG. CO., LITTLE FALLS, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	9.25	10.73
Water-soluble arsenic, metal.....	0.50	0.08
Sulphur.....	48.00	46.21

N. J. Agr. Expt. Sta., Bull. 459, 16 (1927).

Electro Micro $\frac{1}{2}$ and $\frac{1}{2}$.

(VREELAND CHEMICAL CO., LITTLE FALLS, N. J.)

	Guaranteed.	Found.
Total arsenic oxide.....	12.60	14.36
Water-soluble arsenic oxide.....	0.77	0.57
Lead oxide.....	.....	29.49
Sulphur.....	32.00	39.71

N. J. Agr. Expt. Sta., Bull. 301, 16 (1916).

Elkay's Rat and Roach Paste.

See "Phosphorus Preparations".

El Roy Argentine Ant Poison.

(ROY SPECIALTY CO.)

	Guaranteed.	Found.
Arsenic, metal.....	0.20	0.11

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

El Roy Gopher Poison.

See "Strychnine Preparations".

El Vampiro.

(ALLAIRE, WOODWARD & CO.)

Guaranteed: Pyrethrum 75.00 per cent.

Found: Ash 6.98 per cent; organic matter 93.02 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

E. M. F. Orchard Spray.**Emulso.**

See "Oil Emulsions, Mineral".

Entodust.

See "Arsenate of Lead".

Entomocide.

(SACRAMENTO CHEM. CO., SACRAMENTO, CAL.)

Claimed to contain phenol, carbon tetrachloride, oil of citronella and mineral oil.

Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).

Estes's Roach Powder.

(N. T. ESTES & CO., OMAHA, NEB.)

Found: Borax 93.31 per cent; balance is pink coloring matter.

U. S. D., A. Bur. Chem., Bull. 68, 43 (1902).

Exelol.

See "Oil Emulsions, Mineral".

Extermo.

(L. T. GRAVES FERTILIZER CO., PASADENA, CAL.)

Claimed to be both a fertilizer and an insecticide.

Found: Nitrogen 0.18 per cent; phosphoric acid 0.06 per cent; potassium oxide 0.08 per cent; organic matter 62.19 per cent; mineral matter 32.21 per cent; sodium carbonate 4.66 per cent; soap 1.10 per cent; moisture 5.60 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 60 (1923).

E-Z Burgundy.

See "Bordeaux Mixture".

E-Z Spray.

(E-Z WAY CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Sodium polysulphide.....	33.00	33.62
Sodium thiosulphate.....	3.00	6.97
Soap.....	5.00	8.08

Cal. Dept. Agr., Spec. Pub. 58, 34 (1925).

F.**Fancier's Friend.**

(JAMES BLANCHARD, NEW YORK, N.Y.)

Found: Moisture 5.03 per cent; ash 7.21 per cent; sulphur 30.77 per cent. Colored with lead chromate. Apparently intended as an imitation of pyrethrum.

U. S. D. A., Bur. Chem., Bull. 68, 53 (1902).

Felbro Whale Oil Soap.

See "Soaps".

Fertilizer and Insect Exterminator.

(MANUFACTURER NOT STATED).

Found: Moisture 7.60 per cent; organic matter 53.60 per cent; ash 39.80 per cent; sodium carbonate 5.30 per cent; nitrogen 0.69 per cent; phosphoric acid none; potassium trace. Probably a mixture of straw and sawdust, limestone, charcoal and ashes.

Cal. Dept. Agr., Spec. Pub. 34, 60 (1923).

Fertilore Soil Stimulant.

(FERTILORE CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
WATER-SOLUBLE		
Ferric oxide.....	23.98	19.25
Aluminum oxide.....	0.52	0.75
Copper oxide.....	0.40	1.25
Sulphur trioxide.....	39.75	25.80
WATER-INSOLUBLE		
Acid-insoluble.....	8.95	30.15
Ferric oxide.....	7.64	21.65
Aluminum oxide.....	0.11	0.50
Sulphur trioxide.....	6.72	45.93

CALCULATED COMPOSITION

Ferric sulphate.....	36.64
Copper sulphate.....	3.92
Aluminum sulphate.....	5.02
Iron Pyrites.....	3.50
Silica.....	9.25

*Cal. Dept. Agr., Spec. Pub. 51, 58 (1925).***Fibro-Ferro Feeder.**

(FIBRO-FERRO-FEEDER CO., GLENROSE, OHIO.)

Found: Moisture 7.80 per cent; sand 5.56 per cent; sulphur trioxide 22.37 per cent; chloride 7.70 per cent; ferric oxide 16.06 per cent; ferrous oxide 8.06 per cent. The substance is a mixture of organic matter (wood fibers) and partially oxidized ferrous chloride and sulphate.

*U. S. D. A., Bur. Chem., Bull. 68, 52 (1902).***Fidelity Cockroach Paste.**

See "Phosphorus Preparations".

50-50.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Lead arsenate.....	48.00	48.10

Ore. Agr. Expt. Sta., Cir. 64, 11 (1925).

Fir-Tree Oil Soap.**Fish Oil.**

See "Oil, Fish".

Fish Oil Soap.

See "Soaps".

5 X.

See "Nicotine-Sulphur Dusts".

Flea-Off-Flea Powder.

(OSGOOD DRUG STORES, OAKLAND, CAL.)

Not analyzed.

Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).

Fleck's Lice Exterminator.

(J. J. FLECK, TIFFIN, OHIO.)

Found: Insoluble in hydrochloric acid 4.20 per cent; carbon dioxide 9.56 per cent; sulphur trioxide 1.99 per cent; ferric oxide 1.43 per cent; calcium oxide 31.90 per cent; magnesium oxide 21.61 per cent; volatile matter other than carbon dioxide 29.88 per cent. The substance is a mixture of naphthalene, tobacco, partially air-slaked lime and pink dye.

U. S. D. A., Bur. Chem., Bull. 68, 54 (1902).

Fli-Mo-Cide.

See "Oils, Mineral".

Flit.

(THE STANDARD OIL CO., BAYONNE, N. J.)

Found: Specific gravity, 19° C., 0.810; flash point 60° C.; fire point 69° C.; residue at 100° C., 0.28 per cent; methyl salicylate 0.75 per cent. The base is kerosene.

Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).

Floraferro.

(CALIFORNIA COPPER PRODUCERS TRUST.)

	Guaranteed	Found.
Ferrous sulphate.....	25.00	29.74
Ferric sulphate.....	20.00	24.34
Copper sulphate.....	5.00	5.61

Cal. Dept. Agr., Spec. Pub. 75, 45 (1927).

Floral Nicotine.

See "Nicotine Sulphate Solutions".

Fluoricide.¹

(NITRATE AGENCIES, BAYONNE, N. J.)

	Guaranteed.	Found.	Guaranteed.	Found.
Fluorine.....	15.00	15.31	7.00	7.88

Conn. Agr. Expt. Sta., Samples 7506 and 7507.

Fly Croke.

See "Oils, Mineral".

Fly Foil.

Not analyzed.

Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).

Fly-Tox.

(CANADA REX SPRAY CO., BRIGHTON, ONT., CANADA)

(See also "Rex Fly Tox").

Found: Specific gravity, 19°C., 0.830; flash point 66° C.; fire point 78° C.; residue at 100° C., 0.31 per cent; methyl salicylate 3.13 per cent; pyrethrum present. Base is kerosene.

Canada Dept. Agr., Div. Chem. Rept. Dominion Chemist (1928).

Fly X.

See "Sapho Fly X".

¹ Two grades.

Ford's Ant Powder.

(FORD CHEMICAL CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Insect powder.....	7.00	.....
Sodium fluoride.....	76.00	76.30
Organic matter.....	....	10.29

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

Formaldehyde (Formalin).

TABLE XI. FORMALDEHYDE

Manufacturer or Distributor and Brand	Formaldehyde		Publication
	Guaranteed	Found	
	%	%	
Braun-Knecht-Heimann Co.....	37.00	36.80	Cal. Dept. Agr., Spec. Pub. 51, 54 (1925).
Minneapolis Drug Co.....	.....	36.21	North Dakota Bull. 17, 52 (1927).
Noyes Bros. & Cutler.....	.....	37.22	North Dakota Bull. 17, 52 (1927).
Perth Amboy Chem. Wks., P.A.C..	37.00	36.82	Cal. Dept. Agr., Spec. Pub. 58, 50 (1925).
Perth Amboy Chem. Wks., U. S. P. Solution.....	37.30	35.60	Cal. Dept. Agr., Spec. Pub. 51, 54 (1925).
Roessler & Hasslacher Chem. Co., New York, N. Y.....	37.90	37.70	Ore. Agr. Expt. Sta., Cir. 84, 14 (1927).
Western Wholesale Drug Co., Los Angeles, Cal., U. S. P. Solution...	37.30	37.28	Cal. Dept. Agr., Spec. Pub. 51, 54 (1925).

"40" Dust.

(VAYCIDE CHEMICAL CORP., BINGHAMTON, ALA.)

	Guaranteed.	Found.
Total arsenic, metal.....	1.80	2.33
Water-soluble arsenic, metal.....	0.75	0.37
Copper.....	1.05	0.55
Sulphur.....	25.00	22.73
Nicotine.....	1.00	0.34

*N. J. Agr. Expt. Sta., Bull. 424, 16 (1925).***40% Nicotine Sulphate.**

See "Nicotine Sulphate Solutions".

Four and One Spray.**No. 14 Spray Oil.**

See "Oils, Mineral."

Frazier's 5X.

See "Nicotine-Sulphur Dusts."

Frazier's Wet-O-Dry Sulphur.

(F. A. FRAZIER CO.)

	Guaranteed.	Found.
Sodium polysulphide.....	21.00	18.71
Sodium thiosulphate.....	12.00	13.15
Free sulphur.....	60.00	61.43

Cal. Dept. Agr., Spec. Pub. 58, 34 (1925).

Frazier's XX Sulphur.

(F. A. FRAZIER CO.)

	Guaranteed.	Found.
Sodium polysulphide.....	21.00	15.84
Sodium thiosulphate.....	12.00	10.09
Free sulphur.....	60.00	69.36
Inert matter	7.00	....

Cal. Dept. Agr., Spec. Pub. 51, 29 (1925).

Free Mulsion.

See "Oil Emulsions, Mineral".

Fresno.

(SCHOONMAKER & SONS, CEDAR HILL, N.Y.)

Found: This is an ammoniacal solution of copper carbonate containing 2.69 per cent. cupric oxide.

N. Y. Agr. Expt. Sta., Bull. 348, 98 (1912).

Fuller's Carbolic Insecticide Sheep Dip.**Fuller's Sheep Dip and Cattle Wash.**

See "Phenol Soap Solutions".

Fumigator.

See "Nicotine Dusts."

Fumispray.

See "Oil Emulsions, Mineral".

Fungi-Bordo.

See "Bordeaux Mixture".

Fungine.

(APHINE MFG. CO., MADISON, N. J.)

Found: Soluble sulphur 4.95 per cent.

N. Y. Agr. Expt. Sta., Bull. 384, 296 (1914).

Fungtrogen.

(CHEMICAL PRODUCTS DIVISION, ROSE MFG. CO., PHILADELPHIA, PA.)

	Guaranteed.	Found.
Copper.....	0.47	0.43
Nickel.....	0.47	0.32
Inert matter.....	99.06	....

*Conn. Agr. Expt. Sta., Sample 9307.***Fungtrogen.**

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Copper.....	10.00	0.86

*Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).***G.****Garden Dust.**

(DOSCH CHEMICAL CO., LOUISVILLE, KY.)

	Guaranteed.	Found.
Nicotine.....	2.00	2.24

A mixture of lead arsenate, sulphur and nicotine.

*Conn. Agr. Expt. Sta., Bull. 242, 154 (1922).***Garden Guard.**

See "Acme Garden Guard".

Garden Insecticide.

(GEO. H. LEE, OMAHA, NEB.)

Guaranteed: Nicotine, sodium fluoride, sulphur, naphthalene and pyrethrum present.

Found: There is a small deficiency in the sodium fluoride and sulphur.

*Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).***Germain Crude Carbolic Acid.**

See "Phenol."

Germain Fish Oil Soap.**Germain's Rosin Wash.**

See "Soaps".

Germain's Soluble Sulfur Compound.

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Water-soluble.....	....	95.85
Polysulphide sulphur.....	....	37.22
Thiosulphate sulphur.....	....	13.57
Sulphate and sulphite sulphur.....	....	0.66
Total sulphur.....	....	51.45
Sodium polysulphide.....	56.00	48.95
Sodium thiosulphate.....	25.00	33.50
Free sulphur.....	4.00	4.00
Inert matter.....	15.00	....

Cal. Dept. Agr., Spec. Pub. 34, 32 (1923).

Germo.

See "Oils, Mineral."

Germo Carboline.

See "Phenol Soap Solutions."

Germo Cresolis.

(GERMO MFG. CO., LOS ANGELES, CAL.)

Found: Phenols 56.25 per cent; water 10.00 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).***Germo Cresosote Dip.**

See "Phenol Soap Solutions".

Germo Magic Lice Powder.

(GERMO MFG. CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Nicotine.....	0.40	0.42
Naphthalene.....	10.00	11.12
Sulphur.....	20.00	14.16
Phenols.....	1.83	1.22

*Cal. Dept. Agr. Spec. Pub. 75, 40 (1927).***Germo Rat Death.**

(GERMO MFG. CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Barium carbonate.....	96.50	98.50

*Cal. Dept. Agr., Spec. Pub. 66, 34 (1926).***Germosol Special Disinfectant.****Germo Sheep Dip.**

See "Phenol Soap Solutions."

Germo Worm Powder.

(GERMO MFG. CO., LOS ANGELES, CAL.)

Found: Volatile and organic matter 64.50 per cent; insoluble matter 2.35 per cent; calcium oxide 7.07 per cent; sulphur trioxide 10.81 per cent; ferric oxide 15.30 per cent.

*Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).***Getsem Gopher Exterminator.**

(RICHERT AND ROYER.)

	Guaranteed.	Found.
Phenols.....	.....	4.40
Water.....	1.00	trace

*Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).***Go-For Gopher.**

See "Strychnine Preparations."

Gold Crown Poison.**Gold Crown Poison Barley.**

See "Phosphorus Preparations."

Gopher Death.**Gopher-Get-er.****Gopher-Go.****Gopher-Scent.**

See "Strychnine Preparations."

Government Formula Argentine Ant Poison.

(F. A. GARDNER & CO., RIVERSIDE, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	0.17
Total arsenic, metal.....	0.20	0.13

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Go-West

(M. J. FORSELL & CO., SEATTLE, WASH.)

	Guaranteed.	Found.
Calcium arsenate.....	5.00	5.40

Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).

Grape Dust.

See "Hammond's Grape Dust."

Grasshopper Poison.

(EXCHANGE ORANGE PRODUCTS CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	16.66	16.63
Arsenic, metal.....	12.00	12.58

(All water-soluble).
Cal. Dept. Agr., Spec. Pub. 34, 21 (1923).

Grasshopper Poison.

(SMITH-FRANK PACKING CO., SACRAMENTO, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	10.00	14.41
Arsenic metal.....	7.50	10.91

(All water-soluble).

Cal. Dept. Agr., Spec. Pub. 34, 21 (1923).

Gray Arsenoid (Calcium and Copper Arsenite).

(ADLER COLOR & CHEMICAL WORKS, NEW YORK, N.Y.)

Found: Water 16.10 per cent; combined arsenious oxide 21.24 per cent. soluble arsenious oxide 13.76 per cent; cupric oxide 15.10 per cent; calcium oxide 27.10 per cent; carbon dioxide, Prussian blue, sodium sulphate, etc., 6.70 per cent.

Univ. of Calif., Coll. of Agr., Expt. Sta., Bull. 151, 25 (1903).

Graylawn Farm Louse Chase.

(GRAYLAWN FARMS, INC., NEWPORT, VT.)

Guaranteed: *Asagrea officinalis* 10 per cent; sulphur 30 per cent; nicotine not less than 0.5 per cent; inert matter 59.50 per cent.

Found: Sulphur 32.21 per cent; nicotine 0.03 per cent; non-volatile alkalis 1.88 per cent. *Sabadilla* alkaloids present. Inert matter mostly calcium hydroxide.

Conn. Agr. Expt. Sta., Sample 3432.

Green Arsenoid (Copper Arsenite).

(ADLER COLOR & CHEMICAL WORKS, NEW YORK, N.Y.)

Found: Cupric oxide 28.83 per cent; combined arsenious oxide 53.51 per cent; free arsenious oxide 7.82 per cent; moisture 2.77 per cent; silica 0.40 per cent; organic matter, sodium sulphate, etc. 6.67 per cent. Is dyed with "soluble blue".

Univ. of Calif., Coll. of Agr., Expt. Sta., Bull. 151, 26 (1903).

Green Cross Beetle Mort.

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	18.00	18.53
Water-soluble arsenic, metal.....	1.00	0.12
Copper.....	5.00	5.90

N. J. Agr. Expt. Sta., Bull. 459, 12 (1927).

Green Cross Copper Lime Dust.

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

Found: Copper 10.99 per cent.

N. J. Agr. Expt. Sta., Bull. 459, 11 (1927).

Green Cross Nico-Tone.

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Nicotine	2.75	2.86

N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).

Green Cross P. B. K.

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	21.00	20.23
Water-soluble arsenic, metal.....	1.00	0.16
Copper.....	6.00	11.72

N. J. Agr. Expt. Sta., Bull. 459, 12 (1927).

Green Cross Sulpho-Arsenate Powder.

(THE KIL-TONE CO., NEWARK, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	10.10	15.39
Water-soluble arsenic, metal.....	0.66	0.71
Lead oxide.....	.....	33.17
Sulphur.....	48.00	49.20

N. J. Agr. Expt. Sta., Bull. 301, 14 (1916).

Green Death.

(FARMERS' INDUSTRIAL UNION, SYRACUSE, N. Y.)

Found: The substance is artificially colored calcium arsenite, containing 35.94 per cent arsenious oxide.

N. Y. Agr. Expt. Sta., Bull. 348, 98 (1912).

Green Label Hydroxide Paste.

See "Mechling."

Gregory's Special Ant Syrup.

(GREGORY INSECTICIDE CO., BERKELEY, CAL.)

Guaranteed: Arsenic 2.56 per cent.

Found: Arsenious oxide 1.01 per cent; arsenic metal 0.77 per cent; cane sugar 18.45 per cent; water 77.72 per cent.

Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).

Gregory's Standard Ant Destroyer.

(GREGORY INSECTICIDE CO., BERKELEY, CAL.)

	Guaranteed.	Found.
Invert sugar.....	2.00	1.57
Cane sugar.....	38.00	20.78
Water.....	56.00	76.21
Tartar emetic.....	....	1.74

*Cal. Dept. Agr., Spec. Pub. 58, 18 (1925).***Grub and Canker Worm Exterminator.**

(G. H. MORRILL & CO., BOSTON, MASS.)

Found: Linseed oil 87.28 per cent; carbon 11.40 per cent; Prussian blue 1.32 per cent. This substance is printers' ink.

*U. S. D. A., Bur. Chem., Bull. 68, 54 (1902).***H.****Hall's Lightning Squirrel and Gopher Poison.**

See "Strychnine Preparations".

Hall's Nicotine Sulphate Solution.

See "Nicotine Sulphate Solutions."

Hammond's Copper Solution.

(HAMMOND'S SLUG SHOT WORKS, BEACON, N. Y.)

	Guaranteed.	Found.
Copper.....	3.05	3.70

*N. J. Agr., Expt. Sta., Bull. 441, 11 (1926).***Hammond's Grape Dust.**

(HAMMOND'S PAINT & SLUG SHOT WORKS, BEACON, N. Y.)

	Guaranteed.	Found.
Sulphur.....	64.00	63.87
Cupric oxide.....	0.7969	0.87
Nicotine.....	trace	present
Passing 100 mesh sieve.....	....	98.00
Passing 200 mesh sieve.....	....	88.00

*Cal. Dept. Agr., Spec. Pub. 58, 50 (1925).***Handy Killer.**

(RALPH B. ADAMS, LAKEVILLE, N. B., CANADA.)

Found: Arsenious oxide 40.67 per cent. A strongly alkaline solution of sodium arsenite with a slight residue of iron oxide.

*Canada Dept., Agr., Div. Chem., Rept. Dominion Chemist (1928).***He-Bo.**

(STERLING CHEMICAL CO., CAMBRIDGE, MASS.)

	Guaranteed.	Found.
Barium carbonate.....	36.00	34.41
Total arsenic, metal.....	2.00	1.35
Water-soluble arsenic, metal.....	0.30	0.12

*Conn. Agr., Expt. Sta., Bull. 242, 159 (1922).***Heine's Liquid Insect Destroyer and Disinfectant.**

(HEINE CHEMICAL CO., HOLLIS, L. I.)

Found: The substance is a mixture of turpentine and kerosene.

U. S. D. A., Bur. Chem., Bull. 68, 57 (1902).

TABLE XII. HELLEBORE

Manufacturer or Distributor and Brand	Total Ash %	Acid-Insoluble Ash %	Alkaloids		Nitrogen %	Publication
			Guaranteed %	Found %		
J. L. Hopkins & Co., New York, N. Y. White Hellebore Root.....	11.83	6.97	0.79	1.07	1.21	Conn. Agr. Expt. Sta., Bull. 242, 156 (1922).
Interstate Chemical Co., Jersey City, N. J. Key.....	10.56	5.03	0.25	1.43	1.29	Conn. Agr. Expt. Sta., Bull. 242, 156 (1922).
Leggett & Bro., New York, N. Y. Anchor.	7.50	3.23	0.20	1.26	1.59	Conn. Agr. Expt. Sta., Bull. 242, 156 (1922).
Lehn & Fink, New York, N. Y. ¹.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).
S. B. Penick & Co., New York, N. Y. Helle- bore Root.....	9.25	5.40	1.14	1.27	.....	Conn. Agr. Expt. Sta., Bull. 242, 156 (1922).
S. B. Penick & Co., New York, N. Y. Helle- bore Root.....	4.46	1.05	1.00	2.70	1.48	Conn. Agr. Expt. Sta., Bull. 242, 156 (1922).

¹ Guaranteed to contain the alkaloids of powdered hellebore. Not analyzed.

Herbicide.

(READE MFG. CO., JERSEY CITY, N. J.)

Found: Solids 31.09 per cent; arsenious oxide 24.30 per cent; sodium arsenite (NaAsO_2), 31.90 per cent. A green alkaline solution.

Conn. Agr. Expt. Sta., Bull. 258, 376 (1924).

Herbicide (Concentrate) Arsenic.

(STRAUSS-LASHER LABORATORIES, LOS ANGELES, CAL.)

Found: Baumé gravity 50.40; arsenious oxide none; arsenic oxide 43.99 per cent. The preparation is a solution of arsenic acid.

Cal. Dept. Agr., Spec. Pub. 51, 17 (1925).

Hercules Carbohcic Acid.

See "Phenol."

Herold Poultry Worm Capsules.

	Guaranteed.	Found.
Nicotine.....	15.00	15.05

Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).

Hexol.

(SANITARY SUPPLY CO., SAN FRANCISCO, CAL.)

Guaranteed: Water 20.00 per cent.

Found: Soap 14.20 per cent; oils 61.80 per cent; water 23.40 per cent. Probably a pine oil preparation.

Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).

Hexpo.

See "Bordeaux Mixture-Lead Arsenate."

Hirschey's Ant Control.

(HIRSCHEY'S ANT CONTROL)

Found: Arsenic 0.04 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

Hirschey's P. D. Q. Argentine Ant Solution.

(HIRSCHEY'S ANT CONTROL).

	Guaranteed.	Found.
Arsenic, metal.....	0.05	0.04

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Hockwald's Carbolicide.

(HOCKWALD CHEMICAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Water.....	1.00	0.05

Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).

Hockwald's Creosote Oil.

(HOCKWALD CHEMICAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Oil.....	58.00	.....
Phenols.....	40.00	43.60
Water.....	2.00	3.00
Baumé gravity of oil.....	.....	1.20
Unsulphonated oil.....	.....	1.80

Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).

Hockwald's Sheep Dip.

See "Phenol Soap Solutions".

Hooper's Fatal Food.

(O. HOOPER JADWIN, NEW YORK, N. Y.)

Found: Borax 92.44 per cent. The balance is corn meal and red coloring matter.

*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).***Hydrated Lime.**

See "Lime."

Hydro-Cy.

See "Hydrocyanic Acid."

TABLE XIII. HYDROCYANIC ACID

Manufacturer or Distributor and Brand	Hydrogen Cyanide		Publication
	Guaranteed	Found	
	%	%	
California Cyanide Co., Cudahy, Cal. Calcyco Braun Gas.....	80.00	82.30	Cal. Dept. Agr., Spec. Pub. 58, 47 (1925).
Morago & Woodhead, Whittier, Cal. Hydro-Prussic Acid.....	96.98	96.80	Cal. Dept. Agr., Spec. Pub. 34, 24 (1923).
Owl Fumigating Co., Aero.....	96.00	97.50	Cal. Dept. Agr., Spec. Pub. 66, 34 (1926).
Owl Fumigating Corporation. Owl Prussic Acid.....		97.60	Cal. Dept. Agr., Spec. Pub. 34, 24 (1923).
The Pacific R & H Chemical Corp. Hydro-Cy.....	96.00	97.27	Cal. Dept. Agr., Spec. Pub. 66, 34 (1926).
The Pacific R & H Chemical Corp., Pacific R & H.....	96.98	97.19	Cal. Dept. Agr., Spec. Pub. 51, 20 (1925).

Hydro-Prussic Acid.

See "Hydrocyanic Acid."

Hydroxide Paste.

(MECHLING BROS. MFG. CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	6.50	4.90
Water-soluble arsenic, metal.....	0.75	0.07
Copper.....	5.00	4.89
Water.....	.....	64.84

N. J. Agr. Expt. Sta., Bull. 407, 14 (1924).

Hydroxide Powder.

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	12.50	16.33
Water-soluble arsenic, metal.....	1.50	0.23
Copper.....	12.50	12.92

*N. J. Agr. Expt., Sta., Bull. 459, 12 (1927).***I.****Impco Brand Nicotine Sulphur Dust.**

See "Nicotine-Sulphur Dusts".

Impco Complete Garden Dust.

(INTERNATIONAL MILLING CO.)

	Guaranteed.	Found.
Nicotine.....	0.50	0.52
Sulphur.....	25.00	27.82
Arsenic oxide.....	.....	4.11
Lead oxide.....	.....	5.75
Passing 100 mesh.....	.....	85.00
Passing 200 mesh.....	.....	66.00

*Cal. Dept. Agr., Spec. Pub. 58, 26 (1925).***Impco Extra Strong Insecticide Dust.****Impco Insecticide Dust.****Impco Poultry Tobacco Dust Worm Cure.****Impco Strong Insecticide Dust.**

See "Nicotine Dusts."

Imperial Lice and Mite Remedy.

See "Lime-Sulphur."

Improved Kil-Tone.

(THE KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	5.80	7.48
Water-soluble arsenic, metal.....	0.50	0.19
Copper.....	2.45	2.14

*N. J. Agr. Expt. Sta., Bull. 407, 13 (1924)***Individual Single Treatment for Round Worms.**

(AN-FO MFG. CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Nicotine.....	15.00	15.61

*Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).***Insecticide.**

(A. ST. LEGER, LAGO MAGGIORE, ITALY.)

A dark-colored odoriferous liquid, strongly alkaline; a sulphonated tar oil neutralized with ammonia and apparently containing "Rotenone", the active principle of derris.

Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).

Insectonos.

(WILLIAM BRANSON)

Found: Pyrethrum is the active ingredient. The inert ingredients are charcoal and essential oils.

Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 10 (1915).

Insecto No. 1.

See "Oil Emulsions, Mineral".

Insect Powder.

See "Pyrethrum."

Insectrogen.

(CHEMICAL PRODUCTS DIVISION, ROSE MFG. CO., PHILADELPHIA, PA.)

	Guaranteed.	Found.
Total arsenic, metal.	1.75	2.69
Water-soluble arsenic, metal.....	0.15	0.27
Lead arsenate (PbHAsO ₄).....	10.53	12.47
Nickel.....	0.47	0.44
Soap.....	13.05	10.89
Inert matter.....	73.95	....

Conn. Agr. Expt. Sta., Sample 9308.

Instant Louse Killer.

(DR. HESS & CO., ASHLAND, OHIO.)

Found: Moisture, 1.21 per cent; ash insoluble in hydrochloric acid, 27.10 per cent; ash soluble in hydrochloric acid, 64.78 per cent; carbon dioxide, coal-tar products and tobacco by difference, 6.91 per cent. Large amounts of iron, aluminum, calcium and carbonate, some magnesium, a little sulphate and phosphate. The substance consists of small amounts of calcium phenate and tobacco with large amounts of lime, calcium carbonate and clay.

U. S. D. A., Bur. Chem., Bull. 68, 51 (1902).

Iricide.

(GRING'S IRICIDE CO., BERKELEY, CAL.)

	Guaranteed.	Found.
Arsenic	0.10	0.15

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

J.

Jebel.

(J. H. RICE, ASHTABULA, OHIO.)

Guaranteed: Nicotine 0.80 per cent; inert matter 99.20 per cent.

Found: Nicotine 1.08 per cent; water and volatile matter 79.29 per cent; solids 20.71 per cent; ash 7.85 per cent.

Conn. Agr. Expt. Sta., Bull. 242, 154 (1922).

Jenning's Soluble Pine Oil.

