



Haro . Rioja Alta . España

Our Concern for Human Health & the Environment

A primary factor of olive oil quality is the use of only sound and undamaged fruits. Any injury to the fruit will quickly oxidize its oil, lowering both the sensory quality and the high level of natural antioxidants.

A main threat to fruit health is the risk of attack by the olive fly. Its larvae grow inside the fruit pulp, rotting the fruit, oxidizing natural compounds and increasing the oil's acidity. Such fruit is unsuitable for producing high quality olive oil. Unfortunately, strictly biological methods for the control of the olive fly are not reliable up to now and this is a critical factor in the elaboration of Organic Olive oil.

Given our additional concern for consumer health and environment preservation, we decided to manage our olive groves under the INTEGRATED CROP PRODUCTION guidelines (ICP). ICP is based on ecological principles and integrates multidisciplinary methodologies that are practical, effective, economical, and protective for both public health and the environment. We take the best of both organic production and high-technology methods based on scientific knowledge to keep the use of chemicals at the lowest amount and avoid the problems of conventional agriculture.

1/ Primary Focus on Ecological Orchard Management Principles.

- Weeds grow between the trees making the olive grove closer to a natural wood, increasing soil fertility and biological activity, preventing erosion, and creating a habitat for natural enemies of potential pests.
- Chemical fertilization is used at the lowest level to allow for optimal fruit quality while avoiding soil pollution and excess tree vigour that can make the tree more susceptible to pest and fungal infections.
- Trees are managed in order to allow light and air inside the tree, thereby lowering the risk of fungi and pests. If a pest appears to be dangerous for the crop or quality, biological methods are used first.

2/ Using Biological Methods & Minimizing the Use of Chemicals

- The use of high biotechnology methods, such as the sexual confusion of males to avoid female fertilization, and biological pesticides obtained from natural sources, like *Bacillus thuringiensis*, a bacterium that will infect only a specific pest.
- As a last measure, under strict rules and only when a real economical or quality risk exists, the use of chemicals of a low toxicological profile with a narrow spectra of action (not affecting other insects that can act as natural enemies) and low persistence in the environment. The treatment is applied only when the efficacy is optimal in the natural cycle of the pest, and according to a security period before harvest.

3/ BUREAU VERITAS¹ Certification for Adherence to the Principles of ICP

- Certification by BUREAU VERITAS¹ allows us to include in the back label a Lady Beetle (ICP's logo).
- BUREAU VERITAS checks the adherence to official guidelines by conducting periodic yearly inspections of the olive groves, the elaboration, and the final product - assuring that we abide by the principles of ICP, and are completely respectful of both consumer health and the environment.

The limited use of Pesticides in Dauro's Olive Groves:

With the exception of the olive fly, diseases and pests are controlled by means of biological or biotechnological methods to avoid standard chemicals. To control the olive fly, we perform only two applications of pesticides (as opposed to a standard of more than three in orchards), and we reduce the amount of pesticide applied. We mix the pesticide with an attractive protein and apply this to only a sixth of the orchard. The protein attracts the fly and then is killed by the pesticide. Our total amount of pesticide applied is much lower than in standard orchards, resulting in no pesticide residues in our olive oils.

¹ Bureau Veritas is the most widely recognized certification body in the world, offering solutions in the fields of quality, health & safety, environment and social responsibility.