

Abstract

Pears are very perishable fruit because of its high moisture content (77 – 89%). Drying is one of the practices used in the food industry to maintain quality of the final product for a period of time. The purpose of this research was to study the drying process parameters of Rochas pears variety regarding the way of partitions (slices, cubes, rings) and drying agent temperatures. Research has been carried out, with the help of a drying plant for different working conditions. The parameters of drying agent was 60° C and 70° C, the initial air humidity was 40 – 45 %, the time being set so that at the end of the drying process, the moisture content had the value of 12 to 15 %. Drying data were determined using a vertical laboratory dryer for the horticultural products and adjusted with a mathematical model. The results showed that the dividing method of pears influenced the drying process and its duration. Pears divided as cubes and dried at 70° C, reached 14 % humidity earlier than divided into slices.

Key words: pears, drying kinetics, dryer