

ON THE OCCURRENCE OF THE CRAB-LOUSE (*PHTHIRUS PUBIS*: ANOPLURA) IN THE HAIR OF THE HEAD

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IN studying head-lice in large numbers of crops of hair from the scalp (Buxton, 1936, 1938, 1940), a small number of infestations with crab-lice (*Phthirus pubis*) have been discovered. The distribution of crab-lice in over 3000 samples is given in Table 1. It will be seen that *Phthirus* was found in samples of hair from the scalp in every locality studied, except in the small number from Lagos. In the six places in which this insect occurred, the rate of infestation was always below 1%, but always above one in a thousand.

Table 1. *Showing distribution of crab-lice (Phthirus) and head-lice (Pediculus) in crops of hair from the scalp, from certain localities*

Place	No. of crops examined	<i>Phthirus</i> present	%	<i>Pediculus</i> %
Lagos, Nigeria	102	0	0	20.6
Sokoto, Nigeria	409	3	0.7	10.3
Kakamega, Kenya	359	2	0.6	25.0
Nairobi, Kenya	415	2	0.5	9.0
Colombo, Ceylon	240	1	0.4	52.1
Jerusalem, Palestine	543	1	0.2	7.2
Cannanore, Malabar	1437	9	0.6	38.0

It would be interesting to know if there is a tendency for those infested with head-lice to be more frequently infested with crab-lice in the scalp. Unfortunately the data for each locality are meagre. Even from Cannanore we have only nine infestations with *Phthirus*: among 543 infested with *Pediculus*, four also had *Phthirus*, and among 894 negative for *Pediculus*, five had *Phthirus*: the test for goodness of fit gives no indication that the two infestations are correlated.

The material available can only teach us a little about the composition of a population of *Phthirus*. In the eighteen samples of scalp hair in which *Phthirus* occurred, there were 112 individuals, giving a mean of 6.2 lice per infestation (range 1-33, only three of the populations exceeding ten). In four cases, no record was made of the number of male, female and larval crab-lice. In the remaining fourteen populations there were thirteen males, thirty-four females and twenty-one larvae. The number of larvae seems very low, and it is possible that our sieves, which certainly retain *Pediculus* in the first instar, may allow *Phthirus* to pass. The total number of populations being so low, no

further analysis of the data seems justified. The only other available information is published by Nuttall (1918): from the pubic hair of one person he recovered 232 adult *Phthirus*, of which eighty-eight (38%) were males. On the whole one may say that, in the composition of a population, *Phthirus* shows a strong resemblance to *Pediculus* (a subject on which a full paper is in preparation).

It is unfortunate that we know nothing of the general abundance of crab-lice in any of the populations from which the samples of scalp hair have been received, neither do we know whether the individuals in whose scalps *Phthirus* occurred were infested in other parts of the body. It would be of great interest if a general survey for head, body and crab-lice could be carried out on a number of individuals.

It is generally known that, though the crab-louse is doubtless commonest in the pubic and perianal regions, it may be found on any hairy part of the body (Nuttall, 1918; Payot, 1920). The facts here set out add a little precision to our knowledge of this insect: they tend also to support the view that, though doubtless often disseminated by sexual contact, this louse has a number of ways of spreading itself through the human community. The view is sometimes held that an infestation with crab-lice, particularly if it occurs in the pubic region, is evidence of sexual activity, and may be evidence of sexual irregularity. From that view I dissent strongly, holding it to be founded on an imperfect knowledge of the insect's biology, and knowing that it has led to unjust conclusions.

SUMMARY

Over 3000 samples of hair from the scalp have been examined from four places in Africa and three in Asia. In every sample (except one small one) infestations of crab-lice (*Phthirus pubis*) were found; in each place they were found in less than 1% of heads.

The view is emphasized that the crab-louse has several ways of spreading through the human community.

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