



Title of the RRI project: **Automatic machine for honeycomb uncapping and a separator of honey**

Acronym of the project: **AUTO-UNCAPPER-M**

Duration of the project: **07. 02. 2018 – 06. 02. 2020**

Estimated co-financed value of the project: **237.504,98 EUR**

The purpose and the objective of the RRI project is to develop an innovative machine for uncapping honeycombs, which will automate the whole process of uncapping that is a key process in producing honey. Currently, manual uncapping equipment dominates the market for honeycomb uncapping, such as special forks, knives, and rollers for uncapping. There are certain machines on the market for honeycomb uncapping, however, these are only intended for professional beekeepers. Besides that, they have numerous imperfections, which are mostly referred to inadaptability to various shapes and dimensions of the beehive frames.

The objective of the RRI project is to be the first in the world to develop a machine for automatic honeycomb uncapping that will be intended for the middle (with 30-100 beehives) and small beekeepers, at home and around the world. Our automatic honeycomb uncapping machine will enable uncapping knives to adapt to different thickness of the honeycombs, different forms of the side batten and different dimensions. Applied RRI project is likewise exceptionally important for Slovenian beekeeping as it will enable automatic uncapping of AŽ frames, which are a Slovenian feature (in Slovenia 93% of bee families are settled in AŽ beehives, in which AŽ frames are used) and aren't used around the world. As a result of that, it is not expected from foreign beekeeping producers to adapt their uncapping machine for Slovenian beekeepers. Furthermore, we will equip the automatic uncapping machine with a special separator, that will separate honey from wax caps, which can be re-melted in a quality wax, used for producing wax foundation and candles made of bees wax.

With the objective, to set a new standard on a world scale in the beekeeping honeycomb uncapping sphere, we will as part of the project, use all our experience, knowledge and technology, which we have used to develop our other innovative high-technological products (e.g. developing automatic self-turning honey extractors) and we will upgrade those in cooperation with external collaborators with new, innovative technologies and processes.

The registered RRI project falls in a priority sphere of usage S4 "Sustainable food production"; "Agricultural production", focused area 3 "Advanced equipment and technology for producing and processing food", which main objective is more effective agricultural production of nourishment, and additionally focused area 4 "Hygiene, safety and food quality."

"The investment is co-financed by the Republic of Slovenia and European Union from the European Regional Development Fund."

More about it can be found on the website of European cohesion policy in Slovenia: www.eu-skladi.si