

diversity of ecosystems because of a 1,500-m elevation gradient. The predominant community types are ponderosa pine, piñon-juniper and juniper grassland with mixed conifer in the northern upper parts of the canyons. The area can be described as rural with mostly native eco systems, and ideal place to investigate the effect of climate on the pollen season.

We observed that temperature (particularly minimum temperature) and rainfall in the months prior to anthesis are important factors for the forecasting models but meteorological conditions at the time of pollen production may modify the pre-established potential of pollination. Qualitatively, our model states that autumns with average cooler nocturnal temperatures area associated with the most severe season for Cupressaceae (more pollen released to the atmosphere). The meteorological conditions for the months of October, November and December were used as independent variables in predictive formulae built by multiple regression analysis. This model will be used to predict the 2010 season. The variance explained percentage by regression analysis varied between 60% to upper 80% ♦

## AEROBIOLOGY OF THE OLIVE (*OLEA EUROPAEA* L.) IN THE SOUTHWEST OF BUENOS AIRES PROVINCE, ARGENTINA

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Related information between the reproductive phenology of species and their pollen in the atmosphere has important implications, not only for allergies but also for phenological, climatological and production studies. The olive (*Olea europaea* L.) is a species that is adapted to Mediterranean conditions. The area of cultivation has expanded widely over the last few years in the southwest of Buenos Aires province. The objective of this study was to perform a comparative analysis of the pollen content of the surrounding atmosphere and the phenology of flowering of the olive. The observations were made in the Rumaroli olivegrove, on Route 3, in the county of Coronel Dorrego. The phenology of flowering of ten olive trees, of the Arbequina variety, was recorded weekly during 2008. An aerobiological control was carried out simultaneously during November, using a volumetric impact sampler placed in the olivegrove. The aerobiological data obtained during the flowering period in 2008 showed a clear coincidence with phase F (flowers open). The maximum peak of emission occurred on 13<sup>th</sup> November (318 grains/m<sup>3</sup> air), date immediately after to the occurrence of phase F. The values were maintained above 10 grains/m<sup>3</sup> air and the main pollen season ended on 24<sup>th</sup> November. The influence of meteorological variables on the concentration of airborne olive pollen was studied and it was seen that the date of peak flowering of the olive coincided with the greatest production of pollen captured in the air ♦

## THE MEXICAN AEROBIOLOGY NETWORK (REMA)

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The idea of creation the Mexican Network of Aerobiology (REMA) emerged from the '90s given the need to identify and quantify the presence of continuous pollen grains dispersed in the atmosphere both in Mexico City, as in different states that comprise the Mexican Republic. However, this idea did not materialize until visiting Dr. Jean Emberlin in her aeropalynology laboratory in the United Kingdom and talking to Dr. Maria del Mar Trigo and Dr. Victoria Jato during the 8th International Congress on Aerobiology held in 2007 in Neuchatel (Switzerland).

Thus, in 2008 began the formal approach to shaping the ReMa through the search of financial support from several national and international institutions. Among the national