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MAISON CARREE  
EXPI

REPORT ON INITIAL WORK WITH LOUSE POWDERS  
AT THE PRISON AT MAISON CARREE, ALGERIA, CARRIED OUT UNDER  
THE AUSPICES OF THE PASTEUR INSTITUTE OF ALGIERS FROM J [REDACTED]

The opportunity to work at the Maison Carree prison came through the good offices of Dr. Edmond Sergent, the Director of the Pasteur Institute. The first visit to the prison was made on July 23rd, with Dr Beguet, who had previously carried out tests of different types of vaccine at the prison.

All work and observations on louse powder herewith reported have been done by one or more of the group (Dr. Huck, of the Pasteur Institute; Drs. Davis, Markham, Riehl and Soper, of the Rockefeller Foundation) assisted by inmates of the prison working under close direct supervision.

Prepowdering louse infestation.

Examination of the clothing of 158 prisoners to ascertain the percentage of prisoners with lice and to determine roughly the degree of infestation was made from July 26th to July 29th. 108 of the examinations made were in Ward I. where louse powders were to be tested and 50 were in Ward II where no powder was to be applied. These latter cases were expected to serve as controls against the possibility of a seasonal reduction of louse incidence being attributed to the use of the insecticides.

Prepowdering louse counts. July 26 to 29.

Ward	Number examined	With lice	With Over 9 lice	Percent lousy	Percent with over 9 lice
1	108	104	77	96	71
2	50	49	39	98	78
Total	158	153	116	97	73

Insecticides used.

Two insecticides have been tested, one manufactured in the U.S.A. (Insecticide M) and the other prepared here with imported ingredients and locally available diluents (Insecticide G).

Plan of study.

Ward 1. was chosen to test the efficiency of insecticides on a community in which everyone in the community was treated and contact with untreated persons was reduced to a minimum.

The group of 108 men whose clothes had been examined to establish the degree of infestation were divided into three groups: Group 1. to be treated with Insecticide G and to be retreated whenever post treatment examinations should indicate that it is necessary; Group 2. to be treated with Insecticide M and to be retreated after an interval of one week; Group 3. to be treated with Insecticide M and to be retreated when indicated by post treatment indication.

All other persons sleeping in Ward 1. were placed in Group 4. to be treated with Insecticide M as often as necessary to prevent this group becoming a source of reinfestation for the study Groups, 1, 2 and 3.

Plans were made to apply insecticide M to the garments of all new prisoners coming to Ward 1. and to those returning to the Ward after a stay in the prison infirmary.

So far as is known, the only persons to escape the initial dusting of group 4. were those of the prisoners, who assist the guards in the administration of the ward and 15 men who work in the bakery. The assistant guards were dusted 3 days, the bakers 13 days after the first dusting of group 4. This failure to dust all of group 4. is probably of little importance since these 18 men all enjoy special privileges, are much cleaner than the common run of prisoners and have separate quarters.

#### Application of insecticides.

The insecticides were applied by dusting from cylindrical tins with a row of perforations about the base. Powder was shaken along the seams on the inner surfaces of the clothing and on both sides of the blankets used by the prisoners. The removal of clothing is a time consuming operation even in prison where the natural reluctance to disrobe can be readily overcome. To avoid this delay and to facilitate the application of powder to the clothing of women, tests were made with one insecticide (G) of portable blower of the type commonly used in applying powder insecticides to food plants. The initial applications gave surprisingly good distribution of powder on the inner surfaces of the clothing dusted in situ.

Date of application.								
	Group 1.	Group 2.	Group 3.	Group 4. Insecticide M.				New prisoners
	Insecticide G.	Insecticide M.		Routine Group	Assist Guards	Cooks	Patients from Infirmary	
Dusting 1.	Aug. 3	Aug. 3	Aug. 3	Aug. 3 Aug. 4	Aug. 7	Aug. 17	Aug. 13	Aug. 16
Dusting 2.	Aug. 20	Aug. 10	Aug. 17	Aug. 17 Aug. 19	Aug. 17	Aug. 24	Aug. 23	Aug. 23 Aug. 24
Days between Dustings	17	7	14	14-15	10	7	10	7-8

#### Louse counts before and after dusting.

Counts of lice which could be found on the clothing of Groups 1, 2 and 3 were made at intervals after the first treatment and after the second treatment of group 2. The results indicate that: 1. Insecticide G is a slow acting poison with little or no ovicidal power but with a persisting killing power which takes care of most of the young lice which hatch out from eggs in the clothing at the time of application of the insecticide; 2. Insecticide M is a rapidly killing powder whose action is not so complete nor persistent as is that of Insecticide G.

Relation of count to treatment	Prisoners with lice									Number of lice found								
	Group 1.			Group 2.			Group 3.			Group 1.			Group 2.			Group 3.		
	Ex.	Pos.	Over 9 lice	Ex.	Pos.	Over 9 lice	Ex.	Pos.	Over 9 lice	I.*	N.	A.	I.	M.	A.	I.	N.	A.
Before 1st Treatment	36	35	26	34	33	26	34	32	23									
2-4 days after 1st Treatment	36	27	3	34	18	1	34	18	0	115	7	8	41	2	0	32	5	1
6-7 days after 1st Treatment	35	19	0	34	24	3	34	22	5	60	8	3	76	18	5	98	21	1
	Retreated on 7th day																	
10 days after 1st treatment	35	6	0	34	0	0	34	15	2	1	13	0	0	0	0	23	51	5
13 days after 1st Treatment	35	6	0	34	0	0	34	12	1	0	6	1	0	0	0	2	28	2
	Retreated on 14th day																	
17 days after 1st Treatment	35	6	0	32	1	0				1	1	8	0	1	0			
	Retreated on 17th day																	

\* I. Recently hatched instars  
 N. Nymphs  
 A. Adults

The controls in Ward 2 were counted 13 days after the first examination and were found to have suffered no apparent reduction in lousiness.

The first examination of 50 prisoners in Ward 2 revealed 49 infestations of which 39 had 10 or more lice each; 13 days later examination of 48 of these revealed 48 infestations of which 44 were of 10 or more lice each.

*Handwritten signature*  
 Aug 25, 1943