Olive Oil Production

Harvesting

Olive picking is an important operation that contributes significantly to the quality and cost of Extra virgin olive oil. The sensory (organoleptic) quality of virgin olive oil depends, among other variables, on the ripeness of olives and, therefore, the harvest period. To obtain quality oil, the olives should be healthy, picked from the tree (not from the ground), and taken immediately to the oil mill for processing. Unmistakably, picking the olives by hand and crushing them within four hours is the golden standard. It is the most crucial step in guaranteeing the highest organoleptic qualities (aromas, flavor, color, chemical properties) from the olive to the bottle. Careful hand-picking prevents olives from quickly deteriorating caused by damage and bruising. Yet it is not always possible to manually pick the olive from the tree because of cultivation techniques, the size and the shape of the plant, and the orchard terrain. It is a small batch process revered by top producers, but

unfortunately, it requires a considerable number of hired workers and is an unattainable investment for most. Because this is a costly practice, most olive oils found in grocery stores today are produced by mass producers using Mechanical shakers or facilitating machines. Only growers with processing mills located on the estate can transport the freshly picked olives within just a few hours or less to prevent fermentation.

Crushing

Once the olives are sorted, removed from debris, and washed in cold water, the olives (including the pits) are crushed. Though stone and granite wheels are still used today as they were for thousands of years, stainless steel rollers or millstone crushers with their non-porous surface are more preferred, resulting in a thick smooth paste of oil, water, and vegetable matter. “10-11 pounds of olives are needed to produce just 1 liter (4 cups) of olive oil.”

Extraction

The olive paste obtained after crushing must be mixed to achieve the maximum oil yield. The mixing operation consists of slowly and continuously stirring the olive paste to break up the oil/water emulsion. Among the few methods used for extracting the oil, the centrifuge method (also known as the Continuous System) is a more modern-day process adopted by artisanal growers. The centrifuge spins the paste at a high velocity -since oil is lighter than water, it naturally separates during this process though it will take an additional spin in another centrifuge to remove any remaining vegetable water. No chemicals or heat are applied, as these deplete the oil of good nutrients naturally found in olives. The resulting oil is left to settle for one month in inert, glass-coated tile or stainless-steel containers, producing an unfiltered that is naturally high in nutrients and is full of flavor and texture.