

Regional geographic traceability of Treviso Red Chicory

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Food traceability is the ability to track any food through food supply chain, from production to distribution, from where the food came (one step back) and to where the food will go (one step forward). Food geographical origin is essential to protect regional designation, ensure fair competition, prevent diffusing of food pathogen and, last but not least, improve consumer confidence. The technique of stable isotopes is an effective tool for food origin assessment and to recover consumers' confidence; it's generally adopted to various food such as wine, honey, coffee, dairy, vegetables, meat and so on. The aim of this work is to check the geographical origin of Treviso Red Chicory (tardivo and precoce varieties) applying the stable isotopes technique. Several environmental matrices (i.e. oil, water and vegetable) will be examined to ensure the uniqueness and quality of the final product. Two areas were investigated in Veneto (NE of Italy): the former, located in Treviso province, is regulated by the Consortium of variegated Red Chicory of Treviso and Castelfranco; the latter is located in Padova province and is not regulated by the Consortium. Approximately, 89 Chicory samples (63 for tardivo and 26 for precoce varieties) and 68 soil samples (taken at different depth: 0-20 cm and 20-40 cm) were collected. A monthly precipitation sampling (started from October 2015) were conducted in the study areas and 4 irrigation water samples were also collected. The next step of this work, focused on the stable isotope analysis of the above mentioned matrices, will hopefully give the isotopic signature of the examined product.