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ANNUAL REPORT
OF THE CHIMICAL
EXAMINERS DEPARTMENT
FOR THE YEAR
1952



ANNUAL REPORT OF THE CHEMICAL EXAMINER'S DEPARTMENT

FOR THE YEAR
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Madras, dated the 15th April 1953.

From

DR. P. VENKAT RAO, M.B., M.S.C., F.R.I.C.,

Chemical Examiner to Government, Madras-9.

To

THE SECRETARY TO GOVERNMENT,

HEALTH DEPARTMENT, FORT ST. GEORGE, MADRAS-9.

(Through the Director of Medical Services, Madras-6.)

SIR,

[Subject.—Annual Report of the Chemical Examiner's department for the year 1952—Submitted.]

I have the honour to submit the Annual Report of the Chemical Examiner's department for the year 1952.

I was in charge of the Department throughout the year. Dr. A. R. Natarajan, B.Sc., M.B.B.S., my Senior Assistant, continued to be on deputation for undergoing post-graduate studies in the United Kingdom. Dr. K. Krishna Varman, B.Sc., M.B.B.S., was my Senior Assistant throughout the year. Dr. M. V. Korath, B.Sc., M.B.B.S., was on reserve duty, undergoing training in my laboratory from the 1st to 17th January and was my Senior Assistant from the 18th January to the end of the year. Sri S. Natarajan, B.Sc., was my Junior Assistant throughout the year. Sri A. S. Venkateswara Rao, M.Sc., was my Additional Junior Assistant throughout the year. Sri R. Veeraraghavan, B.Sc., was my Assistant for Police Research throughout the year. Sri G. Seshagiri, B.A., was my Sub-Assistant throughout the year. Sri N. Vedachalam, B.Sc. (Pharm.), was my Additional Sub-Assistant throughout the year.

The total number of cases examined during the year was 2,925 with 14,241 articles as compared with 2,479 with 12,187 articles in 1951.

HUMAN POISONING CASES.

The total number of human poisoning cases examined during the year was 1,049 cases with 4,725 articles as compared with 956 cases with 4,417 articles in 1951. Poison was detected in 416 cases or 39.7 per cent. The nature of poisons detected is shown in the following table:—

Inorganic—	Cases.	Organic—	Cases.
Arsenic	13	Aconite	5
Arsenic, copper, datura and aconite	1	Alcohol	58
Copper	38	Alcohol and datura	3
Copper and mercury	1	Alcohol and opium	2
Cyanide	20	Barbituric acid	4
Cyanide and alcohol	3	Campbor	1
Cyanide and opium	1	Cresols	1
Glass pieces	1	Datura	30
Hydrochloric acid	2	Kerosene oil	14
Iodine	4	Madar	4
Iodine and alcohol	1	Nux-vomica	5
Mercury	15	Oduvan	12
Magnesium salts	2	Oleander	42
Nitric acid	13	Opium	13
Nitric acid and alcohol	1	Phenol	1
Nitrite	52	Quinine	4
Nitrite and alcohol	8	Quinine and acetyl salicylic acid	1
Sulphuric acid	13	Turpentine	2
Zinc phosphide or phosphine	25		
Total	214	Total	202

Among the poisons alcohol heads the list with 76 cases, while nitrite comes next with 60 cases, followed by oleander with 42 cases, copper with 40 cases, and datura with 34 cases.

A few cases are selected as of interest—

Aconite.—In this case there are three accused. The first accused is charged with the offence of murder of her husband by adding aconite poison to "paramannam" (a semi-liquid sweet preparation), which she served him on a particular night. The second accused, who is a maternal cousin of the first accused, was having criminal intimacy with her. The deceased warned the second accused not to come to his house. With a view to do away with her husband, the first accused asked the third accused, who is a village quack, to supply poison and sent rupees five through the second accused. The poison was obtained and a portion mixed with the paramannam. The husband of the first accused ate the paramannam and soon afterwards complained to his neighbour of a tingling sensation in his tongue. He asked for some betel leaves and went over to the terrace of the house of another friend. There he was feeling very uneasy, sent for his wife and asked her as to what she did to him. Subsequently he vomited and his condition became precarious. On questioning, the first accused stated that she prepared paramannam and served it to her husband and she also ate it. A native doctor who was summoned, applied an ointment of "Anandabhairavi pill" to the eyes of the deceased. This had no effect and the patient died in the early hours of the morning. The first accused was arrested and on information given by her a packet containing some brown powder was recovered from her box in the kitchen. During a search of the house of the third accused another packet of powder was also seized from a pot in his house.

