Pest Control Newsletter

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Millipede as a beneficial arthropod

The name '**millipede**' derives from Latin roots – "*milli*" means "thousand" and "*ped*" means "foot". As their names suggest, they are wormlike animals with many legs and hence also commonly known as thousand-leggers. Despite their names, they never have a thousand legs! Some have as many as 750 but most have fewer than 50 pairs. Millipedes range in size from as little as 2 mm to 30 cm in length. Most of the millipedes are cylindrical or slightly flattened and bear 2 pairs of legs on most of their body segments. Their structural appearances separate them from centipedes which have only one pair of legs per body segment.

Most millipedes are detritivores and prefer to feed on decaying plant material though some attack living plants and sometimes do serious damage in greenhouses and gardens. Millipedes play an important role in the decomposition process in the soil. They are good fragmenters which stimulate microbial activity and indirectly influence the fluxes of nutrients. Their feeding activities are vital in stimulating the microorganisms which carry out the vast majority of the chemical breakdown. Furthermore, millipedes which feed on the soil surface during the night will further encourage decomposition by inoculating leaf litter with bacteria and fungal spores in the deeper layers when they move down the soil surface during the daytime.

Common habitat of millipede

A millipede with over 50 pairs of legs

Apart from their important ecological role in nutrient flux, millipedes are keys to food chains. They serve as food for animals like birds, shrews, hedgehogs, frogs, turtles, lizards and beetles. Besides, they may also associate with ants. Millipedes help ants to clean up detritus from their nests and prevent mold from building up. Mutually, ants provide protection for millipedes from predators.

Millipedes are usually found in damp places, under leaf litter or stones on the surface of soil, in rotting wood or below the surface among soil particles. Unlike centipedes, millipedes do not bite people. They are considered as beneficial animals in general. They may be found aggregating on a spot when their habitats have been disturbed especially after heavy rain. Application of pesticide for killing them is not recommended. If their aggregation is considered as unsightly, they can be picked up by tools for relocation to a vegetated or shrubby area with less human activities.

Ms. M. Y. LEUNG, Pest Control Officer

Psocids as Pest

Psocids are belonging to the Order Psocoptera and are common household pests found locally. The Order Psocoptera is divided into three sub-orders and over ten thousands species are known, but only a few are common pests at homes. Psocids are small insects with body length usually less than 6 mm. They have a soft-body, fairly long antennae and may or may not have wings. In winged forms, the fore wings are a little larger than the hind wings, and the wings at rest are usually held roof-like over the abdomen. The metamorphosis is simple. The young of psocids are called nymphs and are usually very similar to the adults in appearance. Most species found at homes are wingless and so-called booklice because they often live among books or papers. The species living outdoor usually have well-developed wings. They live under barks, or foliage of trees and shrubs, or in dead leaves. These outdoor species are sometimes called barklice. However, the term "lice" in names "booklice" and "barklice" is somewhat misleading because none of the psocids is parasitic.

Psocids feed on microscopic molds, fungi, cereals, pollen, fragments of dead insects and similar materials and hence are most numerous in damp, humid, warm, undisturbed situations where these molds are found. They are harmless and do not cause any damage or destruction. Furthermore, they do not bite or sting and are pests only by being present.

Since psocids are generally breeding in rather humid habitats, the fundamental control method is to correct moisture and high humidity problems at home. Any procedures which can eliminate moist places and organic matter will be of value in controlling these pests. Residual sprays and power dusting of pesticide can be applied to surfaces where the psocids are in abundances. Infested cereals or grain should be dried to stop mold growth that the psocids are feeding on. Any objects, which you suspect may contain psocids or their eggs and you do not want to throw away, can be placed in a sealed bag in a freezer for 24 hours. This will kill any psocids or their eggs. Any potential hiding places for psocids should be sealed with paint or mastic. This is useful and could give a long-term control. Many fitted kitchen cupboards are made from laminated chipboard and the surfaces, which are not on view, tend not to have a laminated finish. These unfinished edges can provide crevices for the psocids to hide in and should be sealed with a coat of paint or varnish.

Cheung Ka-yun, Head of Port Vector Surveillance Unit