



MINERAL AND WATER CONTENT ANALYSIS OF PASTINACA SATIVA(PARSNIP): IMPLICATIONS FOR NUTRITION AND HEALTH

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Abstract:

Parsnip sativa (parsnip), is a biennial, vegetable plant with nutritional and medicinal properties used mostly for the roots. Described as a sweet and starchy root, it contains health-promoting compounds such as carbohydrates, proteins, pectins, cellulose, flavonoids and dietary fibers. It is recommended for the preparation of dishes and as a spice being characterized by high mineral (K, P, Ca, Mg, Na, Fe, Zn, Cu) and vitamins content (A, B1, B2, B9 and C). The aim of the study is to investigate the water content and mineral composition of parsnip roots and leaves, available on the Romanian market and to identify the implication of consumption for nutrition and health.

• Introduction

Parsnip is considered an important vegetable also, due to its medicinal effects and can be part of a strategy to support overall health and immune function of the consumers

• Material and method

The analysis of minerals was performed using XRF spectrometer. The moisture content was determined using Thermobalance Sartorius 50.

• Conclusions

Compared to other root vegetables, the versatile parsnips may not be as widely consumed as some other root vegetables but including a diverse range of vegetables in our diet we ensure a variety of nutrients and flavors. XRF Analysis helps highlight the variation in elemental composition among the parsnip samples from different markets, potentially reflecting different growing conditions, soil compositions, or agricultural practices.

• Results and discussions

Compared to other root vegetables, parsnips show high content of minerals which are beneficial to human health.

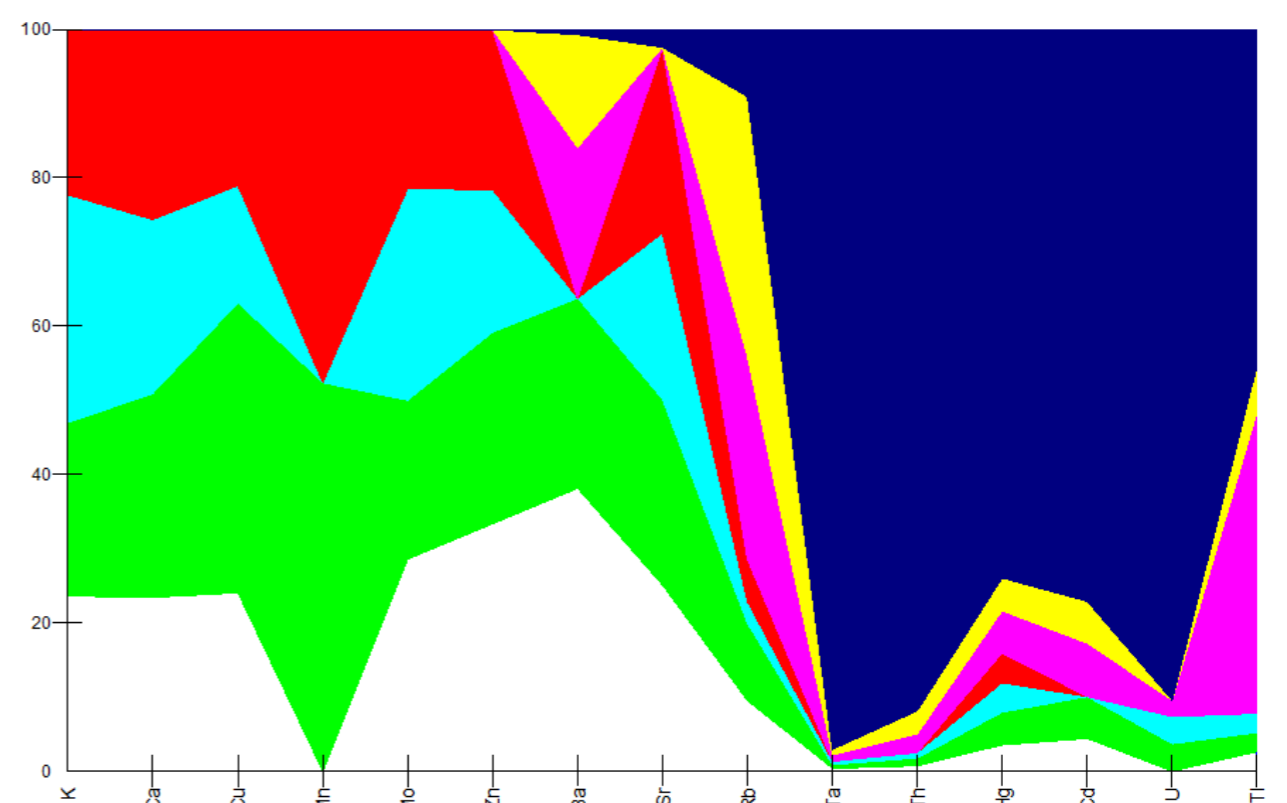


Figure 1. Parsnip Mineral Fingerprint