The viscera of the deceased, the prepared paramannam and the two packets of powder were sent to us for examination. We detected a poisonous alkaloid of the aconitine group in the stomach and contents of the deceased but no poison was detected in the paramannam. The powder recovered from the house of the first accused was found to contain a poisonous alkaloid of the aconitine group and a mydriatic alkaloid together with particles of aconite root and datura seed. The packet seized from the house of the third accused was found to contain white arsenic and crystalline copper sulphate but no aconitine.

In the court the first accused said that she administered the medicine to her husband only as a love potion. She further denied any criminal intimacy with the second accused. Taking into consideration the statements of the other witnesses and the leprosy-like white patches found on the body of the second accused, the judge remarked that even if the second accused was not shunned by society it is difficult to believe that the first accused would have been on criminal intimacy with the second accused. It follows that accused 1 and 2 did not entertain any intention to do away with the husband of the first accused. The first accused's intention was to bring her husband under her domination by depriving him of his will power and she must be deemed to have had knowledge that that powder was likely to cause hurt. On this account the first accused was sentenced to undergo rigorous imprisonment for five years and accused 2 and 3 were acquitted.

Alcohol.—A male aged about 55 years (deceased) got displeased with the findings of a village panchayat in a family quarrel. On a particular night he consumed a large quantity of illicit arrack and began scolding the members of the village panchayat. Thereafter it is alleged that a few of the villagers gave him blows with their fists on his head, face, back, etc., and also sent word to the Police. Two Police constables came to the spot and seeing the man drunk asked him to follow to the police station. On the way four other villagers offered to stand surety for the man but the constables refused to release him and had directed them to come to the police station. When all of them had gone about four furlongs from the village and were on a river bed, the man fell down unconscious and a little later

expired. Some time later one of the police constables went away saying that he would bring the Sub-Inspector of Police. As the constable did not turn up till sunrise two of the villagers went to the police station and gave information. The Sub-Inspector directed them to take the body to the village and wait there for him. During the course of investigation by the Police, the villagers who fisted the deceased were arrested and charged under section 302, I.P.C. The viscera of the deceased were sent to us for examination and we detected alcohol in the stomach and contents, intestines and contents and liver and kidney. The medical officer who conducted the post-mortem examination opined that the man should have died of alcohol poisoning. Taking this fact into consideration along with the absence of ante-mortem injuries on the body, the judge acquitted all the accused.

Arsenic.—A man aged about 70 years had property worth about Rs. 20,000. He had two wives and several daughters but no sons. He executed a will in favour of his wives and daughters. One of the inheritors of his property persuaded the man to make some alterations in the will and then register. But just before the registration date of the changed will, the old man died suddenly after drinking coffee. It was alleged that his younger wife gave him coffee mixed with some poison. The viscera were sent to us for examination and we detected small quantities of arsenic in them.

Datura.—A man was alleged to have been cut with an aruval and buried in the nearby paddy fields. Some foul play was suspected and the body was later exhumed. The viscera were sent to us for examination and we detected in the stomach and contents a mydriatic alkaloid and also particles of datura seed.

Nitrite.—(1) A man was alleged to have been in illegal intimacy with a woman and because of this there were misunderstandings between him and her husband. The man brought some arrack mixed with some poison and asked the woman to administer it to her husband. After taking the arrack the husband of the woman died. The viscera of the deceased and the vessels in which the arrack was brought were sent to us for examination and we detected small quantities of nitrite in the washings of the vessels and alcohol but not nitrite in the visceral matters of the deceased.

(2) A dead body of a man was found in a small irrigation channel and the matter was reported to the village munsif. He immediately proceeded to the spot and found a man carrying away the dead body on his shoulders. The munsif suspected some foul play and reported the matter to the Police. The viscera of the deceased were sent to us for examination and we detected nitrite in the stomach and contents in a quantity equivalent to about 7/10 of a grain of sodium nitrite.

Oleander.—The deceased, aged about thirty years, was the second wife of a person, having been married to him about 20 years ago. About five months prior to the deceased's death, her husband and his son by the first wife left the village in search of a new job and returned only the day before the deceased's death. Another person (accused) happened to come and live in the village of the deceased. He slowly contracted illicit intimacy with the deceased and moved into her house for residence. The return of the husband of the deceased necessitated the severing of relations of the accused with the deceased. Hence the accused is alleged to have killed her by giving her oleander juice under the pretext of curing her excessive heat with "donda" leaf juice.

The viscera of the deceased, the vomited matter and the vegetable matter alleged to have been administered were sent to us for examination and we obtained both from the vomited matter and vegetable matter a poisonous extract which gave reactions similar to those given by oleander. No poison was detected in the viscera. The judge acquitted the accused stating that the prosecution has failed to prove beyond doubt, that it is the accused who administered the oleander juice to the deceased.

