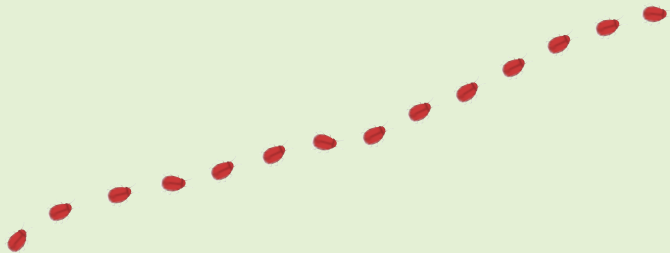




Uninvited house guests

IDENTIFYING AND CONTROLLING INSECT PESTS



CONTENTS:

Uninvited house guests	3
Introduction	4
Scale and key to colour code	5
Textile pests	6
Fur beetle	7
Two-spotted carpet beetle	8
Museum beetle	8
Larder beetle	9
Clothes moth	9
Foodstuff pests	10
Saw-toothed grain beetle	11
Destructive flour beetle	11
Confused flour beetle	11
Bread beetle	12
German cockroach	12
Indianmeal moth	12
Other indoor pests	13
Silverfish	13
Black ant	14
Pharaoh ant	15
American wasp beetle	15
Yellow mealworm beetle	16
Fruit fly	17
Vermin	18
Bedbugs	19
Lice	19
Fleas	19

Designer: Jenniina Riekkö

Photos: Jarmo Holopainen, Seppo Parkkinen and
The entomology division of the Finnish Museum of Natural History

Printers: Newprint Oy

10/2012

UNINVITED HOUSE GUESTS

Sawtoothed grain beetle, Indianmeal moth, German cockroach– are pests a nuisance?

Insects form an essential part of the natural cycle of life. It is only when they end up in our homes that they may constitute a pest. In addition to many harmful insects and their larvae ('grubs') found in Finnish homes, rats and mice are also pests.

The most common house pests are silverfish, ants and fur beetles. Owing to the vast amount of travel and foreign trade nowadays, increasing numbers of pests from warmer regions are also finding their way into our homes.

Identifying harmful animals makes it easier to control them. The pictures in this guide will help you identify pests and the instructions given will enable you to control them.

Housing health advice

Tel. (09) 310 15000

Mon, Wed-Fri, 9.00 –12.00, Tue 9.00 –15.00

Tel. (exchange) 09 310 1635

ymk@hel.fi, www.hel.fi/ymk

Street address: Viikinkaari 2a

Postal address: PL 500, 00099 Helsingin kaupunki

INTRODUCTION

Although insect pests in the home can be harmful, you can generally deal with them yourself. Insecticides and rat poison are sold by e.g. pharmacists, ironmongers (hardware stores), department stores, and garden supplies centres.

More serious infestations are best left to an expert to deal with. Pest control firms can be found e.g. on the net or in the Yellow Pages of the telephone directory under the headings (or search words) “tuholaistorjunta” and “haittaeläinten torjunta”.

The entomology division of the Finnish Museum of Natural History can assist in identifying insects that have come from abroad, as well as those native to Finland. However, before sending specimens you should contact the museum, either by phone or through the internet: telephone exchange (09) 1911 (University of Helsinki), www.luomus.fi/.

You can identify pests yourself from the City of Helsinki Environment Centre’s web pages (www.hel.fi/ymk/haittaelaimet) or by consulting this guide.

Responsibility

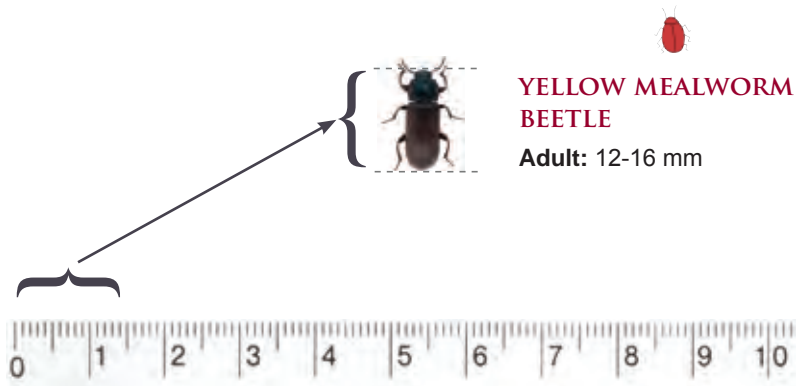
If you suspect there are insect pests in other rooms of your home, contact the home owners association, landlord or caretaker.

