

OPEN DISCUSSION

Moderator: Dr. Traub

Dr. Busvine: Regarding Dr. May's last point, a Canadian investigator whose name escapes me looked into the effects of different synthetic textile fibers on lice. The louse grips a fiber by the end joints of its legs, and the size of the gripping chelate portion is very much related to the diameter of human hair. Pig lice, for instance, have larger claws because hog bristles are thicker. The Canadian researcher found that some of the larger textile fibers were very difficult for lice to invade, but unfortunately clothing made from such fibers is uncomfortable to wear. Perhaps further research should be done in this area.

Dr. Traub: The size of the fibers or hairs that lice cling to is a very important factor, which is why pubic lice are found on children. These insects attach to the eyebrows or eyelashes rather than the fine hairs of the head since the construction of their legs is such that they cannot maneuver except on coarse hairs.

Dr. Boese, what was the cloth you used when you were rearing the lice? Was it a synthetic?

Dr. Boese: No, black fur felt. We once also tested bark cloth, including a type that was very coarse. In beakers, at least, the lice did very well on the bark cloth, even laying eggs on it, but perhaps they could not hold on as easily as to fur felt. The tests on the bark cloth were to see if there might be any insecticidal effect from the natural properties of the bark. No such effects were noted.

Dr. Fabrikant: We have information by personal communication from Burundi about bark cloth. One source, a missionary sister who went there in 1908, told us that at that time the people in most parts of the country wore bark cloth primarily, though in one small area they wore animal skins. Both the bark cloth and the skins were heavily infested with body lice. This information was substantiated by an old Barundi chief who remembered the same situation at the turn of the century.

Body lice were also visible in huge numbers on the people's anklets and bracelets, which were made of nonprecious metals in those days. Wealthy Barundi women would cover an entire arm or leg with such adornments. Nowadays they still wear anklets and bracelets, but more commonly of woven straw. These too are infested.

Dr. Traub: In Borneo 20 years ago quite a few of the natives wore bark clothing. Though they knew the value of natural compounds like derris for killing fish, it never occurred to them that their clothing might be repellent or lethal to insects. They said they hadn't noticed any such effect when we asked them.

I think we also ought to bear in mind Dr. May's comments about the proximity of domestic animals to the peoples in the various parts of the world he mentioned. Such intimate contact is of interest when one considers the possibility that ticks may acquire epidemic typhus from man and transmit it to cattle, or vice versa.