Zinc phosphide.—(1) A man was alleged to have been murdered by pressing his private parts. The visceral matters of the man were sent to us for examination and we detected phosphine in the stomach and contents in a quantity equivalent to about 6-1/5 grains of zinc phosphide.

(2) A goldsmith had four sons the first three of whom were married and the last son unmarried. The unmarried son (accused) gradually picked up illegal intimacy with the wife of his brother (second son of the goldsmith). One day the brother found his wife in sexual intimacy with the accused. He chastised them and complained to his parents. They also reprimanded the boy and the girl. In course of time the brother generously forgave the accused and moved very cordially with him. Further he trusted the accused and did not in any way suspect him. But the accused did not either repent or reform himself. He continued his intimacy with the girl in a discreet manner. He conceived the idea of having the girl exclusively for himself and get rid of the brother. He asked the girl to elope with him to some far-off place. The girl agreed but insisted to carry her little child with her. This the accused did not like and persisted in the girl's abandoning the child and eloping with him. The girl was in a very unhappy position and so she went away to her mother's house to remain at least from being pestered by the accused.

The accused came there also and implored the girl to abandon the child and elope with him. The girl refused to elope on such terms. Then the accused told her that he will poison his brother (her husband) because the latter will not leave him live in peace even if he (accused) elopes with her. The girl was feeling very unhappy and told about this to the accused's parents. The parents said that they would attend to it. In the meantime the accused got some rat poison from a hakim on the pretext of protecting the bean stalks in his house from rats. The accused also purchased some sweet potatoes, got it cooked and subsequently added the rat poison to it. When the brother of the accused visited him, the accused requested his brother with seeming affection to eat the mashed potato, kept in a niche in the wall. The brother innocently and cheerfully took the potato which was kept wrapped in a paper, ate it and also shared it with a neighbouring woman and her grandson. After some time all the three began to vomit profusely. The brother noticed a "smell of matchsticks" in the potato mash and realized that his brother has poisoned him. They were removed to the hospital where the grandson died and the other two recovered. The viscera of the deceased, the stomach washes of the other two persons and the mashed potato were sent to us for examination and we detected phosphine in the stomach and contents of the deceased and in the mashed potato but not in the stomach washes of the other two persons. The accused was sentenced to death by the judge with the remark that the conduct of the brother has throughout been open hearted, generous and affectionate towards the accused. On the other hand the accused was behaving in a very treacherous, sneaky and double crossing manner like a snake in the grass.

ANIMAL POISONING CASES.

We received during the year 78 cases of animal poisoning with 341 articles as compared with 60 cases with 266 articles in 1951.

Poison was detected in 31 cases or 39.74 per cent. The nature of the poisons detected is shown in the following table:—

	Cases.
Arsenic	15
Arsenic and mercury	1
Zinc phosphide or phosphine	4
Phosphine and oleander	1
Aconite	1
Oleander	9
Total ..	31

STAIN CASES.

One thousand four hundred and forty cases were examined under this heading as against 1,169 cases in 1951. One thousand two hundred and thirty-nine cases were examined for blood and two hundred and one cases for semen with or without blood. The total number of articles examined under these headings were seven thousand eight hundred and twenty.

In one thousand two hundred and thirty-nine cases examined for blood, blood was detected in 1,182 cases or 95.4 per cent.

In two hundred and one cases examined for semen with or without blood the detections were semen in 58 cases, blood and semen in 15 cases and blood in 26 cases, the total detections being 99 cases or 49.25 per cent.

Six thousand four hundred and forty specimens in all, of stains in which blood was detected in this laboratory, were sent to the Serologist, Government of India, Calcutta, and the results of his examination are given below:—

Human blood	6,011	Bird's blood	6
Disintegrated and origin not determined	405	Human and ruminant animal's blood	2
Too small	12	Human and bird's blood	1
Ruminant animal blood	3	Total	6,440

In addition to the above, some chips of bone were sent to the Serologist, Government of India, Calcutta, for determination of their origin and it was reported that no opinion could be given.

Besides the above, some brownish lumps alleged to be brain matter from two items were sent to the Serologist, Government of India, Calcutta, for determination of their origin and it was reported that one was of human origin and the other was disintegrated and its origin could not be determined.

Specimens of semen stains from six items were sent to the Serologist, Government of India, Calcutta, for determination of their group and two items were reported to belong to group "O" or from a non-secretor.

Thirty-nine pieces of hair found sticking to the weapons, etc., in blood-stain cases were studied and found to be human hair.

