

PROCEDURE FOR VARIETAL CERTIFICATION OF VEGETABLE OILS

Description:

Currently there are different systems for the varietal or specific certification of oils of plant origin based on DNA. To make this type of certification, these systems are sometimes based on the presence or absence of other chemical compounds such as fatty acids or tocopherols. These methods are highly complex and expensive and do not offer a satisfactory degree of reliability. Other criteria used to detect mixtures of oils of different species, whether fraudulent or legal, are also carried out by determining the presence or absence of certain chemical compounds. Other methodologies based on the distinction of physical properties are also used. On the other hand, there are also studies that have managed to differentiate varieties of olive trees and other plant species according to their DNA through the use of various molecular markers such as RAPD, SCAR, EST or SSR. These studies are usually carried out from plant tissues such as leaves and fruits and not from the oils obtained from these species. Thus, the present technology presents a system based on the use of DNA molecular markers as a reliable, fast and cheap criterion for the determination of the varieties and plant species used for the manufacture of oils of vegetable origin.

Keywords:

[Olive](#), [Oil](#), [Dna](#), [Genetics](#), [Vegetable](#), [Detection](#)

Sectors:

[Biotechnology](#), [Agri-food](#)

Areas:

[Food](#), [Industrial](#), [Biotechnology](#), [Genetics](#)



Advantages:

Among the main advantages of the present invention are:

- The reliability and speed with which the results are obtained.
- The use of the oil itself as a source for obtaining the results.

Uses and Applications:

The nature of this method allows it to be applied to any oil or fat of vegetable origin regardless of whether it has been manufactured from a single variety or from several varieties of the same species, or from a mixture of different plant species. The technique that is exposed in this technology has great importance in quality certifications.

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