



Exopest - Fact Sheet on Midges

Have you numerous bites and uncontrollable itching ?

Habits

Biting midges are small robust insects with piercing and sucking mouthparts that belong to the family of flies Ceratopogonidae. Only a few groups within this family are known to suck blood and their distribution is almost world wide. These small flies are renowned for their nuisance biting associated with habitats such as coastal lagoons, estuaries, mangrove swamps and tidal flats. In Australia these flies are commonly known as sandflies but are correctly referred to as biting midges.

The biting activity of adult biting midges is mainly limited to the periods of dawn and dusk; they will remain inactive through very windy weather, finding shelter amongst vegetation. Biting midges will usually disperse only short distances from their breeding sites. Only female midges feed on blood, but both the females and males will feed on vegetable fluids and nectar. Adult midges are tiny only 1.5-4.0 mm long with stout short legs, and at rest fold their wings, which are often mottled, over the abdomen. Their mouthparts are short and projected down.

Female midges may attack humans in large numbers, biting on any areas of exposed skin, and often on the face, scalp and hands. Some species will blood feed on a wide range of animal hosts.

The egg batches contain between 30-100 eggs, and are laid on selected substrates such as mud, decaying leaf litter, damp soil or other vegetative materials, dependent on the species. The small eel-like larvae hatch in a few days; their larval habitat must contain a proportion of organic material with a high moisture content to provide optimum conditions for the larval stage to thrive and pupate. The whole life cycle takes 3-10 weeks, dependent on species and environmental conditions, particularly temperature.



Clinical Presentation

Biting midges are responsible for acute discomfort, irritation and severe local reactions. Itching may commence immediately after the bite, but often not for some hours later, and most individuals are unaware of being bitten at the time. Biting midges have their greatest impact on people arriving to an area or tourists. Local residents seem to build up some immunity to the biting. In some sensitive people, midges can produce persistent reactions that blister and weep serum from the site of each bite and these reactions may last for several days to weeks. Biting midges are not known to transmit any disease-causing pathogens to humans in Australia.

Laboratory Diagnosis

Identification of biting midges is performed with the use of light microscopy and taxonomic keys, after the specimen has been especially prepared on a glass slide.

Treatment and Control

There are no known efficient methods of controlling biting midges, but personal protection will help in reducing exposure to their bites. Avoid localities, especially at dawn and dusk, that are known to be frequented by biting midges; wear protective clothing (long sleeves/pants), and apply a repellent to exposed skin. These measures will assist in limiting exposure to these biting flies. Irritation associated with bites may be alleviated with anti-pruritic preparations such as EURAX[®], but severe reactions may require medical treatment with antihistamines.



Midge Bites