

P11 - PORTUGUESE OLIVE OIL WASTEWATERS: LOOKING FOR A UNIFYING MODEL

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This presentation will review the microbiological and physicochemical characteristics of Portuguese olive oil wastewaters (OOWW) based on data collected over the last 12 years (Eusébio 2011, Eusébio 2007, Eusébio 2005). These OOWW were all originated from the continuous oil extraction process (three-phase system) at diverse mills spread all over Portugal (Alfândega da Fé, Oliveira do Hospital, Santarém, Rio Maior, and Tavira). The most common physicochemical parameters pH, COD, TSS, VSS and total phenols content were determined, as well as the microbiological indicators, total aerobic heterotrophic bacteria, yeasts and molds (CFU/ml). Molecular characterization of OOWW bacterial consortia was also achieved using temperature gradient gel electrophoresis (TGGE) to identify the most abundant members. The obtained results and correlations between the measured parameters are presented and discussed based on statistical methods in order to characterize the Portuguese OOWW.

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