



**CIRCULAR
ECONOMY
FOR FOOD**



un progetto di

**Università di Scienze
Gastronomiche di Pollenzo**
University of Gastronomic Sciences of Pollenzo

The circular economy of grapes



Using pomace - grape seeds, stalks, leaves and cellar waste for a true circular bio-economy - on an industrial scale, helps create opportunities to make the economy of the sector more sustainable and safeguard natural resources.

By Emanuele Bompan – director of Renewable Matter



Vinegar obviously comes from grapes, it is the art of the man that transforms them into wine. But it is the magic of chemistry that allows countless by-products to be derived from wine production, from pomace for distillates to polyphenols for cosmetics, to substances such as tartaric acid or color additives and even to the production of energy.

The virtuous world of grappa

One of the precursors of the circular economy of grapes, it has been said, were the producers of grappa, such as Nardini, Nonino, Marzadro, Segnana, Poli and many others. “Nonino distills 90% of pomace from Friuli-Venezia Giulia”, explains **Antonella Nonino**, of the homonymous Friulian

distillery that in 1973, with the creation of the monovitigno, revolutionized the entire sector bringing grappa to the same level as the great international spirits.

“The pomace purchased from selected suppliers with whom we have consolidated relationships, such as Pinot Grigio, Pinot Bianco, Friulano, Chardonnay, Ribolla Gialla, Sauvignon, Tarminer, Merlot, Glera (for Prosecco), Schioppettino, Refosco dal peduncolo Rosso, Cabernet, Verduzzo and Picolit. And some varieties such as Moscato and Malvasia that we purchase in the Broni area in Ancient Piedmont. The pomace from which Grappa Nonino is obtained, once distilled – **100% with artisanal method** in a very short time –, is sent to feed factories for the production of animal food, used as fertilizer for nurseries, used to extract seed oil from grape seeds – which has highly appreciated nutritional characteristics – and finally destined to the production of biogas”.

In 2023, the company presented the circular economy project together with Green Spot Technology and ReGeneration Hub Friuli: *Farina Nonino – Green Spot*. “Ninna Granucci, a researcher of Italian-Brazilian origins, from the startup Green Spot, in love with Grappa Nonino, has created **an innovative gluten-free flour from pomace** thanks to a new fermentation process – which has earned her five patents – managing to obtain a flour that maintains the important nutritional properties of pomace, harmonizing the flavor of the Nonino pomace of white and red grapes”, explains Antonella Nonino. The upcycling process has the advantage of obtaining, in addition to a product of high nutritional value, also an **increase in yield** and a **reduction in production and environmental costs** with lower energy consumption.



Photo by Nonino