

House Dust Mites

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House dust mites, *Dermatophagoides* sp., can be found as a component of house dust. The potent allergens they contain may cause allergic reactions of the respiratory tract. A very small percent of children and adults have been found to be afflicted with this allergy. *Dermatophagoides* species are found principally in cotton stuffed mattresses and furniture. These mites are also found on birds, in bird nests, on animals, and on humans. They have been found infesting stored food products.

House dust mites are extremely small. The adult females of one common species, *D. farinae*, are 0.5 mm long. The adult males and tritonymphs are about 0.4 mm. (see Figure 1) The adult mites are light cream-colored with areas of light beige on the integument. There are five distinct stages in the life cycle of the house dust mite: egg, larva, protonymph, tritonymph, and adult. The developmental period from egg to adult spans 23 to 30 days.

House dust mites feed primarily on human skin scales and the dander of pets. They also ingest pollen, spores and mycelia of fungi, and cotton fibers. Dust mites develop optimally at temperatures between 25 to 30°C (77 - 86° F) and relative humidity between 75 to 95%.

Management of house dust mites can be achieved by physically removing the pests and their food source, and by altering their preferred environment. Vacuum mattresses, furniture, and floors. Pay particular attention to cracks and crevices where house dust mites hide. Wash bedding and clean blankets regularly in hot water. Keep floors dry, as these pests prefer humid environments. Special bedding encasements will prevent the penetration of moisture, skin scales, dust, and fungi into the top layer of the mattress where the mites feed. Chemical control is not normally warranted since sanitation or cultural strategies as listed above are so key to suppression of mite populations. At best, pesticides would be only supplemental to good sanitation and temporary at that.



Fig. 1. House dust mite. From Urban Entomology, pp. 525.

Reference:

Ebeling, W., 1978, *Urban Entomology*, pp. 525-529. University of CA, Berkeley, CA.