The property owner or home owners association is responsible for destroying rats and mice in its own area and its own buildings.

The Public Works Department will deal with rats in public areas like parks and streets within the City of Helsinki. Thus, if you observe rats in a park or street in Helsinki, you should call the Public Works Department’s Customer Service, tel. (09) 310 39000. (Street address Pohjoinen Makasiinikatu 9, rakennusvirasto@hel.fi).



SCALE AND KEY TO COLOUR CODE



Harmless

The **green** colour means that the species is completely harmless to human beings.



Indicative

Although species with a **yellow** symbol are not actual pests, their presence may be indicative of e.g. local damp or mould damage.



Pest

Red denotes “pest”.

TEXTILE PESTS

Textile pests by definition are those whose larvae feed on e.g. wool, fur and feathers. These grubs drill holes in clothing and textiles (fabrics) and eat through wool or thread. Some of these pests also live naturally in the wild from which they may accidentally be brought into a home.

Control

- Go through possible locations for such insects (e.g. cupboards, wardrobes, footings and skirting boards). Vacuum these areas before destroying the bag.
- A wash in water at +40–60°C destroys all stages of the insects' life cycle. Deep-freezing (one week at -20°C) also kills most insects. The same goes for two hours at +60°C in a dry sauna.
- Empty infected cupboards and fumigate them inside with an insecticide spray. Use insecticides according to the manufacturer's instructions and leave them to act for a few days, while monitoring the situation. If the insects reappear, repeat the application. If this initial control method fails to produce the hoped-for results, contact the home owners association or a pest control firm.
- Keep woollen clothes and furs, especially in cellars, attics and storerooms, clean and in e.g. airtight plastic boxes or bags.



FUR BEETLE



Adult: 4–6 mm

Larva: 10–11 mm

Adult fur beetles are dark brown and have a wavy yellowish band across the back. Their surface is covered with fine, dense 'fur'. The antennae are short and thread-like but thicken towards the ends.

The larva is chocolate brown with transverse stripes and there is a tuft of bristles at the end of its body.





TWO-SPOTTED CARPET BEETLE

Adult: 5 mm

Larva: 10 mm

The two-spotted carpet beetle can be recognised by the two silvery grey spots on the middle of its back.

The larvae of the two-spotted carpet beetle and the fur beetle are similar. They are distinguished by the two-spotted carpet beetle having some fine scales on the eighth ventral plate; these are absent in the fur beetle.



MUSEUM BEETLE

Adult: 2–3 mm

Larva: 4–5 mm

The roughly spherical museum beetle's colouration varies from black to dark brown. Its wings and thorax have small grey and yellowish brown areas.

The larva is pale brown and hairy. A special feature is the V-shaped tuft of bristles at its rear end.





LARDER BEETLE

Adult: 6–9 mm

Larva: 12–16 mm

The adult beetle is of a generally dark grey colouration with, however, a broad pale grey band lying across the base of the wing cases. The band has three small black patches on each wing. These patches form an irregular “V”. The short antennae are club-shaped.

The larva is dark brown and hairy, with transverse stripes. It slightly resembles that of the fur beetle. At the end of the abdomen there are two small curved thorn-like appendages.



CLOTHES MOTH



Adult: 9–16 mm

Larva: 10–12 mm

The clothes moth is a small, glossy, straw-coloured moth with a deep reddish brown head.

To protect itself, its larva constructs a net from fibres and secreted silk which it carries about with it.



FOODSTUFF PESTS

Pests of foodstuffs either eat human food or pollute it with their excrement. Such pests are found in, e.g. crispbread, flours, spices, biscuits, and other dried foods. The pests generally pass indoors along with packed food bought from shops. You should immediately inform the shop where you bought the contaminated item.

So long as foodstuff pests are discovered quickly, they are easy to eliminate. Generally, destroying the item and its packaging is sufficient unless the insects have escaped.

Despite pests of foodstuffs being common, there is no reason for panic when you find one. They are not poisonous. They do not normally spread disease. A notable exception is the cockroach, which may pass on salmonella. The foul-tasting, foul-smelling secretion of the destructive flour beetle renders food inedible.

Control

- Inspect dried foods, including unopened packs.
- Destroy contaminated products. If you wish to ensure that food pests are unable to breed in a product (e.g. a bagged spice) that appears uncontaminated, you can deep-freeze it for one week at -20°C .
- Empty cupboards where pests have been found. Carefully vacuum clean your home, then dispose of the bag.
- Keep cupboards empty and start by fumigating with an insecticide spray. Apply insecticides according to the manufacturer's instructions and leave them to act for a few days while monitoring the situation. If the insects reappear, repeat the application. If this initial control method fails to produce the hoped-for results, contact the caretaker or a pest control firm.
- Afterwards keep dry foodstuffs in glass or plastic jars or polythene bags.