(SANITARY SUPPLY CO.)

	Guaranteed.	Found.
Soap.....	....	12.10
Water.....	....	34.80
Pine Oil.....	55.00	53.32

Cal. Dept. Agr., Spec. Pub. 75, 55 (1927).

J. & M. Reliable Insecticide.

See "Soaps".

K.**Kalibor.**

(NITRATE AGENCIES CO., BAYONNE, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	18.20	18.18
Water-soluble arsenic, metal.....	0.75	0.12
Copper.....	3.50	3.51

*N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).***Kamforite "H".**

(HENEMAN BROS., HORNCastle, ENGLAND).

Claimed to be a combined pest destroyer, fumigant and fertilizer.

Found: Naphthalene 25.41 per cent; nitrogen 0.25 per cent; phosphoric anhydride 4.33 per cent; potassium none. Ground bone, soot, lime and iron.

*Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).***Karspray.**

See "Phenol Soap Solutions".

Kasulime.

(NITRATE AGENCIES CO., BAYONNE, N. J.)

Guaranteed: Sulphur 60.00 per cent.

Found: Sulphur 49.82 per cent; coarser than 100 mesh, 2.15 per cent; passing 100 mesh sieve, 86.35 per cent; 200 mesh 10.25 per cent; 300 mesh 1.25 per cent.

*N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).***Keresol.****Kerosene Emulsion.**

See "Oil Emulsions, Mineral".

Key Brand B. A. Cartridges.

(INTERSTATE CHEMICAL CO., JERSEY CITY, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	4.50	6.39
Water-soluble arsenic, metal.....	0.75	0.68
Copper.....	9.00	10.14

*N. J. Agr. Expt. Sta., Bull. 424, 13 (1925).***Key Brand B. Beetle Destroyer.**

(INTERSTATE CHEMICAL CO., JERSEY CITY, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	14.00	19.40
Water-soluble arsenic, metal.....	1.00	0.20
Copper.....	5.00	5.02

*N. J. Agr. Expt. Sta., Bull. 459, 11 (1927).***Key Brand Key B.**

(INTERSTATE CHEMICAL CO., JERSEY CITY, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	14.00	18.90
Water-soluble arsenic, metal.....	1.00	1.21
Copper.....	5.00	4.93

N. J. Agr. Expt. Sta., Bull. 441, 12 (1926).

Key Brand No. 7 Key Green.

(INTERSTATE CHEMICAL CO., JERSEY CITY, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	15.00	16.02
Water-soluble arsenic, metal.....	3.00	0.34
Copper.....	.....	17.33

N. J. Agr. Expt. Sta., Bull. 441, 12 (1926).

Key-Cide.

See "Bordeaux Mixture-Lead Arsenate".

K-G Ant Poison.

(KIRK-GEARY CO., SACRAMENTO, CAL.)

Guaranteed: Arsenic 0.10 per cent.

Found: Arsenic 0.13 per cent; invert sugar 39.50 per cent; cane sugar 19.38 per cent; dextrin, etc., 4.22 per cent; water 35.01 per cent.

Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).

Kill-A-Mite.

(GRANT-ERICSON CO., SAN DIEGO, CAL.)

Guaranteed: Carbolic acid a certain per cent, inert matter none.

Found: Oils 94.11 per cent; phenol 1.84 per cent free sulphur 2.17 per cent; water 1.40 per cent.

Cal. Dept. Agr., Spec. Pub. 51, 60 (1925).

Kill Hopper.

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Arsenic.....	12.00	12.78

Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).

Kill-Well Worm Expeller.

(CHICKEN PHARMACY, PETALUMA, CAL.)

	Guaranteed.	Found.
Water	54.00	76.60

Cal. Dept. Agr., Spec. Pub. 75, 64 (1927).

Kilmol Squirrel-zophene.

See "Carbon Disulphide."

Kilto.

See "Allen's Kilto Paste."

Kil-Tone, Improved.

See "Improved Kil-Tone."

Kil-Tone, Modified.

See "Bordeaux Mixture."

Kirk Geary Dipsol Sheep Dip.

See "Phenol Soap Solutions."

Kisants.

(BRUNSWIG DRUG CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	11.00	7.78
Arsenic, metal.....	8.60	5.89

Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).

Kleenup Oil.

See "Oils, Mineral."

Kloral.

(A. R. MAAS CHEMICAL CO.)

	Guaranteed.	Found.
Available chlorine.....	5.00	4.18
<i>Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).</i>		

K. M. G. Kills Morning Glory.

(WEED CONTROL CO. OF CALIFORNIA, BERKELEY, CAL.)

	Guaranteed.	Found.
Arsenic chloride (AsCl_3).....	5.00	8.02
Arsenic acid (H_3AsO_4).....	....	4.79
<i>Cal. Dept. Agr., Spec. Pub. 66, 18 (1926).</i>		

Kolodust.

See "Sulphur".

Koloform.**Kolotax.**

See "Nicotine Dusts."

Krelos.

See "Phenol Soap Solutions."

Krenol Dip.

See "Phenol Soap Solutions."

Kreo Phene.

(PURITY CHEMICAL PRODUCTS CO., SANTA ROSA, CAL.)

Guaranteed: Coal-tar oils 97.00 per cent.
 Found: Phenols 41.40 per cent; coal-tar oils 57.60 per cent; moisture 1.00 per cent.

*Cal. Dept. Agr. Spec. Pub. 75, 56 (1927).***Kreso Dip No. 1**

See "Phenol Soap Solutions."

K. S. Q.

(HEMINGWAY & CO., INC., BOUND BROOK, N. J.)

	Guaranteed.	Found.
Total arsenic oxide.....	35.00	31.00
Water-soluble arsenic oxide.....	0.50	0.27
Cupric hydroxide [$\text{Cu}(\text{OH})_2$].....	....	14.16
<i>N. J. Agr. Expt. Sta., Bull. 273, 11 (1914).</i>		

L.**Lambert's Death to Lice.**

(D. J. LAMBERT, APPONAUG, R. I.)

Found: Moisture 3.97 per cent; ash insoluble in hydrochloric acid 35.91 per cent; ash soluble in hydrochloric acid 31.40 per cent; volatile matter other than moisture 28.72 per cent; a large amount of calcium, some iron, magnesium, potassium, sodium and carbonate, traces of sulphate and phosphate. The substance is a mixture of tobacco, lime, coal-tar products and dirt.

U. S. D. A., Bur. Chem., Bull. 68, 50 (1902).

Larvex.

(LARVEX CORP., BROOKLYN, N. Y.)

Guaranteed: Sodium aluminum silicofluoride 0.52 per cent; inert matter 99.48 per cent.

Found: Total solids 0.89 per cent; fluorine 0.41 per cent; silica 0.15 per cent; aluminum oxide 0.02 per cent; sodium and organic matter 0.40 per cent.

North Dakota, Bull. 17, 52 (1927).

Laurel Green.

(NICHOLS CHEMICAL CO., NEW YORK, N. Y.)

Found: Gypsum 50.00 per cent; greensand 20.20 per cent; copper arsenite 24.70 per cent; moisture, etc., 5.1 per cent; soluble arsenic compounds, 0.8 per cent.

Univ. of Cal., Coll. of Agr., Expt. Sta. Bull. 151, 24 (1903).

Lead Arsenate.

See "Arsenate of Lead."

Lead Arsenite.

See "Pink Arsenoid".

Lead Phenate.

(These are experimental preparations made by Dr. Friend of the Entomology Department of the Connecticut Agricultural Experiment Station.)

Sample No.	3351	7523	8257
Lead oxide.....	62.64	62.00	66.23
Phenol.....	31.61	38.82	33.25
Water.....	2.65	....	0.05

Sample 8257 corresponds approximately to the formula $6\text{PbO} \cdot 7\text{C}_6\text{H}_5\text{OH}$

Lee's Insect Powder.

(G. H. LEE CO., OMAHA, NEB.)

Found: Sulphur 47.93 per cent; arsenious oxide 5.00 per cent. Remainder probably tobacco and pyrethrum.

U. S. D. A., Bur. Chem., Bull. 68, 31 (1902).

Lee's Lice Killer.

(G. H. LEE CO., OMAHA, NEB.)

Found: Sample is probably creosote oil.

U. S. D. A., Bur. Chem., Bull. 68, 55 (1902).

Lee's Louse Powder.

(GEO. H. LEE CO., OMAHA, NEB.)

	Guaranteed.	Found.
Naphthalene.....	2.00	0.60
Free sulphur.....	43.00	43.80
Pyrethrum.....	2.00	....
Sodium fluoride.....	3.00	3.01

Cal. Dept. Agr., Spec. Pub. 75, 40 (1927).

Leggett's Killer.

(LEGGETT & BRO., NEW YORK, N. Y.)

Found: The substance is oil of turpentine.

U. S. D. A., Bur. Chem., Bull. 68, 56 (1902).

Leggett's Roach Destroyer.

(LEGGETT & BRO., NEW YORK, N. Y.)

Found: Borax 22.22 per cent; pyrethrum and blue coloring matter present.

U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).

Leinen's Mildew Go.

(BAY CITY SEED CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found
Free sulphur.....	75.00	73.34
Calcium hydroxide.....	25.00	23.84

Cal. Dept. Agr., Spec. Pub. 34, 57 (1923).

Leinen's Poisoned Barley.

See "Strychnine Preparations."

Leinen's Rat-Go.

(JOHN F. LEINEN CHEMICAL CO.)

Guaranteed: Active ingredients 97.50 per cent; barium sulphate 0.30 per cent; silica 0.40 per cent; water 1.80 per cent.

Found: Barium carbonate 98.33 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).

Leinen's Sow-Bug Go.

(JOHN F. LEINEN CHEMICAL CO.)

	Guaranteed.	Found,
Total arsenic, metal.....	37.00	5.05
Water-soluble arsenic, metal.....	2.80	0.64

Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).

Lemon Oil Company's Standard Insecticide.

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Dry Soap.....	6.00	11.85
Potassium carbonate.....	0.50	1.11
Vegetable oil.....	3.50	7.45
Terebenthine.....	5.00	
Water.....	85.00	79.20

Cal. Dept. Agr. Spec. Pub. 75, 65 (1927).

Lennox Tobacco Soap.

See "Nicotine Soaps".

Lice-Go-Powder.

(S. O. BARNES & SON, GARDENA, CAL.)

Guaranteed: Talc 70.00 per cent.

Found: Naphthalene 3.71 per cent; sodium fluoride 3.30 per cent; essential oils present; loss at 400° C., 3.78 per cent; water 1.40 per cent; talc 11.16 per cent; calcium carbonate 70.10 per cent; calcium hydroxide 7.62 per cent; iron and aluminum oxides 1.10 per cent.

Cal. Dept. Agr., Spec. Pub. 51, 59 (1925).

Licresol.**Licresolis.**

See "Phenol Soap Solutions."

Lilacko Spray

See "Oils, Mineral."

Lilly Pulvules No. 142.

(ELI LILLY & CO., INDIANAPOLIS, IND.)

	Guaranteed.	Found.
Nicotine	13.00	12.88

Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).

Lime Hydrated.

Manufacturer or Distributor	Passing 300 mesh sieve
The Miller Co., Stockbridge Mass.....	84.00%

Conn. Agr. Exp. Sta., Sample 9509.

Limestone, Ground.

(MANUFACTURER UNKNOWN.)

Found: Magnesium oxide 30.86 per cent; calcium oxide 45.87 per cent.
Conn. Agr. Exp. Sta., Sample 8168.

Lime-Sulphur, Dry.

See Table XIV.

Lime-Sulphur Solution.

See Table XV.

Lion Brand Whale Oil Soap.

See "Soaps."

Liquid Insecticide.

(MERRITT CHEMICAL SPECIALTIES, OAKLAND, CAL.)

	Guaranteed.	Found.
Petroleum.....	94.00	92.00
Essential oils.....	6.00	present
Water.....		none

Cal. Dept. Agr., Spec. Pub. 34, 58 (1923).

Liquid Lice Killer.

See "A. R. M. Liquid Lice Killer".

Liquor Cresolis Compound.

See "Phenol Soap Solutions".

Lockman's Worm O-Tone.

(KIRK, GEARY & CO.)

	Guaranteed.	Found.
Water.....	75.00	77.00
Oil.....		22.76

Cal. Dept. Agr., Spec. Pub. 75, 64 (1927).

London Purple.

See Table XVI.

Long and Gretter's Squirrel Poison.

See "Strychnine Preparations".

TABLE XV. LIME-SULPHUR SOLUTION

Manufacturer or Distributor and Brand.	Polysulphide Sulphur Found		Thiosulphate Sulphur Found		Total Sulphur		Calcium Polysulphide		Calcium Thiosulphate		Baumé Gravity, degrees		Publication.
	%	Found	%	Found	%	Found	%	Found	%	Found	Guaranteed	Found	
W. A. Allen, Pittstown, N. J. Allen's Concentrated.....	18.17	.....	.....	.....	.....	.....	24.00	N. J. Agr. Expt. Sta., Bull. 424, 10 (1925).
Banning Spray Mfg. Co., Banning, Cal.	21.10	.....	.....	.....	.....	30.00	Cal. Dept. Agr., Spec. Pub. 58, 27 (1925).
Bear Creek Spray Co., Medford, Ore....	22.90	.....	24.20	.....	.....	30.00	29.10	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
James A. Blanchard Co., New York, N. Y. Lion.....	24.00	25.04	1.00	2.13	.....	30.00	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
California Growers' Association, Inc., Los Angeles, Cal.....	24.07	.....	1.09	.....	.....	25.16	.....	.....	.....	.....	.....	34.07	Cal. Dept. Agr., Spec. Pub. 34, 28 (1923).
California Paint Co., Oakland, Cal....	24.32	.....	0.95	.....	.....	25.26	.....	.....	.....	.....	.....	33.90	Cal. Dept. Agr., Spec. Pub. 34, 28 (1923).
California Rex Spray Co., Benicia, Cal. Rex.....	27.90	30.22	2.10	1.75	32.00	32.64	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
California Spray Chemical Co., Watson- ville, Cal. Ortho.....	28.00	30.30	2.00	1.75	.....	32.75	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
Chicken Pharmacy, Petaluma, Cal. C. P. Lice and Mite Liquid.....	35.34	.....	1.52	.....	35.00	Cal. Dept. Agr., Spec. Pub. 51, 10 (1925).
Chino Valley Apple Growers' Associa- tion, Chino, Cal.....	26.50	22.22	3.50	6.84	30.00	29.70	Cal. Dept. Agr., Spec. Pub. 58, 27 (1925).
Lowell M. Clark. Home.....	28.00	28.52	1.00	2.12	.....	31.75	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).

Cunningham & Thomas, Ukiah, Cal. C & T.....	.....	.....	.....	30.00	28.32	2.00	2.43	30.00	31.00	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
Farm Bureau Coop. Exchange, Eugene, Ore.....	.....	18.70	.....	.....	19.40	.....	.....	.....	29.00	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
T. A. Felton's, Portland, Ore.....	.....	23.10	.....	26.00	27.00	.....	.....	30.00	31.10	Ore. Agr. Expt. Sta., Cir. 64, 6 (1925).
F. A. Frazier Co.....	.....	.....	.....	28.50	30.95	1.50	1.90	32.00	32.63	Cal. Dept. Agr., Spec. Pub. 66, 22 (1926).
General Chemical Co., San Francisco, Cal. Orchard.....	.....	.....	.....	29.00	29.07	1.50	1.59	32.50	32.50	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
General Chemical Co., San Francisco, Cal. Orchard.....	.....	.....	.....	29.00	30.00	.....	1.54	32.00	32.38	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
Germain Seed & Plant Co., Los Angeles, Cal. ¹.....	.....	25.00	25.54	.....	31.31	.....	1.75	.....	33.50	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
The Grasselli Chemical Co., New York, N. Y. Grasselli's.....	.....	.....	.....	26.35	.....	.....	.....	.....	34.10	Conn. Agr. Expt. Sta., Bull. 272, 147 (1925).
Herbert & Herbert, Inc., Perth Amboy, N. J.....	.....	24.00	24.70	.....	25.64	.....	.....	.....	32.50	N. J. Agr. Expt. Sta., Bull. 441, 8 (1926).
Hood River Spray Co., Hood River, Ore. .....	.....	.....	.....	.....	27.10	.....	.....	32.00	31.00	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Hood River Spray Co., Hood River, Ore. .....	.....	22.00	24.50	.....	28.20	.....	.....	30.00	30.40	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Imperial Laboratories, Kansas City, Mo. Imperial Lice and Mite Remedy.	25.28	1.22	26.50	.....	31.98	.....	2.90	.....	33.50	Cal. Dept. Agr., Spec. Pub. 34, 29 (1923).
J. G. Orchards, Newburg, Ore.....	.....	.....	22.70	.....	24.00	.....	.....	30.00	29.10	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Leffingwell Rancho Co. X X X.....	.....	.....	.....	30.00	30.62	1.50	2.00	32.00	33.00	Cal. Dept. Agr., Spec. Pub. 75, 30 (1927).
Leggett & Bro., Inc., New York, N. Y. Anchor.....	.....	24.00	25.82	.....	26.70	.....	.....	.....	33.00	N. J. Agr. Expt. Sta., Bull. 441, 8 (1926).
B. Leis, Beaverton, Ore.....	.....	24.00	24.10	.....	.....	.....	.....	30.00	30.20	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).

¹ Calcium oxide, guaranteed 10.00 per cent; found 9.85 per cent.

TABLE XV. LIME-SULPHUR SOLUTION—Concluded

Manufacturer or Distributor and Brand	Polysulphide		Thiosulphate		Total Sulphur		Calcium Polysulphide		Calcium Thiosulphate		Baumé Gravity, degrees		Publication
	Found	%	Found	%	Guaranteed	%	Guaranteed	%	Found	%	Guaranteed	Found	
Los Angeles Chemical Co., Los Angeles,													Cal. Dept. Agr., Spec.
Cal. Mission.....													Pub. 66, 22 (1926).
A. R. Maas Chemical Co., Los Angeles,													Cal. Dept. Agr., Spec.
Cal.													Pub. 75, 30 (1927).
A. R. Maas Chemical Co., Los Angeles,													Cal. Dept. Agr., Spec.
Cal.	13.80		4.80	20.00	18.60								Pub. 34, 29 (1923).
Mechling Bros. Chemical Co., Camden,													N. J. Agr. Expt. Sta.,
N. J. Concentrated.....					25.00	25.68							Bull. 459, 8 (1927).
Miller Products Co., Portland, Ore....					22.10	24.60							Ore. Agr. Expt. Sta.,
Montgomery Ward & Co.....							24.50	26.40	26.20				Cir. 84, 6 (1927).
Murphy Oil Co., East Whittier, Cal...	12.95		3.39		16.34				19.55				Cir. 84, 6 (1927).
National Chemical Co., Pittsburgh, Pa.													Cal. Dept. Agr. Spec.
Flag.....													Pub. 34, 29 (1923).
Chas. C. Navlet Co., Inc., San Jose,													Cal. Dept. Agr., Spec.
Cal. Navco.....													Pub. 75, 30 (1927).
Parker's Laboratories, South Pasadena,													Cal. Dept. Agr., Spec.
Cal. Parker's Magic Discovery ²													Pub. 58, 28 (1925).
Pomona Valley Lime & Sulphur Co.													Cal. Dept. Agr., Spec.
Gold Buckle.....													Pub. 51, 10 (1925).
													Cal. Dept. Agr., Spec.
													Pub. 75, 31 (1927).

San Jose Spray Mfg. Co., San Jose, Cal. ³	....	....	....	....	30.65	..	1.44	32.00	33.17	Cal. Dept. Agr., Spec. Pub. 75, 31 (1927).
Sherwin-Williams Co., Cleveland, Ohio.	....	....	....	29.00	30.30	...	1.52	32.00	32.25	Cal. Dept. Agr., Spec. Pub. 75, 31 (1927).
Hemmingway's.....	....	....	....	25.00	25.72	....	....	....	32.50	N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).
Standard Chemical Works, Reading, Pa.....	....	....	....	23.20	27.20	26.20	....	30.00	29.90	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Gideon Stolz, Salem, Ore.....	....	....	....	....	22.40	23.20	....	30.00	30.00	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Sutherland Spray Plant, Sutherlin, Ore.	....	....	....	....	18.35	19.33	....	....	29.50	Cal. Dept. Agr., Spec. Pub. 34, 29 (1923).
S. Tinel, Yucaipa, Cal.....	15.39	3.46	....	....	25.20	31.80	....	30.00	31.90	Ore. Agr. Expt. Sta., Cir. 84, 6 (1927).
Valley Fruit Co., Walla Walla, Wash....	....	....	....	....	19.00	....	....	....	27.00	Cal. Dept. Agr., Spec. Pub. 34, 28 (1923).
G. P. Weldon, Ontario, Cal.....	17.82	1.18	....	....	....	....	....	....	....	Cal. Dept. Agr., Spec. Pub. 75, 31 (1927).
Yucaipa Valley Fruit Co. Mountain Boy.....	....	....	....	....	28.00	28.20	2.00	2.43	32.00	31.50

¹ Calcium oxide 11.2 per cent; sodium chloride 0.12 per cent; potassium and sodium sulphates, 0.38 per cent; cyanogen compounds as ferrocyanide 3.13 per cent. Polysulphide sulphur guaranteed 11.69 per cent; thiosulphate sulphur guaranteed 5.21 per cent. Made with refuse gas-house lime.

² Sugar 0.46 per cent.

³ Guaranteed water 70.00 per cent; calcium sulphate 1.00 per cent.

TABLE XVI. LONDON PURPLE

Manufacturer or Distributor and Brand	Total arsenic, metal		Water-soluble arsenic, metal		Publication
	Guaranteed	Found	Guaranteed.	Found	
Acme White Lead & Color Works, Detroit, Mich. Acme.....	% 26.00	% 25.42	% 0.30	% 0.17	Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).
Sherwin-Williams Co., Cleveland, Ohio....	21.00	24.08	1.50	0.75	Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Lotol.

(GARDEN CHEMICAL CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Water.....	40.00	12.20
<i>Cal. Dept. Agr., Spec. Pub. 66, 36 (1926).</i>		

M.

Maggi's Ant Poison.

(PAUL MAGGI, SANTA CLARA, CAL.)

	Guaranteed.	Found.
Sodium arsenate.....	0.20	0.26
<i>Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).</i>		

Maggotbait.

(CHAS. H. LILLY CO., SEATTLE, WASH.)

	Guaranteed.	Found.
Anthracene oil.....	0.80	1.40
<i>Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).</i>		

Magnesium Chloride, Flake.

(DOW CHEMICAL CO., MIDLAND, MICH.)

Found: Magnesium oxide 11.99 per cent; magnesium chloride (MgCl₂-6H₂O) 60.45 per cent. Nearly all water-soluble. Traces of iron, aluminum and calcium present.

Conn. Agr. Expt. Sta., Sample 6831.

Mag-O-Tite.

(RANDALL-MC LAUGHLIN, SEATTLE, WASH.)

	Guaranteed.	Found.
Total arsenic, metal.....	0.06	.....
Water-soluble arsenic, metal.....	0.002	0.06
Naphthalene.....	4.39	6.35
<i>Conn. Agr. Expt. Sta., Bull. 242, 159 (1922).</i>		

Mapco Miscible Oil.

See "Oil Emulsions, Mineral."

Mapco Nicotine Miscible Oil.

(MICHEL & PELTON CO.)

Found: Nicotine 0.90 per cent; soap 6.50 per cent; phenols 6.00 per cent; oils 79.30 per cent; water 6.20 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).

Mapco Nicotine Spray.

(MICHEL & PELTON CO.)

	Guaranteed.	Found.
Nicotine.....	1.00	1.20
Soap.....	20.00	20.20
Water.....	78.00	75.20
Pine oil.....	1.00	.....

Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).

Mapco Rosin Soap for Spray.

See "Soaps."

Mapco Sheep Dip.

See "Phenol Soap Solutions."

Mapco Whale Oil Soap.

See "Soaps."

Marcol.

See "Oils, Mineral".

Marvel Ant Gelatin.

(H. W. MC SPADDEN)

	Guaranteed.	Found.
Arsenious oxide.....	0.10	0.11
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

Mattes Ant Paste.

(L. A. MATTES.)

	Guaranteed.	Found.
Arsenic, metal.....	0.75	0.82
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

McClellan's Sodium Fluoride.

See "Sodium Fluoride".

McNear's Poultry House Spray.

See "Oils, Mineral."

F. W. McNess Krenol Dip & Dininfectant.

See "Phenol Soap Solutions".

F. W. McNess Lice Powder and Insecticide.

(FURST-MC NESS CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Nicotine.....	1.00	1.36
Naphthalene.....	9.00	11.90
Sulphur.....	9.50	10.30
<i>Cal. Dept. Agr., Spec. Pub. 75, 40 (1927).</i>		

Mealy Bug Spray Oil.

See "Oil Emulsions, Mineral."

Mechling's Dry Mix.

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

Guaranteed: Sulphur 60.00 per cent.

Found: Sulphur 60.93 per cent; coarser than 100 mesh, 2.23 per cent; passes 100 mesh, 97.77 per cent; 200 mesh, 25.13 per cent; 300 mesh, 3.03 per cent.

*N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).***Mechling's Green Label Hydroxide Paste.**

(MECHLING BROS. MFG. CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Water.....	.....	56.30
Total arsenic, metal.....	3.25	2.70
Water-soluble, arsenic, metal.....	0.25	0.12
Copper.....	4.50	3.50
Lead oxide.....	.....	9.95

N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).

Mechling's P. T. B.

See "Paradichlorbenzene."

Mechling's Yellow Label Hydroxide Paste.

(MECHLING BROS. MFG. CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Water.....	.....	59.02
Total arsenic, metal.....	5.50	3.90
Water-soluble arsenic, metal.....	0.50	0.13
Copper.....	2.25	2.46
Lead oxide.....	.....	17.55

*N. J. Agr. Expt. Sta., Bull. 286, 13 (1915).***Medol Emulsion.**

See "Oil Emulsions, Mineral."

Melrosine.

(THE GARDEN CHEMICAL CO., NEW YORK, N. Y.)

Guaranteed: Inert matter (water) not over 85 per cent.

Found: Chloroform extract 12.94 per cent; water 79.70 per cent; ash 2.93 per cent; fatty acids (oleic) 10.92 per cent. Potassium present, arsenic absent. Small amount of essential oil probably present. The solid matter is mostly potassium oleate.

*Conn. Agr. Expt. Sta., Sample 8933.***Mercury Preparations, Organic.**

See "Bayer Dipdust," "DuPont Semesan, Jr," "Semesan," "Semesan Bel" and "Uspulun".

Merit Lice Powder.

(TERRY PRODUCTS CO., PASADENA, CAL.)

Two samples:

Sample 1.

Found: Calcium hydroxide 59.08 per cent; calcium carbonate 17.64 per cent; calcium sulphate 0.34 per cent; magnesium carbonate 1.06 per cent; silica 12.80 per cent; iron and aluminum oxides 1.98 per cent; organic matter and water of constitution 6.72 per cent. Red coloring matter present.

Sample 2.

Guaranteed: Talc 67.00 per cent.

Found: Calcium carbonate 1.36 per cent; sodium carbonate 2.91 per cent; ferric oxide 0.66 per cent; water 3.61 per cent; phenols 3.60 per cent; naphthalene 8.44 per cent; talc 78.33 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 57 (1923).***Merit Worm Expeller.**

(TERRY PRODUCTS CO., PASADENA, CAL.)

Two samples:

Sample 1.

Found: Talc 40.62 per cent; magnesium sulphate 12.04 per cent; calcium sulphate 9.05 per cent; calcium silicate 6.85 per cent; Venetian red 7.34 per cent; sand 2.11 per cent; loss on ignition 21.18 per cent; nicotine 0.22 per cent.

Sample 2.

Found: Calcium hydroxide 1.55 per cent; magnesium sulphate 15.79 per cent; iron and aluminum oxides 6.00 per cent; sand 24.59 per cent; loss on ignition 51.60 per cent; nicotine 0.06 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 58 (1923).

Mildew-Go.

See "Leggett."

Mildew Killer.

See "M. K."

Miko Argentine Ant Poison.

(OSGOOD BROS. DRUG STORES).

	Guaranteed.	Found.
Arsenious oxide.....	0.10	0.10
Arsenic, metal.....	0.075	0.08

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Mirto.

(H. HUNTER).

Found: Calcium hydroxide and calcium carbonate present, reaction alkaline.

Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).

Miscible Oil.**Mission Brand Insecto No. 1.**

See "Oil Emulsions, Mineral".

Mission Rat Poison.

See "Phosphorus Preparations."

Mixture 154 A Special.**Mixture S 155 A Special.**

See "Nicotine-Sulphur Dusts."

Mixture M 163 Special.**Mixture No. 150.****Mixture No. 274 Special.****Mixture No. 221 Special.**

See "Nicotine Dusts."

M. K. Mildew Killer (Unburnt Sulfur Ore).

(CHAS. A. LEE CO., KERMAN, CAL.)

Found: Moisture 2.68 per cent; free sulphur 48.15 per cent; free sulphuric acid 1.67 per cent; silica 43.50 per cent; iron and aluminum oxides 0.26 per cent; loss on ignition 3.12 per cent; passing 200 mesh sieve, 60.0 per cent.

Cal. Dept. Agr., Spec. Pub. 51, 58 (1925).

Modified Kil-Tone.

See "Bordeaux Mixture".

Moore's Prepared Squirrel Poison.

See "Strychnine Preparations".

