

THE MARKET FOR FARMED RED PORGY IN FRANCE, GREECE, ITALY AND SPAIN

A study made within the COLORED project (Contract Q5RS-31629)
"Environmental, nutritional, and neuroendocrine regulation of skin
colouration in the Red porgy (*Pagrus pagrus*) towards the
development of natural hue in culture populations"

Project Coordinator – Dr. Michalis Pavlidis

Made by
Marie-Pierre Boudet (Package leader)
Stéphanie Abbal
Hugues Drouin

Supervised by Andrew Cookson

For GIRAG S.A.
CIB 13 chemin du Levant
F-01210 Ferney-Voltaire, France
Tel: +33 450 402 400
Fax: +33 450 402 402

Coordinated by Courtney Hough

For the Federation of European Aquaculture Producers (FEAP)
Rue Nicolas Fossoul 54
B-4100 Bonnelles Belgium
Tel: +32 4 3382995
Fax: +32 4 3379846

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Project Summary

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ENVIRONMENTAL, NUTRITIONAL AND NEUROENDOCRINE REGULATION OF SKIN COLORATION IN THE RED PORGY (<i>PAGRUS PAGRUS</i>), TOWARDS THE DEVELOPMENT OF NATURAL HUE IN CULTURED POPULATIONS		
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<u>PROJECT COORDINATOR</u>		
Name: Michael PAVLIDIS	Title: Dr. Lecturer	Address: Hellenic Centre Marine Research, GR-71003, Heraklion, Greece
Telephone: +30810242022 +30810394084	Telefax: +302810394084 +302810394408	E-mail address: pavlidis@biology.uoc.gr
Key words: adrenergic receptors, carotenoids, chromatophores, color, MSH, Pagrus pagrus, red porgy, stress		
World wide web address		
List of participants		
<p>Partner 1: HCMR – Hellenic Centre Marine Research, Institute of Aquaculture, P.O. Box 2214, GR-71 003 Heraklion, Greece. (Coordinator).</p> <p>Partner 2: KUN -Katholieke Universitat Nijmegen, Dept. of Animal Physiology, Toernooiveld 1, 6525 ED Nijmegen, The Netherlands (Contractor).</p> <p>Partner 3: ICCM - Instituto Canario de Ciencias Marinas, Grupo de Investigación en Aquaculture. Canary Islands Autonomous Government. Muelle de Taliarte S/N, SP-35 200, Telde, Las Palmas, Spain. (Contractor).</p> <p>Partner 4: UoC - University of Crete, Department of Biology, P.O. Box 2208, GR-71 409, Heraklion, Greece (Contractor).</p> <p>Partner 5: InterFish S.A., GR-35 012, Larymna Lokridos, Greece (Contractor).</p> <p>Sub-contractor to Partner 1: FEAP - Federation of European Aquaculture Producers, Rue Vivaldi 30, B-4100 Bonnelles, Belgium.</p> <p>Sub-contractor to Partner 2: UAB - Lab. of Fish Physiology and Aquaculture, Department of Cell Biology, Physiology and Immunology, Faculty of Sciences, Universitat Autònoma de Barcelona, 08193-Bellaterra, Spain.</p>		

Summary & Conclusions

SUMMARY & CONCLUSIONS

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1.

SUMMARY & CONCLUSIONS

This study was carried out in 2003 to fulfil the objectives of Workpackage WP6 - Market analysis of the final product - as part of the EU's COLORED project on farmed red porgy.

Objectives

Our objectives were, in the principal markets for red porgy - **Italy, Greece, Spain and France** - to assess the acceptability of the farmed product to those responsible for purchasing it for the main distribution channels.

Since the farmed fish remains visibly different from the wild one, the task was in fact twofold:

- To assess the degree of assimilation and acceptability for the trade buyer of the farmed fish along side of the wild one of the same name
- As a consequence, to establish the extent to which the farmed fish - a "new" red porgy, which is no longer red, nor necessarily the same size as the wild fish - would be accepted and/or welcomed by the trade.

In so doing, we have ascertained the optimal form, colour and size for this, and the applicable price ranges for sale to the public.

