

## STATE OF THE ART OF SENSORY ANALYSIS FOR PDOS IN EUROPE

Mario Zannoni

*Organismo Controllo Qualità Produzioni Regolamentate, Reggio Emilia, Italy;*

*mariozan@ocqpr.it*

Protected Designation of Origin and Protected Geographic Indications (PDO-PGI, shortened to PDOS) have had a steady success in Europe, with more than 1.000 products registered.

The market value of PDO/PGI last year was approximately 15 billion euros.

The most important products in terms of quantity (wine excluded) were beers, then cheeses and fruit/vegetables; in terms of value the first is cheese, followed by meat/meat products, beers and fruit/vegetables.

The most important PDOS countries are Italy, France and Spain.

In particular the PDO cheese sector sees Italy with 34 PDOS with 469.000 tons production, France with 45 PDOS with 207.000 tons production, Greece with 20 PDOS and 107.000 tons production, the Netherlands with 4 PDOS and 26.000 tons and Spain with 19 and 16.000 respectively.

There are very few PDOS produced by large or medium companies, normally the producing firm is a micro-company with local sales.

Amongst producers there is often a lack of organization to exploit the potential of PDOS. Most of the smaller producers do not see any advantage in using sensory analysis; for them this tool is considered maybe useful for research but too expensive.

On the other hand consumers in Europe seem very interested in traditional local products even though EU consumer awareness of the official PDO/PGI marks seems very limited.

The European Community has shown interest in further development of Geographic Indications (GI) systems stating that: -“The future for many of Europe’s farmers lie less in bulk commodity production, and more in quality products, which maximise the value of agricultural output” (EC Fact Sheet, 2007).

The Commission recognizes nevertheless the need for improvements in the actual system. In EU documents about GI nevertheless *the quality is often highlighted but the taste and sensory characteristics are very rarely quoted.*

In general, research institutes show interest for sensory testing of PDOs, sometimes also with the financial backing of local institutions. Naturally, the largest number of research papers are produced in countries with the largest number of PDOs, such as Italy, France and Spain. Considering the economic importance of the GI in Italy is no wonder that scientific interest in such products is very high.

In quality control organoleptic tests by producers are carried out not for every PDO, but when they exist such tests are not classified as sensory analysis.

Many PDOs are in fact tested organoleptically by expert in a traditional way for commercial purposes, often with a quality score.

In Europe the interests of consumers for tasting PDO products is unevenly distributed. In our continent traditional local food has certainly an appeal among the consumers, but they see the products in a different way according to the geographical areas (F.Vanhonacker et al.,2008). Many people talked about Northern European and Southern European food culture. It is certain that in some southern countries (i.e. Italy, Greece, Portugal) interest in PDO/PGI is high whereas on the contrary in some northern countries like Denmark, Finland, Sweden and Germany such interest is low (Becker, Staus, 2008).

The “single document” of PDOs registered in EU database (DOOR, 2012) always shows the sensory features of the products. Many PDOs have a sensory check on the finished products done by experts, some of them have no sensory check at all. In Europe the general situation is very mixed. It seems that in terms of sensory evaluation every PDO decides autonomously. Sometimes there is a very generic sensory description, sometime a line stating: “taste characteristic”. In some regulations there is a sensory description, but no statement about how to check it.

The PDOs official control by means of sensory analysis are diffused and homogeneous in France, limited and non homogeneous in Italy, episodic in Spain and have some diffusion in Portugal.

In these tests the training of the panellists has to be very accurate because is through their experience that is possible to define a compliance limit to the sensory requirements of a product.

It is thus important also to have guidelines as to how to define the compliance limits and how to train the panellists to evaluate compliance.

Sensory analysis has more chance of being introduced for products of prestige and market relevance. Sensory analysis is an essential tool to define the specificity of a PDO. Taste changes in the same way that there are changes in our European society, it is thus important to know and to follow in time the reaction of consumers to our traditional PDO/PGI products.