

MD.3.	
Title	PEACH DEHYDRATION PROCESS USING MICROWAVES
Authors	VIȘANU Vitali, ȚISLINSKAIA Natalia, ȚĂRNĂ Ruslan, POPESCU Victor, BALAN Mihail, MELENCIUC Mihail, GÎDEI Igor
Institution	Technical University of Moldova
Patent no.	Patent no. MD 1923 Y, from 28.02.2026
Description	The invention relates to a process for dehydrating peaches using microwaves, which can be used in food industry enterprises, laboratories and research centers related to dehydration processes.
	The process, according to the invention, consists in initially selecting peaches suitable for drying, ripe, undamaged, with a humidity of 87-91%, washing and

removing the pits from them, then slicing them with a slicer into 3 mm thick slices and arranging a predetermined amount of slices horizontally in a single layer on a flat, perforated support in the drying chamber. After that, the slices are dehydrated by applying microwaves from a magnetron with a total power of 600 W at a regime of 185-245 W, or 800 W at a regime of 210-260 W, or 900 W at a regime of 225-285 W, for 180-225 min until a product humidity of no more than 20% is reached. At the same time, as a thermal agent, intended for removing humidity from the drying chamber, room air with a temperature of 26-30 °C, its relative humidity of 50-65%, normal atmospheric pressure and air flow speed of 1.0-1.8 m/s is used.

Acknowledgments: The described results were obtained thanks to the research carried out within the project: 25.80012.5107.13.SE "Increasing the efficiency of the dehydration process of stone fruits by applying innovative technologies".