The result of this was to show us what farmed red porgy's appearance and qualities should be in order to obtain maximum acceptance in its main distribution networks, and the extent to which these can be valorised in the price.

Methodology

Interviews were carried out Italy, Greece, France and Spain with a minimum in each of six fish buyers for major retailer chains and wholesalers.

Besides responding to questions corresponding to the chapter headings in our country reports, the buyers were shown photographs of seven fish and asked to identify them. One of the fish was a farmed red porgy, while the others were wild red porgies and fish of similar appearance, with the exception of a sea bass that was included as a control. The results are shown in tabulated form in each country report.

The fish were professionally photographed in Athens and Heraklion and were supplied by the head of the COLORED project. The photographs used are shown in Appendix 1 below.

Documentary research was carried out on consumer habits and motivation from trade and other journals.

Form of the Report

The Report is presented with the following structure :

Summary & Conclusions

Body of the Report : the four Country reports, each of which follows the same format, and the results of the Sensorial Analysis carried out in Italy;

1. Italy
2. Greece
3. Spain
4. France
5. Summary of results of the Sensorial Analysis.

Appendices :

1. The photographs used in the interviews with distributors
2. The original Sensorial Analysis report in Italian.

Important Disclaimer

Our research, analyses and conclusions have been carried out based almost exclusively on information and opinions received from interviews and from published documentation.

Therefore, although we have tried to ensure the completeness and accuracy of information used, all readers and users of this study recognise and accept, by so doing, that neither GIRAG nor any members of its staff or consultants accept any responsibility whatsoever for any loss or damage incurred, directly or indirectly, by any party, however the loss or damage is caused including as a result of negligence, as a result of decisions taken or actions made by any party on the basis of any information, conclusions or recommendations contained in this study.

In this Summary & Conclusions, we draw together the results of the four country analyses to be found in the body of the report, as well as the results of the taste tests carried out in Italy. The reader should refer to those analyses for any specific questions arising from this Summary.

1.1 THE ROLE OF MEDITERRANEAN FISH IN THE DISTRIBUTOR'S OFFER TO CONSUMERS

Fish Consumption per Country, 2001

	France	Greece	Italy	Spain
Fish & sea-food (tonnes)	2 150 990	464 538	1 746 207	2 364 495
Per capita cons. (kg)	35.3	42.5	30.1	58.7
Of which:				
Marine fish (tonnes)	138 666	26 502	102 755	131 068
Per capita cons. (kg)	2.3	2.4	1.8	3.3
Freshwater fish (tonnes)	215 780	30 206	98 094	62 745
Per capita cons. (kg)	3.5	2.8	1.7	1.6

Source: GIRA from FAO

1.11 IMPORTANCE OF FRESH FISH IN GENERAL

Fresh fish is generally considered to be important by the modern multiple retailers, not necessarily in terms of profitability, as the fish department is expensive in terms of labour cost, but because it gives a good brand-image to the store. This is not as true in Greece, since the Greek consumer traditionally is not a major fish-eater, and not all retail chains have fish counters in their stores yet. Fruit and vegetables are more important than fish in Greece to create a good store image.

The share of Mediterranean fish in overall fresh fish consumption is very different from one country to another. The two extremes are:

- Greece, where Mediterranean fish accounts for an estimated 70% to 75% of the overall fish consumed, and where Greek origin is very important. This can even lead to frauds, as Greece has to import some species, given limited domestic supplies
- Italy, where consumers do not reason in terms of geographical origins and where Mediterranean fish is mostly imported and farmed anyway.

Mediterranean fish has a globally positive image of “freshness” and “holidays”. However, its price is higher than Atlantic fish.

1.12 CONSUMER TRENDS

Mediterranean fish consumption suffers from decreasing fish availability and the irregularity of supply due to fishing conditions. It has also suffered from the introduction of the Euro in Italy (price inflation), and the decrease in volumes has been only partly compensated by the rise in farmed fish.

The consumption of Mediterranean fish is also influenced by seasonal factors, and by geography; consumers who live on the Mediterranean coasts and islands tend to eat local fish as part of their gastronomic traditions.

1.13 CONSUMER PROFILE

Mediterranean wild fish consumers tend to be adults **aged** over 40 years old, as the fish requires some cooking ability. Moreover, the fish are mostly bought by middle and upper class consumers, because of their high price. Greek consumers tend to eat more fish in restaurants.