SAW-TOOTHED GRAIN BEETLE



Adult: 2,5–3,5 mm

Larva: 3 mm

Adult saw-toothed grain beetles are brown, rather elongated beetles with toothed edges to the thorax.

Their larvae are pale in colour and, apart from a few fine hairs, completely bald. The tip of the abdomen bears no appendages or bristles at all.



DESTRUCTIVE FLOUR BEETLE



Adult: 5–6 mm

Larva: approx. 10 mm

The adult destructive flour beetle is black or dark brown in colour.

The larva is glossy and yellowish brown in hue. Two upwards curving, sharp spines are attached to the tip of its body.



CONFUSED FLOUR BEETLE



Adult: 3–4 mm

Larva: 7–8 mm

Adult beetles are reddish brown and resemble destructive flour beetles but differ in being slightly smaller.

Larvae are pale yellow and wormlike. Bearing similar appendages at the tip of the abdomen, these larvae resemble those of the destructive flour beetle.



BREAD BEETLE (DRUGSTORE BEETLE)



Adult: 3 mm

Larva: 3 mm

The adult bread beetle is rust brown and densely covered with hairs.

The larva is light in shade and the tip of its abdomen is curved.



GERMAN COCKROACH



Adult: 8–13 mm

The so-called German cockroach is yellowish brown, with two distinct black stripes on the pronotum (the shield behind the head). Its wings cover its abdomen entirely. The antennae are long and threadlike.

Larvae hatching from eggs resemble adults with shorter wings.



INDIANMEAL MOTH



Adult: 14–20 mm

Larva: approx. 10 mm

In adult Indianmeal moths the bases of the forewings are yellowish grey and the tips patterned rust brown. The head is also rust brown.

Their larvae are greyish, slightly translucent insects with brown heads.

OTHER INDOOR PESTS

SILVERFISH



Adult: approx. 12 mm

The silverfish is a wingless, shuttle-shaped, silvery grey insect. It has long, threadlike antennae and there are three longish bristles at the end of the body.

Silverfish live in damp situations in homes, including the kitchen, bathroom, and the vicinity of drains. They may take up residence under ceramic tiles or other coverings, or in ducts running from one apartment to another. These insects are active at night, reacting to sudden illumination by streaking for cover. They are inveterate scavengers, eating almost any kind of organic matter. They will even nibble paper and wallpaper paste. While it is perfectly normal to come across a few silverfish in a home, a dense population is a sign of moisture damage, for the larvae live off mould hyphae and spores.

Control

- Keep damp areas (bathroom, kitchen, etc) dry. For example, leave the door open after a shower to permit the area to dry out as much as possible. Make sure there is adequate ventilation.
- Clean your home regularly. Do not forget to clean the floor drains. Block up holes round pipes, wiring, etc.
- From time to time pour boiling water into drains. If necessary, use insecticide sprays. Apply these according to the instructions. After a few days check the situation again. If there are still silverfish around, repeat the pesticide application. If, however, these measures fail to bring results, or there are large numbers of silverfish, contact the home owners association or a company specialising in pest control.





BLACK ANT

Adult: approx. 4 mm

The black ant is the most common form of ant found in Finnish dwellings. Especially in spring and summer these insects may make incursions into homes to seek food. Black ants' nests are usually built in the ground, or under stones or paving slabs.

Black ants are not a particularly serious nuisance since they are rarely found in homes in substantial numbers. However, if they have built their nest inside some structure in a building, outside assistance will generally be called for.

Control

- Find out where the ants are coming from. Ants normally follow the same routes, by observing which it is possible to locate the point of entry. Destroy contaminated products and enclose the rest in ant-proof jars or bags.
- Begin pesticide application using an insect pest spray or other product effective for ants. Various options are also available for outdoor use; ask about these at the ironmongers or a larger department store. Apply insecticides in compliance with the instructions. After a few days check the situation again. If there are still ants roving around, repeat the pesticide application. If, however, these measures prove inadequate, contact the home owners association or, where necessary, a firm specialising in pest control.

PHARAOH ANT

Adult: 1,5–2 mm

The Pharaoh ant has spread all over the world from tropical Africa. These tiny, yellowish ants are difficult to eradicate. Vast numbers may be present in a home and there may be numerous nests. The species favours places with an even temperature and humidity and sources of food. Pharaoh ants will dine on almost anything.