The following stains cases are of interest:—

(1) A woman was found lying dead in her bed with her throat cut. The blood-stained articles seized in the case were sent to us for examination and blood was detected on all the articles. One of the accused in the case contended that the shirt worn by him was stained with the blood of a hen. The Serologist's opinion on the examination of these articles was that the shirt of the accused was found to have been stained both with human blood and bird's blood and the other articles stained with human blood.

(2) In a murder case, a woman was alleged to have been beaten to death by her husband. The blood-stained articles seized in the case were sent to us for examination. The Serologist in his report stated that the bodice of the woman was stained with the blood of a bird and the rest with human blood.

(3) In a case of rioting by about six persons a woman was alleged to have been beaten by a rice-pounder on her head. The rice pounder and some blood-stained cloths from the accused were sent to us for examination. Further it was alleged that one of the accused killed a cock and soaked the baniyan and a cloth

with the cock's blood and filed a false complaint against others. The Serologist in his findings stated that the banyan and the cloth (seized from the accused) were stained with human blood but no bird's blood was detected on either of them.

(4) Some ladies came to see a cinema show on a particular night and after seeing the cinema they went and slept in a hotel. Some persons who obtained information about their stay in the hotel formed themselves into an unlawful assembly, went into the hotel and alleged to have committed rape on the ladies. The clothes the ladies were wearing at the time of rape were sent to us for examination. We detected semen on all the clothes. The magistrate desired to have a grouping test conducted on the semen stains on the clothes. Hence they were sent to the Serologist, Government of India, Calcutta, who reported that no definite opinion was possible. The result of the judicial enquiries in this case has not been communicated.

MISCELLANEOUS MEDICO-LEGAL CASES.

There were 263 cases with 1,260 articles under this heading as against 243 cases with 1,172 articles in the year 1951.

The nature of articles and the number of cases examined are given below :—

	Cases.		Cases.
Firearms, bullets, etc., in shooting cases ..	44	Filed off numbers ..	5
Bones and tissue, etc., for powder and lead, in shooting cases ..	73	Acids and other corrosives ..	4
Bones and tissue for identification ..	18	Explosives ..	10
Bombs, etc. ..	49	Combustibles ..	17
Fireworks and other explosives ..	19	Other cases ..	17
Cases of cheating ..	18		
Theft of wires ..	18	Total ..	263

Details of a few cases are given below :—

(1) A theft of copper wire from telephone poles near Madras City was reported to the Police. Some Police officers on patrol duty arrested one man on suspicion in a village about twenty-five miles away from the city and seized from his house two rolls of copper wire. These two rolls of copper wire and the out pieces of copper wire from the scene of offence were sent to us for examination with a view to find out whether they are parts of the same wire and the nature of instrument that was used for cutting the wires. On examination it was found that one of the rolls recovered from the house of the accused compared favourably with the wires at the scene of offence. No opinion could be given regarding the nature of weapon used.

(2) Two persons went to a nearby town to purchase puffed rice. The purchase was made and the puffed rice was put in a gunny bag. As there was no rope available to tie the mouth of the gunny bag, one of the persons (accused) tore off a portion of his upper cloth and tied the gunny bag. On their way back to their native place the accused is alleged to have murdered the man who accompanied him, the reasons for which are not stated. Thereafter the accused is stated to have secreted the gunny bag with the piece of cloth in the house of a woman known to him and absconded. Later on the accused was arrested on suspicion and when questioned he confessed that he has secreted the gunny bag in a woman's house. On a search made by the Police they recovered the gunny with a piece of cloth tied to it and a similar piece of cloth from the house of the accused. The Police submitted both the pieces of cloth to us to find out whether they formed parts of one and the same cloth. On examination we found that both the pieces of cloth were similar in weave, appearance and texture indicating the probability of their having formed part of one and the same cloth.

(3) An insured envelope containing Rs. 400 was sent by a person from a city to another person at a distant place. The cover was found with the seals intact and the weight of the cover was noted at the office of origin. It was put in a registered bag and despatched. Midway the bag was opened by the R.M.S. authorities and the envelope was weighed. It was found to weigh less. After noting that, it was despatched to the place of destination. The postmaster at the office of destination found that the seals have been tampered with and on weighing it was found to weigh lesser than what it weighed in the midway R.M.S. office. The post-master grew suspicious and gave open delivery to the addressee. Then it was found that the cover contained currency notes only to the value of Rs. 250. The matter was reported to the Police. In the course of investigation the Police seized the outer cover of the insured letter, the inner cover and samples of gum used in the various post offices through which the covers have passed. They wanted us to find out the nature of gum that is present on the flaps of both the envelopes. By an examination we could find that the gum present on both the envelopes is similar to the gum used by the R.M.S. authorities in a midway station.

