Puliti & Felici

FEDERCHIMICA
ASSOCASA
Associazione nazionale detergenti
e specialità per l'industria e per la casa

Flies

When we talk about "flies", we refer to a large number of species all belonging to the dipteria order, namely insects with just two wings. The larvae of these insects generally look like little white worms with a pointed head and are commonly known to fishermen as maggots. For an entomologist the "house fly" is a very precise species, while for those whose expertise lies elsewhere, a fly is simply an insect that flies around and looks large and stubby. At the most, non-experts differentiate flies according to their size, classifying them as "generic flies", "blue bottles" and "gnats".
Let's take a closer look at the characteristics of each of these groups.

Generic flies

The most common fly in this group is the "house fly": it is black, 5-10 mm long and lays its eggs on decaying organic plant and animal matter.
Another fly that is a common visitor to our homes is the Fannia canicularis, the lesser house fly, very similar to the house fly but slightly smaller and lighter in colour. It never seems to tire of flying and rarely lands. It flies round and round in a point of the room, suddenly changing direction and flying on small triangular or quadrilateral courses. If you see one, it is probably a Fannia.
There is an old saying that flies bite when a storm is about to break.
This behaviour is actually common to one species in particular, the Stomoxys calcitrans, a blood-sucking insect. Although it is normally attracted to cattle and horses, it won't turn its nose up at a human if there's one around.

Blue bottles

Blue bottles have a very similar shape to flies but are a lot bigger and can have a shiny metallic body. Like flies, they reproduce mainly on decaying organic matter of plant and, more commonly, animal origin.
Some blue bottles are similar in colour to bees or wasps and the way they fly is also similar. This colouring is called Batesian mimicry and is when a harmless animal "mimics" poisonous or otherwise dangerous species in order to ward off predators.
These imitator flies are syrphids and are very useful because they are pollinators. Larvae of some species also prey greedily on greenfly, making the syrphids doubly useful.
Horse flies are also large, blood-sucking insects when adults. Unlike mosquitos which suck blood through a spear-like proboscis similar to a hypodermic needle, horse flies cut the skin and lap up the blood which flows out, causing extremely painful wounds.
The larvae grow in muddy environments.
There are also so-called flesh flies which are large (8-15 mm) and, as their name suggests, are associated with dead bodies as their larvae develop on decaying flesh. They have brilliant metallic blue (Calliphora spp) and green (Lucilia sericata) coloration or can be grey (Sarcophaga carnaria).
Although they can be a nuisance, they play a very important part in the degradation of organic matter.

Gnats

One of the most common gnats is the fruit fly, famous because it was used by Mendel in his studies on genetics. It grows on rotting fruit.
Another very common gnat we can find in our homes is the drain fly, with its chubby body and hairy wings, which is totally harmless.
It can often be found in bathrooms or damp environments. The larvae grow in water and inhabit gutters, sewage systems and drains.

There are many other groups of gnats, some of which bite: they are black flies, sand flies and biting midges.

Damaged caused by flies, blue bottles and gnats

The damage caused by these insects is mainly due to their bothersome behaviour, namely their bites and their unpredictable flying and landing on people.
Less obvious but much more dangerous is the role flies play as carriers, as they carry a wide range of bacteria (typhus fever, cholera and salmonella to name but a few) which they pick up, unawares, when they come into contact with excrement and decaying matter.

They then transfer it to our food by either simply landing on it or regurgitating or depositing excrement. The species which bite, on the other hand, can transmit diseases with their saliva.

How to protect ourselves

The measures we can take to protect ourselves from these animals are strictly linked to the species and the stage of their life.
To protect against larvae, householders can prevent creating damp and humid conditions where they can proliferate: always clean the bin where you store your organic kitchen waste thoroughly and keep an eye on your compost heap. Aerosols can be used on adult house flies but these products must be handled with care, following the instructions on the label to avoid breathing in their fumes which can be harmful. What is more, this action is temporary because flies have become very resistant to insecticides and after a first "attack", they often return.
There are also a variety of traps designed to reduce the number of insects: light traps, for example, sticky coloured panels or traps baited with fermenting food (containing sugar or proteins depending on the insect targeted).
The truth is that none of these actions will actually get rid of flies but, if used properly and accompanied by other measures, they can help keep these irritating insects under control.