

Title Chemical and sensorial quality parameters of dehydrated lemon fruit

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Abstract

Two varieties of lemon - lemon Taiti (*Citrus latifolia*) and Galician lemon (*Citrus aurantifolia*) fruits were dehydrated in the forms of entire lemon or their rinds. The main objective of the present work was to verify the presence of bitterness in the dehydrated product. The effect of fruit variety, maturation stage, concentration of salt solution used for brining, and the fruit and brine ratio were evaluated while dehydration was carried out in a cabin drier. Salt concentration varied from 10, 20, 30, 35 and 40% and contact period from 1, 2, 3 and 4 days while the proportion of fruit and brine solution was varied from 1:2, 1:3 and 1:4. The fruits were immersed in cold or hot water to remove the salt and dried later. Through detailed sensorial and visual tests, it was concluded that the Galician lemon fruits in the mature stage when treated with 30% salt solution for four days, having a fruit/brine ratio of 1:4 presented best results. The optimum dehydration temperature in a cabinet drier with forced air circulation was 60°C. The dehydrated product, triturated in the form of a powder, retained the characteristic flavor and aroma attributes of lemon and it could well serve as a condiment source.