

March flies and their medical importance



Photo: MDA Lindsay

March fly, a common pest species in the south-west of Western Australia.

This brochure provides information about March flies and their health impacts, as well as ways of avoiding them.

What are March flies?

March flies (also sometimes known as horse flies or tabanids) are stout-bodied flies measuring 6mm to 25mm in length with large eyes. There are some 200 species in Australia. They can be a serious pest of humans, livestock, domestic animals and wildlife.

The females of most species of March fly take a blood meal after inflicting a painful bite with their piercing mouthparts. They can be annoyingly persistent when attempting to bite. The adults of both sexes feed on nectar and plant juices.

Where and when do they occur?

March flies can occur anywhere in WA, and in a range of habitats. The adults are most active during daylight hours during the warmer months, particularly on sunny, calm days. In the tropics, they can continue to be active through the drier winter months.

The breeding places include damp soil, rotting vegetation, sand and rot holes in trees, with the larvae feeding on animal and plant material within the substrate. The life cycle can take many months or even years, depending on the species and soil temperatures. After emerging, the adults mate and the females disperse from the breeding site in search of blood meals. The adults live for 3-4 weeks.

What are the health impacts?

March flies are not known to transmit disease to humans or livestock in Australia. However, their bites can cause adverse allergic reactions in some people, sometimes requiring hospitalisation. Livestock can suffer severe blood loss from repeated biting.

One small, brown species occurring in the north-west (Pilbara and Kimberley) of Western Australia, appears to produce serious symptoms in some people, including hives, fever, wheezing and in severe cases, anaphylaxis.



Photo: Frank E French, Georgia Southern University, www.insectimages.org

March fly, similar to a species in the north-west of Western Australia, associated with severe allergic reactions.

The allergic reaction occurs in response to the saliva injected by the fly to prevent the blood from clotting. The application of an ice pack or a mild antihistamine may relieve painful bites. Secondary infection due to scratching the bites may require the application of antiseptic cream or systemic antibiotics. Patients with a severe allergic reaction should seek urgent medical assistance and advice.

How do I avoid being bitten?

Control of these flies using pesticides is generally not possible due to their extensive breeding areas and ability to fly long distances from breeding sites.

March flies are known to be attracted to dark blue, so it is advisable to avoid wearing blue and other dark colours. Light-coloured loose-fitting clothing and insect repellents will provide protection when March flies are present.

The most effective repellents for March flies contain diethyl toluamide (DEET) at between 5 and 20 percent (50-200g/litre) and are most effective in lotion form. As with all chemicals, repellents should be applied in accordance with the manufacturer's instructions, especially to infants and young children.

Fly trapping may be useful for reducing populations in localised areas such as schools and workplaces. Dark coloured boards (e.g. 60cm square), coated with a permanently sticky adhesive have been used with some effect overseas. Other commercially-available traps may be sourced through the internet.

Further Information

For more information about March flies please contact your local government Environmental Health Officer

or

Environmental Health Directorate
Department of Health
PO Box 8172
PERTH BUSINESS CENTRE WA 6849
Telephone: (08) 9385 6001
Facsimile: (08) 9383 1819

This brochure and information on other insects of importance to public health are available at:
<http://www.health.wa.gov.au/envirohealth/home/index.cfm>



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