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ANALYTIC SUMMARY

ESCUREDO, O.; SEIJO, M. C. & IGLESIAS, I. Evolution of pathogenic and nonpathogenic spores during four campaigns in a potato warehouse.

SUMMARY: A study has been presented on the evolution of pathogenic and non pathogenic spores inside a potato store on Xinzo de Limia (Northwest of Spain). The sampling was done four occasions between the years 2002-2006 using a Lanzoni VPPS 2000 Hirst volumetric sampler type Hirst, located in the high part of the store on boxes of tubers. The analyzed spores belong to the morphologic types *Penicillium-Aspergillus* sp., *Cladosporium* sp., Basidiospores, *Fusarium* sp., *Alternaria* sp., *Helminthosporium* sp. and some *Phytophthora infestans* of which they are responsible for diseases in tubers, resulting in important economic losses. The information demonstrates that *Fusarium* sp. stands out as the principal pathogenic followed by *Alternaria* sp. and *Phytophthora infestans*. The annual and interannual variation demonstrates that of the four years studied, the occasion with the major number of total spores was 2002/2003 with 636,554 spores with a maximum daily concentration of 9,001 spores/m³. A study has been made about the influence of the environmental conditions on the development of the different conidial types in tubers. Temperatures and high dampness favour the development of fungi and determine the later proliferation of spores.

KEY WORDS: aerobiology, aeromycology, potato store, Xinzo de Limia, NW of Spain.

FERNÁNDEZ-GONZÁLEZ, M.; RODRÍGUEZ-RAJO, F. J.; AIRA, M. J. & JATO, V. Phenology of the Treixadura variety cultivated in the Ribeiro Denomination of Origin (Ourense-Spain) during the year 2008.

SUMMARY: The knowledge of the grapevine phenology is of great usefulness in the managing of the vineyard, allowing us to apply the plat protective measures in the phenology stages in which grapevine is more vulnerable to the attack of the different diseases. In this study the phenological behavior and the thermal requirements of the Treixadura variety in the denomination of origin Ribeiro (Ourense, Spain) were described. The work has been carried out in a vineyard situated in Cenlle during the year 2008. Observations have been conducted on 20 plants and the phenology scale standardized by the BBCH has

been applied. During the flowering stage, pollen production has been calculated in terms of pollen production by anther and by plant. Finally the Brix quantification has been taking into account as a measure of the fruits ripeness.

The vegetative cycle, considered as the period of time from the beginning of the sprouting to the vintage, lasted 194 days with an accumulation of 1,160 GDA. The average production of pollen by anther was 4,216 pollen grains, reaching a value of 34,744,936 pollen grains produced by plant.

KEY WORDS: phenology, grapevine, pollen production.

SÁNCHEZ REYES, E.; RODRÍGUEZ DE LA CRUZ, D. & SÁNCHEZ SÁNCHEZ, J. Airborne spore content of *Ganoderma* P. Karst. in the atmosphere of Valladolid.

SUMMARY: The aim of this paper was to test the airborne spore content of *Ganoderma* P. Karst. in Valladolid, which was monitored during 2005-2006. The number of spores count was 2,100 and 3,563, respectively, being the main spore season (MSS) registered since mid July until the end of October. The meteorological parameters that influenced airborne spore concentration during the MSS, significantly and in a positive way, were maximum temperature and winds from NW whereas rainfall and wind velocity did it negatively. The intra-diurnal pattern was very similar for the three models used, reaching a highest hourly concentration percentage around 6 a.m.

KEY WORDS: *Ganoderma*, spores, intra-diurnal pattern, meteorological factors, Valladolid, Spain.

VERGAMINI, S. M.; DUSO, L.; DE ANTONI ZOPPAS, B. C.; FERNÁNDEZ-GONZÁLEZ, D. & VALENCIA-BARRERA, R. M. Airborne pollen calendar of Caxias do Sul (Rio Grande do Sul, Brazil), 2001-2002.

SUMMARY: The pollen concentration in the atmosphere of Caxias do Sul was studied using the volumetric suction Hirst-type sampler (*Burkard*-model), during 2001 and 2002. During the study period, 40 pollen types were identified and 18 of these were selected to compose the Pollen Calendar: *Amaranthus*, *Araucaria*, Asteraceae, *Carya*, Cupressaceae, Cyperaceae, *Ligustrum*, Melastomataceae, *Mimosa scabrella*, *Myrsine*, Myrtaceae, Pinaceae, *Plantago*, Poaceae, *Ricinus*, *Rumex*, *Sorocea* and Urticaceae, which account for 97% of the total pollen content. Clearly distinct pollen seasons were observed, with the highest concentrations of pollen grains in winter and spring.

KEY WORDS: aeropalynology, pollen calendar, Caxias do Sul, Brazil.