(4) During the course of investigation in a theft case, the Police recovered an iron window-bar, an iron round file and a wire. They scraped the points from the iron window bar, iron file and the wire and sent them to us to find out whether the scraped points from the iron round file and the wire are the points struck from the window bar while these two implements were used for pulling out the window bar. On examination we found that the points on the iron round file and the wire were similar in appearance and composition to the paint on the window bar.

GENERAL ANALYSES.

Ninety-five articles were examined under this heading during the year under report as against 51 articles in 1951. These comprised 87 articles for Madras Government and 8 articles for private parties.

OFFICE AND STAFF.

The service books of the establishment are up to date and the inventory of the valuable stock has been kept and duly checked.

The members of the staff have all performed their duties satisfactorily during the year.

I have to tender my thanks to the Professors of Bacteriology, Pathology, Pharmacology and Medical Jurisprudence, Medical College, Madras, the Principal, Agricultural College, Coimbatore, and the Deputy Inspector-General of Police, Railways and C.I.D., Madras, for assistance in certain special cases.

Yours faithfully,
P. VENKAT RAO,
Chemical Examiner to Government.

APPENDIX.

TABLE I.—Summary of work done.

	1951.		1952.	
	Number of cases investigated.	Number of articles examined.	Number of cases investigated.	Number of articles examined.
Medico-legal investigations—				
Human poisoning cases—(a) In Table II.	956	4,417	1,049	4,725
Animal poisoning cases—(b) In Table II.	60	266	78	341
Stain cases—(c) In Table II	1,169	6,231	1,440	7,820
Miscellaneous medico-legal cases—(d) In Table II.	248	1,172	263	1,260
Total medico-legal cases ..	2,428	12,136	2,830	14,146
General analyses ..	51	51	95	95
Grand total ..	2,479	12,187	2,925	14,241

TABLE II.—Showing the results of medico-legal analyses according to cases.

Nature of exhibits.	1951.			1952.		
	Total number of cases investigated.	Number of cases detected.	Total number of articles examined.	Total number of cases investigated.	Number of cases detected.	Total number of articles examined.
(a) HUMAN POISONING.						
General.						
1 Cases in which viscera and contents were tested for poison. The viscera of individuals—	603	260	2,425	668	276	2,632
Poison detected ..	..	281				
Poison not detected ..	..	404				
		685				
2 Cases in which tissues other than viscera were tested for poison.	..	..	..	..	..	..
3 Cases in which excreta, vomit, dejecta or stomach contents received without viscera were tested for poison.	273	118	391	303	108	385
4 Cases in which only miscellaneous articles were received.	76	32	165	69	30	231
5 Miscellaneous articles received with cases under entries Nos. 1, 2 and 3.	..	..	1,413	..	..	1,485
Abortion.						
6 Cases in which viscera or contents were examined. The viscera of individuals—	4	4	18	8	2	33
Poison detected ..	..	2				
Poison not detected ..	..	6				
		8				
7 Cases in which only miscellaneous articles were received.	..	..	..	1	..	1
8 Miscellaneous articles received with cases under entry No. 6.	..	..	5	..	..	8
Total (a) ..	956	414	4,417	1,049	416	4,725

TABLE II.—Showing the results of medico-legal analyses according to cases—cont.

Nature of exhibits.	1951.			1952.		
	Total number of cases investigated.	Number of cases detected.	Total number of articles examined.	Total number of cases investigated.	Number of cases detected.	Total number of articles examined.
(b) ANIMAL POISONING.						
9 Cases in which viscera and contents from horned cattle were tested for poison. The viscera of cattle—	35	19	120	44	15	169
Poison detected ..	..	15				
Poison not detected ..	..	41				
		56				
10 Cases in which viscera and contents from animals other than horned cattle were tested for poison. The viscera of cattle—	7	5	21	9	2	37
Poison detected ..	..	6				
Poison not detected ..	..	6				
		12				
11 Cases in which tissues other than viscera were tested for poison.	..	..	..	..	..	..
12 Cases in which animal excreta, dejecta or stomach contents forwarded without viscera were tested for poison.	5	..	17	4	1	14
13 Cases of animal poisoning in which only miscellaneous articles were received.	13	10	17	21	13	33
14 Miscellaneous articles received with cases under entries Nos. 9 to 12.	..	..	91	..	..	88
Total (b) ..	60	34	266	78	31	341
(c) STAIN CASES.						
15 Blood-stain cases other than No. 16 ..	1,042	990	5,922	1,239	1,182	7,346
16 Blood-stain, rape and unnatural crime cases.	1	1	2	..	..	..
17 Seminal-stain cases ..	85	33	189	150	53	301
18 Mixed blood and seminal-stain cases.	41	37	168	51	48	173
19 Other stain cases ..	..	..	..	..	..	..
Total (c) ..	1,169	1,061	6,281	1,440	1,281	7,820
(d) MISCELLANEOUS.						
20 Cases in which human bones, hair, etc., were received.	243	..	1,172	263	..	1,260
Total (d) ..	243	..	1,172	263	..	1,260
Grand total ..	2,428	1,509	12,136	2,830	1,728	14,146

TABLE III.—Statement of poisons detected in the articles received under headings Nos. 1 to 14 of Table II.

