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Fernandez-Lopez, Manuel Viuda-Martos

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Sommario/riassunto

This Special Issue will look at the advances made in the essential oils. Essential oils have received increasing attention as natural additives for the shelf-life extension of food products, due to the risk in using synthetic preservatives. Synthetic additives can reduce food spoilage. but the present generation is very health conscious and believes in natural products rather than synthetic ones due to their potential toxicity and other concerns. Therefore, one of the major emerging technologies is the extraction of essential oils from several plant organs and their application to foods. Essential oils are a good source of several bioactive compounds, which possess antioxidative and antimicrobial properties, so their use can be very useful to extend the food shelf-life. Although essential oils have been shown to be promising alternative to chemical preservatives, they present special limitations that must be solved before their application in food systems. Low water solubility, high volatility and strong odor are the main properties that make it difficult for food applications. Recent advances refer to new forms of application to avoid these problems are currently under study. Their application into packaging materials and coated films but also directly into the food matrix as emulsions. nanoemulsions, coated and others are some of their new applications.