The **frequency** of consumption is also hard to quantify because it depends on season and geography. It would appear that Spain is the country where the consumption frequency is the highest (once to two times a week).

The fish can be **cooked** in all imaginable ways (fried, grilled, in the oven, in salt ...), depending on the season and the species.

Mediterranean fish tends to be served whole, hence a preference for smaller sizes of fish. However, there is a market for larger fish for family consumption, and for catering.

1.14 DISTRIBUTORS' BUYERS' PROFESSIONALISM & KNOWLEDGE OF FISH

The following chart indicates the degree of recognition shown by the various operators interviewed by GIRA. The retailer and wholesaler buyers interviewed were asked to give the names of the seven different fish presented to them on photographs. The fish were all photographed by a professional and are shown in Appendix 1 at the end of this report.

GIRA has given a "1" for each right answer and a "0" for a wrong answer and for no answer at all.

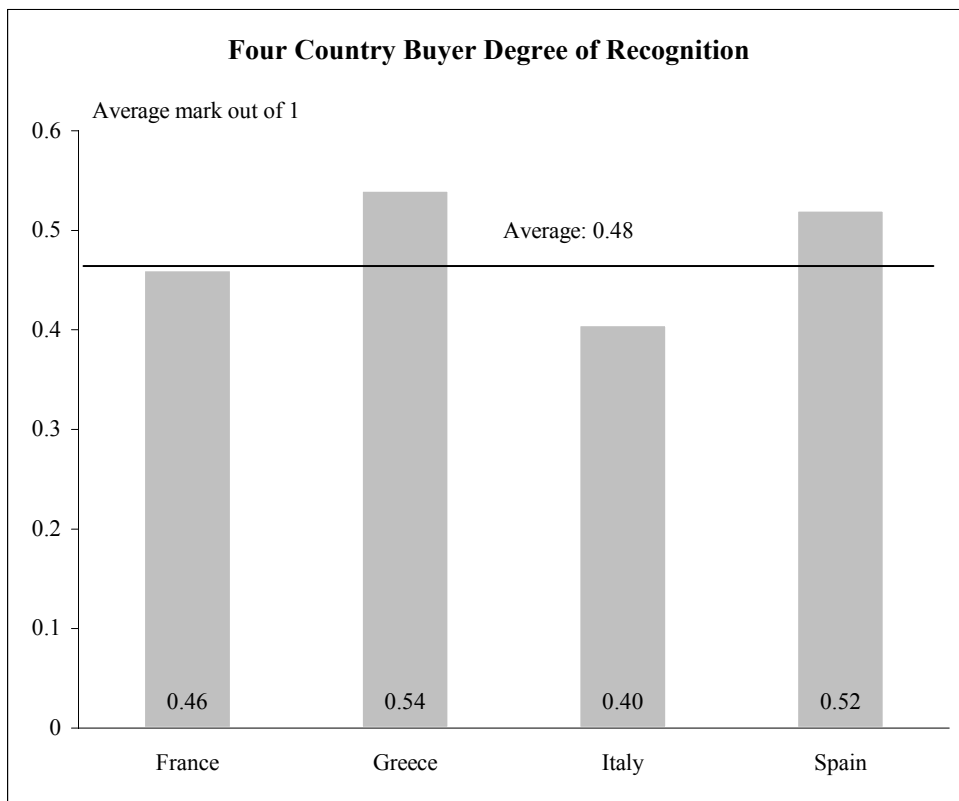
From this chart, we can conclude that:

- the degree of recognition is surprisingly rather low, with an overall average of just 48%. Some buyers showed remarkable errors of judgement
- Greek buyers are relatively more knowledgeable than the other three, but still only with an average of 54%, followed by the Spanish buyers at 52%.

This result can be partly explained by the presence of red porgies among the pictures. This fish is more familiar to Greek buyers than their European counterparts. The recognition obtained for sea-bream and sea-bass are better, given that these are more common fish overall.

