

Carboni, A., & Silva, C. L. M. (in press). *Effect of sonication pre-treatment and drying temperature on avocado seeds (Persea americana) drying kinetics and flour quality*. Abstract from ICEF 14 - International Congress on Engineering and Food, Nantes, France.

Avocado finds its primary use as a fresh product, but there is a growing interest in its industrial use. Processing of the fruit originates many by-products and wastes, represented by seeds and peels, whose amount can reach 21-30% of the initial weight of the fruit. This study investigated the effects of sonication (35 kHz 30°C) pre-treatment and drying temperature (40-50-60°C) on Avocado Seeds (*Persea Americana*) drying kinetics and flour quality. For modelling the drying kinetics, five different empirical equations were tested, and the Modified Page model (II) indicated a better fitting to the experimental data. The sonication pre-treatment reduced the drying time. The seeds flour total phenols, and tannins contents showed that only for 60 °C the sonication of the product before drying resulted in better preservation. However, sonication pre-treatment reported a higher color deterioration, particularly in the samples treated at 50 and 60°C.