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**Identification and partial characterization of the major *Tyrophagus putrescentiae* allergen Tyr p 2.**

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The clinical relevance of *Tyrophagus putrescentiae* allergens was analyzed by SDS-PAGE-immunoblotting with individual sera from allergic patients sensitized to this mite. A 14-kDa protein was disclosed as a major allergen, since it bound specific IgE from 70% of sera tested. The sequence established by Edman degradation for the first 17 N-terminal aminoacid residues of this allergen is:

G Q V K F T D X G K K E I A S V A  
(H) (L)

A significant similarity of this sequence with those from Der 2 and Lep d 2 was found (76 and 88%, respectively). These results allow to conclude that this allergen is homologous to group 2 allergens from other mite species, and, consequently, it should be named Tyr p 2.

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**Pattern of allergen reactivities in children in Saudi Arabia**

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A comparative study of IgE mediated skin reactivities using a battery of 22 aeroallergen extracts was conducted in paediatric patients. The SPT profile included extract from *Dermatophagoides farinae*, and *D. pteronyssinus*, Cockroach Cat, Wool, *Alternaria*, *Atriplex*, *Chenopodium*, *Cynodon*, *Phoenix*, *Prosopis*, *Olea*, *Phelum*, *Rumex* and *Salsola*. Though the results varied from region to region, a number of allergens reacted more positively than others. *Prosopis juliflora* reacted in 76.9% children in an agricultural compared to 29% in a mountainous region. *Cynodon dactylon* reacted in 69.6% patients compared to 34.3%. In contrast 44.7% patients reacted positively to *Cladosporium* extract in Western compared to 13.8% in agricultural region. An influence of geography and climate was also noted. More pollen sensitive patients were recorded in agriculture than dry region. More indoor allergen sensitivities were recorded in both dry and mountainous region.

The findings suggest regional variation in SPT reactivities indicating use of different allergen profiles for different regions.

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***Prosopis* saga in the Arabian Peninsula**

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Airborne Pollen grains from species of *Prosopis* have been incriminated in the sensitization and development of allergic diseases. Though two species are known to exist in the Arabian Peninsula, a number of *Prosopis* have been imported from Central America. Two decades ago, having found links between *Prosopis* pollen and increase in respiratory allergies in Kuwait, almost  $10 \times 10^3$  *Prosopis* trees from the streets of Kuwait were cut and removed.

An aerobiological study in Saudi Arabia using Burkard Volumetric Trap revealed a maximum concentration  $>60$  Pollen  $m^{-3}$  to  $140 m^{-3}$  with a mean value of  $4 m^{-3}$ . Accordingly, SPT conducted on  $>400$  allergic patients revealed  $>76\%$  positive reactions in Central region with heavy *Prosopis* plantation. Figures for other regions were 29.1% and 11.1% with a mean of 41.9%.

In view of the data on *Prosopis* and increased incidence of respiratory allergy, a municipal decree has been issued to gradually eliminate the trees from the central region in Saudi Arabia.

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**Sensitization to inhalant allergens in Cuban asthmatics.**

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Continuous exposure and symptoms of asthma to inhalant allergens, especially mites and moulds, in the tropical environments makes difficult to elucidate which allergens are involved in the sensitization of asthmatics. The aim of this study was to investigate the role of different types of inhalant allergens as sensitizers in Cuban asthmatic patients. Two hundred and ten allergic patients (5-52 years old; 138 women, 72 men), with continuous asthma, were investigated by skin prick test (SPT). Cat, dog, *Cladosporium*, *Aspergillus*, *Penicillium* and *Lolium*, *D. pteronyssinus*, *D. farinae*, *A. siro*, *L. destructor*, *T. putrescentiae* (Soluprick®, ALK), *D. siboney* and *B. tropicalis* (BioCen, Havana) allergens were used for duplicated SPT on the forearm. Wheal areas  $\geq 7 mm^2$  were considered positive. Positive SPT was most common to dog (51,7 %), followed in order by cat (46,6 %), *Cladosporium* (43,9 %), *Aspergillus* (41,4 %), *Penicillium* (39,6 %) and *Lolium* (33,2 %). The largest skin reactions were to dog and cat allergens. Despite the frequency of sensitization to mites was higher (45 - 88 %) in this group of asthmatic patients, our results demonstrate that also other inhalant allergens are important as sensitizers in asthmatics in Cuba.