

Benham, of Dunedin, is reported to have recently discovered the human flea on the skin of rats. In the case of the rats which I have experimented with and had under observation here, I have never found any infested with these skin parasites, which may account for the few found affected, and the results of the experiments shown above. In Auckland the dead rats, when found, were immediately placed by the rat-catcher in a strong solution of crude carbolic acid, so that no observations could be made. One rat, however, which had been found dead in the street (having been killed evidently by a dog, and not plague-infected) was infected by lice to a great extent. But in Wellington, so far as I observed, the rats were practically free from skin parasites.*

It seems fairly evident that the result of these experiments indicate that the entrance of the bacillus pestis to the alimentary tract is not attended by the same danger as a subcutaneous inoculation; also, that when the bacillus pestis is mixed with other organisms the virulence is increased. Now, under natural circumstances a pure culture may be confidently asserted never to be introduced subcutaneously by means of parasites of the skin or a contaminated wound, and the less cleanly the skin the more likelihood of a fatal termination to an inoculation of plague bacilli. This conclusion is also verified by clinical evidence on the history of this disease.

* In many of the rats with which I experimented in Wellington trypanosomes were found in the blood.

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