Poisons.	Human poisoning.				Cattle poisoning.						
	General.				Abortion.		In viscera and contents.	In tissues other than viscera.	In excreta or stomach contents.	In miscellaneous articles.	
	In viscera and contents.	In tissues other than viscera.	In excreta or stomach contents.	In miscellaneous articles.	In viscera and contents.	In miscellaneous articles.					
INORGANIC.											
Arsenic	42	..	2	40	..	..	41	..	..	24	
Arsenic and mercury ..	..	..	..	..	..	..	..	..	..	3	
Arsenic, copper, datura and aconite.	5	..	..	9	..	..	..	..	..	..	
Copper	52	..	30	52	..	..	..	..	..	..	
Copper and mercury ..	5	..	..	1	..	..	..	..	..	..	
Cyanide	77	..	..	38	..	..	..	..	..	..	
Cyanide and alcohol ..	9	..	..	2	..	..	..	..	..	..	
Cyanide and opium ..	4	..	..	2	..	..	..	..	..	..	
Glass pieces	..	..	1	..	..	..	..	..	..	..	
Hydrochloric acid ..	3	..	1	4	..	..	..	..	..	..	
Iodine	..	..	4	2	..	..	..	..	..	..	
Iodine and alcohol ..	..	..	1	1	..	..	..	..	..	..	
Mercury	44	..	1	52	..	..	..	..	..	..	
Magnesium salts ..	4	..	1	3	..	..	..	..	..	..	
Nitric acid	27	..	6	18	..	..	..	..	..	..	
Nitric acid and alcohol ..	2	..	..	3	..	..	..	..	..	..	
Nitrite	154	..	10	145	..	..	..	..	..	..	
Nitrite and alcohol ..	26	..	2	27	..	..	..	..	..	..	
Sulphuric acid	27	..	10	16	..	..	..	..	..	..	
Zinc phosphide or phosphine.	70	..	7	45	..	..	8	..	2	9	
Zinc phosphide phosphine and oleander.	..	..	..	..	..	..	2	..	..	4	

ORGANIC.								
Aconite	16	..	3	17	..	..	4	1
Alcohol	195	..	3	77	..	..	..	..
Alcohol and datura ..	15	..	..	8	..	..	..	..
Alcohol and opium ..	7	..	..	3	..	..	..	..
Barbituric acid	..	..	4	4	..	..	..	..

TABLE III.—Statement of poisons detected in the articles received under headings Nos. 1 to 14 of Table II—cont.

Poisons.	Human poisoning.						Cattle poisoning.				
	General.				Abortion.		In viscera and contents.	In tissues other than viscera.	In excreta or stomach contents.	In miscellaneous articles.	
	In viscera and contents.	In tissues other than viscera.	In excreta or stomach contents.	In miscellaneous articles.	In viscera and contents.	In miscellaneous articles.					
ORGANIC—cont.											
Camphor	..	..	2	..	..	..	..	..	..	..	..
Cresols	4	..	..	2	..	..	..	..	..	..	..
Datura	35	..	45	41	..	..	..	..	..	..	..
Kerosene oil	..	..	14	14	..	..	..	..	..	..	..
Madar	12	..	..	5	..	..	..	..	..	..	..
Nux-vomica	16	..	..	6	..	..	..	..	..	..	..
Oduvan	36	..	2	27	..	..	..	..	..	..	..
Oleander	152	..	2	58	4	1	10	..	..	..	13
Opium	53	..	..	16	..	..	..	..	..	..	..
Phenol	..	..	1	2	..	..	..	..	..	..	..
Quinine	18	..	..	7	5	1	..	..	..	..	..
Quinine and Acetyl Salicylic acid.	4	..	..	3	..	..	..	..	..	..	..
Turpentine	..	..	2	2	..	..	..	..	..	..	..
Poison detected ..	1,114	..	154	752	9	2	65	..	2	48	..
Poison not detected ..	1,518	..	231	914	24	7	141	..	12	73	..
Total	2,632	..	385	1,666	33	9	206	..	14	121	..

TABLE IV.—Showing the places from which cases, in which articles were tested for poison, have been received during the year 1952.