If they get into a TV set, computer or coffee maker, the ants may cause a short circuit. They are so small they can easily wriggle past seals. With their love for warmth, Pharaoh ants are attracted to district heating ducts, through which they can pass from one building to the next. Eradicating them always requires expert help.

Control

- Contact the home owners association management or a pest control company.

AMERICAN WASP BEETLE

Adult: 2–4 mm

Larva: 5–6 mm

The general hue of this dermestid beetle varies from dark brown to glossy black. Its body is covered with rather dense black or yellowish brown hairs. Commonly there is a light brown or yellowish oblique stripe at the base of the wing cases.

Larvae are hairy, light brown on top, and appear banded. The larva bears a cluster of rather long bristles at its rear end.





NOTE!
Also consumes
foodstuffs

YELLOW MEALWORM BEETLE



Adult: 12–16 mm

Larva: approx. 30 mm

An adult yellow mealworm beetle is a large black and dark brown insect resembling the destructive flour beetle but discernibly bigger.

The larva or “mealworm” is yellowish brown and shiny. It has a robust form and there are two small spiky appendages at the tip of its abdomen.

In the wild mealworms live in rotting wood, as well as in the nests of birds and wasps, whence they may find their way indoors.



FRUIT FLIES



Adult: 2–4 mm

Larva: 3 mm

Fruit flies are small, commonly pale yellowish brown, flying insects.

The most common member of the family is *Drosophila melanogaster*. Another related species found indoors is the vinegar fly.

Fruit fly larvae live on a broad variety of decaying vegetable food, especially rotting fruit. They are also partial to beer or wine left in a glass, ketchup, sweet jams, rotting potatoes, cucumber, kitchen scraps and vinegar.



A population discovered in the home may have originated from eggs undetectable to the human eye present on fruit purchased from a shop.

In summer adults may fly in through open windows, or larvae may be brought in along with slightly rotten fruit or berries.

Fruit flies breed extremely rapidly, a single female laying up to 400 eggs on food for human consumption. Within just a few days the larvae are full-sized and then they pupate. A single generation develops from egg to adult in just 10-14 days. Larvae render contaminated food unusable.

Control

- For several months all foodstuffs which may be acceptable to fruit flies should be either protected or removed.
- Fruit should be preserved in bags.
- Biowaste containers should be emptied sufficiently often.

VERMIN

Those insects requiring blood for food are referred to in Finland as vermin. This category includes bedbugs, lice and fleas. Vermin pass into homes along with e.g. people, clothing and fabric-covered furnishings, or even get there via birds nests in attics, etc. They live in dwellings, clothes, and in hair or on the skin of humans and animals. Generally speaking, poor hygiene standards and untidiness increase the incidence of such vermin. When vermin are discovered, control measures must be started without delay.

Control

Bedbugs and fleas

- If you discover bedbugs or fleas in your home, contact the caretaker immediately to arrange for fumigation by professionals. If necessary, also consult your local health centre.
- Thoroughly clean your home, vacuum cleaning the mattress and bed as well, and wash all the bed clothes at +60°C. Dispose of the vacuum cleaner's dustbag afterwards.
- If fumigation is not quickly carried out, the insects may infect the next apartment and the problem will spread throughout the whole block.

Lice

- Head lice live in people's hair. To eradicate them you can use shampoos or special detergents available from pharmacists. If necessary, also consult your local health centre. Thoroughly clean your home, vacuum clean the mattress and bed as well, and wash all the bed clothes at +60°C. Dispose of the vacuum cleaner's dustbag afterwards.
- Body lice live in clothing. If you find one, contact your own health centre. Thoroughly clean your home and vacuum clean the mattress and bed, then dispose of the vacuum cleaner's dustbag. Contact the caretaker immediately to arrange for fumigation by professionals.



BEDBUGS



Adult: 5–8 mm

The adult bug is a broad, flat brownish insect. Individuals that have not fed for a long period are paler.

The bedbug's larval stages resemble the adult but are smaller and lighter in colour.



LICE



Adult: 2,5–3 mm

The adult louse is a wingless, flattened parasite which is either white or grey in colour. The head louse lives only in hair. It attaches its one millimetre-long eggs ("nits") to the base of hairs. Although the head louse is not known to spread any diseases, the body louse can spread typhoid fever and relapsing fever. The body louse lives in clothing.



FLEAS



Adult: 1–6 mm

Fleas are shiny, wingless insects living in the dens or nests of mammals and birds. Generally, they are blackish and laterally flattened. Fleas are excellent jumpers.

Their larvae are white and legless and possess biting mouthparts.

