



30<sup>th</sup> Congress of the  
European Academy of  
Allergy and Clinical Immunology  
11 – 15 June 2011  
Istanbul, Turkey



# Abstracts

[www.eaaci2011.com](http://www.eaaci2011.com)

## Bridging Science and Culture

### Guest Editors

S. Bavbek

B. Bilò

E. Bogacka

B. Bohle

K. Brockow

M. Calderon

L. O. Cardell

J-L. Fauquert

P. Gevaert

C. Grattan

S. Halken

P. Hellings

K. Hoffmann-Sommergruber

L. Kalogjera

E. Knol

J. Makowska

A. Mari

L. Mayorga

G. Moscato

M. Ollert

G. Passalacqua

L. K. Poulsen

M. Raulf-Heimsoth

G. Roberts

F. Ruëff

C. Scharf

P. Schmid-Grendelmeier

J. Schwarze

I. Terreehorst

T. Werfel

### Poster Session 1 – Aerobiology

Rumeli Hall Lower Level

**Chairs:** François Spertini, Switzerland  
Sevcan Celenk, Turkey

373 **Climate change and aeroallergens: current scenario**

Singh, A; Rogers, C

Institute of Genomics and Integrative Biology, Allergy and aerobiology Lab, Delhi, India

374 **Atopy and sensitisation rates to aeroallergens in children and teenagers in Jeju, Korea**

Jaechun, L<sup>1</sup>; Keun-Hwa, L<sup>2</sup>; Jeong Hong, K<sup>3</sup>; Bong-hee, J<sup>4</sup>; Jae-Wang, K<sup>5</sup>; Hye-Sook, L<sup>6</sup>

<sup>1</sup>Jeju National University, Pulmonology/Allergy, Jeju, Republic of Korea; <sup>2</sup>Jeju National University, Microbiology, Jeju, Republic of Korea; <sup>3</sup>Jeju National University, Otorhinolaryngology, Jeju, Republic of Korea; <sup>4</sup>Jeju National University, Jeju, Republic of Korea; <sup>5</sup>Jeju National University, Dermatology, Jeju, Republic of Korea; <sup>6</sup>Jeju National University, Center for Environment and Health, Jeju, Republic of Korea

375 **Pollinosis and pollen count in Elche, Spain: 10 years of difference**

Flores, E<sup>1</sup>; Soriano, V<sup>2</sup>; Cervera, L<sup>1</sup>; Fernandez, J<sup>2</sup>

<sup>1</sup>Marina Salud Hospital, Diagnostic Laboratory Service, Denia (Alicante), Spain; <sup>2</sup>Alicante University Hospital, Allergy Section, Alicante, Spain

376 **Allergic sensitisation to ornamental plants in patients with allergic rhinitis and asthma**

Aydin, Ö<sup>1</sup>; Erkeköl, F<sup>2</sup>; Misirliçil, Z<sup>1</sup>; Demirel, Y<sup>1</sup>; Mungan, D<sup>1</sup>

<sup>1</sup>Ankara University School of Medicine, Department of Chest Disease, Immunology and Allergy Division, Ankara, Turkey; <sup>2</sup>Atatürk Chest Disease and Thoracic Surgery Training and Research Hospital, Department of Chest Disease, Immunology and Allergy D, Ankara, Turkey

377 **Cupressaceae pollinosis in lyrical singers in Bologna, Italy**

Cagnetti, D

AUSL Citta' di Bologna, Bologna, Italy

378 **Allergenic pollen and pollen allergy in Indonesia**

Rengganis, I<sup>1</sup>; Hartana, A<sup>2</sup>; Guhardja, E<sup>2</sup>; Djauzi, S<sup>3</sup>; Budiarti, S<sup>2</sup>

<sup>1</sup>Bogor Agricultural Institute, \*University of Indonesia, Department of Biology, \*Department of Internal Medicine, Bogor, \*Jakarta, Indonesia; <sup>2</sup>Bogor Agricultural Institute, Department of Biology, Bogor, Indonesia; <sup>3</sup>University of Indonesia, Department of Internal Medicine, Jakarta, Indonesia

379 **Diurnal variation of olive pollen concentrations in Bursa - Mudanya**

Akturk, I<sup>1</sup>; Altunoglu, M<sup>2</sup>; Bicakci, A<sup>1</sup>; Malyer, H<sup>1</sup>; Sapan, N<sup>3</sup>

<sup>1</sup>Uludag University Science and Art Faculty, Department of Biology, Bursa, Turkey; <sup>2</sup>Kafkas University Science and Art Faculty, Department of Biology, Kars, Turkey; <sup>3</sup>Uludag University Faculty of Medicine, Division of Pediatric Allergy, Bursa, Turkey