David C. Moore U. C. Chicken Worm Capsules.

(PALMER DRUG CO.)

	Guaranteed.	Found.
Nicotine.....	13.00	13.46
<i>Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).</i>		

Moor Mans Stock and Poultry Dip and Disinfectant.

See "Phenol Soap Solutions."

Morehead's Ant Killer.

(MOREHEAD ANT KILLER CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Tartar emetic.....	.....	1.05
Glucose.....	23.18	large amount
Cane sugar.....	46.38	large amount
Water.....	26.09	25.27
Trace of arsenic present.		

*Cal. Dept. Agr. Spec. Pub. 34, 18 (1923).***Morse's Gopher Poison.**

See "Strychnine Preparations."

Morse's Snail and Slug Destroyer.

(C. C. MORSE & CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Crystallized potash alum.....	99.00	99.42
<i>Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).</i>		

Moth Exterminator and Ovicide.

(H. LIEBES CO., SAN FRANCISCO, CAL.)

Found: Naphthalene 87.20 per cent; aldehydes 12.00 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 59 (1923).***Mulford Phosphorus Paste.**

See "Phosphorus Preparations."

Muller's Grand Tobacco.

See "Tobacco Dusts."

Munn's Argentine Ant Poison.

(COFFIN-REDINGTON CO.)

	Guaranteed.	Found.
Arsenic, metal.	0.15	0.21
<i>Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).</i>		

Edgar A. Murray Roach Doom.

(EDGAR A. MURRAY CO.)

Guaranteed: Inert ingredients: curcuma 5.00 per cent; sodium carbonate 2.00 per cent; sodium sulphate 2.00 per cent; sodium chloride 2.00 per cent; iron oxide 1.00 per cent; insoluble in acids, 2.00 per cent.

Found: Sodium fluoride 91.99 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).

Mystic Spray Insecticide.

(MYSTIC MFG. CO., GLENDALE, CAL.)

	Guaranteed.	Found.
Water.....	3.00	0.05
<i>Cal. Dept. Agr., Spec. Pub. 75, 64 (1927).</i>		

Mystic XX Spray.

See "Oils, Mineral."

N.**Nabob Oil.**

See "Oils, Mineral."

Naco Bordeaux-Paris Green.

(NITRATE AGENCIES CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Cupric oxide.....	18.00	16.23
Total arsenious oxide.....	17.00	17.32
Water-soluble arsenious oxide.....	2.00	0.82
<i>Conn. Agr. Expt. Sta., Bull. 242, 153 (1922).</i>		

Naco Brand Sulfur Dusting Mixture Formula No. 5

(NITRATE AGENCIES CO., BAYONNE, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	1.95	2.22
Water-soluble arsenic, metal.....	0.50	0.23
Sulphur.....	70.00	67.12
<i>N. J. Agr. Expt. Sta., Bull. 441, 16 (1926).</i>		

Naco Brand Sulphur Smoke Dusting Mixture.

(NITRATE AGENCIES CO., BAYONNE, N. J.)

	Guaranteed.	Found.
Sulphur.....	80.00	79.58
<i>N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).</i>		

Naco Dust Special.

(NITRATE AGENCIES CO., BAYONNE, N. J.)

	Guaranteed.	Found.
Total arsenic, metal.....	6.50	7.56
Water-soluble arsenic, metal.....	0.50	0.08
Copper.....	7.30	5.82
<i>N. J. Agr. Expt. Sta., Bull. 459, 16 (1927).</i>		

Naco Kalibor.

See "Kalibor."

Naphicide.

(NITRATE AGENCIES CO., BAYONNE, N. J.)

	Guaranteed.	Found.
Nicotine.....	2.00	2.23
<i>N. J. Expt. Sta., Bull. 407, 11 (1924).</i>		

Naphtho.

(MILLER PRODUCTS CO., PORTLAND, ORE.)

	Guaranteed.	Found.
Naphthalene.....	9.10	9.8
<i>Ore. Agr. Expt. Sta., Cir. 64, 15 (1925).</i>		

Naphtholene.

(MILLER PRODUCTS CO., PORTLAND, ORE.)

	Guaranteed.	Found.
Naphthalene.....	\$5.00	\$9.00
<i>Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).</i>		

Navco Crude Oil Emulsion.

Navco Miscible Oil.

See "Oil Emulsions, Mineral."

Navco Weed Destroyer.

(CHAS. C. NAVLET CO., INC., SAN JOSE, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	30.00	31.48
<i>Cal. Dept. Agr., Spec. Pub. 75, 25 (1927).</i>		

Navco Whale Oil Soap.

See "Soaps."

Neutral Emulsion.

See "Oil Emulsions, Mineral."

New Insect Destroyer.

(DEWANE BOGUE, MEDINA, N. Y.)

Found: The substance is largely kerosene oil.
N. Y. Agr. Expt. Sta., Bull. 284, 301 (1904).

New Jersey Dry-Mix-Sulfur-Lime.

(J. R. GILLAM & BRO., BURLINGTON, N. J.)

Guaranteed: Sulphur 62.00 per cent.
 Found: Sulphur 55.58 per cent; coarser than 100 mesh, 5.70 per cent;
 passes 100 mesh, 94.30 per cent; 200 mesh, 35.00 per cent; 300 mesh, 1.80
 per cent.
N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).

New Jersey Dry Mix Sulfur-Lime.

(JERSEY ORCHARD SUPPLY CO., BURLINGTON, N. J.)

	Guaranteed.	Found.
Sulphur.....	62.00	66.74
<i>N. J. Agr. Expt. Sta., Bull. 424, 10 (1925).</i>		

New Nicotine Contact Mixture.

See "Nicotine Dusts."

Niagara "All in One".

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	4.00	6.30
Total arsenic, metal.....	1.80	1.82
Water-soluble arsenic, metal.....	0.50	....
Nicotine.....	1.10	1.11
Sulphur.....	19.00	....

Guaranteed lead arsenate 9.5 per cent; Bordeaux mixture 19 per cent;
 inert matter 51.40 per cent.

Conn. Agr. Expt. Sta., Bull. 242, 157 (1922).

Niagara All-in-One Dust No. 6.

See "No. 6 All-in-One Dust."

Niagara A-1 Dust Mixture.

See "Nicotine Dusts."

Niagara Copodust.

See "Copodust."

Niagara Copotex.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	6.25	6.58
Water-soluble arsenic, metal.....	0.50	0.27
Copper.....	6.80	6.62

N. J. Agr. Expt. Sta., Bull. 459, 13 (1927).

Niagara D. C. Dust No. 3.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	6.80	8.40

Maine Agr. Expt. Sta., Official Inspections 122, 86 (1926).

Niagara D 18 Dust Mixture.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	6.25	7.02
Water-soluble arsenic, metal.....	0.50	0.20
Copper.....	6.80	6.70

N. J. Agr. Expt. Sta., Bull. 459, 14 (1927).

Niagara Dormant Dust.

See "Dormant Dust".

Niagara Dry Mix.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Sulphur.....	61.00	63.39

Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).

Niagara D 6 Dust

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	6.80	6.94

Cal. Dept. Agr., Spec. Pub. 75, 43 (1927).

Niagara D 20 Dust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	6.80	6.99
Total arsenic, metal.....	4.74	5.10
Water-soluble arsenic, metal.....	0.50	0.04
Guaranteed: Monohydrated copper sulphate 19.00 per cent; calcium arsenate 13.30 per cent.		

Cal. Dept. Agr., Spec. Pub. 75, 44 (1927).

Niagara D 25 Pctato Dust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	8.60	8.90
Guaranteed: Monohydrated copper sulphate 24.00 per cent.		
<i>Conn. Agr. Expt. Sta., Bull. 258, 370 (1924).</i>		

Niagara Dust Mixture No. 3 with Nicotine.

See "Nicotine Dusts."

Niagara Dust Mixture with Sulphur and Nicotine.

See "Nicotine-Sulphur Dusts."

Niagara 85-15 Dusting Mixture.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

Guaranteed: Total arsenic 2.92 per cent; water-soluble arsenic not more than 0.50 per cent; sulphur 83.00 per cent; lead arsenate 14.70 per cent; inert matter 2.30 per cent.

Found: Total arsenic 3.02 per cent.

Conn. Agr. Expt. Sta., Bull. 242, 157 (1922).

Niagara 80-10-10 Mixture.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

Guaranteed: Total arsenic 1.95 per cent; water-soluble arsenic not more than 0.50 per cent; sulphur 78.00 per cent; lead arsenate 9.80 per cent; inert matter 12.20 per cent.

Found: Total arsenic 2.26 per cent.

Conn. Agr. Expt. Sta., Bull. 242, 157 (1922).

Niagara 80-20 Mixture.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	3.90	4.67
Water-soluble arsenic, metal.....	0.50	0.18
Sulphur.....	77.00	79.26

Cal. Dept. Agr. Spec. Pub. 75, 27 (1927).

Niagara Entodust, No. 1

See "Arsenate of Lead."

Niagara "50-50".

See "50-50".

Niagara Kolodust.

See "Sulphur."

Niagara Koloform.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

Guaranteed: Sulphur 61.00 per cent.

Found: Sulphur 71.11 per cent; coarser than 100 mesh, 1.53 per cent; passes 100 mesh, 98.47 per cent; 200 mesh, 53.67 per cent; 300 mesh, 10.50 per cent.

N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).

Niagara Kolotax.

(NIAGARA SPRAYER CO., MIDDLEPORT, N.Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	1.95	2.16
Water-soluble arsenic, metal.....	0.50	0.15
Sulphur.....	77.00	88.52

*N. J. Agr. Expt. Sta., Bull. 459, 13 (1927).***Niagara Mixture No. 150, 70-10-20.**

(NIAGARA SPRAYER CO., MIDDLEPORT, N.Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	1.95	1.90
Water-soluble arsenic, metal.....	0.50	0.20
Sulphur.....	67.00	69.85

*N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).***Niagara Mixture S 303.****Niagara New Nicotine Contact Mixture D-1****Niagara New Nicotine Contact Mixture D-11****Niagara Nicotine Contact Mixture.**

See "Nicotine Dusts."

Niagara Nicotine Sulfur Dust No. 7.

See "Nicotine-Sulphur Dusts."

Niagara 90-10 Dusting Mixture (Pomodust).¹

(NIAGARA SPRAYER CO., MIDDLEPORT, N.Y.)

	Guaranteed.	Found.	Guaranteed	Found.
Sulphur.....	88.00	87.79	87.00	89.73
Total arsenic, metal.....	1.95	1.84	1.76	1.84
Water-soluble arsenic, metal.....	0.50	0.24	0.50	0.12
Lead Arsenate.....	9.80	.....	.....	.....

*Conn. Agr. Expt. Sta., Bull. 258, 370 (1924) and Bull. 272, 146 (1925)***Niagara No. 4 Nicotine-Lime Dust.****Niagara No. 6 Dust Mixture, with Nicotine.****Niagara No. 10 Dust Mixture, with Nicotine.**

See "Nicotine Dusts."

Niagara No. 3 Dust Mixture with Nicotine and Basic Lead Arsenate.

(NIAGARA SPRAYER CO., MIDDLEPORT, N.Y.)

	Guaranteed.	Found.
Nicotine.....	1.00	1.25
Total arsenic, metal.....	2.10	2.25
Water-soluble arsenic, metal.....	0.50	0.06
Lead oxide.....	.....	12.50

*Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).***Niagara P. D. B. Paradichlorobenzene.**

See "Paradichlorobenzene."

¹ Two Samples.

Niagara Potato Dust Mixture without Poison.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

Guaranteed: Copper 6.50 per cent; monohydrated copper sulphate 19.50 per cent; inert matter 80.50 per cent.

Found: Copper 7.56 per cent.

*Conn. Agr. Expt. Sta., Bull. 242, 157 (1922).***Niagara 70-10-20 Mixture.**

See "Niagara Mixture No. 150."

Niagara Soluble Sulphur Compound.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

Guaranteed: Sodium polysulphide 40.00 per cent; sodium thiosulphate 18.00 per cent; free sulphur 3.00 per cent; inert matter 39.00 per cent.

Found: Total sulphur 41.40 per cent, present mostly as thiosulphate and free sulphur. Not in original package and probably decomposed.

*Conn. Agr. Expt. Sta., Bull. 258, 370 (1924).***Niagara Soluble Sulphur Solution.**

See "Soluble Sulphur Solution."

Niagara Special Mixture M. 163.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper.....	10.40	10.90

N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).

Niagara Special Mixture No. 161.

See "Special Mixture No. 161."

Niagara Special Mixture No. 274.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	0.98	1.27
Water-soluble arsenic, metal.....	0.50	0.20
Sulphur.....	82.00	82.78

*N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).***Niagara Special Mixture No. 221**

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	0.98	1.51
Water-soluble arsenic, metal.....	0.50	0.35
Sulphur.....	73.00	71.70

*N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).***Niagara Special Mixture 154 A.****Niagara Special Mixture S 155 A.**

See "Nicotine-Sulphur Dusts."

Niagara Special 68.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	1.94	2.31
Water-soluble arsenic, metal.....	.....	0.20
Copper.....	3.93	4.10

Maine Agr. Expt. Sta., Official Inspections 114, 88 (1924).

Niagara Special 210 Dust Mixture.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	7.40	2.68
Water-soluble arsenic, metal.....	0.50	0.24
Copper.....	6.80	8.21

*N. J. Agr. Expt. Sta., Bull. 459, 15 (1927).***Niagara Sulphur Dust.**

See "Sulphur Dust."

Niagara Sulphur with 7 per cent Nicotine Solution.**Niagara Sulphur with 10 per cent Nicotine Solution.**

See "Nicotine-Sulphur Dusts".

Niagara Vitedust.

See "Vitedust."

Nickel Carbonate.

(MANUFACTURER UNKNOWN)

Found: Nickel 44.64 per cent; nickel carbonate 90.28 per cent; trace of sulphate present.

*Conn. Agr. Expt. Sta., Bull. 242, 160 (1922).***Nico Dust.**

See "Nicotine Dusts."

Nico-Dust for Walnut Worm and Aphis.

(WALNUT GROWERS' SPRAY MFG. CO., LOS ANGELES, CAL.)

Guaranteed: Nicotine 0.40 per cent; basic lead arsenate 10.00 per cent; total arsenic 1.50 per cent; water soluble arsenic trace, inert matter (lime) 89.60 per cent.

Found: Nicotine 0.62 per cent; lead oxide 11.95 per cent; arsenic oxide 2.89 per cent; total arsenic 2.19 per cent; water-soluble arsenic 0.08 per cent.

*Cal. Dept. Agr., Spec. Pub. 51, 50 (1925).***Nico Dust No. 75.**

(NICO-DUST MFG. CO.)

	Guaranteed.	Found.
Total arsenic, metal.....	.....	5.65
Water-soluble arsenic, metal.....	.....	0.18
Calcium arsenate.....	22.00	15.05

*Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).***Nico Fume (Liquid).**

See "Nicotine Sulphate Solutions."

"Nico-Fume" Paper.

(TOBACCO BY-PRODUCTS & CHEM. CORP., LOUISVILLE, KY.)

	Guaranteed.	Found.
Nicotine.....	20.00	21.10

*Ore. Agr. Expt. Sta., Cir. 84, 10 (1927).***Nico Fume Tobacco Powder.**

See "Nicotine Dusts."

Nico Garden Dust.**Nico Soap.**

See "Nicotine Soaps."

Nico-Sulphur Dust No. 5.**Nico-Sulphur Dust No. 6.****Nico-Sulphur Dust No. 8.**

See "Nicotine-Sulphur Dusts."

Nicota.**Nicoticide.**

See "Nicotine Sulphate Solutions."

Nicotine Capsules.

(LANGLEY & MICHAELS).

	Guaranteed.	Found.
Nicotine.....	13.00	13.48
<i>Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).</i>		

Nicotine Contact Mixture.

See "Nicotine Dusts".

Nicotine Dusts.

See Table XVII.

Nicotine, Floral.

See "Nicotine Sulphate Solutions."

Nicotine-Lime Dust.

See "Nicotine Dusts."

Nicotine Miscible Oil.

(MICHEL & PELTON CO.)

Guaranteed: Water 10.00 per cent.

Found: Nicotine 1.00 per cent; soap 5.40 per cent; phenols 5.70 per cent; tar oil 21.10 per cent; mineral oil 61.60 per cent; water 4.00 per cent.

*Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).***Nicotine, Rose.**

See "Nicotine Sulphate Solution."

Nicotine Soaps.

See Table XVIII.

Nicotine Spray.

See "Nicotine Soaps."

Nicotine-Sulfur-Lead Arsenate Dust.

(WALNUT GROWERS' SPRAY MFG. CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Sulphur.....	60.00	44.19
Nicotine.....	1.90	1.55
Lead arsenate.....	10.00	0.27
Arsenic, metal.....	2.00	0.06
Inert matter.....	28.00	...

Cal. Dept. Agr., Spec., Pub. 34, 49 (1923).

TABLE XVII. NICOTINE DUSTS

Manufacturer, Distributor or Brand	Nicotine		Inert matter, Guaranteed	Fineness, finer than		Publication
	Guaranteed	Found		100 mesh	200 mesh	
Anaheim Feed & Fuel Co., Anaheim, Cal.						
Nico-Dust	%	%	%	%	%	Cal. Dept. Agr., Spec. Pub. 34, 44 (1922).
Bomberger Seed Co., Modesto, Cal.		2.71	.....	.....	.....
Double Nico-Dust		1.29	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 44 (1922).
Bomberger Seed Co., Modesto, Cal.		1.04	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).
Nico Dust ¹		1.40	.....	.....	.....
California Associated Raisin Co., Fresno, Cal.		1.62	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 44 (1922).
Double Nico-Dust ¹		3.00	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).
California Pest Control Co., Calpest Garden Dust		3.74	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
California Spray Chemical Co., Watsonville, Cal.		2.00	95.00	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).
California Spray Chemical Co., Watsonville, Cal.		2.00	98.00	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Ortho Double		3.50	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
California Spray Chemical Co., Watsonville, Cal.		4.00	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Ortho Double		3.91	.....	.....	.....
California Spray Chemical Co., Watsonville, Cal.		3.60	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Ortho Double		1.70	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
California Sprayer Co., Calispray Dust No. 12		1.22	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
California Sprayer Co. Calispray Insecticide Dust No. 11	0.50	.....	.....	90.00	66.00	Cal. Dept. Agr., Spec. Pub. 66, 25 (1926).

California Sprayer Co. Calispray Insecticide Dust No. 15.	2.40	2.32	97.80	85.50	72.50	Cal. Dept. Agr., Spec. Pub. 66, 25 (1926).
Dosch Chemical Co., Louisville, Ky. Dosch No. 6 ¹ .	2.20	2.60	97.80	85.50	72.50	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Dosch Chemical Co., Louisville, Ky. Dosch No. 10 Nico-Dust ¹ .	3.80	3.27	96.20	85.50	72.50	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).
Hall Tobacco Chemical Co., New York, N. Y. Fumigator.	12.50	9.80	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 64, 11 (1925).
Heightstown Hardware Co., Heightstown, N. J. Ax-fixo ² .	1.25	1.47	98.75	85.50	72.50	Conn. Agr. Expt. Sta., Bull. 258, 371 (1924).
Insecticide Supply Co., Los Angeles, Cal. Dustall No. 3.	0.90	1.33	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Insecticide Supply Co., Los Angeles, Cal. Dustall No. 6.	2.00	2.30	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Insecticide Supply Co., Los Angeles, Cal. Dustall No. 8.	2.75	3.48	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Insecticide Supply Co., Los Angeles, Cal. Dustall No. 10.	3.50	3.58	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
International Milling Co., Impco Extra Strong Insecticide Dust.	2.50	1.89	.....	79.00	59.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
International Milling Co., Impco Insecticide Dust.	2.00	1.95	.....	86.00	64.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
International Milling Co., Impco Strong Insecticide Dust.	1.20	1.06	.....	86.00	58.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
Manufacturer unknown.	.....	2.81	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 9663.
Manufacturer unknown. Nicotine Sulphate Dust.	.....	3.25	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 4170.
Chas. C. Navlet Co., San Jose, Cal. Niagara Niagara Sprayer Co., Middleport, N. Y. Niagara A-1 Dust Mixture.	2.00	3.91	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Niagara Sprayer Co., Middleport, N. Y. Niagara Dust Mixture No. 3 with Nicotine.	.....	3.01	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Niagara Sprayer Co., Middleport, N. Y. Niagara Mixture S 303.	1.00	1.13	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
	1.00	1.35	.....	93.00	82.00	Cal. Dept. Agr., Spec. Pub. 66, 25 (1926).

¹ Lime carrier.
² Total ash 96.50 per cent; insoluble ash 1.28 per cent; calcium oxide 31.85 per cent; magnesium oxide 23.57 per cent.

TABLE XVII. NICOTINE DUSTS—Concluded.

Manufacturer, Distributor or Brand	Nicotine		Inert Matter, Guaranteed	Fineness, finer than		Publication
	Guaranteed	Found		100 mesh	200 mesh	
	%	%	%	%		
Niagara Sprayer Co., Middleport, N. Y.	1.25	1.43	98.75	.....	.....	Conn. Agr. Expt. Sta., Bull. 258, 371 (1924)
New Nicotine Contact Mixture D-1.....						
Niagara Sprayer Co., Middleport, N. Y.	1.25	1.49	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
New Nicotine Contact Mixture D-11.....						
Niagara Sprayer Co., Middleport, N. Y.	2.20	2.38	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 242, 155 (1922).
Nicotine Contact Mixture.....						
Niagara Sprayer Co., Middleport, N. Y.	1.90	1.95	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
No. 4 Nicotine-Lime Dust.....						
Niagara Sprayer Co., Middleport, N. Y.	2.00	2.38	.....	90.00	80.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
No. 6 Dust Mixture with Nicotine.....						
Niagara Sprayer Co., Middleport, N. Y.	3.25	3.89	.....	89.00	72.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
No. 10 Dust Mixture with Nicotine.....						
Niagara Sprayer Co., Middleport, N. Y.	2.20	2.44	97.80	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Lime Dust.....						
Niagara Sprayer Co., Middleport, N. Y.	1.10	1.23	98.90	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Lime Dust.....						
Niagara Sprayer Co., Middleport, N. Y.	1.90	1.81	98.10	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Lime Dust.....						
Niagara Sprayer Co., Middleport, N. Y.	0.70	0.52	99.30	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 43 (1922).
Lime Dust.....						
Niagara Sprayer Co., Middleport, N. Y.	2.70	2.92	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
gara A-1 Dust.....						

Niagara Sprayer Co., Middleport, N. Y.	No. 51	1.75	1.76	98.25	.....	Cal. Dept. Agr., Spec. Pub. 51, 48 (1925).
Nico-Dust Mfg. Co., Los Angeles, Cal.	Nico-Dust No. 3	.095	0.99	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Nico-Dust Mfg. Co., Los Angeles, Cal.	Nico-Dust No. 6	2.00	2.21	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Nico-Dust Mfg. Co., Los Angeles, Cal.	Nico-Dust No. 8	2.75	3.84	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Nico-Dust Mfg. Co., Los Angeles, Cal.	Nico-Dust No. 10	3.50	4.62	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
San Jose Spray Mfg. Co., San Jose, Cal.	S. J.	1.75	1.82	.....	99.00	Cal. Dept. Agr., Spec. Pub. 58, 36 (1925).
Tobacco By-Products & Chem. Corp., Louisville, Ky.	Black Leaf F 2	2.00	0.84	.....	.....	N. J. Agr. Expt. Sta., Bull. 441, 9 (1926).
Tobacco By-Products & Chem. Corp., Louisville, Ky.	Nico Fume Tobacco Powder	12.50	12.71	.....	.....	Conn. Agr. Expt. Sta., Bull. 272, 147 (1925).
L. D. Waller Seed Co., Guadalupe, Cal.	Nico-Dust ¹	..	3.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).
Walnut Growers Association, Double Nico-Dust	Walnut Growers' Spray Mfg. Co., Los Angeles, Cal.	2.36	2.41	94.00	.....	Cal. Dept. Agr., Spec. Pub. 34, 44 (1922).
Nico-Dust No. 2 ¹	Walnut Growers' Spray Mfg. Co., Los Angeles, Cal.	0.75	0.96	99.25	.....	Cal. Dept. Agr., Spec. Pub. 51, 48 (1925).
Nico-Dust No. 5	Walnut Growers' Spray Mfg. Co., Los Angeles, Cal.	1.50	1.60	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 36 (1927).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	0.56	0.45	98.50	.....	Cal. Dept. Agr., Spec. Pub. 34, 42 (1922).

¹ Lime carrier.

² Total ash 96.50 per cent; insoluble ash 1.28 per cent; calcium oxide 31.85 per cent; magnesium oxide 23.57 per cent.

TABLE XVIII. NICOTINE SOAPS

Manufacturer or Distributor and Brand	Nicotine		Soap		Water Found	Publication
	Guaranteed	Found	Guaranteed	Found		
	%	%	%	%		
Alhambra Spray Co., Alhambra, Cal.	0.80	0.95	12.50	9.80	83.40	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
Nico-Soap	.....	1.68	.....	16.90	.....	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
An-Fo Mfg. Co., Los Angeles, Cal.	0.80	0.95	12.50	9.80	83.40	Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).
Spray ¹	.....	1.68	.....	16.90	.....	Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).
An-Fo Mfg. Co., Los Angeles, Cal.	1.00	1.10	12.50	16.40	77.80	Cal. Dept. Agr., Spec. Pub. 75, 39 (1927).
Spray ¹	0.12	0.47	37.70	41.89	53.06	N. Y. Agr. Expt. Sta., Bull. 384, 298(1914).
Benj. Hammond, Fishkill, N. Y.	1.00	2.11	37.70 ⁴	38.05 ⁴	.....	Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 10 (1915).
Hammond Slug & Shot Works, Fishkill, N. Y.	.....	0.40	.....	.....	.....	.....
Juice ²	.....	None	.....	20.60	.....	.....
Juice ³	.....	.....	.....	.....	.....	.....
The Charles H. Lilly Co., Seattle, Wash.	2.00	2.10	6.00	6.30	.....	Ore. Agr. Expt. Sta., Cir. 84, 10 (1927).
Soap	.....	.....	.....	.....	.....	.....
Manufacturer Unknown, Sulfo-Tobacco Plant and	.....	.....	.....	.....	.....	.....
Animal Soap	.....	.....	.....	.....	.....	.....
Chas. C. Navlet Co., San Jose, Cal.	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 47 (1923).
Nico Whale Oil	.....	.....	.....	.....	.....	.....
Soap	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 47 (1923).

¹ Pine oil guaranteed 1.50 per cent.

² Fatty acids and resin, found 32.46 per cent; combined alkali, guaranteed 7.80 per cent; found 9.43 per cent; unsaponified, found 5.05 per cent.

³ Potash guaranteed 7.80 per cent; found 8.04 per cent.

⁴ Includes resin.

TABLE XIX. NICOTINE SULPHATE SOLUTION

Manufacturer or Distributor and Brand	Nicotine		Inert matter, Guaranteed	Publication
	Guaranteed	Pound		
Detroit Nicotine Co., Detroit, Mich. "To-Bak- ine" Liquid.	% 45.00	% 46.02	%	Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 9, (1915).
Germain Seed & Plant Co., Los Angeles, Cal. Floral Nicotine.	10.00	11.14	90.00	Cal. Dept. Agr., Spec. Pub. 34, 52 (1922).
Hall Tobacco Chemical Co., St. Louis, Mo. Hall's Kentucky Tobacco Products Co., Louisville, Ky. Black Leaf 40.	40.00	40.61	.....	Conn. Agr. Expt. Sta., Bull. 272, 147 (1925).
Montgomery, Ward & Co., Portland, Ore. Nicotine Sulfate.	40.00	41.95	60.00	Cal. Dept. Agr., Spec. Pub. 34, 52 (1922).
Nicotine Mfg. Co., St. Louis, Mo. Nikoteen.	40.00	40.30	.....	Ore. Agr. Expt. Sta., Cir. 84, 10 (1927).
Nikoteen Mfg. Co., St. Louis, Mo. 30% Nikoteen Nicotine Production Corporation. N. P. C. Nicotine Sulphate.	30.00	31.56	70.00	Cal. Dept. Agr., Spec. Pub. 34, 52 (1922).
P. L. Palethorp Co., Owensboro, Ky. Nicoticide. Parke Davis & Co., Detroit, Mich. Rose Nicotine Purity Chemical Products Co. Santa Rosa Ca. Nicota ¹	40.00 25.00 10.00	40.64 45.30 11.19	..... ..... .....	Cal. Dept. Agr., Spec. Pub. 75, 34 (1927). N. Y. Agr. Expt. Sta., Bull. 348, 94 (1912). N. Y. Agr. Expt. Sta., Bull. 384, 297 (1914).
Scabura Dip Co., Chicago Ill. Nikoteen.	2.00	2.33	.....	Cal. Dept. Agr., Spec. Pub. 75, 34 (1927).
F. A. Thompson Co., Detroit, Mich. Rose Nico- tine. . . . .	.....	26.01	.....	U. S. D. A. Bur. Chem., Bull. 68, 47 (1902).
Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky. Black Leaf 40.	10.00	9.92	.....	N. Y. Agr. Expt. Sta., Bull. 384, 297 (1914).
Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky. 40% Nicotine Sulphate.	40.00	40.54	.....	Conn. Agr. Expt. Sta., Bull. 242, 154 (1922) and Bull. 272, 147 (1925).
Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky. Nicco Fume (Liquid).	40.00	40.42	.....	N. J. Agr. Expt. Sta., Bull. 459, 7 (1927).
	40.00	42.90	.....	Conn. Agr. Expt. Sta. Bull. 272, 147, (1925).