Only in Greece did anyone (2 out of 7) rightly recognise the farmed porgy. In the large majority of cases, it was declared to be one of the varieties of seabream, although several buyers were clearly uncomfortable with their choice. There is little doubt that the considerable similarity between the farmed red porgy and seabream will lead to confusion and the risk of both consumers and buyers being misled.

Worse still, for the farmed red porgy, it will be impossible to differentiate it clearly (and hence to valorise it) with its present colouration and shape.



Source: GIRA Interviews

1.2 PERCEPTION OF FARMED FISH

Farmed fish were introduced many years ago in the countries analysed, and have gained a positive image in several of the countries, except in France where prejudices are still strong. Despite the fact that consumers are generally happier to eat wild fish (especially in restaurants), they acknowledge the following advantages of farmed fish:

- cheaper, more stable prices
- regular supplies
- increasing quality (in terms of fat in particular)
- strict controls on production (and traceability)
- better freshness than wild fish
- acceptable taste.

These are also the factors which make retailers very favourable to farmed fish.

Communication with consumers mostly comes from retailers (through posters about farmed fish in their stores) as there is a lack of institutional communication.

The French consumer is still reluctant (even if this has been slowly changing over the years) to consume farmed fish, mostly because of French retailers who push wild fish more than farmed fish. The French consumer still believes that farmed fish is less healthy than wild fish and has fears about feed. She prefers to consume wild fish, even if it is more expensive.

The Italian consumer is also reticent about farmed fish, acknowledging the superiority of the wild fish, but appreciating more and more the lower prices of farmed fish.

Spaniards have started to feel more concerned about fish feed and fish stress in recent years.

And in general, **consumers feel happier with a farmed fish if they already know the wild variety.**

1.3 RED PORGY SALES

1.31 SALES TRENDS

Red porgy is sold in all four countries studied, however volumes are very small, too small to be monitored by any regular consumer panel. Greece seems to be the major market with a total of 7 000 tonnes a year, of which 1 400 tonnes of fresh red porgy, the remainder being sold frozen.

The Italian market for red porgy is mostly in food-service, providing the fish is bigger than 2kg and especially when it can be used for a buffet meal.

Red porgy sales reflect the same geographic presence as Mediterranean fish in general, with higher volumes registered on the Spanish coasts and islands, and in the south of France, than in the more inland parts of the country.

Sales of red porgy are stable in most countries, but can show a rising trend wherever retailers put effort into selling it.

1.32 ORIGINS

Domestic production of wild red porgy is minimal in all four countries, hence the high share of imported products, mostly from non-EU countries. Red porgy can come from two types of countries, depending on the level of price/quality required:

- Morocco and Tunisia: high price and quality
- other African countries (Senegal, Mauritania) and South America (Brazil, Argentina): cheaper prices - so the majority of supplies come from these countries.

Red porgy mostly goes through wholesalers/importers, rather than direct to the retailer, given the small volumes involved.

1.33 SIZE

There is a wide range of sizes of red porgies available, the smallest weight mentioned to GIRA being 150g, on the Italian market. The most common size, however, seems to be between 300 and 700g, portions for one or two people. The biggest sizes (between 1kg and 5kg) are destined mostly to the food-service sector, and for the Christmas period in Spain.

There are different trends per country: while both Italian and Greek markets are markets for larger sized red porgies, the Spanish and the French ones on the contrary are markets for medium sized fish.

1.34 SELLING PRICES

There is a wide range of prices linked to the origin of the fish. The most expensive origins seem to be Mediterranean ones (Greece and Spain) as well as Morocco. Senegal, Oman and Argentina are much cheaper. Brazil and Mauritania supply frozen red porgies and can supply products at very low prices.

The Mediterranean fish is more expensive but also considered by consumers to be of higher quality, while the Atlantic one is more consistent in its supplies and also cheaper (except for fish from Morocco, which is assimilated to Mediterranean in terms of quality). Fresh fish is also more expensive than frozen.

Prices indicated in Greece were much higher than the other countries. This can be partly explained by the fact that red porgy is a luxury item in Greece.

