

most frequent pollen sensitization were to *Fraxinus americana* (16.7%), *Cynodon dactylon* (17.2%) and *Atriplex canescens* (13.3%) in children; and *Fraxinus americana* (26%), *Cynodon dactylon* (23.9%) and *Atriplex canescens* (22.2%) in adults. When comparing both groups, sensitization to *Fraxinus americana*, *Junglans regia*, *Juniperus sabinoides*, *Quercus* spp, *Amaranthus palmeri*, *Ambrosia elatior*, *Artemisa* spp, *Atriplex canescens*, *Chenopodium* spp, *Helianthus annuus*, *Salsola kali*, *Bromus* spp., *Holcus lanatus*, and *Lolium perenne* was more frequent in adults ($p < 0.02$). The positive ST average was 2.7 in children and 3.2 in adults.

Conclusions: The most prevalent pollen allergen sensitization for children and adults were *Fraxinus americana*, *Cynodon dactylon* and *Atriplex canescens*. We observed that pollen sensitization occurs more frequently in adults.

P055

COMPARISON OF AIRBORNE POLLEN IN THE MOJAVE DESERT AND LAS VEGAS



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Introduction: The purpose of the study is to compare airborne pollen found in the Mojave Desert with the urban environment of Las Vegas. Its importance is to determine the distribution of native and non-native plant pollen patterns in the Mojave Desert.

Methods: Air samples were collected using a Burkard spore trap from January 1st to December 31st 2015, at a National Allergy Bureau (NAB) site in Las Vegas and a site in the Mojave Desert, located approximately 32 miles south of Las Vegas. Microscope slides were prepared and analyzed by light microscopy.

Results: Bimodal distribution trends were observed in Cedar (Cupressaceae) and Ash (*Fraxinus*) pollen concentrations, peaking in the middle of February and March 2015, in both sites. Cupressaceae was higher in the Mojave site, with the highest concentration detected mid-March. Higher *Fraxinus* concentrations were observed in Las Vegas, peaking mid-February. Mulberry (*Morus*) pollen was observed between March and May of 2015. In April, *Morus* was the dominant genus, peaking at 10,781 grains/m³. Ragweed (*Ambrosia*) pollen trends followed similar patterns in both sites with higher pollen concentrations reported in the Mojave from mid-March to late-April. Grass (Gramineae/Poaceae) pollen concentrations were higher in Las Vegas compared to the Mojave site, except in September.

Conclusion: Las Vegas and Mojave Desert pollen concentrations follow parallel trends. Higher concentrations were reported in Las Vegas with two exceptions: higher Cupressaceae and *Ambrosia* pollen concentrations were observed in the Mojave. Furthermore, *Fraxinus* was detected despite not growing naturally in the Mojave, which may be explained by airborne transport.

P056

SENSITIZATION TO PLATANUS OCCIDENTALIS TREE AND RICINUS COMMUNIS WEED POLLEN IN NORTHERN MEXICO



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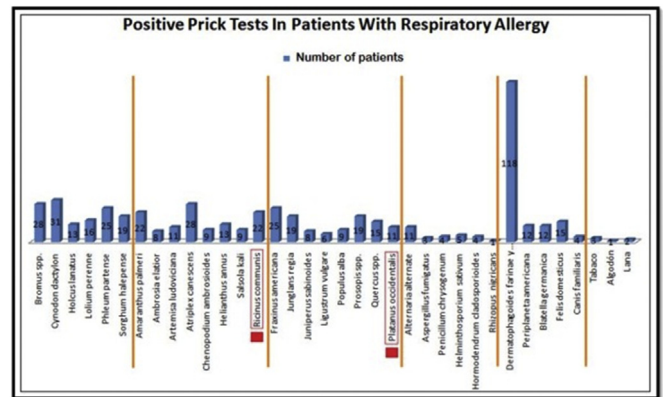
Introduction: *Platanus occidentalis*(Po) and *Ricinus communis*(Rc) pollen were captured with a volumetric Hirst (Burkard Manufacturing Co.) in Monterrey. We evaluated their sensitization

prevalence to include these allergens in our routine Skin Prick Tests (SPT).

Methods: Prospective, observational, descriptive study. We carried out 192 SPT in patients 5-60 years old with rhinitis and asthma symptoms.

Results: Positive SPT 140 (72.95%): male 60 (42.9%), female 80 (57.1%), median age 21. Allergic rhinitis 91 (65%), Asthma 1 (0.7%), Rhinitis and Asthma 48 (34.3%). • Positive SPT in frequency order: Dermatophagoides 126 (90%), trees 65 (46.4%), grasses 50 (35.7%), weeds 50 (35.7%), epithelium 40 (28.5%), fungi 18(12.8%), others 6 (4.2%). • SPT positive to *Platanus occidentalis* (Po) were 11 (7.8%), and 22 (15.7%) to *Ricinus communis* (Rc). • From 35 allergens tested, Rc takes the fifth place in prevalence along with *Amaranthus palmeri*(Ap) 22 (15.7%), after Dermatophagoides 118 (84.3%), *Cynodon dactylon* 31 (22%), *Atriplex canescens*(Ac) 28 (20.0%), *Bromus* spp 28 (20.0%), *Phleum partense* 25 (17.9%), *Fraxinus americana*(Fa) 25 (17.9%). Po takes the eleventh place. • From 8 positive SPT to weeds (122 patients (100%)): Rc takes second place 22 (18%) in prevalence, along with Ap 22 (18%), preceded only by Ac 28 (22.9%). • From 8 positive SPT to trees 112(100%): Po takes the fourth place 11 (9.8%), preceded by Fa 25 (22.3%), *Junglans regia* 19 (16.9%), *Prosopis* spp. 19 (16.9%), and *Quercus* spp. 15 (13.39%).

Conclusion: Rc is prevalent in our area and we ought to start daily routine SPT to this allergen.



Positive SPT in Patients With Respiratory Allergy

P057

COMPARABILITY OF EXTRACT DILUTIONS FOR INTRADERMAL SKIN TESTING AT 1:1,000 W/W AND 1,000 PNU/ML CONCENTRATIONS



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Introduction: Non-standardized allergenic extracts at 1:1,000 w/w and 1,000 Protein Nitrogen Units (PNU) per mL are often used for intradermal skin testing, but direct comparisons of the protein concentrations of these product strengths have not been reported. Estimating the mean protein nitrogen content of 1:1,000 w/w extracts from various product categories can help assess the likelihood of comparable clinical results with analogous products at 1,000 PNU/mL strengths.

Methods: PNU values were compiled for 2,460 production lots of aqueous extract concentrates at 1:10 w/v or 1:20 w/v from one licensed U.S. allergen manufacturer during a recent 5-year period. Mean values for each extract (total of 259 products from 15 categories) were determined and used to calculate the corresponding PNU content of these products at 1:1,000 w/v.

Results: PNU/mL estimates for 1:1,000 w/v extracts (mean values per category) ranged from 111 (Smuts) to 1,177 (Flowers/Cultivated Plants). Product groups were characterized as Low PNU