¹ Water guaranteed 85.00%; found 96.10%.

TABLE XX. NICOTINE-SULPHUR DUSTS

Manufacturer or Distributor and Brand	Nicotine		Free Sulphur		Combined sulphur, Found	Inert matter, Guaranteed	Fineness, finer than		Publication
	Guaranteed	Found	Guaranteed	Found			100 mesh	200 mesh	
	%	%	%	%	%	%	%	%	
American Milling & Warehouse Co. (defunct) Impco.	0.29	0.29	49.98	49.98	.....	.....	78.00	52.00	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Bomberger Seed Co., Modesto, Cal.	0.96	0.96	39.39	39.39	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
California Associated Raisin Co., Fresno, Cal.	0.88	0.88	52.44	52.44	0.31	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
The California Sprayer Co., Calispray Dust No. 1.	1.30	1.30	72.00	73.85	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).
The California Sprayer Co., Calispray Dust No. 2.	2.43	2.43	70.00	67.10	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).
The California Sprayer Co. Calispray Com bined Insecticide and Fungicide Dust No. 3.	3.30	3.50	68.00	64.60	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).
The Calispray Sprayer Co. ²	1.60	1.87	71.00	66.55	.....	3.40	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).
Dosch Chemical Co., Louisville, Ky. Dosch	1.80	1.81	58.00	60.16	.....	40.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).
Dosch Chemical Co., Louisville, Ky. Dosch	2.00	4.03	.....	54.58	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).
Dosch Chemical Co., Louisville, Ky. Dosch	2.00	1.55	59.00	58.00	.....	39.00	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).
F. A. Frazier Co. Frazier's 5X ³	1.50	1.52	40.00	35.70	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).

† L. O. Haupt, Hanford, Cal. ¹.....	.....	0.97	.....	68.10	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Hood River Spray Co., Hood River, Ore. N. S. P. Dust.....	.....	1.89	.....	64.00	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 11 (1927).
C. C. Morse & Co., San Francisco, Cal....	.....	1.31	.....	65.65	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).
Niagara Sprayer Co., Middleport, N. Y. Niagara Dust Mixture with Sulphur and Nicotine No. 5.....	1.75	2.46	48.00	49.42	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).
Niagara Sprayer Co., Middleport, N. Y. Niagara No. 7.....	2.25	2.61	58.00	58.15	4.16	39.75	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
Niagara Sprayer Co., Middleport, N. Y. Niagara Special Mixture 154A.....	1.75	2.32	58.00	62.02	.....	.....	95.00	73.00	.....	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Niagara Sprayer Co., Middleport, N. Y. Niagara Special Mixture S155A.....	2.25	3.25	38.00	41.03	.....	.....	.....	92.00	72.00	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Niagara Sulphur with 7% Nicotine Solution ¹	2.55	2.59	66.00	68.57	1.40	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
Niagara Sprayer Co., Middleport, N. Y. Niagara Sulphur with 10% Nicotine Solution ¹	3.75	3.27	63.00	64.13	2.14	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
Niagara Sprayer Co., Middleport, N. Y. No. 10 ¹	3.25	4.22	58.00	56.29	5.74	39.75	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
San Francisco Sulphur Co., San Francisco, Cal.....	3.50	0.26	50.00	46.17	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
San Jose Spray Mfg. Co., San Jose, Cal....	3.50	2.51	50.00	45.15	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 37 (1927).
Standard Chemical Co., Oakland, Cal. Sulphur-Nicotine Compound ⁴	1.20	1.24	43.00	47.00	.....	49.80	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 48 (1922).
L. D. Waller Seed Co., Guadalupe, Cal....	2.84	1.45	13.10	66.09	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 46 (1922).

¹ Lime carrier.² Calcium hydroxide guaranteed 24.00 per cent.³ Sulphur classed as inert matter on label.⁴ Soap guaranteed 6.00 per cent; found 4.60 per cent.

TABLE XX. NICOTINE-SULPHUR DUSTS—Concluded.

Manufacturer or Distributor and Brand.	Nicotine		Free Sulphur.		Combined sulphur, Found	Inert matter, Guaranteed	Fineness, finer than		Publication
	Guaranteed	Found	Guaranteed	Found			100 mesh	200 mesh	
	%	%	%	%	%	%	%	%	
Walnut Growers' Association ¹	0.96	1.01	50.00	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. Nico Garden Dust	2.00	1.86	45.00	30.16	.....	.....	95.00	75.00	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. Nico-Sulphur Dust No. 5	1.75	1.83	45.00	46.36	.....	.....	90.00	72.00	Cal. Dept. Agr., Spec. Pub. 58, 35 (1295).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. Nico-Sulphur Dust No. 6	2.00	2.20	40.00	32.78	.....	.....	90.50	60.50	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. Nico-Sulphur Dust No. 8	2.75	2.99	40.00	37.18	.....	.....	86.00	45.00	Cal. Dept. Agr., Spec. Pub. 66, 24 (1926).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	3.70	2.78	48.10	49.99	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	1.50	1.16	60.00	50.33	.....	38.50	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	1.96	1.80	50.00	50.26	.....	44.00	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	0.96	1.03	50.00	44.92	.....	47.00	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 45 (1922).
Walnut Growers' Spray Mfg. Co., Los Angeles, Cal. ¹	2.36	1.01	25.00	28.71	0.52	69.00	.....	.....	Cal. Dept. Agr., Spec., Pub. 34, 45 (1922).

¹ Lime carrier.

Nicotine-Sulfur Paste.

(STANDARD CHEMICAL CO., OAKLAND, CAL.)

	Guaranteed.	Found.
Nicotine	1.20	1.56
Free sulphur	43.00	45.25
Combined sulphur	6.00	0.25
Soap	6.00	7.07
Inert matter (lime)	49.80	.....

Cal. Dept. Agr., Spec. Pub. 34, 48 (1923).

Nicotine Sulphate Dust.

See "Nicotine Dusts."

Nicotine Sulphate Solution.

See Table XIX.

Nicotine-Sulphur Dusts.

See Table XX.

Nico-Tone.

(THE KIL-TONE CO., VINELAND, N. J.)

See also "Green Cross Nico-Tone."

	Guaranteed.	Found.
Nicotine	1.25	0.67

N. J. Agr. Expt. Sta., Bull. 407, 10 (1924).

Nico-Tone B.

(THE KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Nicotine	3.00	2.17

N. J. Agr. Expt. Sta., Bull. 407, 10 (1924).

Nico Whale Oil Soap.

See "Nicotine Soaps."

Nictone.

(PARKE, DAVIS & CO., DETROIT, MICH.)

Found: Nicotine 9.87 per cent.

N. Y. Agr. Expt. Sta., Bull. 384, 297 (1914).

Nikoteen.

See "Nicotine Sulphate Solution."

Nikoteen Aphis-Punk.

(NICOTINE MFG. CO., ST. LOUIS, MO.)

Guaranteed: Nicotine 700 grains per package.

Found: Nicotine 7.96 per cent; 239.5 grains per package.

N. Y. Agr. Expt. Sta., Bull. 348, 94 (1912).

90-10 Dusting Mixture.

See "Niagara 90-10 Dusting Mixture."

No-Mor-Fly

(NO-MOR PRODUCTS CO., LOS ANGELES, CAL.)

Found: Oil 100.00 per cent; water trace, ash none to 0.003 per cent. Wintergreen and cassia present.

Cal. Dept. Agr. Spec. Pub. 51, 56 (1925).

North State Insecticide.

(NORTH STATE INSECTICIDE CO., RICHMOND, VA.)

Found: Insoluble in hydrochloric acid, 24.91 per cent; cupric oxide 12.43 per cent; iron and aluminum oxides 13.98 per cent; calcium oxide 9.07 per cent; arsenious oxide 20.32 per cent; sulphur trioxide 12.95 per cent; acetic acid and water by difference, 6.34 per cent.

U. S. D. A., Bur. Chem. Bull. 68, 27 (1902).**Nox-A-Vermin.**

(COAST CHEMICAL CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Phenols.....	20.00	22.40

Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).

Noxem Squirrel and Gopher Poison.

See "Strychnine Preparations."

Noxicide.

See "Phenol Soap Solutions."

Nox-Weed.

(C. W. MORRELL, LOS ANGELES, CAL.)

Found: Arsenious oxide 16.74 per cent; sodium hydroxide 26.80 per cent; sodium carbonate 42.00 per cent; sodium chloride small amount, chromic oxide 1.93 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 20 (1923).**Nox Worm Dry Powdered.**

(A. F. DINGLEY, SOUTH PORTLAND, ME.)

	Guaranteed.	Found.
Total arsenic, metal.....	16.00	19.82
Water-soluble arsenic, metal.....	5.00	0.25
Copper.....	4.00	5.30

Maine Agr. Expt. Sta., Official Inspections 122, 87 (1926).**N. S. P. Dust.**

See "Nicotine-Sulphur Dusts."

No. 1 Niagara Entodust.

See "Arsenate of Lead."

No. 3 Dust.

(LEGGETT & BRO., INC., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal.....	16.00	16.30
Water-soluble arsenic, metal.....	0.50	0.04
Copper.....	.....	4.85

N. J. Agr. Expt. Sta., Bull. 441, 12 (1926).**No. 3 Dust Mixture.**

See "Nicotine Dusts."

No. 4 Nicotine-Lime Dust.**No. 5 Nicotine Dust.****No. 6 Dust Mixture with Nicotine.****No. 10 Dust Mixture with Nicotine.**

See "Nicotine Dusts."

No. 6 All-in-One Dust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Nicotine	1.00	1.14
Total arsenic, metal	1.76	2.10
Water-soluble arsenic, metal	0.50	0.26
Lead oxide . . . . .	.. . . .	6.45
Sulphur	75.00	76.16

*Cal. Dept. Agr. Spec. Pub. 75, 38 (1927).***No. 6 Disinfectant.**

See "Phenol Soap Solutions."

Nu Rex O.

(CALIFORNIA REX SPRAY CO., SACRAMENTO, CAL.)

	Guaranteed.	Found.
Arsenic oxide	5.55	6.62
Copper	12.70	11.50

*Ore. Agr. Expt. Sta., Cir. 84, 13 (1927).***Nyal Roach Powder.**

(NYAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Talc	55.00	46.32

*Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).***O****Oakland Ant Co.**

(OAKLAND ANT EXTERMINATING CO., OAKLAND, CAL.)

Found: Arsenious oxide 0.29 per cent; arsenic, metal 0.22 per cent.

*Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).***Oil, Fish.**

The U. S. Department of Agriculture recommends the following specifications for fish oil for spraying purposes:

The oil should be light pressed and unadulterated, and have the following specifications:

Saponification value	190 to 193
Iodine value	139 to 193
Specific gravity at 15° C.	0.927 to 0.933
Free fatty acid	Less than 5 per cent.

*U. S. D. A., Dept. Bull. 1439 (1926).***Oil, Menhaden, Light Pressed**

(MANUFACTURER UNKNOWN)

Found: Specific gravity, 15° C., 0.932; saponification number 187; iodine number 173; free fatty acids 3.46 per cent.

*Conn. Agr. Expt. Sta., Sample 421.***Oils, Mineral.**

See Table XXI.

Oil Emulsions, Mineral.

See Table XXII.

TABLE XXI. OILS, MINERAL

Manufacturer or Distributor and Brand	Oil	Baume gravity, degrees	Specific gravity, 20° C.	Saybolt Viscosity, 100° C., seconds	Unsulphated	Evaporation, 60-65° C.	Cold Test	Publication
Associated Oil Co., San Jose, Cal. Avon Brown Neutral	%	21.80	.....	.....	63.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).
Associated Oil Co., San Jose, Cal. Crude Oil ²	100.00	18.40	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 39 (1922).
J. R. Chase, San Jose, Cal. Crude Oil ³	.....	19.50	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 57 (1925).
G. F. Doleshal Products Co., Pasadena, Cal. Sure-Shot ⁴	99.80 ⁵	39.60	.....	.....	75.90	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 57 (1925).
Hackney Chemical Co., Parlier, Cal. Di-Fit Home Spray	100.00	39.30	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).
Hockwald Chemical Co., San Francisco, Cal. Fli-Mo-Gide	100.00 ⁶	44.10	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).
Lacko Specialty Co., Inc., San Francisco, Cal. Fly Croke	100.00	43.50	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).
Lacko Specialty Co., Inc., San Francisco, Cal. Lilacko Spray	99.80	43.10	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).
Mailhard & Schmedell, San Francisco, Cal. Chemco Insect and Germ Destroyer ⁷	100.00	50.50	.....	.....	52.10 ⁸	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 56 (1925).
Manufacturer unknown. Aicopol Oil	.....	.....	0.9201	222	56.20	3.22	+7° F.	Conn. Agr. Expt. Sta., Sample 6729.
Manufacturer unknown. No. 14 Mineral Oil	.....	.....	.....	246	97.80	1.71	.....	Conn. Agr. Expt. Sta., Sample 8213.
Manufacturer unknown. No. 15 Mineral Oil	.....	.....	.....	90	92.80	1.38	.....	Conn. Agr. Expt. Sta., Sample 8214.

Manufacturer unknown. No. 16 Mineral Oil	.....	.....	331	96.40	1.68	.....	Conn. Agr. Expt. Sta., Sample 8215.
Manufacturer unknown. No. 14 Spray Oil	.....	0.9306	604	56.00	1.77	+27°F.	Conn. Agr. Expt. Sta., Sample 6727.
Manufacturer unknown. No. 910 Spray Oil	.....	0.9280	473	56.40	1.69	+16°F.	Conn. Agr. Expt. Sta., Sample 6728.
Mystic Mfg. Co., Glendale, Cal. XX Mystic XX Spray ⁹	100.00	37.60	.....	77.40	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 43 (1925).
Standard Oil Co. of New York. Socony Motor Oil—heavy	.....	0.9148	915	39.60	0.73	+18°F.	Conn. Agr. Expt. Sta., Sample 6725.
Standard Oil Co. of New York. Socony Motor Oil—light	.....	0.9073	291	62.40	1.26	+10°F.	Conn. Agr. Expt. Sta., Sample 6726.
Standard Oil Co. of New York. Socony Motor Oil—medium	.....	0.9129	443	52.40	0.85	+16°F.	Conn. Agr. Expt. Sta., Sample 6724.
Standard Oil Co. of New Jersey. Acto	.....	.....	173	96.00	.....	.....	Conn. Agr. Expt. Sta., Sample 9369.
Standard Oil Co. of New Jersey. Marcol	.....	.....	96	96.00	.....	.....	Conn. Agr. Expt. Sta., Sample 9371.
Standard Oil Co. of New Jersey. Wyrol	.....	.....	140	96.00	.....	.....	Conn. Agr. Expt. Sta., Sample 9370.
Sun Oil Co., Philadelphia, Pa. XXX Pale Spindle Oil	.....	0.9257	169	55.20	3.88	-27°F.	Conn. Agr. Expt. Sta., Sample 6723.
Sun Oil Co., Philadelphia, Pa. LIV Newport Pale	.....	0.9307	224	54.80	3.04	+16°F.	Conn. Agr. Expt. Sta., Sample 6720.
Sun Oil Co., Philadelphia, Pa. LIX New York Red	.....	0.9360	449	53.20	1.77	+28°F.	Conn. Agr. Expt. Sta., Sample 6722.

¹See Scott, "Standard Methods of Chemical Analysis" 1st ed. p. 575.

²Light oils 4.00 per cent; medium oils 31.25 per cent; heavy oils 64.75 per cent.

³Distillation test: initial boiling-point 105° C.; distilling 105-200° C., 5.19 per cent; 200-250° C., 9.86 per cent; 250-305° C., 15.30 per cent; residue 69.44 per cent. Trace of water. Asphalt.

⁴Guaranteed active ingredients 100.00 per cent.

⁵Water 0.2 per cent.

⁶Ash 0.002 per cent.

⁷Sample is a mixture of kerosene and gasoline with a little oil of wintergreen.

⁸Fraction boiling above 150° C.

⁹Precipitated chalk, guaranteed 0.34 per cent; none found. Water, trace.

TABLE XXI. OILS, MINERAL—Concluded

Manufacturer or Distributor and Brand	Oil	Baumé Gravity, degrees	Specific gravity, 100° C., seconds	Saybolt Viscosity, 100° C., seconds	Unsulphated	Evaporation 60-65° C.	Cold Test	Publication
Sun Oil Co., Philadelphia, Pa.	LXII	.....	0.9347	332	53.40	2.22	+27°F.	Conn. Agr. Expt. Sta., Sample 6721.
Toledo Red	.....	.....	.....	.....	.....	.....	.....	.....
Sun Oil Co., Philadelphia, Pa.	XCI	.....	0.9254	103	58.00	5.08	-27°F.	Conn. Agr. Expt. Sta., Sample 6714.
Sunoco Golden	.....	.....	.....	.....	.....	.....	.....	.....
Sun Oil Co., Philadelphia, Pa.	XCII	.....	0.9395	196	76.60	2.44	-18°F.	Conn. Agr. Expt. Sta., Sample 6713.
Sunoco Golden	.....	.....	.....	.....	.....	.....	.....	.....
Sun Oil Co., Philadelphia, Pa.	XCV	.....	0.9450	434	77.80	1.69	+14°F.	Conn. Agr. Expt. Sta., Sample 6710.
Sunoco Golden	.....	.....	.....	.....	.....	.....	.....	.....
Sun Oil Co., Philadelphia, Pa.	XCV	.....	0.9518	652	75.00	1.58	+43°F.	Conn. Agr. Expt. Sta., Sample 6711.
Sunoco Golden	.....	.....	.....	.....	.....	.....	.....	.....
Sun Oil Co., Philadelphia, Pa.	XCVII	.....	0.9705	907,219	54.20	0.71	+85°F.	Conn. Agr. Expt. Sta., Sample 6712.
Sunoco Golden	.....	.....	.....	.....	.....	.....	.....	.....
The Texas Co. Aleph Oil	.....	.....	0.9313	291 ¹⁰	53.40	2.88	+21°F.	Conn. Agr. Expt. Sta., Sample 6715.
The Texas Co. Altair Oil	.....	.....	0.9342	463 ¹¹	54.40	2.05	+18°F.	Conn. Agr. Expt. Sta., Sample 6717.
The Texas Co. Nabob Oil	.....	.....	0.9281	214 ¹²	54.00	3.57	+19°F.	Conn. Agr. Expt. Sta., Sample 6718.
The Texas Co. No. 776 Oil	.....	.....	0.9230	704 ¹³	55.40	1.93	+41°F.	Conn. Agr. Expt. Sta., Sample 6716.
Tidewater Oil Co. Tycol 122	.....	.....	0.9070	213	58.80	0.00	+21°F.	Conn. Agr. Expt. Sta., Sample 6719.
Van Winkle Coffee Co., San Francisco, Cal.	Old Rip Van Winkle Fly Spray	100.00 ¹⁴	42.20	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).

¹See Scott "Standard Methods of Chemical Analysis" 1st ed. p. 575.¹⁰Guaranteed 300.¹¹Guaranteed 500.¹²Guaranteed 200.¹³Guaranteed 780.¹⁴Ash 0.011 per cent; water, trace.

O. K. Ant Paste.

(WESTERN WHOLESALE DRUG CO.)

Guaranteed: Arsenic 8.39 per cent.
 Found: Arsenious oxide 11.33 per cent; arsenic, metal 8.58 per cent;
 invert sugar 21.45 per cent; sucrose 17.27 per cent; water 33.02 per cent.
Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).

O-Kay Gopher Poison.**Okay Poisoned Wheat.****O.K. Squirrel Poison.**

See "Strychnine Preparations."

Old Rip Van Winkle Fly Spray.

See "Oils, Mineral."

Ongman's Dip and Disinfectant.

See "Phenol Soap Solutions".

Orange Oil Emulsion.**Orchard Dormant Soluble Oil.****Ortho Apricot Oil.****Ortho Crude Oil Emulsion.**

See "Oil Emulsions, Mineral."

Ortho Double Nicotine Dust.

See "Nicotine Dusts."

Ortho Garden Dust.

(CALIFORNIA SPRAY CHEMICAL CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Nicotine	2.00	2.11
Arsenic oxide	4.00	3.82
Copper	2.50	2.54

*Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).***Ortho Gopher Poison.**

See "Strychnine Preparations."

Ortho Kleenup.**Orthol.**

See "Oil Emulsions, Mineral."

Ortho Liquid Soap.

See "Soaps."

Ortho Miscible Oil.**Ortho Orange Oil Emulsion.**

See "Oil Emulsions, Mineral."

Ortho Paradichlorobenzene.

See "Paradichlorobenzene."

TABLE XXII. OIL EMULSIONS, MINERAL

Manufacturer or Distributor or Brand	Oil		Phenols—Found	Soap—Found	Water		Ash— other than Soap	Constants of Separated Oil			Publications*
	Guaranteed	Found			Guaranteed	Found		Baume Gravity, degrees	Saybolt Vis- cosity, 100° F.	Unsulp- hated	
J. Willis Adriance, Stockton, Cal.	%	%	%	%	%	%	%	°	seconds	%	Cal. Dept. Agr., Spec. Pub. 34, 39 (1923).
Germo.....	94.00	5.90	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).
Alhambra Spray Co. Alhambra Spray ¹	60.40	10.20	4.90	1.31	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 37 (1923).
American Soap Co., Oakland, Cal.	70.00	66.00	4.05	.....	.....	.....	28.00	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 37 (1923).
American Jazz Spray ².....	.....	.....	.....	.....	.....	.....	33.05	53	86.00	.....	Cal. Dept. Agr., Spec. Pub. 75, 51 (1927).
Anaheim Spray Chemical Co., Anaheim, Cal. Blue Ribbon Orchard Spray.....	79.50 ³	.....	4.00	20.00	16.20	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 32 (1926).
Anaheim Spray Chemical Co., Anaheim, Cal. E. M. F. Orchard Spray.....	68.15	.....	6.20	.....	24.70	.....	37.10	.....	66.75	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).
Associated Oil Co., San Jose, Cal. Pe- trotine.....	83.00	86.30	.....	.....	.....	.....	29.80	.....	87.60	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).
Balfour, Guthrie & Co., San Francisco, Cal. Orchard Dormant Soluble Oil.....	.....	81.95	3.68 ⁴	5.28	13.00	8.00	0.81	.....	52.00	.....	Cal. Dept. Agr., Spec. Pub. 51, 37 (1925).
Balfour, Guthrie & Co., San Francisco, Cal. Soluble Oil Spray ⁵	87.00	86.37	2.80	4.03	.....	.....	1.57	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).
Balfour, Guthrie & Co., Los Angeles, Cal. Universal Brand Neutral Emul- sion.....	70.00	71.20	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).
Balfour, Guthrie & Co., Los Angeles, Cal. Universal Brand Triona.....	70.00	75.40	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).

Balfour, Guthrie & Co., Los Angeles, Cal. Universal Brand Triumph.....	86.60 ³	4.40	3.90	13.00 ³	5.00 ³	28.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Balfour, Guthrie & Co., Los Angeles, Cal. Universal Brand Triumph.....	87.00 ³	4.80	3.50	.....	3.90 ³	29.10	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Balfour, Guthrie & Co., Los Angeles, Cal. Universal Dormant Soluble Oil.	85.70 ³	1.80	7.10	13.00 ³	3.80 ³	19.90	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Balfour, Guthrie & Co., San Francisco, Cal. Universal Mealy Bug Spray Oil	75.40	7.80	9.40	13.00	7.00	23.20	44.20	Cal. Dept. Agr., Spec. Pub. 66, 32 (1926).
Balfour, Guthrie & Co., Lindsay, Cal. Universal Medol Emulsion.....	70.00	.....	.....	.....	30.20	28.20	52.70	Cal. Dept. Agr., Spec. Pub. 66, 30 (1926).
Bean Spray Pump Co., San Jose, Cal. Bean's Bug-Go, Crude.....	75.00 ³	.....	1.39	.....	21.60	22.55	.....	Cal. Dept. Agr., Spec. Pub. 66, 32 (1926).
David Burke & Co. Bejo Orchard Spray	89.40	.....	2.00	30.00	6.80	40.10	76.90	Cal. Dept. Agr., Spec. Pub. 66, 32 (1926).
David Burke & Co. Pacific Orchard Spray.....	77.40	5.80	4.90	25.00	11.40	39.10	70.60	Cal. Dept. Agr., Spec. Pub. 66, 32 (1926).
California Pest Control Co. Calpest Summer Spray.....	80.00 ³	.....	.....	.....	13.15	31.10	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).
California Rex Spray Co., Benicia, Cal. Rex Emulso.....	75.00 ³	.....	1.40	.....	22.40	24.20	19.40	Cal. Dept. Agr., Spec. Pub. 66, 33 (1926).
California Rex Spray Co., Benicia, Cal. Rex Miscible Oil, Heavy.....	80.40 ³	4.40	6.50	8.00 ³	8.30 ³	27.90	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
California Rex Spray Co., Benicia, Cal. Rex Miscible Oil, Light.....	80.30 ³	3.70	6.20	8.00 ³	9.40 ³	29.20	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
California Rex Spray Co., Benicia, Cal. Vulture Oil.....	75.00 ³	.....	1.60 ⁶	.....	22.95 ³	30.15	63.00	Cal. Dept. Agr., Spec. Pub. 75, 51 (1927).

¹Inert matter 24.60 per cent.²Soap guaranteed 4.00 per cent; inert matter guaranteed 26.00 per cent; found 30.00 per cent; Baumé gravity of oil, guaranteed 30.00. Rosin present.³Per cent by volume.⁴Phenols guaranteed 87.00 per cent. This emulsion contains rosin.⁵Inert matter guaranteed 13.00 per cent; found 6.00 per cent. Rosin present.⁶Guaranteed 1.00 per cent.

TABLE XXII. OIL EMULSIONS, MINERAL—Continued

Manufacturer or Distributor or Brand	Oil		Phenols—Found	Soap—Found	Water		Ash other than Soap	Constants of Separated Oil			Publications
	Guaranteed	Found			Guaranteed	Found		Baume Gravity, degrees	Saybolt Viscosity, 100° F., seconds	Unsulfurated	
California Spray Chemical Co., Wat- sonville, Cal. Kleenup Oil	%	%	%	%	%	%	%	22.70	45.50	%	Cal. Dept. Agr., Spec. Pub. 66, 30 (1926).
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Apricot Oil	77.10	77.10	.....	.....	21.80	21.80	0.07	22.70	45.50	.....	Cal. Dept. Agr., Spec. Pub. 66, 30 (1926).
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Crude Oil Emul- sion	75.00	74.00	.....	.....	26.00	26.00	.....	29.10	59.80	.....	Cal. Dept. Agr., Spec. Pub. 66, 30 (1926).
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Crude Oil Emul- sion	75.00 ³	75.60 ³	.....	.....	.....	22.70	.....	22.10	38.80	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Kleenup Grade A7	.....	.....	.....	.....	.....	.....	0.29	.....	53.20	102	Conn. Agr. Expt. Sta., Sample 8861.
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Kleenup Oil	.....	.....	.....	.....	.....	.....	.....	.....	55.60	102	Conn. Agr. Expt. Sta., Sample 8045.
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Kleenup Oil, Grade B	75.00 ³	78.20 ³	.....	.....	.....	21.65	.....	21.85	58.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 48 (1927).
California Spray Chemical Co., Wat- sonville, Cal. Orthol	75.00 ³	77.50 ³	none	.....	21.80 ³	21.80 ³	0.13	40.60	94.50	.....	Cal. Dept. Agr., Spec. Pub. 58, 42 (1925).
California Spray Chemical Co., Wat- sonville, Cal. Orthol Concentrate	80.00 ³	79.60 ³	.....	.....	.....	18.70	.....	30.70	86.80	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
California Spray Chemical Co., Wat- sonville, Cal. Orthol-K (Heavy)	.....	.....	.....	.....	.....	.....	.....	.....	111	.....	Conn. Agr. Expt. Sta., Sample 9743.
California Spray Chemical Co., Wat- sonville, Cal. Ortho Miscible Oil	85.00 ³	87.25 ³	2.72	6.14	3.65	3.65	.....	21.55	50.90	.....	Cal. Dept. Agr., Spec. Pub. 66, 33 (1926).

