

Mineral composition of black and white fruits of *Myrtus communis* L.



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Keywords

Myrtus communis L.

fruits

minerals

NWFP

Wild Nuts & Berries

Scale

Global

National

Context

Myrtus communis is an aromatic plant native plant of Mediterranean region and Southern Europe. In Tunisia, most of the myrtle are concentrated in the North of the country (35,000 ha) (ODESYPTANO 2007). The myrtle is considered by the local authorities as a "strategic plant" because of its economic importance. It is among the most important plants in terms of production of essential oils at the national level. Fruits of myrtle are poorly exploited and needs valorization and development of its uses.

Objective

This work aims the valorization of myrtle fruits through the determination of its mineral composition. Such a study is important to highlight the nutritional value of this NWFP.

Results

Fruits of myrtle showed an important amount of minerals. Both black and white fruits showed an important amount of magnesium (Mg), calcium (Ca) and Iron (Fe). Magnesium amount varied from 3961 to 4587 mg/g MS for black and white fruits, respectively. The rate of calcium was about 9567 mg/g MS for black fruits and about 12942 mg/g MS for white fruits. White fruits of myrtle showed higher amount of Fe (510 mg/g MS) when compared with Black ones (345 mg/g MS).

Recommendations

Fruits of *M. communis* constitute an important source of minerals. The harvesting method is also important to preserve the resource. The fruits must be harvested directly from the plant without tearing the branches.

Impacts and weaknesses

The valorization of myrtle fruits is important to preserve the resource. The highlight of the nutritional value of This NWFP is likely to the development of its uses in the food sector.

Besides its mineral composition, several other analyses need to be performed such as phenol and lipid composition.

Fruits are known by their astringency. This can be a problem when used in food sector.

Future developments

Fruits of myrtle are edible NWFP. It can be used for the development of alimentary products such as jam, juice....

The astringency of fruits must be minimized to favor their consumption.



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Further information

ODESYPANO : Mhamed NAIJA et Hamed DALY (2007) Etude sur l'association des populations des zones montagneuses et forestières du Nord-ouest à la promotion de la filière des Huiles Essentielles. Rapport final,

« This project is carried out under the MOBIDOC scheme, funded by the EU through the EMORI program and managed by the ANPR »

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About INCREDIBLE Project

INCREDIBLE project aims to show how Non-Wood Forest Products (NWFP) can play an important role in supporting sustainable forest management and rural development, by creating networks to share and exchange knowledge and expertise. 'Innovation Networks of Cork, Resins and Edibles in the Mediterranean basin' (INCREDIBLE) promotes cross-sectoral collaboration and innovation to highlight the value and potential of NWFPs in the region.



Funding

'Innovation Networks of Cork, Resins and Edibles in the Mediterranean basin' (INCREDIBLE) project receives funding from the European Commission's Horizon 2020 programme under grant agreement N° 774632.