380 **Airborne pollen grains in Bursa-Mudanya, 2006**

Akturk, I<sup>1</sup>; Altunoglu, M<sup>2</sup>; Bicakci, A<sup>1</sup>; Malyer, H<sup>1</sup>; Sapan, N<sup>3</sup>

<sup>1</sup>Uludag university, Science and Art Faculty, Department of Biology, Bursa, Turkey; <sup>2</sup>Kafkas university Science and Art Faculty, Department of Biology, Kars, Turkey; <sup>3</sup>Uludag university, Faculty of Medicine, Division of Pediatric Allergy, Bursa, Turkey

381 **The effects of meteorological data on the pollen amounts of tree taxa existing in Konya atmosphere in 2008-2009**

Kizilpinar, Y<sup>1</sup>; Göktürk, B<sup>2</sup>; Dogan, C<sup>1</sup>; Karabulut, E<sup>3</sup>; Artac, H<sup>2</sup>; Reisli, Y<sup>2</sup>

<sup>1</sup>Hacettepe University, Faculty of Science, Biology, Ankara, Turkey; <sup>2</sup>Selcuk University Meram Medical Faculty, Pediatric Allergy and Immunology, Konya, Turkey; <sup>3</sup>Hacettepe University Faculty of Medicine, Biostatistics, Ankara, Turkey

382 **The analysis of daily pollen counts in Middle Anatolia: Is there any relationship between allergic diseases and meteorological factors?**

Kizilpinar, I<sup>1</sup>; Dogan, C<sup>1</sup>; Yavuz, S<sup>2</sup>; Artac, H<sup>3</sup>; Sahiner, U<sup>2</sup>; Buyuktiyaki, B<sup>2</sup>; Gokturk, B<sup>3</sup>; Reisli, I<sup>3</sup>; Sackesen, C<sup>2</sup>; Tuncer, A<sup>2</sup>

<sup>1</sup>Hacettepe University, Faculty of Science, Biology, Ankara, Turkey; <sup>2</sup>Hacettepe University Faculty of Medicine, Pediatric Allergy and Asthma Unit, Ankara, Turkey; <sup>3</sup>Selcuk University Meram Medical Faculty, Pediatric Immunology and Allergy Unit, Konya, Turkey

383 **Increase of chenopodiaceae pollinosis caused by changes in territory due to human activities**

Bruno, M<sup>1</sup>; Di Marco, G<sup>2</sup>

<sup>1</sup>Lofarma S.p.A., Medical Department, Milan, Italy; <sup>2</sup>Ospedale di Salemi - ASP9 Trapani, Pneumology Service, Aero-biology Monitoring Station, Trapani-Erice, Italy

384 **Allergen patterns in patients with bronchial asthma and allergic rhinitis; study of 1414 patients in Libya**

Gaber, K<sup>1</sup>; Touhami, M<sup>2</sup>

<sup>1</sup>Benghazi Medical Centre, Respiratory Medicine, Benghazi, Libyan Arab Jamahiriya; <sup>2</sup>Benghazi Medical Centre, ENT, Benghazi, Libyan Arab Jamahiriya

385 **Atmospheric concentration of cladosprium and alternaria spores in Adana and preparation of protein extracts for use in skin-prick test**

Korkmaz Guvenmez, H<sup>1</sup>; Akdag, P<sup>2</sup>; Karakoc, G<sup>2</sup>; Altintas, D<sup>2</sup>; Yilmaz, M<sup>2</sup>; Ceter, T<sup>3</sup>; Pinar, M<sup>4</sup>; Kendirli, S<sup>2</sup>; Aiykan, B<sup>1</sup>

<sup>1</sup>Department of Biology, Faculty of Science and Letters, Cukurova University, Adana, Turkey; <sup>2</sup>Cukurova University, Faculty of Medicine, Pediatric Allergy-Immunology, Adana, Turkey; <sup>3</sup>Department of Biology, Faculty of Arts and Sciences, Kastamonu University, Kastamonu, Turkey; <sup>4</sup>Department of Biology, Faculty of Sciences, Ankara University, Ankara, Turkey

386 **Seasonal allergy from olive tree and the importance of the botanical knowledge: the role of the phenology**

Rojo, J<sup>1</sup>; Vaquero, C<sup>1</sup>; Rapp, A<sup>1</sup>; Moral, Á<sup>2</sup>; Pérez-Badia, R<sup>1</sup>

<sup>1</sup>University of Castilla-La Mancha, Institute of Environmental Sciences, Toledo, Spain; <sup>2</sup>Hospital Virgen del Valle, Service of Allergy, Toledo, Spain

**Increase of chenopodiaceae pollinosis caused by changes in territory due to human activities**Bruno, Marco<sup>1</sup>; Di Marco, Giuseppe<sup>2</sup><sup>1</sup>Lofarma S.p.A., Medical Department, Milan, Italy; <sup>2</sup>Ospedale di Salemi - ASP9 Trapani, Pneumology Service, Aero-biology Monitoring Station, Trapani-Erice, Italy

