

**#91-21-CATLRJ**

**Technology**

**Food Technology**

**Natural Antioxidant, Hydroxytyrosol (DOPET), from Olive Mill Wastewater**



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Industry Laboratory

Olive Production Health

#antioxidante |# hydroxytyrosol |#DOPET |#phenolic compounds |#polyphenols|#effluents  
|#olives |#3,4-dihydroxyphenyl ethanol |#anti-inflammatory |#antiviral |#olive trees |#olive

<https://www.argentina.gob.ar/inta/tecnologias/extraccion-de-hidroxitirosol-dopetde-efluentes-de-la-aceituna-de-mesa>

The main issue from the olive mill process for preserved table olives is the use of water and the residues, such as wastewater, which require treating to prevent contamination in the areas where they are disposed of. Hydroxytyrosol (3,4-dihydroxyphenyl ethanol; DOPET) is one of the most powerful antioxidants, found mainly in the leaves and fruit of the olive tree, with proven positive effects on cardiovascular health, anti-inflammatory and antiviral properties, and found in high concentrations in the effluents from the olive processing industry.

Hydroxytyrosol (DOPET) is the most abundant phenol and the most active scavenger of free radicals found in olives and virgin olive oil. It is a highly powerful antioxidant and a well-known safe food additive, according to regulatory agencies like the FDA. The laboratories from the Agricultural Experiment Station of Catamarca have worked to obtain hydroxytyrosol from olive mill wastewater.

This product is aimed at the olive processing industry overall, as well as services companies that work to improve the quality and security standards of industrial effluents. In this case, the hydroxytyrosol (a natural antioxidant) extraction and production technology has been developed from the wastewater of the table olive industry. The latter enabled to obtain a byproduct and reduce environmental contamination.

Bioactive compound recognized as a safe food additive by regulatory agencies like the FDA.

Natural Antioxidant

Strategy that contributes to maintain effluents safe.

Environmentally friendly.

The technology is in the development stage at laboratory scale. Currently, activities are focused on finding optimal effluent preservation techniques.

Determining the most appropriate existing technology to separate and concentrate hydroxytyrosol.

Transfer to scale production at profitable levels.

Communication of product benefits and marketing.

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