California Spray Chemical Co., Watsonville, Cal. Ortho Orange Oil Emulsion ⁸.....	.....	.....	.....	25.00	24.70	0.48	40.30	96.70	Cal. Dept. Agr., Spec. Pub. 51, 32 (1925).
California Spray Chemical Co., Watsonville, Cal. Ortho Orange Oil Emulsion ⁸	75.00	80.30	.....	25.00	18.20	0.51	40.80	95.90	Cal. Dept. Agr., Spec. Pub. 51, 32 (1925).
California Spray Chemical Co., Watsonville, Cal. Ortho Penetrating Oil Spray.....	75.00 ³	72.50 ³	1.90	none	25.10	.....	25.40	53.80	Cal. Dept. Agr., Spec. Pub. 58, 44 (1925).
California Spray Chemical Co., Watsonville, Cal. Volck Concentrate.....	.....	83.55	.....	.....	16.28	0.02	.....	.....	Conn. Agr. Expt. Sta., Sample 2504.
California Spray Chemical Co., Watsonville, Cal. Volck ⁹	83.00	79.19	.....	.....	.....	.....	.....	94.40	Conn. Agr. Expt. Sta., Sample 8934.
California Spray Chemical Co., Watsonville, Cal. Volck Emulsion.....	.....	.....	.....	.....	.....	.....	.....	108	Conn. Agr. Expt. Sta., Sample 8047.
California Spray Chemical Co., Watsonville, Cal. Volck Light.....	83.00 ³	81.80 ³	.....	.....	17.95	.....	34.00	95.60	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Carco Spray Co., Tacoma, Wash. Oil Emulsion.....	.....	86.60	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 13 (1927).
Classen, Murfit & Co., Philadelphia, Pa. Keresol.....	.....	80.00 ¹⁰	4.15	12.00	.....	1.30	.....	.....	Conn. Agr. Expt. Sta., Bull. 258, 373 (1924).
Clarkson & Ford, New York, N. Y. Soluble Spray Oil ¹¹.....	.....	85.10	.....	.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 272, 148 (1925).
Coulson Poultry & Stock Food. Coulson's Poultry Spray.....	.....	88.60	9.60 ¹²	.....	0.10	0.04	26.20	38.40	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
Eastbay Chemical Co., Emeryville, Cal. Zeno Miscible Oil Spray ¹³.....	.....	84.22	4.00	4.78	.....	0.94	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).

³Per cent by volume.⁷Total nitrogen, 0.15 per cent; ammonia (NH₃) 0.12 per cent; casein 0.19 per cent. This is an ammonium caseinate emulsion.⁸Ash contains copper and calcium.⁹Ammonia (NH₃), found 0.06 per cent.¹⁰Kerosene.¹¹Specific gravity, 25° C., 0.9333; unsaponifiable matter 85.10 per cent. Rosin present. A light petroleum oil containing a sodium soap.¹²Guaranteed 15.00 per cent. Sample does not contain rosin.¹³Inert matter guaranteed 16.00 per cent, found 6.00 per cent.

TABLE XXII. OIL EMULSIONS, MINERAL—Continued

Manufacturer or Distributor or Brand	Oil		Phenols—Pound	Soap—Pound	Water		Ash other than Soap	Constants of Separated Oil			Publications
	Guaranteed	Pound			Guaranteed	Pound		Baume Gravity, degrees	Saybolt Viscosity, 100° F. seconds	Unsaponated	
Eastbay Chemical Co., Emeryville, Cal.	%	%	%	%	%	%	%				Cal. Dept. Agr., Spec. Pub. 34, 36 (1923).
Zeno Miscible Oil Spray ¹⁴	83.00	4.20	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 35 (1925).
Herbicide Chemical Laboratories.	54.57	53.99	.....	3.13 ¹⁵	45.29	42.20	0.01	.....	.....	65.30	Cal. Dept. Agr., Spec. Pub. 51, 35 (1925).
Fumispay	.....	55.76	.....	3.54	40.00	39.00	0.08	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 35 (1925).
Herbicide Chemical Laboratories.	.....	90.70	.....	.....	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta. Cir. 84, 13 (1927).
Fumispay	84.00	73.80	.....	.....	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta. Cir. 84, 13 (1927).
Hood River Spray Co., Hood River, Ore.	75.00	87.80 ³	.....	.....	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta. Cir. 84, 13 (1927).
Hood River Spray Co., Hood River, Ore.	85.00 ³	87.80 ³	.....	.....	.....	12.50	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Oil Emulsion	85.00 ³	87.80 ³	.....	.....	.....	12.40	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Oil Emulsion	85.00 ³	87.70 ³	.....	.....	.....	8.42	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Leffingwell Rancho Co., Whittier, Cal.	90.00 ³	91.10 ³	3.97	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
XXX Heavy Emulsion	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
XXX Medium Emulsion	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Los Angeles Chemical Co., Los Angeles, Cal.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Bull. 242, 162 (1922).
Mission Brand Insecto No. 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 44 (1925).
Manufacturer unknown. Sulco-V. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 44 (1925).
McClore Chemical Laboratories. Calox	.....	89.20	3.33	4.00	16.00	2.87	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 44 (1925).
McClore Chemical Laboratories. Renol (Miscible Oil)	.....	84.60	3.50	8.50	6.00	2.40	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 44 (1925).

G. P. McNear Co., Petaluma, Cal. Four and One Spray	92.70	7.20 ¹⁶	.....	.....	0.10	0.01	.....	74.20	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
G. P. McNear Co., Petaluma, Cal. McNear's Poultry House Spray	94.00	5.76 ¹⁷	.....	.....	trace	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).
Michel & Pelton Co., Mapco Miscible Oil	83.60	5.20	7.05	10.00	2.50	.....	21.05	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Chas. C. Navlet Co., Inc., San Francisco, Cal. Navco Crude Oil Emulsion ¹⁸	66.12	.....	.....	30.00 ³	31.60 ³	0.64	22.60	31.70	Cal. Dept. Agr., Spec. Pub. 51, 33 (1925).
Chas. C. Navlet Co., Inc., San Francisco, Cal. Navco Miscible Oil	85.40 ³	5.20	6.30	12.00 ³	2.80 ³	.....	22.30	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Peerless Spray Chemical Co., Covina, Cal. Peerless Spray Emulsion	85.00 ³	85.27 ³	.....	.....	14.13	.....	27.77	85	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
Perfecto Spray Mfg. Co., Los Angeles, Cal. Perfecto Spray Oil	83.00 ³	85.73 ³	.....	.....	13.98	.....	31.33	45	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
B. G. Pratt, New York, N. Y. Pratt's Carboleme ¹⁹	86.00	present	.....	.....	11.17	1.22	.....	.....	Conn. Agr. Expt. Sta., Bull. 272, 148 (1925).
Rochester Rex Co., Rochester, N. Y. Emulso	.....	.....	.....	.....	.....	.....	.....	157	Conn. Agr. Expt. Sta., Sample 8235.
R. R. Rogers Chemical Co., "Cee-Pec-Dee" Carbolized Petroleum Distillate	79.78	19.32 ²⁰	.....	2.00	0.80	0.06	24.90	47.50	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
San Jose Spray Mfg. Co., San Jose, Cal. Cot Oil	79.90 ³	0.10	.....	30.00	18.50	0.21	30.60	62.20	Cal. Dept. Agr., Spec. Pub. 66, 31 (1926).
San Jose Spray Mfg. Co., San Jose, Cal. Crude Oil Emulsion	81.19 ³	0.20	.....	.....	19.01	0.44	19.30	.....	Cal. Dept. Agr., Spec. Pub. 66, 31 (1926).

³Per cent by volume.¹⁴Inert matter guaranteed 16.50 per cent; found 12.50 per cent.¹⁵Guaranteed 0.14 per cent.¹⁶Guaranteed 2.00 per cent.¹⁷Guaranteed 4.80 per cent.¹⁸Ether-insoluble matter (glue) 1.65 per cent. Rosin present.¹⁹Guaranteed mineral oil 83.00 per cent; saponifiable oil 3.00 per cent; potassium oxide 1.00 per cent.²⁰Guaranteed 20.00 per cent.

TABLE XXII. OIL EMULSIONS, MINERAL—Concluded.

Manufacturer or Distributor or Brand	Oil		Phenols—Pound	Soap—Pound	Water		Ash other than Soap	Constants of Separated Oil			Publications		
	Guaranteed	Pound			%	Guaranteed		Found	%	Baumé Gravity, degrees		Saybolt Viscosity, 100° F., seconds	Unsopho-nated
San Jose Spray Mfg. Co., San Jose, Cal. Exlol.	83.14 ³	83.14 ³	.....	.....	25.00	15.62	.....	22.53	.....	68.80	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
San Jose Spray Mfg. Co., San Jose, Cal. San Jose Summer Oil.	80.00 ³	86.01 ³	.....	.....	.....	13.58	.....	30.60	106	100.00	Cal. Dept. Agr., Spec. Pub. 75, 49 (1927).
San Jose Spray Mfg. Co., San Jose, Cal. Skalene.	.....	78.54 ³	5.60	4.20	10.00	11.75	.....	27.30	.....	64.40	Cal. Dept. Agr., Spec. Pub. 66, 33 (1926).
San Jose Spray Mfg. Co., San Jose, Cal. Skalol.	.....	82.70 ³	4.60	5.30	10.00	6.20	.....	21.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Santa Rosa Poultry Association, Santa Rosa, Cal. Sarpa Poultry Spray ²¹.	.....	98.10	1.60	.....	.....	0.30	none	.....	.....	42.00	Cal. Dept. Agr., Spec. Pub. 51, 57 (1925).
Santa Rosa Poultry Association, Santa Rosa, Cal. Sarpa Poultry Spray.	.....	76.11	21.88	.....	.....	2.00	0.01	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 57 (1925).
Sherwin-Williams Co., Cleveland, Ohio. Citro-Mulsion ²² .	69.00	72.90	0.56	.....	31.00	23.20	0.05	.....	.....	67.10	Cal. Dept. Agr., Spec. Pub. 51, 33 (1925).
Sherwin-Williams Co., Cleveland, Ohio. Citro-Mulsion ²³ .	73.00	72.87	0.38	.....	.....	23.80	0.08	.....	.....	63.40	Cal. Dept. Agr., Spec. Pub. 51, 33 (1925).
Sherwin-Williams Co., Cleveland, Ohio. Free Mulsion.	.....	85.70 ²⁴	.....	.....	.....	.....	.....	.....	162	59.40	Conn. Agr. Expt. Sta., Sample 7776.
Sherwin-Williams Co., Cleveland, Ohio. Spray Mulsion.	.....	83.60	2.90	8.10	5.00	4.00	.....	24.70	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 53 (1927).
Sherwin-Williams Co., Cleveland, Ohio. Summer Mulsion.	75.00	74.90	.....	.....	.....	24.40	.....	36.50	.....	95.20	Cal. Dept. Agr., Spec. Pub. 75, 50 (1927).

Sherwin-Williams Co., Cleveland, Ohio.	75.00	75.34	0.23	.....	23.80	0.11	27.20	.....	58.90	Cal. Dept. Agr., Spec. Pub. 66, 31 (1926).
Winter Mulston..... ²⁵	.....	.....	.....	.....	.....	.....	.....	142	62.80	Conn. Agr. Expt. Sta., Sample 7777.
Standard Oil Co. of Indiana. Dendrol ²⁵	.....	.....	.....	.....	.....	.....	.....	193	60.80	Conn. Agr. Expt. Sta., Sample 8862.
Standard Oil Co. of Indiana. L 21 Oil ²⁶	.....	.....	.....	.....	.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 8862.
Sterling Spray Co. S. O. S. Sterling Oil Spray.....	.....	92.48	.....	1.90	.....	.....	36.65	37	76.10	Cal. Dept. Agr., Spec. Pub. 75, 51 (1927).
Sun Co., Boston & New York. Sun Miscible Oil ²⁷.....	.....	79.00	.....	.....	.....	2.85	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 258, 373 (1924).
Sun Oil Co., Philadelphia, Pa. Sunoco Spray Oil.....	.....	.....	.....	.....	.....	.....	.....	374	46.00	Conn. Agr. Expt. Sta., Sample 8046.
Van Antwerp Drug Corp., Mobile, Ala. Schnarr's Insecticide ²⁸.....	.....	49.13	.....	.....	.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 258, 373 (1924).

³Per cent by volume.

²¹Specific gravity, 0.89002.

²²Ether-insoluble (gums) 2.05 per cent.

²³Ether-insoluble (gums) 2.18 per cent.

²⁴Cc per 100 gm.

²⁵Alcohol 0.23 per cent.

²⁶Total nitrogen 0.03 per cent, ammonia nitrogen 0.01 per cent.

²⁷Unsaponifiable matter 79.00 per cent; saponified matter 16.00 per cent.

²⁸Total fatty acids 8.25 per cent; free fatty acids 0.77 per cent.

Ortho Penetrating Oil Spray.

See "Oil Emulsions, Mineral."

Ortho Penetrating Poisoned Barley.

See "Strychnine Preparations."

Ortho Poison Brand.

(CALIFORNIA SPRAY CHEMICAL CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	7.19	6.90
Arsenic, metal.....	1.75	5.22

Cal. Dept. Agr., Spec. Pub. 51, 18 (1925).

Ortho Walnut Worm and Aphis Dust.

(CALIFORNIA SPRAY CHEMICAL CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Nicotine.....	0.90	1.17
Total arsenious oxide.....	3.00	3.22
Total arsenic, metal.....	1.96	2.10
Water-soluble arsenic, metal.....	.....	0.06
Lead oxide.....	.....	10.00

Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).

Ortho Walnut Worm Dust.

(CALIFORNIA SPRAY CHEMICAL CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Arsenic.....	1.96	1.72

Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).

Ortho Weed Killer.

(CALIFORNIA SPRAY CHEMICAL CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	29.00	29.73

Cal. Dept. Agr., Spec. Pub. 75, 25 (1927).

Ortho Whale Oil Soap.

See "Soaps."

Otaylite.

(MANUFACTURER NOT STATED)

Found: Water 8.20 per cent; soap 14.38 per cent; free sulphur 8.13 per cent; sodium carbonate 22.50 per cent; silica 28.46 per cent; iron and aluminum oxides 1.40 per cent; calcium carbonate 13.05 per cent; magnesium carbonate 3.48 per cent. No arsenic or lead present.

*Cal. Dept. Agr., Spec. Pub. 34, 59 (1923).***The Owl Argentine Ant Poison.**

(THE OWL DRUG CO., SACRAMENTO, CAL.)

	Guaranteed.	Found.
Arsenic.....	0.20	0.18

Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).

Owl Prussic Acid.

See "Hydrocyanic Acid".

The Owl Sheep Dip.

See "Phenol Soap Solutions."

"Oxygenic" Powder.

(OXYGENIC INDUSTRIAL CO., LOS ANGELES, CAL.)

Found: Water 7.48 per cent; copper sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$) 28.45 per cent; calcium oxide 32.12 per cent; gypsum 11.29 per cent; ammonium chloride 4.59 per cent; potassium chloride 3.42 per cent; sodium chloride 0.50 per cent; magnesium chloride 2.85 per cent; magnesium sulphate 3.10 per cent; silica 2.40 per cent; iron and aluminum oxides 0.58 per cent; carbon dioxide 3.22 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 60 (1923).

P.**Pacific R & H Hydrocyanic Acid.**

See "Hydrocyanic Acid."

Panama Spray Compound.

(CENTER PHARMACY, OAKLAND, CAL.)

No statement of active or inert ingredients. Not analyzed.

Cal. Dept. Agr., Spec. Pub. 66, 36 (1926).

Paracide.

See "Paradichlorbenzene."

Paradichlorbenzene.

See Table XXIII.

Paragrene.

(FRED L. LAVANBURG, NEW YORK, N. Y.)

Found: Cupric oxide 23.46 per cent; combined arsenious oxide 17.52 per cent; free arsenious oxide 23.08 per cent; acetic acid 6.72 per cent; gypsum 19.31 per cent, sodium sulphate 2.26 per cent; sodium chloride 0.25 per cent; ferric oxide 0.20 per cent; moisture 6.20 per cent. The substance is a mixture of Paris green, gypsum and white arsenic.

Univ. of Cal. Coll. of Agr., Expt. Sta., Bull. 151, 23 (1903).

Paris Green.

See Table XXIV.

Parker's Magic Discovery.

See "Lime-Sulphur Solution."

Par'Oidium.

(F. C. BOUCHER & CO., ST. PAUL, MINN., IMPORTERS).

Found: Ash insoluble in hydrochloric acid 7.10 per cent; carbon dioxide 2.88 per cent; sulphur trioxide 17.12 per cent; ferric oxide 10.63 per cent; calcium oxide 15.58 per cent; magnesium oxide 0.73 per cent; free sulphur 19.12 per cent; tobacco and water (by difference) 26.84 per cent. Substance is a mixture of gypsum, sulphur, ferric oxide, small amounts of sand, and tobacco.

U. S. D. A., Bur. Chem., Bull. 68, 54 (1902).

TABLE XXIII. PARADICHLORBENZENE

Manufacturer or Distributor and Brand	Paradichloro- benzene		Melting Point, °C.	Publication
	Guaranteed	Found		
Braun-Knecht-Heimann, San Francisco, Cal.	99.00	98.80	.....	Ore. Agr. Expt. Sta., Cir. 84, 14 (1927).
California Spray Chemical Co., Watsonville, Cal. Ortho.	99.00	98.50	.....	Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).
Hooker Electrochemical Co., Paracide.	100.00	99.70	.....	Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).
Meeching Bros. Mfg. Co. Camden, N. J. Mech- ling's P. T. B. . . . .	.....	.....	56	Conn. Agr. Expt. Sta., Bull. 242, 160 (1922).
Niagara Alkali Co., Niagara P. D. B. ¹ . . . . .	.....	99.17	53.2	Cal. Dept. Agr., Spec. Pub. 51, 56 (1925).
Southern California Disinfecting Co., Los Angeles Cal. Cedar Blocks.	100.00	93.60	.....	Cal. Dept. Agr., Spec. Pub. 75, 66 (1927).

¹ No ash.

Manufacturer or Distributor and Brand	Arsenious Oxide				Cupric Oxide Found %	Publication
	Total		Water-Soluble			
	Guaranteed %	Found %	Guaranteed %	Found %		
Acme White Lead & Co'or Works, Detroit, Mich.	50.00	57.50	...	1.00	24.60	Ore. Agr. Expt. Sta., Cir. 84, 9 (1927).
Bowker Chemical Co., New York, N. Y.	50.00	55.23	3.50	1.15	29.55	N. J. Agr. Expt. Sta., Bull. 459, 5 (1927).
Brunswick Drug Co., Pfeiffer's.	50.00	57.01	3.50	5.30	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Chipman Chemical Engineering Co., Inc., Bound Brook, N. J. Chipman	50.00	55.17	3.50	0.64	31.28	N. J. Agr. Expt. Sta., Bull. 459, 5 (1927).
Le Comptoir Co-Opératif Fédéré de Québec, Mont- real, Can.	...	55.48	...	1.15	30.42	Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).
Dupuy & Ferguson, Montreal, Can.	...	56.99	...	1.17	30.07	Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).
The Glidden Co., Cleveland, Ohio. Glidden.	50.00	55.32	3.50	2.47	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Interstate Chemical Co., Jersey City, N. J. Key.	50.00	55.04	3.50	1.15	31.60	N. J. Agr. Expt. Sta., Bull. 459, 5 (1927).
Fred. J. Lavanburg Co., New York, N. Y. Star.	50.00	55.68	3.50	3.26	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
John Lucas & Co., Inc., Philadelphia, Pa. John Lucas	50.00	55.58	3.50	3.07	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Lucas-Kil-Tone Co., Vineland, N. J. Green Cross.	50.00	54.53	3.60	2.43	31.68	Cal. Dept. Agr., Spec. Pub. 459, 5 (1927).
Martin-Senour Co., Chicago, Ill.	50.00	54.33	3.50	1.65	30.19	N. J. Agr. Expt. Sta., Bull. 424, 7 (1925).
Montgomery, Wa d & Co., Oakland, Cal.	50.00	56.72	3.50	2.06	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Nitrate Agencies Co., Bayonne, N. J. Naco.	50.00	54.34	3.50	1.50	30.01	N. J. Agr. Expt. Sta., Bull. 407, 7 (1924).
Pfeiffer Insecticide Co., Inc., New York, N. Y. Bug Williams.	50.00	53.15	3.50	1.65	29.80	N. J. Agr. Expt. Sta., Bull. 424, 7 (1925).
Sherwin-Williams Co., Cleveland, Ohio. Sherwin- Williams.	50.00	55.83	3.50	2.74	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Sherwin-Williams Co., Cleveland, Ohio. Hemming- way's.	50.00	55.42	3.50	1.10	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Snow & Nealley, Bangor, Me.	...	57.20	...	3.02	...	Maine Agr. Expt. Sta., Official Inspections 126; 84 (1927)
Walnut Growers' Spray Mfg. Co. Golden State.	50.00	55.73	3.50	2.37	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Western Wholesale Drug Co. Devoe.	50.00	56.69	3.50	2.24	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).
Western Wholesale Drug Co. Star.	50.00	57.81	3.50	1.98	...	Cal. Dept. Agr., Spec. Pub. 75, 23 (1927).

P. B. K.

(JOHN LUCAS & CO., INC., PHILADELPHIA, PA.)

(See also "Green Cross P. B. K.")

	Guaranteed.	Found.
Total arsenic, metal	21.30	21.24
Water-soluble arsenic, metal	1.00	1.64
Copper	6.00	9.00

N. J. Agr. Expt. Sta., Bull. 407, 14 (1924).**P. D. Q. Argentine Ant Solution.**

See "Hirschey."

P. D. Q. Insect Powder.

(WORCESTER COMPOUND CO., WORCESTER, MASS.)

Found: Moisture 2.62 per cent; free sulphur 15.59 per cent; ash insoluble in hydrochloric acid 64.51 per cent; ash soluble in hydrochloric acid 15.23 per cent; coal-tar products (by difference) 2.05 per cent; calcium, magnesium, potassium, sodium, sulphate and phosphate present. A mixture of sulphur, coal-tar products and earth.

U. S. D. A., Bur. Chem., Bull. 68, 49 (1902).**Peerless Spray Emulsion.****Penetrating Oil Spray.**

See "Oil Emulsions, Mineral."

Perfecto Rosin Paste.

See "Soaps."

Perfecto Spray Oil.

See "Oil Emulsions, Mineral."

Pest-Go.

(PEST-GO, INC., PORTLAND, ORE.)

	Guaranteed.	Found.
Active salts	70.00	68.80

Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).

Pestroy.

See "Bordeaux Mixture-Lead Arsenate."

Peterman's Roach Food.

(WM. PETERMAN, NEW YORK, N. Y.)

Found: Borax 20.60 per cent; balance potato or pea meal and red coloring matter.

U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).**Petrotine.**

See "Oil Emulsions, Mineral."

Pheno-Dip.

See "Phenol Soap Solutions."

Phenol.

See Table XXV.

Phenolene.

See "Phenol Soap Solutions."

TABLE XXV. PHENOL

Manufacturer or Distributor and Brand	Phenols		Water	Non-Soap Ash	Oils	Constants of Separated Oil		Publication
	Guaranteed	Found				Baume Degrees	Unsapon- ated	
Braun-Knecht-Heimann Co., San Fran- cisco, Cal. Acid Carbohc, Crude.	24.60	0.50	0.50	0.13	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).
Braun-Knecht-Heimann Co., San Fran- cisco, Cal. Hercules Carbohc Acid.	33.60	1.00	1.00	0.13	75.66	0.80	39.03	Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).
German Seed & Plant Co. German Crude Carbohc Acid ¹ .	15.00	0.40	0.40	0.05	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Hayward Drug Co., Hayward, Cal. Crude Carbohc Acid.	22.00	0.60	0.60	0.05	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
A. R. Maas Laboratories. Crude Carbohc Acid.	14.92	trace	trace	0.05	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Mefford Chemical Co., Los Angeles, Cal. Crude Carbohc Acid.	37.70	1.60 ²	1.60 ²	0.05	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Peterson Bros., Hayward, Cal. Waters Bros. Crude Carbohc Acid ¹ .	17.00	0.20	0.20	0.05	84.48	0.70	trace	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
R. R. Rogers Chemical Co., San Francisco, Cal. Crude Carbohc Acid.	40.00	14.00	14.00	0.03	70.98	1.60	3.60	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
R. R. Rogers Chemical Co., San Francisco, Cal. Crude Carbohc Acid 25 per cent.	25.00	1.60	1.60	0.03	70.98	1.60	3.60	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Rogers Pharmacy, Hayward, Cal. Crude Sol. Carbohc Acid.	12.60	trace	trace	0.07	86.50	25.50	49.80	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).

¹ Adulterated with mineral oil.² Guaranteed none.

TABLE XXVI. PHENOL SOAP SOLUTIONS

Manufacturer or Distributor and Brand	Phenols		Soap		Water		Non-Soap Ash	Oils			Publication
	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found		Total	Tar	Mineral	
Acme White Lead & Color Works, Detroit, Mich.	10.70	24.30	10.00	10.40	0.60	52.00				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
Acme Sheep & Cattle Dip	16.10	21.81	10.00	9.60	2.09	49.25				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
An-Fo Mfg. Co., Los Angeles, Cal.	17.30	20.90	10.00	8.20	1.05	50.40				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
An-Fo Disinfectant	22.20	5.86	10.00	2.00	0.35	68.29				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
An-Fo Mfg. Co., Los Angeles, Cal.	25.10	14.40	10.00	6.40		22.70	29.40			Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
An-Fo Sheep Dip	14.00	16.00	10.00	8.00	0.50	59.70				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
H. L. Atkinson, San Francisco, Cal.	16.80	23.30	9.00	8.60	0.60	49.20				Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).	
At-Ko Sheep Dip	15.90	14.20	10.00	6.60	1.20	60.90				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
Buker's Bird Store, San Francisco, Cal.	9.10	7.90		29.80	4.80	45.00 ³				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
Baker's Sheep Dip	9.15	24.94		15.30	2.40	63.20 ⁴				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	
Coffin-Redington Co., San Francisco, Cal.											
Cal. Creo Fenol Sheep Dip											
The G. E. Conkey Co., Cleveland, Ohio.											
Conkey's Noxicide ²											
Economy Hog & Cattle Powder Co.											
Economy Germicide Dip											
W. P. Fuller & Co. Fuller's Carbolic Insecticide Sheep Dip											
W. P. Fuller & Co. Fuller's Sheep Dip and Cattle Wash											
Furst-McNess Co., Oakland, Cal.											
W. McNess Krenol Dip & Disinfectant	19.40	26.20	8.00	8.00	0.50	43.60				Cal. Dept. Agr., Spec. Pub. 75, 57 (1927).	

Germain Seed & Plant Co., Los Angeles, Cal.	10.25	20.57	10.00	14.10	1.06	52.68	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Cann's Canco	9.50	13.60	12.00	12.00	0.70	62.60	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Germa Mfg. Co. Germa Cresosote Dip.	12.40	14.70	12.00	7.40	0.60	63.00	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Germa Mfg. Co. Germa Sheep Dip	11.30	19.60	12.00	10.40	0.60	55.70	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Heinrich Chemical Co., Oakland, Cal.	12.50	10.30	8.00	5.80	1.70	25.80	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Ongman's Dip & Disinfectant.	14.00	14.93	9.50	8.87	1.25	54.03 ⁵	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Dr. Hess & Clark. Dr. Hess Dip and Disinfectant	14.50	17.80	12.00	7.80	0.50	56.80	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Hockwald Chemical Co. Hockwald's Sheep Dip	25.30	14.10	7.00	4.60	0.10	28.70 ⁶	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Kirk, Geary & Co. Kirk Geary Dip-Sheep Dip	16.60	22.70	10.00	10.80	0.10	48.30	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Langley & Michaels Co. Cresolite Sheep Dip	16.60	20.10	20.00	17.00	3.70	55.97	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
Langley & Michaels Co., Germosol	58.80	18.90	12.00	10.80	0.20	57.95	Cal. Dept. Agr., Spec. Pub. 75, 58 (1927).
Dr. LeGear Medicine Co., St. Louis, Mo. Dr. LeGear's Dip and Disinfectant ⁷	12.51	15.60	15.00	10.60	0.43	57.95	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
Arthur R. Maas Chemical Co. Cresolol	14.76	10.00	10.00	9.20	0.43	57.95	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
Mefford Chemical Co. Sheep Dip	3.50	10.00	10.00	9.20	0.43	57.95	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).

¹Contains rosin.²Sp. Gr. of oil, Baumé, 3.10.³Guaranteed 54.40 per cent.⁴Guaranteed 36.60 per cent.⁵Guaranteed 53.00 per cent.⁶Guaranteed 65.00 per cent.⁷Sp. Gr. of oil, Baumé, 2.95. Unsulphonated, 1.80 per cent.

TABLE XXVI. PHENOL SOAP SOLUTIONS—Continued

Manufacturer or Distributor and Brand	Phenols		Soap		Water		Non-Soap Ash	Oils			Publication
	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found		Total	Tar	Mineral	
Michel & Pelton Co., San Francisco,	50.00	52.43	.....	.....	21.00	21.18	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Cal. Liquor Cresolis Compound	15.00	16.00	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Michel & Pelton Co., San Francisco,	47.75	.....	.....	21.00	19.85	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Cal. Liquor Cresolis Compound	21.00	19.85	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Michel & Pelton Co., San Francisco,	53.03	.....	.....	10.00	2.20	0.30	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Cal. Liquor Cresolis Compound	10.00	2.20	0.30	.....	28.30	40.00	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Cal. Mapco Sheep Dip	18.70	.....	8.60	10.00	2.20	0.30	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Moorman Mfg. Co., Moor Mans	23.12	.....	30.20	8.00	8.20	0.16	36.99	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).
Stock & Poultry Dip & Disinfectant ^s	28.70	.....	13.70	10.00	9.00	1.80	.....	45.60	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
H. K. Mulford Co., Krelors	U. S. D. A., Bur. Chem. Bull. 68, 57 (1902).
Ness & Co., Darlington, England.	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
Thymo-Cresol ⁹	6.00	.....	18.80	10.00	9.80	0.40	63.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
No-Verno Mfg. Co. Sol-o-creel ¹⁰	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
The Owl Drug Co., The Owl Sheep Dip	20.00	.....	14.20	10.00	8.00	1.50	.....	55.70	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Pacific Chemical Co., Los Angeles,	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Cal. Licresol	50.00	50.75	.....	.....	.....	21.20	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Parke, Davis & Co., Detroit, Mich.	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Kreso Dip No. 1	22.55	.....	20.80	8.00	8.60	2.65	.....	44.60	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).

