

HUMAN LICE

E. I. McDANIEL*

Three species of lice infest man—the head louse, *Pediculus capitis*; the body louse, *Pediculus corporis*, and the crab louse, *Phthirus pubis*. Lice will migrate from one garment to another, or from one person to another, or they may lurk in furniture temporarily. Where they feed continuously, the skin becomes pitted, hardened, and pigmented. This condition is commonly known as vagabond's disease.

Head Lice—The head louse is about $\frac{1}{8}$ inch long. There is considerable variation in size and color. Infestations usually start on the back of the head or behind the ears. Each female lays from 50 to 150 eggs or nits. These hatch in about 7 days and the life-cycle is completed in from 12 to 24 days. Each nit is glued to a hair and where the infestation is heavy the hair next the scalp is stiff with eggs. An objectionable exudation occurs when the insect feeds. Where an infested head is neglected fungi often become established and a fetid scabby mass is formed beneath which myriads of lice collect and feed.

Body Lice—Body lice infest all parts of the body, but are most numerous in the areas protected by hair. Most of the eggs are laid along the seams of garments where they come in close contact with the body; very few are laid on the body itself. Each mother louse lays between 150 and 300 eggs, and about two weeks are required to complete a life-cycle. The length of time adults may live is governed by temperature and food supply. Under favorable conditions some adults live from 30 to 40 days; unfed lice may survive for 10 days at 40° F., but for only two or three days at a temperature of 80° F. Infested clothing stored in a dry place will be freed automatically from lice and their eggs after a period of three weeks.

Crab Lice—The crab louse measures about $\frac{1}{8}$ inch or less in length, and its legs are large in proportion to the rest of the body. It is restricted to the hairy portions of the body. Individuals may bury their heads into the skin and remain feeding in the same place for several days at a time. The infested areas often take on a bluish cast.

Control—Personal cleanliness is the first prerequisite in the control of human lice. A thorough bath with warm water and soap at least

*Section of Entomology.

MICHIGAN STATE COLLEGE
EXTENSION DIVISION
East Lansing

Cooperative Extension Work in Agriculture and Home Economics, Extension Service,
Michigan State College and the U. S. Department of Agriculture Cooperating.

once a week is essential, and either a complete change in clothing or some method of eradicating lice on the clothing removed before the bath is necessary. Where possible, avoid over-crowded conditions and places likely to be infested. Lice on the body or head can be killed by bathing in kerosene or kerosene emulsion. A kerosene emulsion, made by mixing together equal parts of kerosene and soft soap or kerosene and olive oil, is less irritating than kerosene alone. Shampoo the hair with kerosene emulsion and wrap the head with a towel. After about an hour, remove the towel and shampoo with soap and water in the usual way, then rinse the hair in water containing enough vinegar to loosen the nits. Rub the hair dry and comb with a fine tooth comb. Derris soaps are used in the control of both body lice and head lice. These soaps have the advantage over other preparations in that they are practically non-irritating, and are less difficult to apply because it is not necessary to rinse the hair after application. Any nits that may be present can be loosened with vinegar and removed with a fine-toothed comb.

Where a shampoo is not advisable, derris or pyrethrum powder is suggested. Where pyrethrum is used, get fresh powder, flora grade, and dilute one-half with bran, oatmeal, talc, or some other non-irritating carrier. Cover the treated head for 15 to 30 minutes with a cloth and then brush all powder carefully out of the hair and remove the nits in the usual way. Where conditions are such that reinfestation cannot be prevented, remember that short hair is easier to treat than long hair.

With any of the above-mentioned treatments, it may be necessary to repeat the application in a week or 10 days to get any lice that may have escaped the previous treatment or to check any new infestation. Treat hats, caps, and other head coverings to prevent reinfestations.

The control of body lice is practically the same as control of head lice. Disrobe and treat the infested parts of the body with a 2-per cent Lysol or creosote solution, pure kerosene, kerosene emulsion, or use a derris or pyrethrum preparation and take a hot bath. Since body lice and crab lice commonly collect on the hairy parts of the body, shaving of the infested hair not only materially aids in cleaning up the infestation but also serves to prevent reinfestation. Place infested clothing in a container for treatment and put on non-infested clothing.

To free clothing from lice and nits, boil all material that will not be injured by this process. Avoid shrinkage in woolen garments by soaking them in 2-per cent Lysol or creolin solution for one-half to three-fourths hour and then wash carefully in the prescribed way for handling woolen.

Where infested clothing is subjected to heat at 140° F. for 20 minutes, lice in all stages of development will be killed. Coats, suits, and other garments that would be injured by any of the above treatments may be sent to the dry cleaners or pressed with a hot iron, taking care to treat especially all seams and folds.