

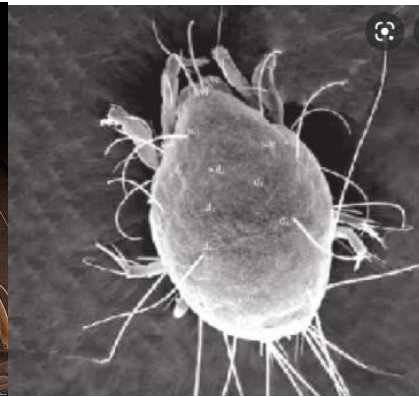
HOUSE DUST MITE



D. farinae



D. pteronyssinus



Blomia tropicalis

SCIENTIFIC NAME: *Dermatophagoides farinae*, *Dermatophagoides pteronyssinus*

FACT: House dust mites or dust mites are arachnids, related to spiders and ticks. They are responsible for causing asthma, allergic rhinitis and atopic dermatitis. The respiratory allergies are caused by the inhalation of fecal matter of live or dead mites.¹ There are 2 well known species of dust mites: the American house dust mite (*Dermatophagoides farinae*) and the European house dust mite (*Dermatophagoides pteronyssinus*). *Blomia tropicalis*, initially described as storage mites, is more common in South America and Southeast Asia.^{2,3} They are very small (0.2-0.3 mm in length—about 33-50 of them would fit in a centimeter), with a translucent cuticled body not visible to the naked eye. They are nonparasitic. Their means of sustenance are the flakes of dead skin cells and microfood crumbs. The genus name “dermato”, meaning very small skin flakes and “phagoides”, meaning eater. The typical life cycle of a dust mite is anywhere from 65-100 days. A mated female mite lays 60-100 eggs in the last 5 weeks of her life. In a 10 week lifespan, it will produce 2000 fecal particles and an even larger number of partially digested enzyme-covered dust particles.⁴

ADDITIONAL FACT: Aside from being an aeroallergen, dust mites can cause oral mite anaphylaxis (pancake syndrome) when *Dermatophagoides* spp. are found in flour.⁵

MORE FACTS: Dust mites are not easy to get rid of.

HDM CONTROL MEASURES: The following recommendations should be kept in mind to reduce mites at home:

For Bedrooms:

1. Cover mattresses and pillows with mite-impermeable covers.⁶
2. Wash beddings regularly at 55°C.^{6,7,8}
3. Remove carpets, draperies, upholstery, stuffed toys and clutter from the bedroom.^{6,7,8}

4. Vacuum weekly (wear mask). Use vacuum cleaner with a double layered bag or a high efficiency particulate air (HEPA) filter.⁶

Rest of the house

- Reduce humidity below 45% relative humidity for the rest of the house.⁸
- Treat carpets with benzyl benzoate or tannic acid.⁶
- Decrease tobacco exposure.⁷

NICE TO KNOW: The following are the currently known species of dust mites with clinical relevance:

Dermatophagoides farinae - American house dust mite

Dermatophagoides pteronyssinus - European house dust mite

Euroglyphus maynei - Mayne's house dust mite

Blomia tropicalis - house dust mite of tropics and subtropics

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