Polk Miller Products Corp. Sargent's Disinfectant	.....	22.10	.....	23.00	10.00	9.00	0.70	.....	42.60	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Pratt Food Co. Pratt's Dip and Disinfectant	9.50	9.20	.....	15.50	10.00	8.00	0.30	.....	64.90 ¹¹	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
W. T. Rawleigh Co., Oakland, Cal. Rawleigh's Stock Dip and Disinfectant	.....	16.40	.....	17.90	8.00	8.40	1.20	.....	54.30	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Ansel W. Robinson, San Francisco, Cal. Robinson's Red Label Sheep Dip	.....	20.12	.....	9.41	10.00	2.00	0.07	.....	65.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
R. R. Rogers Chemical Co., San Francisco, Cal. Arcol	50.00	51.85	20.00	19.78	25.00	22.25	0.09	.....	5.34	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
R. R. Rogers Chemical Co., San Francisco, Cal. Kavol	50.00	43.50	20.00	21.50	27.00	24.01	0.63	.....	8.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
R. R. Rogers Chemical Co., San Francisco, Cal. Vermol	50.00	50.50	20.00	22.80	25.00	19.90	0.68	.....	4.79	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
Scott & Gilbert Co. Scott & Gilbert Sheep Dip	.....	19.20	.....	18.45	10.00	9.10	0.80	.....	51.45	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
The Shaw-Batcher Co. Capital Sheep Dip and Cattle Wash ²	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 59 (1927).
The Sherwin-Williams Co., Cleveland, Ohio. Pheno Dip	.....	26.50	.....	23.90	8.00	8.20	0.30	.....	38.80	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
The Sherwin-Williams Co., Cleveland, Ohio. Phenolene ¹	.....	15.20	.....	21.10	10.00	8.40	0.23	54.31	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 45 (1925).
The Sherwin-Williams Co., Cleveland, Ohio. S. W. Sheep Dip	.....	10.40	.....	22.10	10.00	10.00	0.10	.....	55.30	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
Spratt's Patent, Ltd., San Francisco, Cal. Spratt's Dip	.....	23.70	.....	20.80	10.00	8.00	2.90	.....	43.80	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
United Drug Co. No. 6 Disinfectant	.....	29.40	.....	14.70	10.00	7.80	2.20	.....	45.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).

¹⁰Sp. Gr. of oil, Baumé, 22.40. Unsulphonated, 39.90 per cent.¹¹Guaranteed 55.00 per cent.¹²Emulsion broken. Not analyzed.¹Contains rosin.²Sp. Gr. of oil, Baumé, 3.70. Unsulphonated, trace.³Substance is a creosote soap emulsion.

TABLE XXVI. PHENOL SOAP SOLUTIONS—Concluded.

Manufacturer or Distributor and Brand	Phenols		Soap		Water		Non-Soap Ash			Oils			Publication
	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Total	Tar	Mineral	Total	Tar	Mineral	
	%	%	%	%	%	%	%	%	%	%	%	%	
Geo. Z. Wait Co. Dr. G. Z. Wait's Sheep Dip.....	15.00	13.70	.....	21.40	.....	10.20	.....	0.10	52.20 ¹¹	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
G. Z. Waite, Sacramento, Cal. Sheep Dip.....	15.00	14.20	.....	21.20	.....	9.60	.....	51.10 ⁷	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).
Water Bros., Inc., Oakland, Cal. Liquor Cresolis Compound.....	40.00	45.50	.....	34.10 ¹³	28.00	17.00	.....	0.50	1.80	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
Water Bros., Inc., Oakland, Cal. Sheep Dip.....	.....	21.40	.....	6.90	10.00	3.20	.....	0.20	28.10	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
J. R. Watkins Co., Oakland, Cal. Watkin's Germicide Dip and Dis- infectant.....	18.00	17.40	24.40	22.70	.....	8.40	.....	1.40	49.00 ¹⁴	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
West Disinfecting Co., San Francisco, Cal. Carco Natholeum Dip.....	.....	12.50	.....	21.80	10.00	10.40	.....	1.80	51.60	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 60 (1927).
West Disinfecting Co. Karspray.....	.....	47.00	.....	21.40	25.00	21.40	.....	.....	3.65	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 66, 33 (1926).
West Disinfecting Co. Licresolis.....	.....	55.63	.....	.....	15.00	13.20	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
Western Wholesale Drug Co., Los Angeles, Cal. Solution of Cresol. Williams & Moore. W. & M. Anti- septic Sheep Dip.....	50.00	48.30	.....	.....	.....	19.20	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 43 (1925).
.....	.....	18.10	.....	.....	15.00	8.00	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 51, 44 (1925).

⁷Sp. Gr. of oil, Baumé, 2.95.

Unsulphonated, 1.80 per cent.

¹³Includes 32.00 per cent. olive and other oils.¹⁴Guaranteed 55.00 per cent.

TABLE XXVII. PHOSPHORUS PREPARATIONS

Manufacturer or Distributor and Brand	Free Phosphorus		Publication
	Guaranteed	Found	
Allan-Pfeiffer Chemical Co., St. Louis, Mo. Allan's Lightning Roach Paste ¹	.....	1.94	U. S. D. A. Bur. Chem., Bull. 68, 45 (1902).
American Druggists Syndicate. A.D. S. Rat and Roach Paste.	2.00	1.90	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
Barnard & Co., Boston, Mass. Roach and Water Bug Exterminator ².....	.....	1.37	U. S. D. A. Bur. Chem., Bull. 68, 45 (1902).
C. S. Brown & Co., Chicago, Ill. Fi- delity Cockroach Paste ³.....	.....	0.77	U. S. D. A. Bur. Chem., Bull. 68, 45 (1902).
Buffalo Specialty Co. Rat Nip.....	2.50	1.20	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
B. E. Cole, Hollister, Cal. Squirrel Poison-Phosphorus ⁴	0.90	0.026	Cal. Dept. Agr., Spec. Pub. 51, 52 (1925).
Common Sense Mfg. Co. Common Sense Rat Exterminator.	2.00	1.59	Cal. Dept. Agr., Spec. Pub. 58, 41 (1925).
The DePree Co., San Francisco, Cal. Pied Piper Rat and Roach Paste..	2.00	1.30	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
C. W. Hill Chemical Co., Los Angeles, Cal. Rat Poison (Mission) ⁵.....	.....	0.60	Cal. Dept. Agr., Spec. Pub. 51, 52 (1925).
Hudelson & Damrell, Modesto, Cal. Gold Crown Poison.....	5.00	8.53	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
Hudelson & Damrell, Modesto, Cal. Gold Crown Poison Barley ⁶.....	.....	0.07	Cal. Dept. Agr., Spec. Pub. 66, 35 (1926).
Jacob's Pharmacy, Atlanta, Ga. Tiger Paste ².....	.....	1.93	U. S. D. A. Bur. Chem., Bull. 68, 45 (1902).
H. K. Mulford Co. Mulford Phos- phorus Paste.....	2.00	2.34	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
Nyal Co., San Francisco, Cal. Sure Kill Rat and Roach Paste.....	1.50	1.58	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
The Rat Biscuit Co. Rat Bis-Kit Paste.....	2.00	2.28	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
The Rat-Mum Co. Rat-Mum.....	0.20	0.11	Cal. Dept. Agr., Spec. Pub. 58, 41 (1925).
Stearns' Electric Paste Co. Stearns' Electric Rat and Roach Paste..	1.50	2.16	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
United Drug Co. Elkay's Rat and Roach Paste.....	2.00	1.73	Cal. Dept. Agr., Spec. Pub. 75, 47 (1927).
Youell's Exterminating Co., West- field, N. J. Youell's Rat Snap ⁷ ...	3- $\frac{1}{16}$	0.63	Cal. Dept. Agr., Spec. Pub. 51, 52 (1925).
Zeno Products, Inc., New York, N. Y. Zeno.....	2.00	0.11	Cal. Dept. Agr., Spec. Pub. 51, 52 (1925).

¹Contains corn starch and glucose.²Contains wheat starch and molasses.³Contains wheat starch, molasses and glucose.⁴Manufacture discontinued.⁵Guaranteed 97.00 per cent. inert matter (honey). Manufacture discontinued.⁶No potassium cyanide found present.⁷Guaranteed hydrocyanic acid 5/16 per cent; hydrochloric acid 5/16 per cent; hydrofluoric acid 5/16 per cent; "vertigrese," blue stone and water 1 4/16 per cent; lard, molasses, flour and corn meal 94 1/16 per cent. No hydrocyanic, hydrochloric or hydrofluoric acids or copper found.

Phenol Soap Solutions.

See Table XXVI.

Phosphorus Preparations.

See Table XXVII.

Pied Piper Rat and Roach Paste.

See "Phosphorus Preparations."

Pink Arsenoid (Lead Arsenite.)

(ADLER COLOR & CHEMICAL WORKS, NEW YORK, N. Y.)

Found: Lead oxide 49.58 per cent; combined arsenious oxide 40.02 per cent; free arsenious oxide 3.24 per cent; moisture 0.31 per cent; organic matter, lead sulphate, etc., 6.85 per cent. The substance is colored with a pink aniline residue.

*Univ. of Cal. Coll. of Agr. Expt. Sta., Bull. 151, 26 (1903).***P. K. B.**

(JOHN LUCAS & CO., INC., PHILADELPHIA, PA.)

	Guaranteed.	Found.
Total arsenic, metal.....	21.00	21.64
Water-soluble arsenic, metal.....	1.00	0.87
Copper.....	.....	15.50

*N. J. Agr. Expt. Sta., Bull. 441, 13 (1926).***Plant Oil.**

(B. G. PRATT CO., NEW YORK, N. Y.)

Found: Largely vegetable oils.

*N. Y. Agr. Expt. Sta., Bull. 384, 302 (1914).***Plant Tonic and Insecticide.**

(BYRNE MFG. CO., OAKLAND, CAL.)

Declared composition: Tobacco stems, lime, sulfur, borax, oil of sassafras (synthetic), geranium oil and water.

Found: Nicotine 0.22 per cent; free sulphur 0.39 per cent; faint test for borax; very small amount of calcium oxide; sassafras and geranium oils present.

*Cal. Dept. Agr., Spec. Pub. 34, 60 (1923).***Poison Bait Compound.**

(CHIPMAN CHEMICAL ENGINEERING CO., INC., NEW YORK, N. Y.)

Guaranteed: Sodium arsenite 2.50 per cent; inert matter 97.50 per cent; total arsenic 1.60 per cent; water-soluble arsenic 1.60 per cent.

Found: Total arsenic (metal), 0.98 per cent.

*Conn. Agr. Expt. Sta., Sample 1825.***Poison Barley.**

See "Strychnine Preparations."

Poisoned Ant Syrup.

(SAN DIEGO HORTICULTURAL COMMISSIONER, SAN DIEGO, CAL.)

	Guaranteed.	Found.
Sodium arsenite.....	0.15	0.23

Cal. Dept. Agr., Spec. Pub. 66, 19 (1926).

Poisoned Barley.

Poisoned Grain.

Poisoned Grain Squirrel Poison.

See "Strychnine Preparations".

Poison Green.

(BANNENMAN CHEMICAL CO., SYRACUSE, N. Y.)

Found: Substance is artificially colored calcium arsenite. Arsenious oxide, 38.4 per cent.

N. Y. Agr. Expt. Sta., Bull. 348, 98 (1912).

Poison Spray Tabs—Bordeaux Arsenate.

(EARL THOMAS CULTURE CORP, NEW YORK, N.Y.)

	Guaranteed.	Found.
Total arsenic, metal.	5.00	5.51
Water-soluble arsenic, metal.	0.05	0.07
Copper.		12.40

Maine Agr. Expt. Sta., Official Inspections 110, 56 (1923).

Poison Wheat.

See "Strychnine Preparations."

Pomodust.

See "Niagara 90-10 Dusting Mixture."

Potassium Cyanide.

(MANUFACTURER NOT STATED).

Found: Moisture 0.22 per cent; potassium cyanide 93.80 per cent sodium cyanide 0.87 per cent; sodium chloride 1.15 per cent; potassium ferrocyanide 0.75 per cent; fine dust 3.22 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 25 (1923).

Potato Dust Mixture.

See "Nicotine Dusts."

Potato Dust Poison.

(DELORO CHEMICAL CO., DELORO, ONT., CANADA).

Found: Total arsenic oxide 9.62 per cent; water-soluble arsenic oxide 0.10 per cent; cupric oxide 8.07 per cent.

Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).

Potato Scab Destroyer.

(AM. HORT. DISTRIBUTING CO., MARTINSBURG, W. VA.)

Found: Substance is an artificially colored solution of formaldehyde.

N. Y. Agr. Expt. Sta., Bull. 384, 301 (1914).

Poultry House Spray.

(PURITY CHEMICAL PRODUCTS CO., SANTA ROSA, CAL.)

Guaranteed: Phenols 25.00 per cent; base, sediment and moisture 2.00 per cent.

Found: Phenols 25.00 per cent; mineral oils 53.90 per cent; water 0.40 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 56 (1927).

Pratt's Carboleine.

See "Oil Emulsions, Mineral."

Pratt's Dip & Disinfectant.

See "Phenol Soap Solutions."

Pratt's Lice Killer.

(PRATT FOOD CO.)

	Guaranteed.	Found.
Nicotine.....	0.34	0.72
Naphthalene.....	5.60	5.88
Pyrethrum.....	4.00	....

*Cal. Dept. Agr. Spec. Pub. 75, 40 (1927).***Premium Intestinal Cleaner.**

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Sodium bicarbonate.....	15.00	15.84

*Cal. Dept. Agr., Spec. Pub. 75, 65 (1927).***Preparation B.**

(THE INSECTICIDE CO., SAN FRANCISCO, CAL.)

Guaranteed: Inert matter, trace of butter color.

Found: Mineral oils 10.00 per cent; yellow color present; no ash.

*Cal. Dept. Agr., Spec. Pub. 51, 60 (1925).***Preparation No. 3**

(THE INSECTICIDE CO., SAN FRANCISCO, CAL.)

See "Sodium Fluoride."

Preparation No. 5.¹

(THE INSECTICIDE CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.	Guaranteed.	Found.
Calcium arsenate.....	7.00	3.48	3.25	3.80
Calcium arsenite.....	1.00	2.83	2.50	2.71

*Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).***Prussic Acid.**

See "Hydrocyanic Acid."

P. S. C. Condensed Rosin Spray.**P. S. C. Fish Oil Soap.**

See "Soap."

Puritol.

See "Albatross Puritol."

Purity.

(PURITY CHEMICAL PRODUCTS CO.)

	Guaranteed.	Found.
Sodium hypochlorite.....	4.00	4.24
Available chlorine.....	....	4.04

*Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).***Pyrethro Fly Fluid.**

(W. T. RAWLEIGH CO., FREEPORT, ILL.)

Not analyzed.

*Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).*¹ Two grades.

Pyrethrum

See Table XXVIII.

Pyrox.

See "Bordeaux Mixture-Lead Arsenate."

Q.**Qua-Sul.¹**

(A. R. GREGORY, SAN FRANCISCO, CAL.)

	Guar.	Found.	Guar.	Found.	Guar.	Found.
Sodium polysulphide		7.04		8.00	4.45	7.24
Sodium thiosulphate		3.04		3.17	7.16	3.60
Active sulphur			6.00			
Baumé gravity		19.00		20.50		19.00

*Cal. Dept. Agr. Spec. Pub. 66, 23 (1926).***Quick Action Fly Killer.**

(QUICK ACTION PRODUCTS CO., BELL, CAL.)

	Guaranteed.	Found.
Baumé gravity, 15.5°C		39.90
Mineral oil		96.74
Methyl salicylate	3.00	2.49

*Cal. Dept. Agr., Spec. Pub. 51, 55 (1925).***Quick Action Lice Powder.**

(QUICK ACTION PRODUCTS CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Cresol oil (Phenols)	1.00	0.05
Hydrocarbons	10.00	
Naphthalene		5.92
Sodium fluoride	10.00	8.20
Inert matter	79.00	

*Cal. Dept. Agr., Spec. Pub. 51, 59 (1925).***Qykade.**

(THE CHLORINE PRODUCTS CO., NEW YORK, N. Y.)

Found: Grams per 100 cc. total solids 1.26; available chlorine 0.40; total chlorine, 0.71; calcium oxide, 0.64 per cent. Substance is a mixture of calcium hypochlorite and calcium chloride in solution.

*Conn. Agr. Expt. Sta., Bull. 258, 376 (1924).***R.****Rajah Argentine Ant Poison.**

(THE OWL DRUG CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Total arsenic, metal	0.20	0.16
Water-soluble arsenic, metal	0.20	0.16

*Cal. Dept. Agr., Spec. Pub. 34, 18 (1923).***Rat Bis-Kit Paste.**

See "Phosphorus Preparations."

¹ Three Samples.

TABLE XXVIII. PYRETHRUM

Manufacturer or Distributor and Brand	Ether Extract %	Ash %	Water %	Publication
Buhack Producing & Mfg. Co. Buhack Insect Powder.....	6.80	6.43	.....	Cal Dept. Agr., Spe . Pub. 75, 63 (1927).
W. T Rawleigh Co., Oakland, Ca. Rawleigh's Insect Powder.....	9.00	6.80	.....	Cal. Dept. Ag., Spec. Pub. 75 63 (1927).
Winkelmann & Brown Drug Co., Baltimore, Md. Death Dust for Insects.....	10.68	7.74	6.75	U. S. D. A., Bur. Chem., Bull. 68 39 (1902).

Rat-Ex.

(CHEMICAL SPECIALTIES CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Barium carbonate.....	20.00	26.21
Inert matter.....	80.00	....

*Cal. Dept. Agr., Spec. Pub. 66, 34 (1926).***Rat-Go.**

See "Leinen."

Rat-Mum.**Rat-Nip.****Rat Poison (Mission).**

See "Phosphorus Preparations".

Rat Scent.

See "Strychnine Preparations".

Rat Tex.

(CALIFORNIA REX SPRAY CO., WATSONVILLE, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	30.00	31.66

*Cal. Dept. Agr., Spec. Pub. 75, 26 (1927).***Ravol.**

See "Phenol Soap Solutions."

Rawleigh's Insect Powder.

See "Pyrethrum."

Rawleigh's Louse Powder.

(W. T. RAWLEIGH CO., FREEPORT, ILL.)

Not analyzed.

*Cal. Dept. Agr., Spec. Pub. 58, 48 (1925).***Rawleigh's Stock Dip & Disinfectant.**

See "Phenol Soap Solutions."

Red Cross Ant Destroyer.

(RED CROSS CHEMICAL CO., CINCINNATI, OHIO.)

Found: Borax 11.07 per cent; calcium oxide 13.12 per cent; sulphur trioxide 18.56 per cent; gypsum and sassafras root present.

*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).***Red Label Sheep Dip.**

See "Phenol Soap Solutions."

Reliance Argentine Ant Poison.

(LANGLEY & MICHAELS CO., SAN FRANCISCO, CAL.)

Guaranteed: Arsenic, metal 0.11 per cent; sodium arsenite 0.20 per cent.
Found: Arsenic, metal 0.13 per cent; sodium arsenite 0.22 per cent; invert sugar 7.88 per cent; cane sugar 40.29 per cent; dextrin, etc., 1.82 per cent; water 47.67 per cent.*Cal. Dept. Agr., Spec. Pub. 58, 16 (1925).***Renol.**

See "Oil Emulsions, Mineral."

Revenge Lice Destroyer.

(I. D. RUSSELL CO.)

	Guaranteed.	Found.
Naphthalene.....	2.00	3.57
Sulphur.....	5.00	5.35
Phenols.....	.....	0.80
Phenol and creosote.....	5.00	5.92

*Cal. Dept. Agr. Spec. Pub. 75, 41 (1927).***Rex Emulso.**

See "Oil Emulsions, Mineral.":

Rex Fly Tox.

(CALIFORNIA REX SPRAY CO., BENICIA, CAL.)

Guaranteed: Active ingredients 100.00 per cent.

Found: Specific gravity, 0.8147; oil 100.00 per cent; no water or ash; kerosene 92.50 per cent; safrole present.

*Cal. Dept. Agr., Spec. Pub. 51, 56 (1925).***Rex Miscible Oil.****Rex Vulture Oil.**

See "Oil Emulsions, Mineral."

Rid-O-Germ.

(WESTERN CHEMICAL CO., INC.)

	Guaranteed.	Found.
Available chlorine.....	.....	2.68
Water.....	87.28	87.45

*Cal. Dept. Agr., Spec. Pub. 75, 61 (1927).***Rip Van Winkle Fly Spray.**

See "Oils, Mineral."

Roach and Croton Bug Exterminator.

(PERFECTION MFG. CO., JERSEY CITY, N. J.)

Found: Borax 47.61 per cent; balance pyrethrum, corn meal and pink coloring matter.

*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).***Roach and Water Bug Exterminator.**

See "Phosphorus Preparations."

Roach Doom.

See "Murray."

Roachine.

(BROWN & ALLEN, ATLANTA, GA.)

Found: Borax 90.00 per cent; balance pyrethrum and blue coloring matter.

*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).***Roach Liquid.**

(THE PIED PIPER SERVICE, PROVIDENCE, R. I.)

Found: Substance is a mixture of kerosene and methyl salicylate.

Conn. Agr. Expt. Sta., Bull. 258, 376 (1924).

Roach Powder.

(THE PIED PIPER SERVICE, PROVIDENCE, R. I.)

Found: Water 14.57 per cent; nitrogen 0.50 per cent; protein 3.13 per cent; starch 13.73 per cent; ash 40.60 per cent; sodium oxide 18.89 per cent; boric oxide 18.32 per cent; chloride 5.12 per cent; traces of silica, iron, sulphate and phosphate. The substance is a mixture of a cereal, borax and salt.

Conn. Agr. Expt. Sta., Bull. 258, 376 (1924).

Roachsault.

(BARRETT CHEMICAL CO., NEW YORK, N. Y.)

Found: Sodium fluoride 85.00 per cent; water 2.53 per cent; aluminum and iron oxides 0.27 per cent; fine sand 9.60 per cent; sodium sulphate (by difference), 2.60 per cent.

U. S. D. A., Bur. Chem., Bull. 68, 53 (1902).

Rosin Spray.

See "Soaps."

Rough on Rats.

(E. S. WELLS ESTATE.)

	Guaranteed.	Found.
Arsenious oxide . . . . .	.....	98.19
Arsenic, metal	56.00	74.37
Barium carbonate	20.00	0.00

Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Royal Roach Powder.

(H. C. DUBRING & CO., CHICAGO, ILL.)

Found: Borax 30.94 per cent; arsenious oxide 0.73 per cent; arsenic oxide 4.69 per cent; some calcium and dye stuff. Substance is probably a mixture of borax, London Purple and pyrethrum.

U. S. D. A., Bur. Chem., Bull. 68, 30 (1902).

S.

Salairacine.

(J. D. MCGREGOR, STAMFORD, CONN.)

Two Samples:

Sample 17745.

Found: Moisture 0.90 per cent; acid-insoluble matter, 0.56 per cent; nitrate nitrogen none; lead oxide 24.21 per cent; arsenic oxide 11.73 per cent; iron and aluminum oxides 0.50 per cent; calcium oxide 25.64 per cent; magnesium oxide 17.33 per cent; carbon dioxide (by difference) 19.13 per cent.

Sample 19740.

Found: Nitrate nitrogen 1.95 per cent; arsenic oxide 10.54 per cent; calcium oxide 17.67 per cent.

Conn. Agr. Expt. Sta., Bull. 242, 161 (1922).

Sanders Blue Dust 5-11.

(NEW YORK INSECTICIDE CO., MEDINA, N. Y.)

	Guaranteed.	Found.
Copper	9.00	11.10

Maine Agr. Expt. Sta., Official Inspections 122, 86 (1926).

Sander's Dust.

(MANUFACTURER UNKNOWN).

Found: Copper 6.10 per cent; arsenic 2.93 per cent: Arsenic is present as calcium arsenate.

Conn. Agr. Expt. Sta., Bull. 258, 370 (1925).

San Jose Summer Oil.

See "Oil Emulsions, Mineral."

San-U-Zay Scale Oil.

(THE GARDINER-JOHNS CO., ROCHESTER, N. Y.)

Found: The substance is largely a mixture of mineral and animal oils.

N. Y. Agr. Expt. Sta., Bull. 384, 301 (1914).

Sapho "Fly X."

(THE KENNEDY MFG. CO., MONTREAL, CANADA.)

Found: Specific gravity, 19° C., 0.844; flash point 67° C.; fire point 77° C.; residue at 100° C., 0.15 per cent; methyl salicylate 2.08 per cent. Base is kerosene.

Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).

Sapho Liquid.

(THE KENNEDY MFG. CO., MONTREAL, CANADA.)

Found: Specific gravity, 19° C., 0.844; flash point 67° C.; fire point 78° C.; residue at 100° C., 0.81 per cent; phenol 1.68 per cent. Base is kerosene.

Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).

Sarpa Poultry Spray.

See "Oil Emulsions, Mineral."

Scalecide.

(B. G. PRATT CO., NEW YORK, N. Y.)

Found: Substance is a mixture of mineral and vegetable oils and naphthalene.

N. Y. Agr. Expt. Sta., Bull. 384, 302 (1914).

Scalybark Insecticide.

(DR. MESSIG, SANTA ANA, CAL.)

Found: Water 82.92 per cent; solids 17.08 per cent; lime-sulphur 3.00 per cent; sodium chloride 3.50 per cent; soap 3.00 per cent; free sulphur and vegetable matter, etc. 4.30 per cent; no lead; a minute quantity of arsenic. The substance is partly a yellow liquid and partly a black solid containing some small leaves; it has an ammoniacal odor.

Cal. Dept. Agr., Spec. Pub. 34, 57 (1923).

Schnarr's Insecticide.

See "Oil Emulsions, Mineral."

Schrader Argentine Ant Powder.

(SCHRADER CHEMICAL CO., SAN FRANCISCO, CAL.)

Guaranteed: Sodium fluoride 68.00 per cent; sodium acid fluoride 8.00 per cent; all closed dalmatian flowers 7.20 per cent.

Found: Total fluorine 38.33 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

Schrader's Argentine Ant Syrup.

(SCHRADER CHEMICAL CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Arsenious oxide.....	0.20	0.20
<i>Cal. Dept. Agr., Spec. Pub. 75, 24 (1927).</i>		

Schrader's Red Ant Powder.

(SCHRADER INSECT POWDERS CO., SAN FRANCISCO, CAL.)

Guaranteed: Sodium fluoride 55.00 per cent; sodium acid fluoride 10.00 per cent; all closed dalmatian flowers 20.00 per cent; inert matter 15.00 per cent.

Found: Total fluorine 30.14 per cent; organic matter 21.13 per cent.

Cal. Dept. Agr., Spec. Pub. 66, 37 (1926).

Scott & Gilbert Sheep Dip.

See "Phenol Soap Solutions."

Scrofularia.

(BENJ. HAMMOND, FISHKILL-ON-HUDSON, N. Y.)

Found: Moisture 4.91 per cent; ash 19.52 per cent; ether extract 7.35 per cent. Substance is a mixture of tobacco and pyrethrum colored with lead chromate.

U. S. D. A., Bur. Chem., Bull. 68, 49 (1902).

Selenine.

(CHARLES DICKENS, OAKLAND, CAL.)

Found: Barium polysulphide 4.33 per cent; barium thiosulphate 0.39 per cent; selenium 0.23 per cent; tellurium trace.

Cal. Dept. Agr., Spec. Pub. 58, 50 (1925).

Semesan.

(E. I. DUPONT DE NEMOURS & CO., INC., WILMINGTON, DEL.)

Guaranteed: Hydroxymercurichlorphenol 35 per cent.; inert matter 65.00 per cent.

Found: Mercury 21.32 per cent; hydroxymercurichlorphenol 36.68 per cent; ash 66.30 per cent; calcium oxide 16.72 per cent; silica 0.68 per cent; iron and aluminum oxides 0.35 per cent; magnesium oxide 0.35 per cent; carbon dioxide 16.79 per cent. The mercury compound is para-hydroxymercuri-ortho-chlorphenol, probably present as the sodium salt. The inert matter is probably a mixture of calcium hydroxide and sodium carbonate.

Conn. Agr. Expt. Sta., Sample 8932.

Semesan Bel.

(E. I. DUPONT DE NEMOURS & CO., INC., WILMINGTON, DEL.)

Guaranteed: Hydroxymercurichlorphenol 10.00 per cent.

Found: Mercury 6.52 per cent.

Cal. Dept. Agr. Spec. Pub. 75, 62 (1927).

Sergeant's Disinfectant.

See "Phenol Soap Solutions."

70-10-20.

(J. R. GILLAM & BRO., BURLINGTON, N. J.)

	Guaranteed.	Found.
Total arsenic, metal	1.80	1.80
Water-soluble arsenic, metal . . . . .	.....	0.30
Sulphur	68.00	69.69

*N. J. Agr. Expt. Sta., Bull. 441, 11 (1926).***70-10-20 Mixture.**

See "Niagara Mixture No. 150."

70-10-20 Sulfur Lead-Lime Dust.

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

Guaranteed: Sulphur 70.00 per cent.

Found: Sulphur 66.48 per cent; total arsenic 1.93 per cent; water-soluble arsenic 0.26 per cent.

