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We did SPT with Pru p 9, an already identified and registered allergen from PT pollen, plus Ole e 6-like having a positive response to both in Case 1 and only to Ole e 6 like in Case 2. Nasal challenges with PT pollen and Ole e 6 like were positive in both cases whereas with Pru p 9 and Olive tree pollen only in Case 1. These results show that PT pollen can induce symptoms in children living in an area of PT cultivars and directly or indirectly exposed subjects should be clinically evaluated. We have shown for the first-time allergy to Ole e 6-like from PT pollen in children.

1198 | Pru p 9 is a new peach tree pollen allergen involved in rhinitis and occupational asthma

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Background: Recently, several studies have described peach tree Prunus persica (PT) as a source of occupational allergens. The aim of this work was to study the role of Pru p 9, a new allergen from PT pollen, in exposed subjects.

Method: Workers who reported nasal and/or bronchial symptoms after PT manipulation in the flowering period were evaluated in the village of Blanca (Murcia region, South-East Spain), which is located in an area of PT orchards.

The allergological study included a detailed questionnaire and skin prick test (SPT) to the most prevalent aeroallergens, PT pollen and Pru p 9. Nasal provocation tests (NPT), as well as SDS-PAGE and immunodetection techniques were performed.

Results: A total of 11 cases were included: median age 46.5 yo; age range: 20-57yo; 57% female; 7 medium and 4 highly exposed to PT pollen. Clinical entities referred: 8 rhinitis alone and 3 rhinitis and asthma. Most of the cases were polysensitized to other aeroallergens. The SPT to PT pollen and Pru p 9 were positive in all subjects. The NPT with PT pollen was positive in 7 cases and with Pru p 9 in 8 cases. Other allergens of different molecular weights were identified by immunoblotting.

Conclusion: We demonstrate for the first time that Pru p 9, a novel allergen from PT pollen, can induce respiratory symptoms in exposed workers. Studies are in progress to identify the other allergens present in PT pollen.

1218 | Alternaria and other fungal spores associated with Ambrosia pollen in Ukraine

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Background: It is considered nowadays that airborne allergens can be associated one with other causing sensitive individuals to breath by the mixture of allergens at the same time. Thus, the aim of our study was to check the contamination of the *Ambrosia* pollen by the fungal spores.

Method: Ambrosia pollen samples were collected during the August and September 2019 in East rural outskirts of Vinnytsia city, central Ukraine. Samples were collected at the wasteland and alongside the railway tracks.

Pollen was placed into the sterile containers after being sieved. More than 10 samples were collected in total. Fungi-contaminated sample was determined by simple observation of the fungal growth on it.

Collected pollen was stained by basic fuchsin-containing dye and samples were analyzed under the light microscope with $400 \times \text{magnification}$.

The second method used cultivation of the collected material on the Sabouraud dextrose agar (SDA). Subsequent morphological determination of the fungal colonies was done under the light microscope with the magnifications $4 \times$ and $400 \times$ after application of 1% Lactic acid as a sample preservative.

To determine the quantity of seasonal allergy sufferers sensitive to fungal and ragweed allergens at the same time, we used data of molecular sensitization of 1011 Ukrainian patients obtained by Alex test.

Results: Fungal contamination was present only on one sample collected first at the wastelands. The raw-stained ragweed pollen contained mostly *Alternaria* and, to less extend, *Cladosporium* spores on its surface.

After cultivating the pollen samples on the SDA, 78 fungal colonies were found out. They were *Penicillium* (58% of all colonies), Yeasts (23%), *Cladosporium* (5%), Non-sporulating fungi (5%), *Aspergillus* (4%), *Arthrinium* (3%) and *Alternaria* (2%).

Using data of molecular sensitization, we determined that 12,4% of tested patients were sensitive to both *Alternaria* spores and *Ambrosia* pollen. What is more, in 86,4% of them this sensitization varied from moderate to very high and 28% of these patient had sensitization of a very high level to allergens of both types.

Conclusion: Airborne pollen can be associated with fungal spores. Thus, one should not forget that aerosol is a mixture of different allergens, bacteria, other organic and inorganic matters that can simultaneously influence a body of the exposed person. This can promote the sensitization to a couple of allergens at the same time, enhancing their impact on human body.