	Human.				Cattle.			
	General.		Abortion.		In viscera.		Other articles.	
	In viscera.	Other articles.	In viscera.	Other articles.	In viscera.	Other articles.	In viscera.	Other articles.
	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.
1 Anantapur ..	13	2	3	2	..	..	1	..
2 Arcot, North ..	18	4	9	2	1	..	..	..
3 Arcot, South ..	47	15	20	4	..	..	8	2
4 Bellary	4	2	..	..	1	..	..	..
5 Chingleput ..	10	7	3	2	..	..	..	..
6 Chittoor	12	6	8	7	..	..	10	1
7 Coimbatore ..	42	15	9	2	..	..	2	1
8 Cuddapah	16	12	9	3	..	..	..	1
9 Godavari, East ..	24	10	4	1	..	..	2	1
10 Godavari, West ..	8	3	13	1	..	..	..	1
11 Guntur	32	17	16	11	..	..	4	2

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CHEMICAL EXAMINER'S DEPARTMENT**

TABLE IV.—Showing the places from which cases, in which articles were tested for poison, have been received during the year 1952—cont.

	Human.								Cattle.			
	General.				Abortion.							
	In viscera.		Other articles.		In viscera.		Other articles.		In viscera.		Other articles.	
	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.	Number of cases.	Number of detections.
12 Kanara, South ..	2	..	4	1	..	..	..	..	1	..	..	..
13 Krishna ..	29	9	7	2	..	..	..	..	1	..	..	..
14 Kurnool ..	13	5	4	2	..	..	..	..	..	..	1	..
15 Madras ..	79	44	155	52	..	..	..	..	5	3	..	..
16 Madurai ..	24	11	9	5	2	2	..	..	6	3	2	2
17 Malabar ..	34	12	3	..	1	..	..	..	1	1	..	..
18 Nellore ..	35	18	16	6	..	..	..	..	3	..	..	..
19 The Nilgiris ..	4	1	4	1	..	..	..	..	1	..	..	..
20 Ramanathapuram.	17	9	6	5	..	..	..	..	1	1	..	..
21 Salem ..	56	28	15	10	..	..	..	..	1	..	1	1
22 Srikakulam ..	6	1	2	..	..	..	1	..	1	1	..	..
23 Tanjore ..	53	11	18	4	1	..	..	..	2	1	..	..
24 Tiruchirappalli ..	54	18	18	8	..	..	..	..	2	..	3	3
25 Tirunelveli ..	20	5	6	2	..	..	..	..	..	..	..	..
26 Visakhapatnam ..	9	6	7	3	..	..	..	..	1	1	..	..
27 Foreign cases ..	7	5	4	2	..	..	..	..	..	..	1	1
Total ..	668	276	372	138	8	2	1	..	54	17	24	14

TABLE V.—General analyses for Government departments, etc.

Received from	Nature of substance.	Number of examinations.	Total for the year.
<i>Madras Government departments.</i>			
Director of Industries and Commerce, Madras.	Soda ash ..	3	3
Superintendent, Live Stock Research Station, Guntur.	Visceral matters of a cow.	3	3
Veterinary Assistant Surgeon, Nellore ..	Stomach contents of animal.	3	3
Superintendent of Stationery ..	Inks ..	78	78
Total for Madras Government departments ..			87
<i>Private parties.</i>			
Inks ..	..	8	8
Total for private parties ..			8
Grand total ..			95



HEALTH DEPARTMENT

G.O. No. 1898, 18th May 1953

Report—Chemical Examiner's Department—Administration Report—1952—Reviewed.

READ—the following paper :—

From the Director of Medical Services, dated 6th May 1953,
Ref. No. 39587-M/53.

Order—No. 1898, Health, dated 18th May 1953.

Recorded.

2. The work of the Chemical Examiner's Department during the year 1952 continued to be satisfactory.

(By order of the Governor)

S. A. SUBHAN,
Secretary to Government.

To the Director of Medical Services.

- „ Director of Public Health, Madras.
 - „ Chemical Examiner (through the Director of Medical Services).
 - „ Inspector-General of Police.
 - „ Director, King Institute, Guindy.
 - „ Library of the Madras Legislature.
 - „ Secretariat Library.
 - „ Officer-in-charge, State Administration Report, Public Department.
 - „ Secretary, Madras Medical Association.
 - „ Registrar, Andhra University
 - „ Registrar, University of Madras
 - „ Registrar, Annamalai University
- }(with covering letter).

To the Librarian, Connemara Public Library.

„ the Board of Revenue (Excise Branch).

„ the Home Department.

„ the Development, Public and Legal Departments.

„ the Secretary, Madras Chamber of Commerce.

„ the Secretary, South Indian Chamber of Commerce.

„ the Secretary to the Government of India, Ministry of Education (with covering letter).

„ the Secretary to the Government of India, Ministry of Health (with covering letter).