*N. J. Agr. Expt. Sta., Bull. 459, 11 (1927).***70-20-10 Dusting Mixture.**

(MECHLING BROS. CHEMICAL CO., CAMDEN, N. J.)

	Guaranteed.	Found.
Total arsenic, metal	2.00	2.65
Water-soluble arsenic, metal	0.50	0.12
Sulphur	69.00	65.47

*N. J. Agr. Expt. Sta., Bull. 459, 12 (1927).***75-5-20**

(J. R. GILLAM & BRO., BURLINGTON, N. J.)

Found: Total arsenic 1.28 per cent; water-soluble arsenic 0.26 per cent; sulphur 72.00 per cent.

*N. J. Agr. Expt. Sta., Bull. 441, 11 (1926).***S & G Poultry Lice Powder.**

See "Sodium fluoride."

Sheep Dip.

See "Phenol Soap Solutions."

Simplex.

(H. G. SMITH CO., UTICA, N. Y.)

	Guaranteed.	Found.
Sulphur	20.00	21.07
Arsenic . . . . .	.....	2.61
Lead oxide . . . . .	.....	9.75

*Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 11 (1915).***Sin-O-lor.**

(HUGH KNIGHT, RIVERSIDE, CAL.)

Found: Substance is a purple liquid containing nearly 1 per cent potassium permanganate and 0.62 per cent sodium sulphate.

*Cal. Dept. Agr., Spec. Pub. 34, 58 (1923).***S. J. Nicotine Dust.**

See "Nicotine Dusts."

Skalene.

Skalol.

See "Oil Emulsions, Mineral."

Skinner's Arsenate Bordeaux.

See "Bordeaux Mixture-Lead Arsenate."

Skinner's Special 30-70 Copper Lime Dust.

(SKINNER MACHINERY CO., DUNEDIN, FLA.)

	Guaranteed.	Found.
Copper.....	10.00	12.11

N. J. Agr. Expt. Sta., Bull. 407, 16 (1924).

Slugall.

(GERMAIN SEED & PLANT CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Nicotine.....	0.10	0.12
Total arsenious oxide.....	1.00	0.37
Water-soluble arsenious oxide.....	0.63	0.25
Naphthalene.....	5.00	1.10

Cal. Dept. Agr., Spec. Pub. 75, 38 (1927).

Slug Shot.

(HAMMOND'S SLUG SHOT WORKS, BEACON, N. Y.)

	Guaranteed.	Found.
Free sulphur.....	6.00	.....
Total arsenic, metal.....	0.79	0.89
Water-soluble arsenic, metal.....	trace	0.12
Copper.....	0.91	1.01
Nicotine.....	trace	0.04
Crude carbolic acid.....	0.40	present

Copper sulphate and copper arsenate declared present.
Conn. Agr. Expt. Sta., Bull. 242, 159 (1922).

Slug Slugger.

(MICHEL & PELTON CO.)

	Guaranteed.	Found.
Calcium arsenate.....	3.00	4.76

Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Small's Snail Poison.

(SMALL'S SEED CO., RIVERSIDE, CAL.)

	Guaranteed.	Found.
Calcium arsenate.....	2.80	3.80

Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Snailex.

(THE FERTILSPRAY CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Ferrous sulphate.....	20.00	20.06
Ferric sulphate.....	20.00	32.39
Copper sulphate.....	0.45	1.25

Cal. Dept. Agr., Spec. Pub. 75, 45 (1927).

Snail Foil.

(AN-FO MFG. CO.)

	Guaranteed.	Found.
Free sulphur	3.00	2.88
Phenols	2.00	2.28
Sodium fluoride	1.00	1.36
Mineral oil	8.00	8.77

*Cal. Dept. Agr., Spec. Pub. 75, 40 (1927).***Snail Poison.**

See "Small's Snail Poison."

Snarol.

(THE ANTROL LABORATORIES, INC., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Calcium arsenate	3.50	5.17
Total arsenic, metal	1.32	1.95
Inert matter	96.50	....

*Conn. Agr. Expt. Sta., Sample 8935.***Soap.**

See Table XXIX.

Soap, Sulfo-Tobacco Plant & Animal.

See "Nicotine Soaps."

Soap, Sulpho-Tobacco.

See "Sulpho-Tobacco Soap."

Soap, Tobacco.

See "Nicotine Soaps."

Soda-Sulfur Compound.

(W. C. COLLINS, SAN FRANCISCO, CAL.)

Found: Water-soluble matter, 68.44 per cent; sodium polysulphide 0.80 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 32 (1923).***Sodium Fluoride.**

See Table XXX.

Sodium Fluosilicate.

(VIRGINIA-CAROLINA CHEMICAL CORP., RICHMOND, VA.)

Found: Sodium fluosilicate 79.39 per cent; sodium fluoride 16.45 per cent; sodium carbonate 0.75 per cent; undetermined 3.41 per cent.

*Conn. Agr. Expt. Sta., Sample 7505.***Solbar.**

See "Barium Tetrasulphide."

Sol-o-cree.

See "Phenol Soap Solutions."

Soluble Arsenoid.

See "Watson."

Soluble Oil.**Soluble Oil Spray.**

See "Oil Emulsions, Mineral."

Soluble Sulphur Compound.

See "Nicotine Dusts."

Soluble Sulphur Solution.¹

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.	Guaranteed.	Found.
Soluble sulphur	58.00	58.21	57.00	58.16
<i>N. Y. Agr. Expt., Sta., Bull.</i> 384, 296 (1924).				

Solution of Cresol.

See "Phenol Soap Solutions."

S. O. S. Sterling Oil Spray.

See "Oil Emulsions, Mineral."

Sow-Bug Destroyer.

(CHAS. C. NAVLET CO., SAN FRANCISCO, CAL.)

Guaranteed: Copper aceto-arsenite 8.00 per cent.
 Found: Arsenious oxide 10.94 per cent.
Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Sow-Bug-Go.

See "Leinen."

Sow-Bug-Killer.

(SAN JOSE SPRAY MFG. CO., SAN JOSE, CAL.)

Guaranteed: Copper aceto-arsenite 8.00 per cent.
 Found: Arsenious oxide 10.76 per cent.
Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).

Special Dry Mix.

(THE KIL-TONE CO., VINELAND, N. J.)

Found: Sulphur 54.64 per cent.
N. J. Agr. Expt. Sta., Bull. 441, 7 (1926).

Special Filled Capsules No. 173935.

(ELI LILLY & CO., INDIANAPOLIS, IND.)

Found: Nicotine 15.82 per cent.
Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).

Special Mixture 154A.

See "Nicotine-Sulphur Dusts."

Special Mixture No. 161 Potato Dust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal	7.40	8.65
Water-soluble arsenic, metal	0.50	0.22
Copper	6.00	7.31
<i>N. J. Agr. Expt. Sta., Bull.</i> 407, 14 (1914).		

Special Mixture M 163.

Special Mixture No. 221.

Special Mixture No. 274.

¹ Two Samples.

TABLE XXIX. SOAP

Manufacturer or Distributor and Brand	Soap				Water—Pound	Total Alkali Pound	Sodium Carbonate	Non-soap Ash	Inert Matter—Pound	Publication
	Total		Rosin Soap	Fish Oil Soap						
	Guaranteed	Pound								
	%		%	%	%	%	%	%		
California Pest Control Co. Calpest Whale Oil	24.86	69.38	2.53	23.58 ^s	63.90	U. S. D. A. Bur. Chem., Bull. 68, 35 (1902).				
California Spray Chemical Co., Watson- ville, Cal. Ortho Liquid	13.70	78.40 ¹	1.10	63.90	Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).					
California Spray Chemical Co., Watson- ville, Cal. Ortho Whale Oil	30.00	61.60	42.40	63.90	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).					
Roy E. Campbell, Alhambra, Cal. Citrus Washing Powder ²	20.80	35.25	242, 160 (1922).	63.90	Cal. Dept. Agr., Spec. Pub. 34, 59 (1922).					
General Chemical Co., New York, N. Y. Fish Oil ³	71.20	71.20	23.58 ^s	63.90	Conn. Agr. Expt. Sta., Bull. 242, 160 (1922).					
German Seed & Plant Co., Los Angeles, Cal. Germain Fish Oil ⁴	34.70	28.60	63.90	63.90	Cal. Dept. Agr., Spec. Pub. 51, 40 (1925).					
German Seed & Plant Co., Los Angeles, Cal. Germain's Rosin Wash	64.71	34.30	63.90	63.90	Cal. Dept. Agr., Spec. Pub. 51, 40 (1925).					
Johnson & Munsur Seed Co., Los Angeles, Cal. J & M Reliable Insecticide ⁶	39.60	29.60 ^s	63.90	63.90	U. S. D. A. Bur. Chem., Bull. 68, 35 (1902).					
Langley & Michaels Co. Hard Fish Oil ⁷	64.40	29.60 ^s	63.90	63.90	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).					
Manufacturer unknown. Lennox To- bacco ⁸	64.40	29.60 ^s	63.90	63.90	Cal. Dept. Agr., Spec. Pub. 34, 47 (1922).					

Michel & Pelton Co., San Francisco, Cal.	.....	43.30	18.30	.....	7.70	29.10 ¹⁰	Cal. Dept. Agr., Spec. Pub. 51, 40 (1925).
Mapco Rosin Soap for Spray.....	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Michel & Pelton Co., San Francisco, Cal.	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).
Mapco Whale Oil.....	53.30	.....	43.40 ¹¹	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).
Miller Products Co., Portland, Ore., Whale Oil.....	60.00	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).
Mt. Hood Soap Co., Portland, Ore.	58.50	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Felbro Whale Oil.....	.....	.....	69.40	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Chas. C. Navlet Co. Navco Whale Oil	.....	.....	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Pacific Soap Co. P. S. C. Condensed Rosin Spray.....	55.00	.....	33.70	11.08 ¹²	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Pacific Soap Co. P. S. C. Condensed Rosin Spray.....	65.00	.....	35.75	14.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Pacific Soap Co. P. S. C. Condensed Rosin Spray.....	.....	.....	31.74 ¹¹	12.51	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 54 (1927).
Pacific Soap Co. P. S. C. Fish Oil.....	75.00	.....	16.67	4.37	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 55 (1927).
Perfecto Spray Mfg. Co., Los Angeles, Cal. Perfecto Rosin Paste.....	.....	.....	35.10 ¹³	.....	3.99	.....	Cal. Dept. Agr., Spec. Pub. 58, 46 (1925).

¹Water guaranteed 67.00%.

²Trace of phosphate present.

³Two samples of this soap were examined only to see whether they were potassium or sodium soaps. One was a sodium soap, the other chiefly potassium soap.

⁴Glycerine 4.21 per cent.

⁵Inert matter guaranteed 30.00%.

⁶Fatty anhydrides 25.30 per cent; resin anhydrides 34.67 per cent; sodium oxide 2.92 per cent; potassium oxide 1.82 per cent.

⁷Oils 24.90 per cent.

⁸Water guaranteed 35.60%.

⁹No nicotine found.

¹⁰Inert matter guaranteed 30.00%.

¹¹Water guaranteed 40.00%.

¹²Alkali guaranteed 10.00%.

¹³Water guaranteed 36.00%.

TABLE XXIX. SOAP—Concluded.

Manufacturer or Distributor and Brand	Soap				Water—Pound	Total Alkali Pound	Sodium Carbonate	Non-soap Ash	Inert Matter—Pound	Publication
	Total		Fish Oil Soap	Rosin Soap						
	Guaranteed	Pound								
J. C. Pierson, Albany, N. Y. Fir-Tree Oil ¹⁴	66.25	.....	.....	28.74	7.28 ¹⁵	.....	.....	.....	N. Y. Agr. Expt. Sta., Bull. 384, 298 (1914).
George A. Price, Albany, N. Y. Stott's Fir-Tree Oil ¹⁶	71.12	.....	.....	23.73	5.91	.....	.....	.....	N. Y. Agr. Expt. Sta., Bull. 348, 95 (1912).
San Jose Soap Works, San Jose, Cal. Whale Oil	25.90	.....	.....	74.10	.....	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 59 (1922).
Sun-Ban Laboratories, Portland, Ore. Clensel	32.10	30.40	.....	.....	.....	.....	.....	.....	.....	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).
J. B. Williams Co., Glastonbury, Conn. No. 30 ¹⁷	67.57	.....	.....	30.97	6.56	0.15	0.95	.....	Conn. Agr. Expt. Sta., Sample 3778.
Williams & Moore, Stockton, Cal. Williams & Moore Spray	79.10	.....	.....	18.50	.....	.....	1.10	.....	Cal. Dept. Agr., Spec. Pub. 66, 36 (1926).

¹⁴Fatty acids and resin 59.15 per cent; unsaponified matter (mostly phenol) 5.01 per cent.¹⁵Combined alkali 7.10 per cent; free caustic 0.18 per cent.¹⁶Phenol 5.15 per cent.¹⁷Free oleic acid 0.63 per cent; sodium chloride 0.46 per cent.

Special 210 Dust Mixture.

See "Nicotine Dusts."

Special Mixture S 155 A.

See "Nicotine-Sulphur Dusts."

Spratt's Dip.

See "Phenol Soap Solutions."

TABLE XXX. SODIUM FLUORIDE

Manufacturer or Distributor and Brand	Sodium Fluoride		Publication
	Guaranteed	Found	
	%	%	
Brunswig Drug Co.	93.70	93.70	Cal. Dept. Agr., Spec. Pub. 51, 59 (1925).
Burrell-Dugger Co. Talcimized ...	65.00	70.17	Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).
The Insecticide Co., San Francisco, Cal. Preparation No. 3 ¹	93.27	93.27	Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).
C. U. McClellan & Co. McClellan's	95.50	95.31	Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).
Mefford Chemical Co.	90.00	97.56	Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).
Montgomery, Ward & Co., Port- land, Ore.	65.00	98.60	Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).
Scott & Gilbert Co. S&G Poultry Lice Powder.	90.00	96.58	Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).

¹ Ash found 5.40 per cent.; "inert fossil flour", guaranteed 7.60 per cent.**Spratt's Lice Powder.**

(SPRATT'S PATENT, LTD.)

	Guaranteed.	Found.
Ash (talc)	40.00	37.06
<i>Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).</i>		

Spray Moore Weed Killer.

(KIRK, GEARY & CO.)

	Guaranteed.	Found.
Arsenious oxide	30.00	26.74
<i>Cal. Dept. Agr., Spec. Pub. 75, 25 (1927).</i>		

Spray Mulsion.

See "Oil Emulsions, Mineral."

Squirrel Poison.

See "Strychnine Preparations."

Squirrel Poison-Phosphorus.

See "Phosphorus Preparations."

Stallard's New Lice Exterminator.

(MANUFACTURER NOT STATED.)

Found: Moisture 0.16 per cent; free sulphur 73.51 per cent; ferric oxide 23.73 per cent; silica 1.53 per cent.

Cal. Dept. Agr., Spec. Pub. 51, 11 (1925).

Star Water.

(MANUFACTURER UNKNOWN.)

Found: Available chlorine 2.64 per cent.

Conn. Agr. Expt. Sta., Bull. 258, 377 (1924).

Stearns' Electric Rat and Roach Paste.

See "Phosphorus Preparations."

Steraklene.

(CONNECTICUT CHEMICAL & DISINFECTANT CO., NEW HAVEN, CONN.)

	Guaranteed.	Found.
Sodium hypochlorite	8.00	6.13
Available chlorine . . . . .	.....	5.86
Inert matter	92.00	....

Conn. Agr. Expt. Sta., Sample 9466.

Sterilac

(THE STERILAC CO., NORTH CHICAGO, ILL.)

Guaranteed: Active ingredient 94.00 per cent; inactive (mono-hydrated sodium carbonate), 6.00 per cent. "An alkaline chloramine mixture readily soluble in water."

Found: Chloramine T, 94.24 per cent.

Conn. Agr. Expt. Sta., Sample 9658.

Sterling Argentine Ant Poison.

(WESTERN WHOLESALE DRUG CO., LOS ANGELES, CAL.)

	Guaranteed.	Found
Arsenic, metal	0.18	0.12

Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).

Sterling Oil Spray.

See "Oil Emulsions, Mineral."

Sterlingworth Cut Worm Killer.

(STERLING CHEMICAL CO., CAMBRIDGE, MASS.)

	Guaranteed.	Found.
Total arsenious oxide	1.00	1.99
Water-soluble arsenic, metal	0.07	1.40

Conn. Agr. Expt. Sta., Bull. 242, 159 (1924).

Sterlingworth Weed Killer.

(STERLING CHEMICAL CO., CAMBRIDGE, MASS.)

	Guaranteed.	Found.
Arsenic oxide	30.00	30.10

Cal. Dept. Agr., Spec. Pub. 34, 20 (1923).

Stott's Fir-Tree Oil Soap.

See "Soap."

Strawberry Weevil Bait.

(M. R. FORSELL, SEATTLE, WASH.)

Found: Total arsenic oxide 1.54 per cent; water-soluble arsenic oxide 0.61 per cent; calcium oxide 0.42 per cent; magnesium oxide 1.42 per cent; moisture 7.24 per cent. Substance is dried apple waste plus magnesium arsenate.

*Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).***Strychnine Preparations.**

See Table XXXI.

Success Special Insecticide.

(VICTORY TREE SPRAY CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Sulphur	6.00	7.20
Sodium nitrate	23.00	22.44
Sodium carbonate	39.90	32.99
Soap	10.00	9.27
Water . . . . .	.....	27.41
Inert matter	22.00	.....

Cal. Dept. Agr., Spec. Pub. 58, 49 (1925).

Success Tree Spray.

(H. D. BLANCHARD, PORTERVILLE, CAL.)

	Guaranteed.	Found.
Water . . . . .	.....	8.72
Sulphur	20.00	15.63
Sodium nitrate	20.00	19.62
Sodium carbonate	35.00	38.70
Soap	12.00	12.04
Insert matter	11.00	.....

Cal. Dept. Agr., Spec. Pub. 51, 55 (1925).

Sulco-V. B.

See "Oil Emulsions, Mineral."

Sulfene.

(F. A. FRAZIER CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Sodium polysulphide	64.00	65.76
Sodium thiosulphate	22.00	25.60
Free sulphur	2.00	0.45
Sodium sulphate	4.00	.....
Water	8.00	.....

Cal. Dept. Agr., Spec. Pub. 66, 23 (1926).

TABLE XXXI. STRYCHNINE PREPARATIONS

Manufacturer or Distributor and Brand	Strychnine		Publication
	Guaranteed	Found	
G. H. Benedict and Co. O. K. Squirrel Poison ¹	%	%	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
Brunswig Drug Co., Los Angeles, Cal. Brunswig Squirrel Annihilator.....	0.40	0.17	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Gopher Poison	.....	0.28	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Penetrating Poisoned Barley.....	90.00	89.60	Cal. Dept. Agr., Spec. Pub. 66, 27 (1926).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Penetrating Poisoned Barley.....	0.3125	0.443	Cal. Dept. Agr., Spec. Pub. 66, 27 (1926).
Coffin-Redington Co., Noxem Squirrel and Gopher Poison.....	0.3129	0.38	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
B. E. Cole, Hollister, Cal. County Farm Bureau Mixture ²	0.30	0.29	Cal. Dept. Agr., Spec. Pub. 51, 51 (1925).
Diamond Milling Co., Livermore, Cal. Poisoned Barley.....	.....	0.55	Cal. Dept. Agr., Spec. Pub. 58, 38 (1925).
Herbert F. Dugan. Poisoned Barley.	0.41	0.33	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
Herbert F. Dugan. Strychnine Alka- loid.....	0.25	0.26	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
Dupins Chemical Co., Fort Dodge, Ia. Gopher-Get-'er ³.....	.....	99.66	Cal. Dept. Agr., Spec. Pub. 34, 53 (1923).
Dupuis Chemical Co. Gopher-Go...	0.25	0.37	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
Fort Dodge Chemical Co., Fort Dodge, Ia. Gopher Death ⁴.....	.....	0.35	Cal. Dept. Agr., Spec. Pub. 51, 51 (1925).
Germain Seed & Plant Co., Los An- geles, Cal. Go-For-Gopher ⁵	0.31	0.05	Cal. Dept. Agr., Spec. Pub. 51, 51 (1925)..
Kirk-Geary Co., Sacramento, Cal. Capital Squirrel Poison.....	31.00	0.15	Cal. Dept. Agr., Spec. Pub. 58, 38 (1925).
Kirk-Geary Co., Sacramento, Cal. Dead Shot Squirrel & Gopher Killer	0.24	0.23	Cal. Dept. Agr., Spec. Pub. 58, 38 (1925).
Kirk-Geary Co., Sacramento, Cal. Dead Shot Squirrel & Gopher Killer	0.25	0.25	Cal. Dept. Agr., Spec. Pub. 58, 38 (1925).
Langley & Michaels Co., San Fran- cisco, Cal. Hall's Lightning Squirrel and Gopher Poison.....	0.24	0.21	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
	0.347 ⁶	0.32 ⁶	

¹Cyanide, guaranteed 0.10 per cent; found trace.²Sample is poisoned wheat sweetened with saccharin.³Sample is a poisoned mixture of raisins and figs.⁴Tablets sweetened with sugar and having an odor of anise.⁵Sample is poisoned raisins.⁶Strychnine sulphate.

TABLE XX XI. STRYCHNINE PREPARATIONS—*Concluded.*

Manufacturer or Distributor and Brand	Strychnine		Publication
	Guaranteed	Found	
Langley & Michaels Co., San Francisco, Cal. Hall's Lightning Squirrel and Gopher Poison	0.32 ⁶	0.30 ⁶	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
John F. Leinen Chemical Co., San Francisco, Cal. Leinen's Poisoned Barley	0.3125	0.449	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
John F. Leinen Chemical Co., San Francisco, Cal. Leinen's Poisoned Barley	0.40625	0.36	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
John F. Leinen Chemical Co., San Francisco, Cal. Morse's Gopher Poison	0.3125	0.27	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
John F. Leinen Chemical Co., San Francisco, Cal. O-Kay Gopher Poison	0.25	0.23	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
John F. Leinen Chemical Co., San Francisco, Cal. O-Kay Poisoned Wheat	0.25	0.24	Cal. Dept. Agr., Spec. Pub. 58, 39 (1925).
Long & Gretter, Monterey, Cal. Long and Gretter's Squirrel Poison	0.20	0.324	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
Roy Specialty Co. El Roy Gopher Poison ⁷	.....	0.25	Cal. Dept. Agr., Spec. Pub. 51, 51 (1925).
Scott & Gilbert Co., San Francisco, Cal. Cespi Poisoned Barley	0.30	0.288	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
Scott & Gilbert Co., San Francisco, Cal. Cespi Poisoned Wheat	0.30	0.33	Cal. Dept. Agr., Spec. Pub. Cal. 75, 46 (1927).
Geo. Z. Wait Co. Wait's Squirrel and Gopher Poison ⁸	0.20	0.21	Cal. Dept. Agr., Spec. Pub. 58, 40 (1925).
Western Wholesale Drug Co. Western Poisoned Barley	0.27	0.26	Cal. Dept. Agr., Spec. Pub. 66, 28 (1926).
W. M. Willett, San Francisco, Cal. Wakelee's Squirrel & Gopher Poison	0.25	0.61	Cal. Dept. Agr., Spec. Pub. 58, 40 (1925).
Williams & Moore. Moore's Prepared Squirrel Poison	0.32	0.33	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
C. G. Woods Chemical Co. Gopher Scent	0.20	0.30	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).
C. G. Woods Chemical Co. Rat Scent	0.20	0.29	Cal. Dept. Agr., Spec. Pub. 75, 46 (1927).

⁶Strychnine sulphate⁷Sample is a mixture of poisoned raisins, wheat, etc.⁸Arsenic guaranteed 0.75 per cent; found 0.57 per cent.

Sulfo.

(MILLER PRODUCTS CO., PORTLAND, ORE.)

	Guaranteed.	Found.
Sulphur	90.00	85.50
<i>Ore. Agr. Expt. Sta., Cir. 84, 11 (1927).</i>		

Sulfocide.

(B. S. PRATT CO., NEW YORK, N. Y.)

Two samples:

Sample 18457.

Guaranteed: 30 per cent sulphur as sodium polysulphide and thio-sulphate.

Found: Total sulphur 29.25 per cent; thiosulphate sulphur 1.84 per cent; sulphate sulphur 0.10 per cent; sulphide sulphur 27.31 per cent.

*Conn. Agr. Expt. Sta., Bull. 242, 160 (1922).***Sample 2506.**

Guaranteed: Sodium polysulphide 39-40 per cent; sodium thiosulphate 1-2 per cent; inert matter 58-60 per cent.

Found: Total sulphur 33.78 per cent; monosulphide sulphur 7.79 per cent; thiosulphate sulphur 2.56 per cent; sulphate sulphur 0.25 per cent; polysulphide sulphur 23.18 per cent; sodium polysulphide (calculated as the pentasulphide), 38.48 per cent.

*Conn. Agr. Expt. Sta., Bull. 272, 146 (1926).***Sulfodust.**

See "Sulphur."

Sulfo-Tobacco Plant and Animal Soap.

See "Nicotine Soaps."

Sulfur.

See "Sulphur."

Sulfur Dusting Mixture Formula No. 5.

See "Naco."

Sulfur-Lime.

See the following:

Dry Mix Sulfur-Lime.

80-20.

Kasulime.**Leinen's Mildew-Go.****Mechling's Dry Mix.****New Jersey Dry Mix Sulfur-Lime.****Niagara Dry Mix.****Sulfur-Nicotine Compound.**

See "Nicotine-Sulphur Dusts."

Sulpho-Arsenate Mixture.

(THE KIL-TONE CO., VINELAND, N. J.)

	Guaranteed.	Found.
Sulphur	68.00	68.57
Total arsenic, metal . . . . .	....	2.47
Water-soluble arsenic, metal . . . . .	....	0.19

*N. J. Agr. Expt. Sta., Bull. 407, 13 (1924).***Sulpho-Arsenate Powder.**

(THE KIL-TONE CO., VINELAND, N. J.)

(See also "Green Cross")

	Guaranteed.	Found.
Total arsenic, metal	9.48	9.69
Water-soluble arsenic, metal	0.66	0.19
Sulphur	48.50	49.73

*N. J. Agr. Expt. Sta., Bull. 441, 12 (1926).***Sulphur Carbolate of Lime.**

See "Whitney."

"Sulpho-Tobacco" Soap.

(R. W. HUNT, SAN JOSE, CAL.)

	Guaranteed.	Found.
Nicotine	0.18	0.03
Sulphur	3.88	0.78

*Cal. Dept. Agr., Spec. Pub. 34, 47 (1923).***Sulpho-Tone.**

(LUCAS-KIL-TONE CO., VINELAND, N. J.)

Guaranteed: Sulphur 60.00 per cent.

Found: Sulphur 62.48 per cent; coarser than 100 mesh, 0.86 per cent; passes 100 mesh, 99.14 per cent; 200 mesh, 57.37 per cent; 300 mesh, 14.75 per cent.

*N. J. Agr., Expt. Sta., Bull. 459, 8 (1927).***Sulphur.**

See Table XXXII.

Sulphur-Arsenate Dust 83-15.

(JOHN BACON, GASPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal	2.80	2.44
Water-soluble arsenic, metal	0.15	0.14
Sulphur	83.00	84.75

*Conn. Agr. Expt. Sta., Bull. 272, 147 (1925).***Sulphur-Arsenate Dust 90-10.**

(JOHN BACON, GASPORT, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal	1.90	1.86
Water-soluble arsenic, metal	0.10	0.11
Sulphur	88.50	88.27

Conn. Agr. Expt. Sta., Bull. 272, 147 (1925).

TABLE XXXII. SULPHUR

Manufacturer or Distributor and Brand	Sulphur		Water	Ash	Type	Publication
	Guaranteed	Found				
	%	%				
Batelle & Rennick, New York, N. Y. ¹	99.50	99.70	0.12	0.02	Sublimed	N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).
99½% Pure Superfine Commercial	90.00	91.40 ²	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Cabco Supply Stores, Cabco Flour . . .	92.00	93.50	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Cabco Supply Stores, Cabco	100.00	99.86	0.12	0.02	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
California Associated Bayers Co., Fresno-Selma, Cal. "Lilly"	46.00	48.92	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 57 (1922).
California Rex Spray Co., Rex Sulfur Paste	99.00	99.32	0.09	0.12	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Dusting	85.00	87.29	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
California Spray Chemical Co., Wat- sonville, Cal. Ortho-Milled ³ . . . . .	.....	99.50	0.33	0.10	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Soil	99.00	99.48	0.45	0.08	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
California Spray Chemical Co., Wat- sonville, Cal. Ortho	90.00	92.65	1.83	3.52	.....	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
California Spray Chemical Co., Wat- sonville, Cal. Ortho Wettable . . . . .	.....	99.69	0.21	0.10	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
R. L. Cody, Ventilated ⁴	100.00	99.88	0.12	none	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
D. F. DeBernardi & Co. L. Chambon Fils	100.00	99.67	0.21	0.12	Milled	Cal. Dept. Agr., Spec. Pub. 51, 21 (1925).
F. A. Frazier Co. Frazier's B-7 Dust- ing ⁵						

F. A. Frazier Co. Frazier's Dusting Sulphur B-6.....	90.00	91.62	0.22	8.16	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
General Chemical Co., San Francisco, Cal. Orchard Brand Atomic.....	45.00	46.10	52.15	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
General Chemical Co., San Francisco, Cal. Orchard Brand Dritomic.....	90.00	91.20	0.80	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Granucci Bros., San Francisco, Cal. Columbus Brand.....	.....	97.15 ⁶	.....	.....	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
Granucci Bros., San Francisco, Cal. Columbus Sublimed.....	.....	99.40	0.33	0.28	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
Granucci Bros., San Francisco, Cal. Columbus Ventilated.....	.....	99.70	0.14	0.16	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
Herbert & Herbert, Inc., Perth Amboy, N. J. Square Brand H.&H. Colloidal Holland & Holland XXXXX Brand Resublimed Flowers.....	45.00	55.22	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 459, 9 (1927).
Kutner-Goldstein Co. Fleur de Lis Soufre Sublimed Flowers.....	100.00	99.50	0.30	0.20	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
D. Lima Bros. Co. Marca Fioristilla Ground.....	100.00	99.60	0.40	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Manufacturer unknown. Colloidal.....	.....	98.00	0.23	0.61	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
Manufacturer unknown. Superfine ⁷.....	.....	36.30	.....	.....	.....	Conn. Agr. Expt. Sta., Bull. 258, 371 (1924).
Mechling Bros. Chemical Co., Camden, N. J. Sulfur Dust ⁸.....	.....	99.50	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 6914.
	.....	.....	.....	.....	.....	N. J. Agr. Expt. Sta., Bull. 459, 8 (1927).