Red Porgy Retailing Prices, 2003 (EUR/kg)

	France	Greece	Italy	Spain
Greece		27<40		
Morocco		up to 25		10<16
Spain				10<16
Senegal	Overall average:	11<16	7.5	
Oman	10<11	10<12	8<9	
Argentina				5<7
Brazil			4.6	
Mauritania		4.5		

Source: GIRA interviews

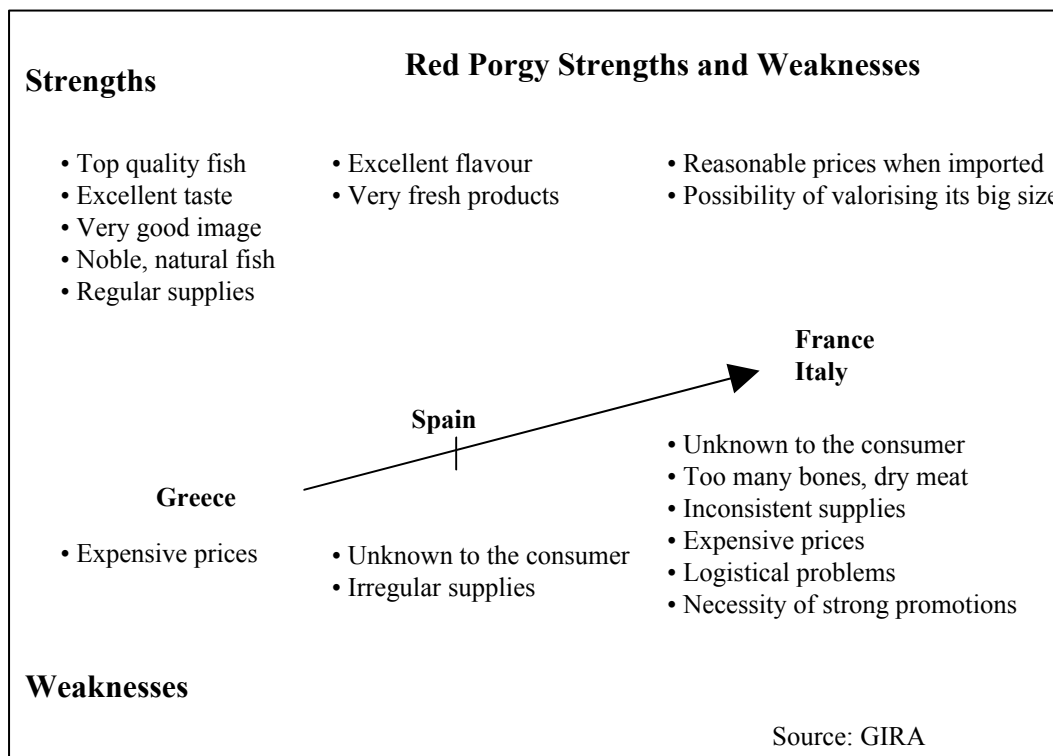
1.35 STRENGTHS AND WEAKNESSES OF WILD RED PORGY

There are three types of market for red porgy: Greece; France & Italy; and Spain situated half way between the two extremes. On the Greek market, red porgy is perceived very positively. It is considered as a top quality fish, whose image is excellent and whose only weakness is the high price, which can be overcome by obtaining cheaper imported products.

The Spanish market is more difficult to assess, given that red porgy is generally unknown to the consumer (and sometimes to the buyer).

The other two markets are even more difficult to approach as red porgy is generally unknown to the consumer *and* the taste is not widely appreciated. Logistical prices problems are also said to reduce the product's shelf-life and have a negative impact on both freshness and product colour.

Irregularity of supplies makes it difficult to create a better knowledge among potential consumers.



