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## BIO-O5. SEASONAL AND HOURLY PATTERN OF AIRBORNE AECIOSPORES

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Introduction. Aeciospores are seasonal spores of propagation for rust fungi, mainly parasites of grasses. Spores often appear with light colors as yellow or pink, even hyaline and an echinulate ornamentation. The study aims to analyse airborne presence of aeciospores in two cities and to assess the temporal pattern of their distribution. Material and Methods. The study was developed in 2016. Aeciospores were captured using volumetric spore traps located in Extremadura (SW Spain), at Plasencia (Virgen del Puerto Hospital) and Cáceres (School of Technology at the University of Extremadura), 70 km straight line apart. Spearman correlation coefficient was used to compare daily data. Results. Although present in 154 (PL) and 152 (CC) days aeciospores were recorded mainly in spring. Peak concentrations of 109 spores m<sup>3</sup> (PL) and 74 spores m<sup>3</sup> (CC) were detected in both places the same day (26 May), when mean temperature reached 20°C. Daily concentration showed correlation statistically significant between both places (r=0.38 p>0.001). Temperature showed correlation with spore records (PL r=0.230 p<0.001; CC r=0.326 p<0.001). Hourly distribution showed for both places low concentration along the night and high values between 12:00-20:00. Conclusions. Rust showed a clear seasonal pattern of aeciospores distribution, being May the month with the highest concentrations. Both places studied show similar pattern of distribution and spore concentration, showing that aecisopores appear more abundantly along the light hours of day than in the night hours.

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