

The ESSICA Interreg ALCOTRA project (2014-2020) is aimed at **innovating the aromatic plants supply chain** through the application of a **new cold drying system**; the **analysis and use of drying by-products**; the adoption of **innovative disinfection techniques**; the study of **new types of biodegradable packaging**; the **dissemination of experimental results** to producers and companies; the **promotion of high profile training**.

MÚSES EUROPEAN ACADEMY OF ESSENCES



CONTATTI

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Le Terre dei Savoia

ESSICA **LAB**
 NATURAL TECHNOLOGY



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Le Terre dei Savoia is a recognized association of Piedmontese municipalities. Thanks to partnerships throughout Europe, collaborations with universities and research institutions, the heritage and vocation of our territory live in innovative projects.



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COLD DRYER

Specifications:

load capacity: from 50 to 120 kg

Temperature: 20 - 40° C

Humidity: 5/6%

Suitable for:

aromatic plants, cereals, spices, fruits, flowers, mushrooms, seeds, pollen and beekeeping products.

The cold drying technology is based on refrigeration systems that dehydrate the air for more effective drying, thus enabling the collection of constitutional waters, useful for other preparations. Furthermore, ion sanitisation guarantees the maximum hygiene of the product.

DRYING



GRINDER PULVERISER

Specifications:

2 HP / 1.5 KW / 2300 rpm

Suitable for:

dried or fresh products

Equipped with a hammer or knife cutting system and interchangeable sieves, it can be used to mill or pulverize the product to obtain grinded material or flours.

MILLING



BELL-TYPE PACKAGING MACHINE

Specifications:

chamber dimensions: 422 x 503 x 220 mm / sealing bar 40 cm / vacuum pump 16m³/h

Suitable for:

packaging fresh or dried products

Equipped with stainless steel chamber and sealing bar, it can be used to pack any type of product in vacuum, adjustable from 10% to 99%.

PACKAGING

ESSICA LAB

is the centre of a **network** of entrepreneurs, researchers, producers and consumers, dedicated to high-profile **experimentation** in the food and cosmetics sector.

Equipped with **state-of-the-art machinery** for the transformation of agricultural raw materials, the laboratory is also a place for **exchange** and **reflection** on issues such as the circular economy, sustainability and the development of innovative ideas.

ESSICA LAB is at the service of those who intend to take new paths in the field of **research** and **production**: the laboratory is open to all companies that can take advantage of its technology and machinery for small productions, ad-hoc processing, experimentation and in general for the transformation of products.

MICROWAVE EXTRACTOR

Specifications:

12 l reactor / power 2 x 950 W

Suitable for:

dried or fresh products

Thanks to the selective heating mechanism it does not require solvents and is available in two configurations. The fragrance mode makes it possible to obtain essential oils quickly and effectively. The configuration for flavours obtains natural flavouring substances also rich in pigments, flavonoids and carotenoids.

EXTRACTING

ULTRASOUND EXTRACTOR

Specifications:

2 litres / power 150 W - 50 Hz

Suitable for:

leaves and small branches, flowers, roots

Ultrasonic technology delivers the complete extraction of plant material, preserving the integrity of plant molecules. This technology makes it possible to save a considerable amount of time because ultrasounds speed up the transfer of active ingredients: it is possible to obtain one litre of macerate in just 15 minutes. Moreover, it is an organic technique because it is a physical process during which no chemical products are added.

CUTTING

CUTTER

Specifications:

2 speeds / Power 900 W / 400 V / Speed 375 and 750 rpm

Suitable for:

cutting large quantities of products

Equipped with a cylindrical hopper, it is suitable for the uniform cutting of both long products and small fruits and vegetables such as chilli peppers, strawberries, bananas, grapes.