1.36 COMPETING FISH

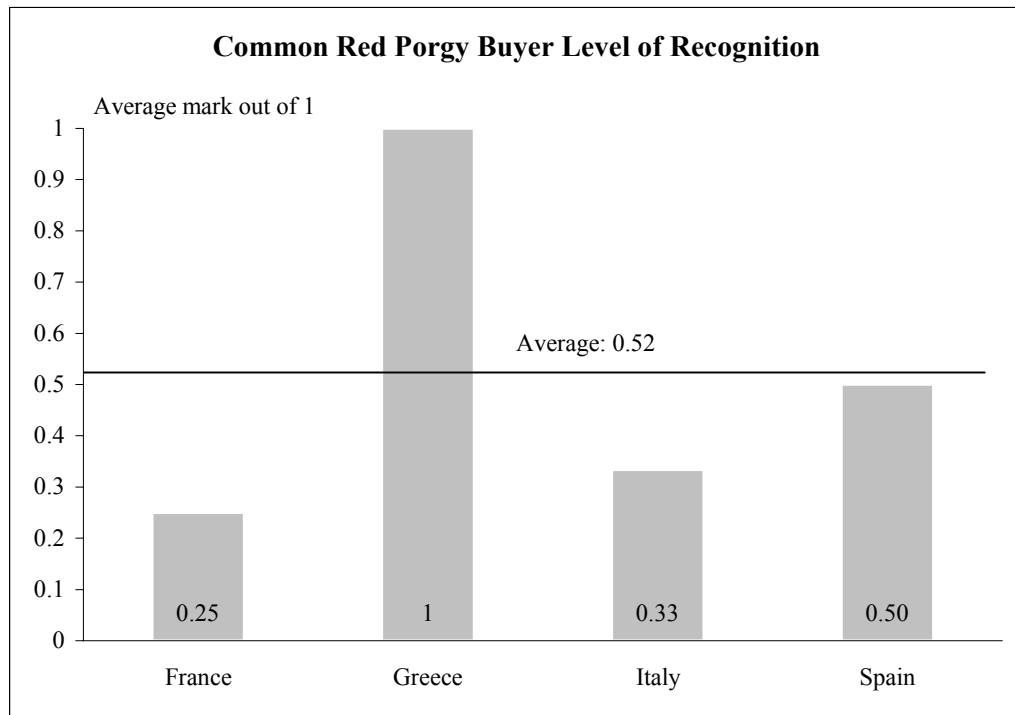
Despite the fact that buyers often put red porgy in the same category as sea-bream and sea-bass, since they are similar and cooked in a similar way, red porgy does not have any real competitor. Sea-bream and sea-bass are mostly farmed, hence:

- bigger volumes
- more regular supplies
- significantly cheaper prices.

If we accept that the fish that our interviewed buyers mistook for red porgy are in fact that fish's nearest competitors, the following chart - drawn up from buyers' responses to the photograph of wild/common red porgy - shows the degree of competition.

Only Greek operators unanimously recognised the common, wild red porgy - it is a unique fish, with little direct competition in Greece. The other buyers either did not know what it was or mistook it for a sea-bream.

Blue spotted sea bream are more recognizable to the interviewees, especially in Spain.



Source: GIRA from interviews

1.4 FARMED RED PORGY

1.41 DEGREE OF KNOWLEDGE

The degree of knowledge by fish buyers of farmed red porgy is very different from one country to the other.

Spain is the country where farmed red porgy seems to be almost totally unknown among buyers, closely followed by France. No farmed porgy is sold in these two countries

Italy, and Greece are the two countries where *farmed* red porgy is best known:

- some Greek producers also try to sell farmed porgy in Italy and are currently visiting the buyers there. The leading Italian retailer follows Italian experiments with the farmed porgy very closely and intends to insert the fish in its product range

- **Greek buyers remember the experiment which was launched a few years ago and which had to be stopped because of the bad results obtained.** The colour and taste of the fish did not correspond to consumer requirement. This had a strong impact on the Greek opinion about farmed porgy – which continues to be rather negative.

There are just a few sales of farmed porgy in Greece, but none elsewhere.

