PENNSTATE

College of Agricultural Sciences • Cooperative Extension

Entomological Notes

Department of Entomology

BOOKLICE

Booklice, also called psocids, are not true lice. While they resemble lice in size and shape, booklice feed only on fungi or mold. If you find them in grain or other stored food products, it is an indication of high humidity which encourages mold growth. In addition to food products, psocids may be found under wallpaper, in furniture, along the sides of windows or on window sills around potted plants. Booklice do not bite, transmit disease, or damage food or fabric, but they can be very annoying when present in large numbers.

BIOLOGY

Booklice (Fig. 1) found inside homes are wingless and very tiny: less than l/l6 of an inch long. While their back legs are thicker than the other four, and resemble the legs found in jumping insects, booklice do not jump, but run about rather quickly.

Adult booklice range in color from translucent white to gray or brown. Females can produce about 60 eggs during the warm summer months and their life cycle (from egg to adult) can be completed in less than one month. When cool temperatures prevail, female booklice produce fewer eggs and the time required to complete their life cycle is over three months. Females deposit their eggs singly and often conceal them by covering with debris. Booklice undergo simple metamorphosis, that is their nymphs look just like adults except that they are much smaller and sexually immature. The common house-infesting booklice normally have four nymphal stages.

INJURY

Booklice feed on molds and will overrun cereals and similar materials that support mold growth. Their presence, therefore, is a nuisance and can render some foods unfit. The starchy paste of wallpaper and books also can support mold growth or may be attacked directly by booklice. Outside of annoyance, their damage is insignificant.

MANAGEMENT

The best way to control booklice is to eliminate moist environmental conditions. Reducing the humidity in your home will eliminate the mold on which the booklice feed. Lowering the relative humidity to less than 50% will prevent their development. An air space under potted plants on windowsills will help keep the humidity down and reduce mold growth. Throw away any infested food material and make sure other foods are kept dry. Pesticides are not normally necessary to control booklice in homes.

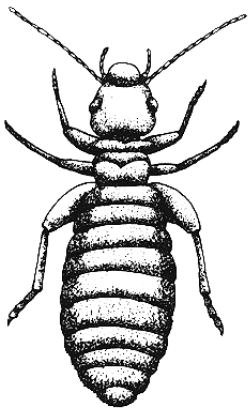

Figure 1. Adult booklouse.

Revised by Steven B. Jacobs
Sr. Extension Associate
Dept. of Entomology
Reviewed April 2007

HP-19
© The Pennsylvania State University 2007

This publication is available in alternative media on request.

Where trade names are used, no discrimination is intended and no endorsement by The Pennsylvania State University or Pennsylvania Department of Agriculture is implied.

Entomological Notes are intended to serve as a quick reference guide and should not be used as a substitute for product label information. Although every attempt is made to produce Entomological Notes that are complete, timely, and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

Issued in furtherance of Cooperative Extension Works, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. D. Jackson, Director of Cooperative Extension, The Pennsylvania State University.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Bouke Building, University Park, PA 16802-5901, Tel 814-865-4700/V, 814-863-1150/TTY.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

College of Agricultural Sciences, U.S. Department of Agriculture, and Pennsylvania Counties Cooperating