



Research project description

Selection and study of lactic acid bacteria from local foods and their impact on food security (food preservation and antimicrobial activity) and health safety (reducing the allergenicity of milk products)

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Abstract

Herbal medicine is a very effective approach in human pharmacopoeia (Vinson et al. 1995). Approximately 70% of wild plants in North Africa have potential value for medicine, biotechnology and optimization of food resources. And medicinal plants constitute a focal point for the development of socio-economic interests of conserving our botanical heritage. The majority of work on medicinal and aromatic plants in the North African focused on the collection, botanical identification and elucidation of the chemical structure of the compounds that constitute them. These plants are still unknown antioxidant and antifungal properties point of view. *Myrtus* is a species of wild plant characteristic of the Mediterranean. This plant is used fresh or dried as a culinary plant. Its essential oils are widely used in alternative medicine with their antiseptic, anti microbial and anti-spasmodic.

The surveys carried out in Tunisia and Morocco, have revealed to the presence of many fungi affecting various organs of plants such as sorghum grown in Morocco, strawberries, vines and crops in Tunisia. Fungal complex observed on grain sorghum consists of a number of species higher compared to that of the foliar lesions. The most common species are *Fusarium* sp. with a rate of 82%, followed by *Curvularia lunata* (79%), *Alternaria alternata* (53%) and *Trichoderma harzianum* (40%). In addition, moisissures are filamentous fungi that grow on a wide range of products used in the food ration. The main substrats on which they are proliferated oilseed and cereal crops but also the also found in forages. Pricipaux the kind of mycotoxin-producing fungi are *Aspergillus*, *Fusarium* and *Penicillium*.

Thus, our study is to search within a group of medicinal plants in the northern region of antigenotoxic those with power and particularly an antioxidant power and / or anti-fungal. The completion of this study part of a part in inciting the conservation of Moroccan and Tunisian botanical biodiversity, on the other hand to support the Bedouin community who are beginning to realize the scale of the domestic and international markets medicinal plants.