1.42 STRENGTHS AND WEAKNESSES OF FARMED RED PORGY

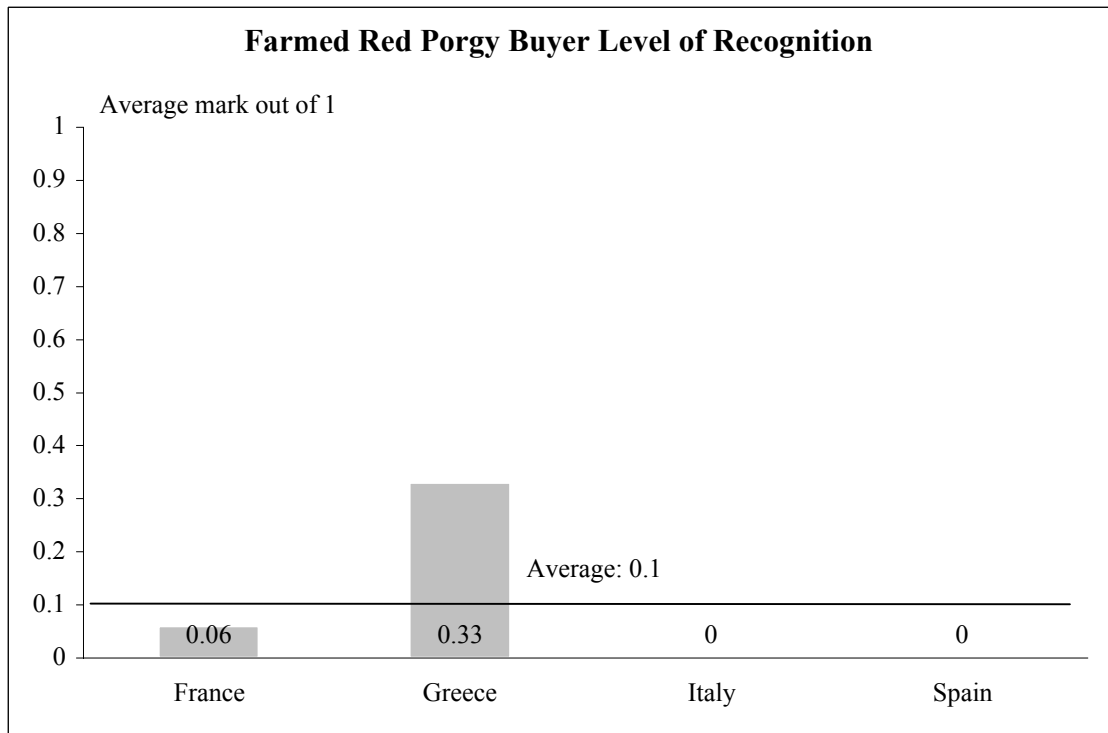
Spanish operators do not know farmed red porgy enough to express an opinion on strengths and weaknesses. Italy is the only country where the advantages are not outweighed by drawbacks, unlike France or Greece.

	France	Greece	Italy
ADVANTAGES			
Cheap prices	x	x	x
Regular supplies	x	x	x
Higher freshness	x	x	x
DISADVANTAGES			
Lack of consumer recognition	x		
Preference for wild fish	x		
Too high a price for farmed fish		x	
No need for it (existing cheap imports)		x	

1.43 COMMENTS FROM BUYERS ABOUT THE (PICTURE OF) FARMED RED PORGY SHOWN TO THEM

When shown the picture of a farmed porgy, the degree of knowledge shown by buyers was much lower even than in the case of common red porgy, with an average of just 10% recognising it. Only Greek, and French buyers to a less extent, were able to recognize it.

Spanish buyers did not recognise the farmed porgy quite simply because they had never seen one before.



Source: GIRA from interviews

A common opinion was that **the farmed porgy presented on the picture looked like a "misshapen" sea-bream**. It definitely does not look like its wild counterpart in terms of shape or colour. **It does not have attractive colours**. Moreover, one operator noticed that it had a **big belly**, probably due to fat, which would reduce the length of its shelf-life.

We were told that there are currently some experiments going on for farmed porgy in Greece, Italy and France, and that the results are better than the one presented on the picture in terms of colour.

1.44 ACCEPTABILITY OF FARMED RED PORGY ALONG SIDE THE WILD ONE

The Greek retailers – the only ones who already sell some farmed porgy – put a sign on farmed red porgy to indicate its farmed origin. The consumer is ready to buy it as long as the price is lower than that of its wild counterpart.

The French retailers do not believe there is a possibility of selling both wild and farmed, as the price of the farmed fish would have to be too low to be attractive to them or to producers.

1.5 CONCLUSIONS FROM THE SENSORIAL ANALYSIS OF FARMED RED PORGY

GIRA requested the Institute of Food Quality and Technology of Veneto Agricoltura in Vicenza, Italy, to carry out standard taste tests on a sample of farmed red porgy, with the aim of pinpointing any significant differences between it and wild red porgy as well as a group of other farmed and wild fish.

