Title Industrial processing of figs by solar drying in Morocco

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Citation ISHS Acta Horticulturae 798:331-334 . 2008.

Keywords figs; industrial processing; solar dryers; solar absorber; pre-treatment; product quality; phostoxin; figs dried conditioned

Abstract

In Morocco, traditional fig drying in done in open air and under direct solar radiations. The raw figs are not controlled and sorted before drying, and the produce is heavily contaminated with bacteria and mould spores. UNIDO managed to develop an improved solar drying system in north of Morocco for small-scale operations. The experience showed that the drying time depends on many variables, especially the quantity and intensity of solar radiations, the relative humidity and the type of produce to be dried. Typical drying time in solar dryers varies from 3 to 8 h. To produce a high quality and cost effective product the drying time must be as short as possible without using excessive heat that causes product degradation. The solar dryers using indirect or convection dryers and in which the product is exposed to warn air heated by means of a solar absorber. With dried figs, the results in all cases showed the reduction in overall drying time, gave cleaner products with longer storage and shelf life, better flavour retention and more attractive appearance than the one obtained by direct solar drying. For example, figs were dried by pre-treating them with sodium meta-bisulphite solution + sodium chlorate solution in 20-30 s at lower than 20°C day temperature. The dried figs are treated by phostoxin within 72 h and immediately packaged in plastic bags.