¹Passes 100 mesh 97.2 per cent; 200 mesh 43.5 per cent; 300 mesh 14.5 per cent.

²Calcium hydroxide, guaranteed 10.00 per cent; found 7.14 per cent.

³Inert matter guaranteed 15.0 per cent.

⁴Passes 200 mesh 97.0 per cent.

⁵Passes 200 mesh 95.0 per cent.

⁶Copper sulphate 2.73 per cent.

⁷Passes 300 mesh 100 per cent.

⁸Passes 100 mesh 99.0 per cent; 200 mesh 24.6 per cent; 300 mesh 9.2 per cent.

TABLE XXXII. SULPHUR—Continued

Manufacturer or Distributor and Brand	Sulphur		Water	Ash	Type	Publication
	Guaranteed	Found				
Meyer, Wilson & Co., San Francisco,						
Cal. Flowers of Sulphur K. R.	99.00	99.10	0.90	...	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Murphy Oil Co., East Whittier, Cal. . .	....	99.73	0.27	none	....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
Chas. C. Navlet Co., Berkeley, Cal. . .						
Neutral Brand Dusting	99.00	98.20	0.30	1.10	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Chas. C. Navlet Co., Berkeley, Cal. . .						
Neutral Sulphur, Superfine Flour . . .	99.50	99.13	0.24	0.63	Milled	Cal. Dept. Agr., Spec. Pub. 58, 23 (1925).
Niagara Sprayer Co., Middleport, N. Y.						
Y. Niagara Dusting Sulphur, Sul-	93.00	92.40	....	....	....	Conn. Agr. Expt. Sta., Bull. 258, 371 (1924).
fodust ⁹						
Niagara Sprayer Co., Middleport, N. Y.						
Niagara Kolodust	90.00	90.10	....	....	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Niagara Sprayer Co., Middleport, N. Y.						
Y. Niagara Superfine Dusting	99.50	99.70	0.20	0.10	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Niagara Sprayer Co., Middleport, N. Y.						
Y. Vesuvius Sublimed Flowers	100.00	99.85	0.09	0.06	....	Cal. Dept. Agr., Spec. Pub. 66, 21 (1926).
Dr. O'Toole, Sacramento, Cal. . . . .	....	99.46	0.10	0.44	....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
Pacific Guano & Fertilizer Co., Berke-						
ley, Cal. Cropmaker Flowers	100.00	99.50	0.40	0.10	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Pacific Guano & Fertilizer Co., Berke-						
ley, Cal. Producer Flowers	100.00	99.64	0.25	0.11	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).
Pacific Guano & Fertilizer Co., Berke-						
ley, Cal. Sunkist Dusting	99.00	97.45	0.35	1.60	....	Cal. Dept. Agr., Spec. Pub. 75, 28 (1927).

Pascal, Dubedat & Co., P. D. C. Rooster Flowers.....	99.62	99.44	0.39	0.17	.....	Cal. Dept. Agr., Spec. Pub. 66, 21 (1926).
Richards Import & Export Co. Union D. Rubino, Angelo Pontillo.....	90.00	99.57	0.38	0.05	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 24 (1925).
San Francisco Sulphur Co., San Francisco, Cal. Alfa Brand Dry Wettable Flowers.....	90.00	99.71	0.08	0.21	.....	Cal. Dept. Agr., Spec. Pub. 66, 21 (1926).
San Francisco Sulphur Co., San Francisco, Cal. Anchor Sublimed Velvet Flowers.....	100.00	92.50	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Asti Sublimed Sulphur, 100% Pure.....	100.00	99.80	0.20	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Diamond S Flour.....	100.00	100.00	.....	.....	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 24 (1925).
San Francisco Sulphur Co., San Francisco, Cal. Eagle Sublimed Flowers	100.00	99.65	0.23	0.12	Milled	Cal. Dept. Agr., Spec. Pub. 58, 24 (1925).
San Francisco Sulphur Co., San Francisco, Cal. Electric.....	99.80	99.38	0.22	0.40	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Owl Superfine Flour...	99.50	99.85	0.02	0.11	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Red Flag Velvet Flowers	100.00	98.69	0.18	0.56	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Swan Brand Superfine Ventilated Dusting.....	98.50	99.64	0.28	0.09	Sublimed	Cal. Dept. Agr., Spec. Pub. 58, 24 (1925).
San Francisco Sulphur Co., San Francisco, Cal. Ventilated ⁹.....	.....	98.13	0.30	1.57	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
San Francisco Sulphur Co., San Francisco, Cal. Ventilated ¹⁰.....	.....	99.59	0.25	0.16	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1923).
San Francisco Sulphur Co., San Francisco, Cal. XL Sublimed.....	99.80	99.83	0.07	0.10	Milled	Cal. Dept. Agr., Spec. Pub. 66, 21 (1926).
The Sherwin-Williams Co., Cleveland, Ohio. Sherwin-Williams Dusting...	100.00	99.80	0.07	0.13	Milled	Cal. Dept. Agr., Spec. Pub. 58, 24 (1927).

⁹Inert matter guaranteed 7.00 per cent.¹⁰Passes 200 mesh 97.00 per cent.

TABLE XXXII. SULPHUR—Concluded.

Manufacturer or Distributor and Brand	Sulphur		Water	Ash	Type	Publication
	Guaranteed	Pound				
The Sherwin-Williams Co., Cleveland, Ohio. Sherwin-Williams Ultra	% 100.00	% 99.59	% 0.22	% .....	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
Brand Flowers.....	.....	.....	.....	.....	.....	.....
The Sherwin-Williams Co., Cleveland, Ohio. Sherwin-Williams Zephyr	100.00	99.43	0.38	0.20	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
Brand Flowers.....	.....	.....	.....	.....	.....	.....
Stauffer Chemical Co., Anchor Velvet Flowers.....	100.00	99.60	0.10	0.30	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
T. D. Urbahns, Sacramento, Cal. Ortho Sprays—Milled, ¹⁰	85.00	90.24	2.02	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
T. D. Urbahns, Sacramento, Cal. Wet- O-Dry XX Wettable Dösch ¹²	70.00	71.84	.....	.....	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1922).
Western Sulphur Co., Oakland, Cal. Bear Brand Bleaching.....	100.00	99.50	0.50	.....	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
Western Sulphur Co., Oakland, Cal. Cream of Sulphur.....	90.00	90.13	0.51	7.83	Milled	Cal. Dept. Agr., Spec. Pub. 58, 25 (1925).
Western Sulphur Co., Oakland, Cal. Poppy Dusting.....	98.00	99.08	0.15	0.78	.....	Cal. Dept. Agr., Spec. Pub. 75, 29 (1927).
T. & S. C. White Co., New York, N. Y. Sulphur Dust 100%-300 Mesh ¹⁴.....	.....	.....	.....	.....	.....	Conn. Agr. Expt. Sta., Sample 3620.
Yolo County Purchasing & Selling Corp., Woodland, Cal. Ortho ¹⁵	99.00	99.46	0.32	0.23	.....	Cal. Dept. Agr., Spec. Pub. 34, 26 (1923).

¹⁰Passes 200 mesh 97.0 per cent.¹¹Guaranteed: calcium thiosulphate 4.58 per cent; gypsum 1.63 per cent; casein, 0.46 per cent.¹²Inert matter guaranteed 15.0 per cent.¹⁴Passes 200 mesh 100 per cent.¹⁵Passes 200 mesh 83.16 per cent.

Sulphur Compound.

(BOGART CHEMICAL CO., NEW YORK, N. Y.)

(See also "Agricultural Sulphur Compound" and "Niagara Soluble Sulphur Compound").

Found: Soluble sulphur 9.35 per cent.

*N. Y. Agr. Expt. Sta., Bull. 348, 93 (1912).***Sulphur Dust.**

(NIAGARA DUST CO., KENTVILLE, N. S., CANADA.)

Found: Sulphur 78.60 per cent; total arsenic oxide 4.74 per cent; water-soluble arsenic oxide 0.06 per cent; lead oxide 9.75 per cent; colloidal clay (Bentonite) present.

*Canada Dept. Agr., Div. Chem., Rept. Dominion Chemist (1928).***Sulphur Smoke Dusting Mixture**

See "Naco."

Sulphur with 7 Percent Nicotine Solution.**Sulphur with 10 per cent Nicotine Solution.**

See "Nicotine-Sulphur Dusts."

Summer Mulsion.**Summer Oil.**

See "Oil Emulsions, Mineral."

"Sun" Argentine Ant Poison.

(SUN DRUG CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Total arsenic, metal	0.20	0.30
Water-soluble arsenic, metal	0.20	0.30

Cal. Dept. Agr., Spec. Pub. 34, 18 (1923).

Sun Miscible Oil.**Sunoco Spray Oil.**

See "Oil Emulsions, Mineral."

Sure Death Rat Killer.

(PFEIFFER CHEMICAL CO.)

Found: Arsenious oxide 97.22 per cent.

*Cal. Dept. Agr., Spec. Pub. 75, 27 (1927).***Sure Death to Insects.**

(H. C. DUSENBERRY, NEW YORK, N. Y.)

Found: Substance is gasoline possibly containing oil of citronella.

*U. S. D. A., Bur. Chem., Bull. 68, 56 (1902).***Sure Destruction for Cockroaches and Ants.**

(INSECT EXTERMINATOR MFG. CO., COUNCIL BLUFFS, IOWA.)

Found: Borax 99.50 per cent; balance pink coloring matter.

*U. S. D. A., Bur. Chem., Bull. 68, 43 (1902).***Sure Kill Rat and Roach Paste.**

See "Phosphorus Preparations".

Sure-Noxem.

(DEVOE & RAYNOLDS, CHICAGO, ILL.)

	Guaranteed.	Found.
Arsenious oxide	2.00	2.10
Sulphur	6.00	16.60

Ore. Agr. Expt. Sta., Cir. 64, 11 (1925).

Sure-Shot.

See "Oils, Mineral."

S. W. Sheep Dip.

See "Phenol Soap Solutions."

T.**Talbot's Bed Bug Powder.**

(TALBOT MFG. CO.)

Guaranteed: Sodium acid fluoride 8.00 per cent.
 Found: Sodium fluoride 58.46 per cent; ash 4.67 per cent.
Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

Talcimized Sodium Fluoride.

See "Sodium Fluoride."

Tar Acids and Petroleum Oils.

(R. R. ROGERS CHEMICAL CO.)

Guaranteed: Phenols 20.00 per cent.
 Found: Phenols 21.60 per cent; oils 77.35 per cent; non-soap ash 0.02 per cent; moisture 0.40 per cent. Constants of separated oil: Baumé gravity 23.3; unsulphonated oil, 44.40 per cent.
Cal. Dept. Agr. Spec. Pub. 51, 44 (1925).

Thrip Juice.

See "Nicotine Soaps."

Thymo-Cresol.

See "Phenol Soap Solutions."

Tiger Paste.

See "Phosphorus Preparations."

Tizit Tree Spray.

(TIZIT SPRAY MFG. CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Total arsenic, metal	4.00	3.41
Water-soluble arsenic, metal	0.20	2.25
Lead oxide	16.00	15.55
Sulphur	22.00	23.00
Sodium carbonate	16.00	17.08
Sodium oleate	25.00	24.98
Inert matter	17.00	....

Cal. Dept. Agr., Spec. Pub. 51, 54 (1925).

Tobacco Dusts.

See Table XXXIII.

Tobacco, Ground.

See "Tobacco Dusts."

Tobacco Naphtholene Mixture.

(H. A. STOOHOFF CO., MT. VERNON, N. Y.)

	Guaranteed.	Found.
Nicotine.....	0.50	1.02
<i>N. Y. Agr. Expt. Sta., Bull. 384, 297 (1914).</i>		

Tobacco Soap.

See "Nicotine Soaps."

Tobacco Tea.

(INDIGO BLUING CO)

Found: Nicotine 0.28 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 52 (1923).***"To-Bak-ine" Liquid.**

See "Nicotine Sulphate Solutions."

Todco, Argentine Ant Poison.

(OWL DRUG CO., SAN FRANCISCO, LOS ANGELES, CAL.)

Guaranteed: Arsenic 0.20 per cent.

Found: Arsenic, 0.15 per cent; cane sugar 59.24 per cent.

*Cal. Dept. Agr., Spec. Pub. 58, 17 (1925).***Tonicide.**

See "Blue Label."

Tree Paint.

(HOOD RIVER SPRAY CO., HOOD RIVER, ORE.)

	Guaranteed.	Found.
Copper.....	1.00	0.70
<i>Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).</i>		

Tree Spray.

See "Tizit" and "Victory."

Treevax.

(TREEVAX CHEMICAL CO., HICKSVILLE, OHIO.)

Found: Sulphur 62.00 per cent; potassium nitrate 27.00 per cent; ferric oxide 11.00 per cent.

*Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 11 (1915).***Trelife.**

(THE FERTILSPRAY CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Ferrous sulphate.....	20.00	20.98
Ferric sulphate.....	20.00	36.85
Copper sulphate.....	0.45	1.27

Cal. Dept. Agr., Spec. Pub. 75, 45 (1927).

TABLE XXXIII. TOBACCO DUST

Manufacturer or Distributor and Brand	Nicotine		Nicotine-sulphate, Guaranteed	Inert Matter, Guaranteed	Passing 200 mesh	Publication
	Guaranteed	Found				
Z. N. Beach, Wallingford, Conn.	0.50	1.66	0.00	0.00	0.00	Conn. Agr. Expt. Sta., Sample 4715.
Melvin W. Buster, Santa Rosa, Cal.	1.00	2.03	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
C. D. Carpenter, Berkeley, Cal.	1.00	2.36	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
Lewis Cheeseman, Hatfield, Mass. ¹	0.50	1.72	0.00	0.00	0.00	Conn. Agr. Expt. Sta., Bull. 242, 155 (1922).
Corona Chemical Co., Newark, N. J.	0.50	0.82	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
H. P. Cox, San Francisco, Cal.	1.00	1.50	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
Dosch Chemical Co., Louisville, Ky. Dosch	1.00	0.40	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
F. & I. Tobacco Products Co., Lancaster, Pa.	1.00	0.93	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
Golden Gate Mills, San Francisco, Cal. Impco	0.50	0.73	0.00	98.50	60.00	N. J. Agr. Expt. Sta., Bull. 407, 11 (1924).
Poultry Tobacco Dust Worm Cure	0.50	1.30	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 51, 49 (1925).
Hall Tobacco Chemical Co., St. Louis, Mo.	0.50	1.16	0.00	0.00	0.00	Conn. Agr. Expt. Sta., Bull. 242, 155 (1922).
International Milling Co., San Francisco, Cal.	0.50	2.78	2.00	98.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
International Milling Co., San Francisco, Cal.	0.50	1.30	5.00	95.50	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
International Milling Co., San Francisco, Cal.	0.50	1.30	0.00	99.50	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
R. J. Irwin, Inc., New York, N. Y. No. 2	0.50	0.98	0.00	0.00	0.00	N. J. Agr. Expt. Sta., Bull. 441, 9 (1926).
E. M. Ives, Meriden, Conn.	0.50	0.71	0.00	0.00	96.00	Conn. Agr. Expt. Sta., Bull. 272, 148 (1925).
M. E. Jaffa, University of California, Berkeley, Cal.	0.50	1.09	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
Kentucky Tobacco Produce Co.	0.50	0.16	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).
Montgomery, Ward & Co., Portland, Ore.	1.50	1.32	0.00	0.00	0.00	Ore. Agr. Expt. Sta., Cir. 84, 11 (1927).
Chas. W. Muller, Muller's Ground Tobacco.	1.00	1.08	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 75, 34 (1927).
E. J. Reilly, San Francisco, Cal.	0.50	0.60	0.00	0.00	0.00	Cal. Dept. Agr., Spec. Pub. 34, 50 (1923).

¹ Total ash 39.60 per cent; acid-insoluble ash 15.30 per cent; total nitrogen 1.99 per cent.

Trepep.

(PERFECTO SPRAY MFG. CO., LOS ANGELES, CAL.)

Guaranteed: Water 80.00 per cent.

Found: Water 83.60 per cent; soap 3.69 per cent; nicotine 0.26 per cent; copper 0.23 per cent; protein 5.13 per cent; phenols 0.90 per cent; calcium oxide 4.70 per cent; sulphur 0.79 per cent; free ammonia 0.36 per cent.

*Cal. Dept. Agr., Spec. Pub. 66, 37 (1926).***Triona.****Triumph.**

See "Oil Emulsions, Mineral."

Tuber Tonic.

(SHERWIN-WILLIAMS CO., CLEVELAND, OHIO.)

Found: Total arsenic 23.40 per cent; water-soluble arsenic 0.86 per cent; copper 19.70 per cent.

*N. J. Agr. Expt. Sta., Bull. 459, 16 (1927).***Tux-E-Do Mixture.**

(SCHOONMAKER & SON, CEDAR HILL, N. Y.)

Found: Total arsenious oxide 2.69 per cent; water-soluble arsenious oxide 1.77 per cent; cupric oxide 5.90 per cent.

*N. Y. Agr. Expt. Sta., Bull. 348, 90 (1912).***Twenty Plus Disinfectant.**

(MICHEL & PELTON CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Sodium hypochlorite	12.00	11.91
Available chlorine . . . . .	....	5.67

*Cal. Dept. Agr., Spec. Pub. 51, 53 (1925).***210 Dust Mixture Special.**

See "Nicotine Dusts."

Tydel 122.

See "Oils, Mineral."

U.**U. C. Worm Capsules.**

(JONES DRUG STORE, PETALUMA, CAL.)

Found: Nicotine 15.59 per cent.

*Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).***Universal Brand Neutral Emulsion.****Universal Brand Triona.****Universal Brand Triumph.****Universal Dormant Soluble Oil.****Universal Mealy Bug Spray Oil.****Universal Medol Emulsion.**

See "Oil Emulsions, Mineral."

University Capsules.

(THE UNIVERSITY CAPSULE CO., SAN FRANCISCO, CAL.)

	Guaranteed.	Found.
Nicotine.....	13.00	14.20
<i>Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).</i>		

University Poultry Worm Capsules.

(NOVATO PHARMACY, NOVATO, CAL.)

Found: Nicotine 14.81 per cent.

*Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).***University Worm Capsules.**

(CHICKEN PHARMACY, PETALUMA, CAL.)

	Guaranteed.	Found.
Nicotine.....	13.00	13.39
<i>Cal. Dept. Agr., Spec. Pub. 75, 35 (1927).</i>		

University Worm Capsules No. 1.

(PETALUMA AVIAN PATHOLOGY LABORATORY, PETALUMA, CAL.)

	Guaranteed.	Found.
Nicotine.....	15.00	14.83
<i>Cal. Dept. Agr., Spec. Pub. 66, 26 (1926).</i>		

Urania Green.

(IMPORTED FROM GERMANY).

Found: Total arsenious oxide 57.05 per cent; water-soluble arsenious oxide 4.18 per cent.

*Cal. Dept. Agr., Spec. Pub. 34, 16 (1923).***Uspulun.**

(THE BAYER CO., INC., NEW YORK, N. Y.)

Guaranteed: Hydroxymercurichlorphenol sulphate 30.00 per cent.

Found: Mercury 19.57 per cent.

*Cal. Dept. Agr., Spec. Pub. 75, 62 (1927).***V.****Vaporizing and Fumigating Insecticide.**

(EASTERN CHEMICAL CO., BOSTON, MASS.)

	Guaranteed.	Found.
Nicotine.....	37.00	30.87
Camphor.....	23.00	13.64
Alcohol.....	32.00	53.49

*U. S. D. A., Bur. Chem., Bull. 68, 47 (1902).***Veltha.**

(WM. WOOD & SON, WOODGREEN, LONDON, ENG.).

Found: Sand 32.73 per cent; water 27.00 per cent; carbon 2.31 per cent; sulphur trioxide 19.90 per cent; ferrous oxide 17.90 per cent. Substance is partially dehydrated ferrous sulphate with 35.00 per cent sand and carbon.

*U. S. D. A., Bur. Chem., Bull. 68, 48 (1902).***Vermol.**

See "Phenol Soap Solutions."

Verm-O-Spray.

(VERM-O-SPRAY PRODUCTS CO., WEST HAVEN, CONN.)

Found: Specific gravity, 15.6° C., 0.8825; trace of ash; flash point 61.0° C.; fire point 64° C.; salicylate present. Substance is a mixture of kerosene and methyl salicylate.

Conn. Agr. Expt. Sta., Bull. 258, 376 (1924).

Victory Tree Spray.

(VICTORY TREE SPRAY CO., LOS ANGELES, CAL.)

	Guaranteed.	Found.
Total arsenic oxide	4.50	5.74
Water-soluble arsenic, oxide	0.50	1.37
Lead oxide	15.00	14.83
Sulphur	25.00	24.85
Sodium oxide	10.00	13.02
Soap . . . . .	....	3.80

Cal. Dept. Agr., Spec. Pub. 66, 18 (1926).

Vigorol.

(TREE CHEMICAL CO., SAN JUAN BAUTISTA, CAL.)

Guaranteed: Potassium cyanide 5.47 per cent.

Found: Potassium cyanide, 1.66 per cent; nitrate nitrogen 0.31 per cent; ammonia nitrogen 2.24 per cent; organic nitrogen 0.65 per cent; total nitrogen 3.20 per cent; phosphorous pentoxide 3.15 per cent. This is a preparation intended to be injected into the sap of trees. It was found to injure trees, and renewal of license to sell was refused in California.

Cal. Dept. Agr., Spec. Pub. 51, 12, 58 (1925).

Vitedust.

(NIAGARA SPRAYER CO., MIDDLEPORT, N. Y.)

	Guaranteed.	Found.
Copper sulphate	11.00	9.40
Lead arsenate	14.00	12.80

Ore. Agr. Expt. Sta., Cir. 64, 11 (1925).

Volck.**Vulture Oil.**

See "Oil Emulsions, Mineral."

W.**Dr. G. Z. Wait's Sheep Dip.**

See "Phenol Soap Solutions."

Wait's Squirrel and Gopher Poison.**Wakelee's Squirrel and Gopher Poison.**

See "Strychnine Preparations."

Walnut Worm Dust.

See "Ortho Walnut Worm Dust."

War on Ants.

(CANNON CHEMICAL CO.)

Guaranteed: Sugar 20.00 per cent.

Found: Sodium fluoride 45.27 per cent; organic matter 25.05 per cent; sugar 19.72 per cent.

Cal. Dept. Agr., Spec. Pub. 75, 63 (1927).

Waters Bros. Crude Carbohc Acid.

See "Phenol."

Watkin's Germicide Dip and Disinfectant.

See "Phenol Soap Solutions."

Watkin's Louse Killer.

(J. R. WATKINS CO.)

	Guaranteed.	Found.
Nicotine.....	0.10	0.23
Naphthalene.....	10.00	10.07

*Cal. Dept. Agr., Spec. Pub. 75, 41 (1927).***Watson's Soluble Arsenoid.**

(JOHN WATSON CO., INC., HOULTON, ME.)

Guaranteed: Sodium arsenate 80.00 per cent; arsenic, metal 32.20 per cent.

Found: Arsenic, metal 40.09 per cent.

*Maine Agr. Expt. Sta., Official Inspections 118, 70 (1925).***Weedicator.**

(WEEDICATOR WEED CO.)

	Guaranteed.	Found.
Arsenious oxide.....	.....	7.84
Water.....	70.00	70.00

*Cal. Dept. Agr., Spec. Pub. 75, 25 (1927).***Weed Killer.**

(CHIPMAN CHEMICAL ENGINEERING CO., BOUND BROOK, N. J.)

	Guaranteed.	Found.
Salts.....	45.00	44.10

*Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).***Weed Killer.**

(HOOD RIVER SPRAY CO., HOOD RIVER, ORE.)

Found: Arsenious oxide 30.00 per cent.

*Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).***Weed Killer.**

(U. S. SMELTING, REFINING & MINING CO., SALT LAKE CITY, UTAH).

	Guaranteed.	Found.
Sodium arsenite.....	43.00	44.50

*Ore. Agr. Expt. Sta., Cir. 84, 15 (1927).***Weed-Killer No. 1 Thin Liquor.**

(F. W. WAITE, EL CENTRO, CAL.)

Found: Arsenious oxide 1.13 lb. per gal.; sodium chloride, 1.94 lb. per gallon.

*Cal. Dept. Agr., Spec. Pub. 34, 20 (1923).***Weed Killer, No. 2, Thick Liquor.**

(F. W. WAITE, EL CENTRO, CAL.)

Found: Arsenious oxide 8.10 lb. per gal.; sodium chloride 0.14 lb. per gallon.

Cal. Dept. Agr., Spec. Pub. 34, 20 (1923).

Weed Killer, Solid.

(F. W. WAITE, EL CENTRO, CAL.)

Found: Arsenious oxide 1.56 per cent; sodium hydroxide 57.60 per cent; sodium carbonate 38.16 per cent; sodium chloride 1.42 per cent.

Cal. Dept. Agr., Spec. Pub. 34, 20 (1923).

Weevil Bait.

See "Strawberry Weevil Bait."

Wescoco Bleaching Water.

Found: Available chlorine 2.89 grams per 100 cc.

Conn. Agr. Expt. Sta., Bull. 258, 377 (1924).

Western Poisoned Barley.

See "Strychnine Preparations."

Whale Oil Soap.

See "Soap."

White Arsenoid (Barium Arsenite).

(ADLER COLD & CHEMICAL WORKS, NEW YORK, N. Y.)

Found: Barium carbonate 44.05 per cent; barium chloride 13.05 per cent; barium oxide 8.18 per cent; free arsenious oxide 27.64 per cent; lead carbonate 1.86 per cent; silica 0.20 per cent; water 4.00 per cent.

Univ. of Calif. Coll. of Agr. Expt. Sta., Bull. 151, 25 (1903).

Whitewash.

See "Wyandotte Detergent."

Whitney's Sulphon Carbolate of Lime.

(WHITNEY CO., NATICK, MASS.)

Found: Sand, 1.14 per cent; carbon dioxide 8.60 per cent; sulphur trioxide 0.16 per cent; calcium oxide 57.42 per cent; magnesium oxide 7.37 per cent; phenol anhydride 1.68 per cent; water and pink dye by difference, 23.63 per cent.

U. S. D. A., Bur. Chem., Bull. 68, 51 (1902).

Williams and Moore Spray Soap.

See "Soap."

Winter Mulsion.

See "Oil Emulsions, Mineral."

W. & M. Antiseptic Sheep Dip.

See "Phenol Soap Solutions".

Wyandotte Detergent (Whitewash).

(MANUFACTURER NOT STATED.)

Found: Moisture 4.50 per cent; sand 69.22 per cent; sodium carbonate 10.60 per cent; calcium oxide 1.20 per cent; magnesium oxide 0.35 per cent; soap 10.40 per cent; nicotine none. This substance was sold as a wash to prevent sunburn of trees, but was found of no value for this purpose.

Cal. Dept. Agr., Spec. Pub. 34, 59 (1923).

Wyrol.

See "Oils, Mineral."

X.

XL all.

(G. H. RICHARDS, LONDON, ENG.)

Found: Nicotine 3.41 per cent.

*N. Y. Agr. Expt. Sta., Bull. 348, 94 (1912).***XX Mystic XX Spray.**

See "Oils, Mineral."

X X X Heavy Emulsion.**X X X Medium Emulsion.**

See "Oil Emulsions, Mineral."

Y.

Yellow Label Hydroxide Paste.

See "Mechling."

Youell's Rat Snap.

See "Phosphorus Preparations."

Z.

Zeno.

See "Phosphorus Preparations."

Zenoleum Lice Killer.

(ZENNER DISINFECTANT CO., DETROIT, MICH.)

Found: Nicotine 0.51 per cent.

*Mich. Agr. Coll. Expt. Sta., Spec. Bull. 74, 11 (1915).***Zeno Miscible Oil Spray.**

See "Oil Emulsions, Mineral."

Zinc Arsenite.

See "Arsenite of Zinc."

Zinc Bordeaux.

(GENERAL CHEMICAL CO., NEW YORK, N. Y.)

	Guaranteed.	Found.
Total arsenic, metal	10.16	10.22
Water-soluble arsenic, metal	1.00	0.25
Copper	15.70	16.07
Zinc	13.31	14.41

Conn. Agr. Expt. Sta., Bull. 242, 154 (1922).