

IDENTIFICATION OF HOUSE DUST MITE SPECIES (ACARINA : ASTIGMATA) IN PRODUCING ALLERGY AND ASTHMA IN RESIDENTIAL PLACES IN SOUTH OF IRAN

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ABSTRACT : Due to the rule of mites in producing severe allergic reactions in sensitive people; the current study was designed to investigate the mite fauna in carpet dust sample from residential houses in Shiraz city at summer 2009. The survey was done descriptive. The populations for study were mites in residential houses in Shiraz. In this study, randomized sampling was done from 100 residential houses situated in different parts of Shiraz city and totally 100 dust samples were collected from carpet with vacuum cleaner. Samples were transferred to the health college laboratory of Shiraz University of Medical Sciences and registered. About 200 mg house dust from each place was disgorged into Petri dish and placed under stereomicroscope or binocular. Entomologic needle has been used for separation of mites and kept them in alcohol 70%. In this study 69 mites were hunted and 3 species were identified for the first time in this area. These species were *Dermatophagoides farinae* (52.2%), *Glycyphagus domesticus* (13.0%) and *D. pteronyssinus* (34.8%). The results of investigation demonstrated that 12 out of 100 houses (12%) were contaminated with one or multiple mites. It was identified that 85% of contaminated residential places have shown the *D. farinae* mites. Results from this study showed that the degree of contamination by house dust mites in studied residential houses was 12%. Although, the *D. farinae* is allocated for 52.2% of diagnosed cases, it seems that due to climatic conditions in Shiraz city, frequency of mites is significantly low and has little relation to allergy and asthma in Shiraz city.

Key words : Asthma, House dust mites, allergy, Iran, fauna.