**Background:** Modern agrobiology is the science that studies biological particles dispersed in the atmosphere, and, in our case, the pollens of allergizing plants. It is therefore involved in detecting the presence of pollens in the air, measuring their quantity, diagnosing and treating their effects. The diffusion of some allergizing plants is favoured by human activities. Of course, we are talking about vegetable species that are endemic in the area and typical of the climate, but their presence is favoured, though unawares, by man's activities and carelessness. Chenopodiaceae are herbaceous plants or shrubs, such as goosefoots or *Chenopodium*, growing also in ruderal and uncultivated places, but, mostly, in salty places, such as beaches and coast, along the saltwork basins or on seaweed sediments in decay. Moreover, in the last years, the presence of these plants where they had never grown before, such as dry areas and detritus heaps following the construction of breakwaters, piers and constructions built on the seaside that modified the coast ecosystem, has become more frequent. This is thought-provoking and confirms the importance of human activity on the changes in the territory and the relevant ecosystem.

**Method:** The aero-biologic monitoring was performed by ASMARA — Sicilian Association of Asthma.

**Result:** From the analysed data it has been observed that the pollen season for Chenopodiaceae, in Western Sicily, is in spring. Once the presence of the plants in the territory has been demonstrated, the real epidemiological impact on the allergic population was evaluated. This survey has been performed with allergic extracts produced by Lofarma S.p.A., Milan, Italy. The data collected showed a 14% of subjects allergic to Chenopodiaceae, and, among these, 10 were mono-sensitive.

**Conclusion:** In consideration of the discrepancy of the data published for macro-areas, it is essential for the agrobiology centres to diffuse the peculiar data of the local territory, reaching the largest possible number of interested subjects. Moreover, allergologists must know allergizing plants. In the last century, human activities deeply changed the territory, mostly in the urban coast areas. The plants of the Chenopodiaceae family have invaded these areas, growing luxuriantly near inhabited quarters. The plants of the Chenopodiaceae family induce a sensitization and a symptomatology that, if not correctly diagnosed, leads to a lack of efficacy of the therapeutic actions.

## INCREASE OF *CHENOPODIACEAE* POLLINOSIS CAUSED BY CHANGES IN TERRITORY DUE TO HUMAN ACTIVITIES

MARCO BRUNO\* - GIUSEPPE DI MARCO\*\*

\*Medical Department, Lofarma S.p.A., Milan, Italy

\*\*Pneumology Department, Aero-biology Monitoring Station,  
Hospital of Salemi, ASP9, Erice, Trapani, Italy

**BACKGROUND:** Modern agrobiolology is the science that studies biological particles dispersed in the atmosphere, and, in our case, the pollens of allergizing plants. It is therefore involved in detecting the presence of pollens in the air, measuring their quantity, diagnosing and treating their effects. The diffusion of some allergizing plants is favoured by human activities. Of course, we are talking about vegetable species that are endemic in the area and typical of the climate, but their presence is favoured, though unawares, by man's activities and carelessness. *Chenopodiaceae* are herbaceous plants or shrubs, such as goosefoots or *Chenopodium*, growing also in ruderal and uncultivated places, but, mostly, in salty places, such as beaches and coast, along the saltwork basins or on seaweed sediments in decay. Moreover, in the last years, the presence of these plants where they had never grown before, such as dry areas and detritus heaps following the construction of breakwaters, piers and constructions built on the seaside that modified the coast ecosystem, has become more frequent. This is thought-provoking and confirms the importance of human activity on the changes in the territory and the relevant ecosystem.



*Chenopodium album*

**METHOD:** The aero-biologic monitoring was performed by ASMARA – Sicilian Association of Asthma.

**RESULT:** From the analysed data it has been observed that the pollen season for *Chenopodiaceae*, in Western Sicily, is in spring. Once the presence of the plants in the territory has been demonstrated, the real epidemiological impact on the allergic population was evaluated. This survey has been performed with allergic extracts produced by Lofarma S.p.A., Milan, Italy. The data collected showed a 14% of subjects allergic to *Chenopodiaceae*, and, among these, 10 were mono-sensitive.

**CONCLUSION:** In consideration of the discrepancy of the data published for macro-areas, it is essential for the agrobiolology centres to diffuse the peculiar data of the local territory, reaching the largest possible number of interested subjects. Moreover, allergologists must know allergizing plants. In the last century, human activities deeply changed the territory, mostly in the urban coast areas. The plants of the *Chenopodiaceae* family have invaded these areas, growing luxuriantly near inhabited quarters. The plants of the *Chenopodiaceae* family induce a sensitization and a symptomatology that, if not correctly diagnosed, leads to a lack of efficacy of the therapeutic actions.