

Report on Standardization of Rhinomanometry criteria and using 3 allergen dilutions (0.01, 0.1 and 1 mg/ml) (Ifidesa-Aristegui, Spain) in randomized patients with positive prick test (10 mg/ml). We performed a personal symptom-score (nasal discharge, pruritus and sneezes) questionnaire.

Results. The Ag₅₀ (mg protein/ml) values found were: *Ricinus c.* 7.2, *Zigophyllum fabago* 930, *Mercurialis annua* 3570, *Betula verrucosa* 2720, *Olea europea* 1900, *Heliantus annuus* 1000, *Lolium perenne* 5.800. Rhinomanometry: 34 SPT-positive-patients. 15 (44.1%) were discarded (inespecific nasal hyperreactivity). 8 (42.1%) out of the other 19: positive criteria and 11 (59.87%) negative. Negative control 12 non atopic subjects. 6 of the 8 positive (75%) showed specific RAST \geq class 1. 2 (18.2%) negative patients had RAST \geq class 1.

Conclusions. *Ricinus communis* pollen is an allergen causing respiratory (mainly nasal) symptoms. Found in mild climate areas, it can play an important role in Mediterranean countries patients. It is surprising the higher figures of nasal hyperreactivity. Further studies about this fact are going on.

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IMPORTANCE OF TROPOMYOSIN IN THE ALLERGY TO HOUSEHOLD ARTHROPODS. CROSS-REACTIVITY WITH OTHER INVERTEBRATE EXTRACTS

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The aim of the study was to investigate the involvement of the actin binding protein tropomyosin in the allergic sensitization of patients to household arthropods, as well as to study its panallergenic character in relation to other invertebrate extracts.

Three arthropod extracts were prepared, namely fly (*Musca domestica*), moth (*Ephestia* spp.) and spider (*Tegenaria* spp.), and used to evaluate by cutaneous and RAST tests a population of 100 household arthropods allergic patients. Twenty-nine sera were selected for the subsequent SDS-PAGE Immunoblotting assays. Tropomyosin was purified by electroelution and used for production of a polyclonal antiserum.

The antiserum was used for tropomyosin identification, together with the exclusive change in mobility of the protein under 6M urea SDS-PAGE conditions.

IgE binding bands at 36, 34, 31, 27 and 17 kDa were detected in the fly extract by more than 50 % of tested sera. In moth and spider extracts, the more relevant allergens were found at 34, 31, 24 and 110, 38, 35, 26, 19 kDa, respectively.

Cross-reactivity studies performed by SDS-PAGE Immunoblotting using a pool of household arthropod allergic patients and tropomyosin antiserum demonstrated the presence of such protein as a cross-reacting allergen in a large variety of extracts obtained from mites, insects, crustaceans, molluscs and parasites.

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AEROBIOLOGIC STUDY ON CHENOPODIALES POLLEN IN THE BADAJOZ AREA (SW SPAIN)

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Pollens from various species of Chenopodiales cause allergic symptoms. About 34.5% of pollinic patients living in the Mediter-

anean area and in the south of Spain are sensitive to this pollen. This order includes two large and closely related families (Chenopodiaceae and Amaranthaceae), producing similar pollen grains. The aim of this study was to determine the concentration and seasonal occurrence of Chenopodiales pollen (CP) in our area, and investigate possible relationship with climatic variables (temperature, relative humidity, speed and wind direction, and rainfall).

Atmospheric sampling was carried out with a Burkard volumetric spore trap from 1993 to 1995. The trap was installed at about 6 m above ground level. Slides were prepared following standard methods and examined by light microscopy by \times 400 magnification on 4 longitudinal transects. The occurrence of CP was calculated hourly and daily, and results were expressed as the number of pollen grains/m³ of air. Meteorological data were obtained from The Meteorological Center of Badajoz. Statistical analysis between CP concentration and weather variables was studied by the Spearman correlation coefficient method.

CP appeared from April to October. The months of maximum concentration were June to September with daily counts about 20 grains/m³. We have observed a daily rhythm of appearance, with highest concentrations between 10 to 12 hours (a.m.). A positive statistical association has been found between CP concentration, temperature, SE wind and speed wind.

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GRASS POLLEN ALLERGY IN HUNGARY

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We present the results of 8 years aeropalinological and allergological study on airborne grass pollen grains in two Hungarian city, in Budapest and Szeged.

Burkard volumetric pollen traps were used for these monitorings. Grasses are one of the most important aeroallergens in Hungary. Their pollen production 13-17 % of the yearly total pollen concentration. Yearly number of flowering days was 104-175, the main period is May-June. Number of those days, when daily pollen count was more than the threshold value: 32-38 days/ year, in the yearly peak days were counted 205-308 PG/m³ in Budapest, 150-349 PG/m³ in Szeged.

Yearly total grass pollen concentration was between 1200-2800 PG/m³ in Budapest, 1500-3400 PG/m³ in Szeged.

On the basis of SPT (skin prick test), in Szeged (n=261) 59 % of patients with grass pollen pollinosis suffer from hay fever only in May and June, 41 % of them has symptoms during all the grass pollen season. Polysensitisation to other pollen allergens is very frequent (82%), 57% of patients was allergic to both Poaceae and Scelae, 63 % to ragweed and 33 % to mugwort.

In Budapest the prevalence of SPT positivity in patients with seasonal rhinitis allergica (n= 105), grass pollen positive 67,8 %, to Scelae 57,1 %, to *Dactylis glomerata* 41 %, to *Zea mays* 39 %, to *Poa pratensis* 28,6 % and to *Phleum pratense* 21 %.