„ the Secretary, Madras Public Service Commission.

„ all District Magistrates.

„ all Sessions Judges.

„ the State Prosecutor.

„ the Chief Justice, Madras (with covering letter).

„ the Director, Cinchona Department, Ootacamund.

„ the Chief Presidency Magistrate.

„ the Superintendent, Government Press (for distribution in accordance with G.O. No. 442, P.H., dated 29th January 1941, as subsequently amended).

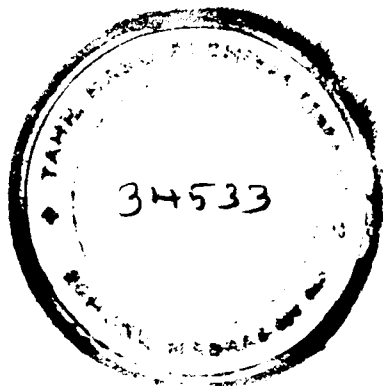
„ the Information Officer, Press Information Bureau, Government of India, Madras.

Forwarded to the *Public Department*

(By order)

G. S. S. S.
579

Superintendent.



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LIST OF AGENTS FOR THE MADRAS GOVERNMENT PUBLICATIONS.

IN CITY.

ACCOUNT TEST INSTITUTE, Egmore, Madras.
CITY BOOK COMPANY, Post Box No. 605, Madras-4.
HIGGINBOTHAMS, Madras.
P. VARADACHARI & Co., Madras.
THE SOUTH INDIA SAIVA SIDDHANTHA WORKS PUBLISHING SOCIETY, LIMITED, Madras.
VENKATARAMA & Co., Madras.
V. PERUMAL CHETTI & SONS, Madras.
V. RAMASWAMY SASTRULU & SONS, Madras.
OTTUMAI OFFICE, Madras-17.
M. DORAISWAMY MUDALIAR & Co., Madras.
FREE INDIA CO-OPERATORS' AGENCY, Madras-4.
SOUTH INDIA TRADERS, Royapetta, Madras.

IN MUFASSAL.

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TRIVENI PUBLISHERS, Masulipatnam, Krishna district.
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THE COMMERCIAL LINKS, Governorpet, Vijayavada, Krishna district.
THE MANAGER, Gramodharana, Buckinghampet, Vijayavada, Krishna district.
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K. P. AHMED KUNHI & BROS., Cannanore, Malabar district.
KERALA POLYTECHNIC CO-OPERATIVE SOCIETY, LTD., Kozhikode-5 (South Malabar).
P. K. BROTHERS, Kozhikode (South Malabar).
V. D. MOORTHY, Nellore, Nellore district.
A. VENKATASUBBAN, Vellore, North Arcot district.
TIMES MODERN MART, Salem, Salem district.
K. BHOJA RAO & Co., Mangalore, South Kanara district.
U. R. SHENOY & SONS, Mangalore, South Kanara district.
SRINIVAS & Co., Kumbakonam, Tanjore district.
P. N. SWAMINATHA SIVAN & Co., Pudukkottai, Tiruchirappalli district.
S. & RISHNASWAMI & Co., Tiruchirappalli, Tiruchirappalli district.
PACANIAPPA BROTHERS, Teppakulam, Tiruchirappalli, Tiruchirappalli district.
V. S. VASAN & Co., Tirunelveli, Tirunelveli district.
S. R. SUBRAMANIA PILLAI, Tirunelveli, Tirunelveli district.
ALIVU NOOLAGAM, Market Street, Ootacamund.

IN OTHER STATES.

BHANWARILAL JAIN, Motikatra, Agra.
SREEN ABHIRAVA VAIDYA SHARADA BOOK DEPOT, Bangalore-2.
THE BANGALORE BOOK CENTRE, Bangalore-2.
THE STANDARD BOOK DEPOT, Bangalore-2.
HARI GOVIND BOOK STALL, Baroda.
NEW BOOK COMPANY, Bombay.
THE POPULAR BOOK DEPOT, Lamington Road, Bombay-7.
THE BOOK COMPANY, Calcutta.
TRACKER SPINK & Co., Calcutta.
BHARAT STORES, Ernakulam.
CHAROTAR BOOK STALL, Anand (Gujarat).
OSMANIA UNIVERSITY STUDENTS' CO-OPERATIVE BOOK DEPOT, Lallaguda P.O., Hyderabad (Deccan).
S. M. JAGANATHAN, Nagercoil.
S. V. KAMAT, Kumta (North Kanara).
JAIN BOOK AGENCY, New Delhi.
INTERNATIONAL BOOK SERVICE, Poona.
INTERNATIONAL BOOK HOUSE, Trivandrum.