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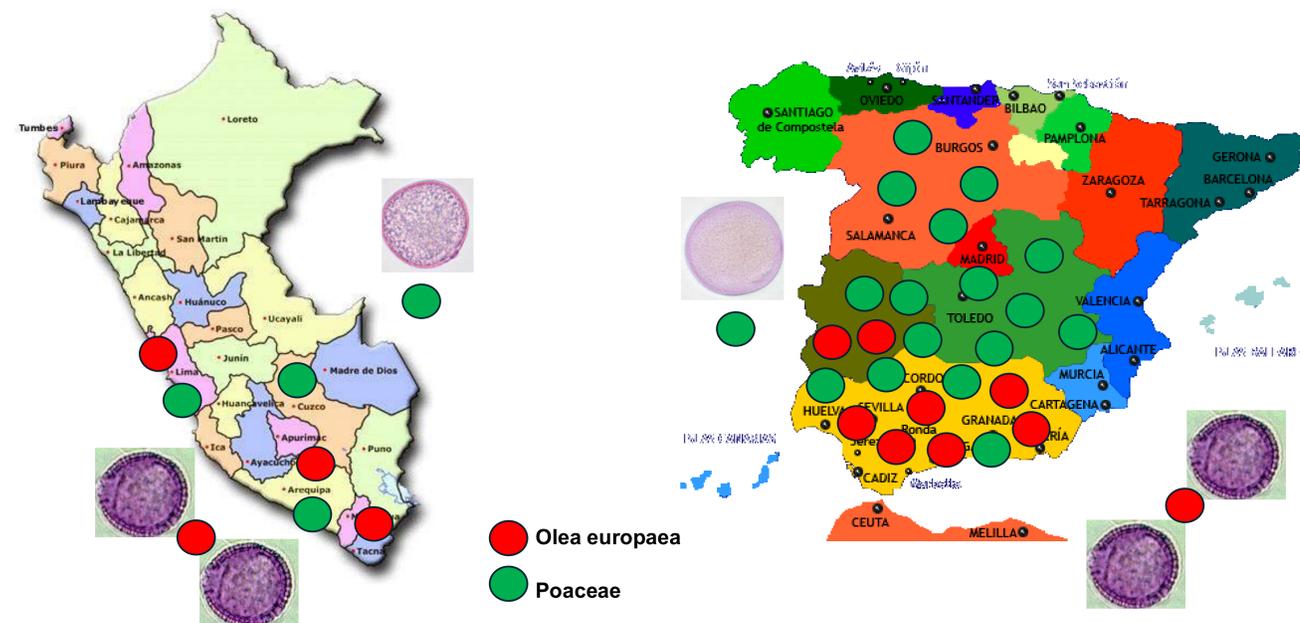
1. Aerobiological station in SANNA / Clínica el Golf, San Isidro, Lima, Peru; 2. Red Latinoamericana de Aerobiología, Lima, Peru; 3. Centro de Alergias "Tinoco", el Oro, Machala, Ecuador; 4. Universidad de Especialidades Espíritu Santo (UEES), Guayaquil, Ecuador; 5. Comité de Aerobiología Clínica de la (SEAC), Almería, Spain.

## Background

Allergy precautions must be taken regarding the preventive treatments that must be followed when the patient with pollinosis travels to another cities or latitudes. Our aim is to report the principal pollen types identified in (touristic) cities from Perú and Spain.

## Methods

Records were requested from the coordinators of aerobiological stations in Perú and Spain (Aerobiology Committee of the Spanish Society of Allergology and Clinical Immunology), we used information of Burkard spore trap for 7 days samplers. The selection of pollen types was based on their frequency and seasonal variation



## Results

Poaceae (grass) and *Olea europaea* were the most frequent pollens.

In Peruvian Cities presented high concentrations of **Poaceae** from **September to January**, an annual average peak in a representative sampled period (2016 – 2018), showed: **Arequipa**: 312 grains/m<sup>3</sup>, **Cuzco**: 384 grains/m<sup>3</sup>, and **Lima metropolitan** 43 grains/m<sup>3</sup> (2021– 2024).

*Olea europaea*, peaked from **September to January**, (2016 – 2018), we found: **Arequipa**: 454 grains/m<sup>3</sup>, **Tacna**: 588 grains/m<sup>3</sup>, and **Lima metropolitan (San Isidro district), Olivar Park**: 33 grains/m<sup>3</sup> (2021 – 2024).

In Spanish cities, appeared Poaceae peaks concentrations from **April to June**; **Cuenca, Huelva, Granada, Castilla y León community** presented moderate concentrations annually (3,500 to 5,000 grains/m<sup>3</sup>), in **Córdoba city** the annual average peak was: 488 grains/m<sup>3</sup>.

Further, in **Madrid, Segovia, Sevilla, Extremadura (Cáceres y Badajoz), Castilla la Mancha (Ciudad Real, Toledo)**, presented high concentrations annually (> 5,000 grains/m<sup>3</sup>), in **Cáceres city** the annual average peaks was: 822 grains/m<sup>3</sup>, (2021 to 2024).

*Olea europaea*, peaked from **April to June**; **Andalucía and Extremadura community, In Jaén city** the annual average peak was 8,000 grains/m<sup>3</sup> (2021 2024).

## Conclusions:

This is the first report comparing aerobiological data from Perú and Spain stations. Poaceae was identified as the most prevalent pollen. In Peruvian cities, the period of high pollens concentration occurred consistently between September to January coinciding with the spring season in the southern hemisphere's. In contrast, in Spanish cities the spring season typically occurs between April to June. We hope that this information will enable allergists to provide appropriate recommendations to their allergic patients travelling to any of these cities.