A more detailed summary of the taste tests is given in the report in the Body of the report that follows the four country reports. The longer report, supplied by the Institute in Italian, is given in Appendix 2.

It was decided to carry out the test in Italy since the future success of farmed red porgy will probably depend to a large extent on the Italian consumer. The tests were carried out in July and August 2003.

The results as calculated by the laboratory are summed up in the following table:

	<i>White-ness</i>	<i>Smell of fresh fish</i>	<i>Sweet</i>	<i>Acid</i>	<i>Bitter</i>	<i>Taste of fresh fish</i>	<i>Tender-ness</i>	<i>Fibres</i>	<i>Succu-lence</i>	<i>Adhe-sion</i>	<i>Fatty-ness</i>
Seabream - farmed Geece	8,01	6,11	4,00	2,36	1,99	4,56	6,87	4,61	5,03	5,94	3,93
Seabream - farmed Italy	7,53	5,06	3,48	2,29	2,25	4,26	6,63	4,75	5,05	5,69	3,27
Seabream - wild	8,38	7,44	3,95	2,87	1,73	5,03	6,45	4,72	5,85	5,79	3,84
Red porgy - farmed Greece	8,49	6,34	3,61	2,11	1,82	4,48	4,37	6,63	5,20	4,33	2,94
Red porgy - wild	7,54	5,65	2,96	2,43	2,10	3,66	6,73	4,13	5,54	3,49	3,06
Trout (supermarket)	2,19	4,67	3,42	2,47	1,98	4,58	5,74	5,22	4,38	4,51	2,80
Trout (fishmonger)	3,73	4,40	2,43	1,75	2,18	3,28	7,01	4,90	4,87	4,38	3,03

The laboratory thus concluded that **the major difference between the farmed red porgy and the other fish tested lay in its lower tenderness and higher fibre content**, but there were also other significant differences.

However, there was little to distinguish it in the key aspect of *taste* from the rest of the sample.

The *wild* red porgy was generally found to have similar characteristics to the farmed and wild seabream.

Finally, it must be repeated that the above results apply only to the samples delivered to the laboratory.

It would also appear reasonable for those involved in breeding and farming the fish to look into the possible causes of these two potentially negative results.

2. RECOMMENDATIONS

The foregoing allows us to make the following tentative recommendations.

2.1 NAME

Except in Greece where red porgy has an excellent image and is known to be red, there is no theoretical problem in introducing farmed red porgy under that name, even though it might not be red, in the other countries:

- red porgy is generally unknown to the consumer
- its colour is thus unknown
- and its name is colour-neutral in languages other than English.

It is the common opinion among operators that a fish has to bear its official name - so no fantasy name. It is also compulsory to indicate that it is farmed.

The necessity of giving the farmed fish the same name as the wild one in Greece, because of its positive marketing implications, raises the issue of the colour, which has to be at least reddish, if not the same colour as the wild fish. This is not the case in the other countries.

2.2 OPTIMAL SIZE AND COLOUR

Size

The optimal size is different per country, however operators agree about the opportunity for large size red porgy in the food-service area in all four countries.

In the retail sector, the optimal size is:

- from 250 to 500g (Italy)
- from 300g upwards (Greece)
- 400-600 or 500-700g (Spain)
- over 600g, for a better valorisation (France).

Colour

The importance of colour for the fish consumers and buyers is very different per country, but follows the degree of their knowledge of the fish itself. It is particularly important for the Greek consumer who knows red porgy and expects a red fish. In the other countries, the colour does not matter as the consumer generally does not know what red porgies look like anyway.

However, quite aside from its absence of reddishness, it seems that our farmed red porgy cannot be sold with its current dark colour, since this makes it look like a misshapen sea-bream, and reduces its attractiveness to consumers.

The colour must at least be much brighter:

- a dark-coloured fish implies a lack of freshness in Spain
- colour is the first criterion of choice, and makes the fish more attractive.

In Greece, the colour has to be at least reddish, which is the case of the Atlantic porgy sold already in the country. Its colour will influence its price positioning. The redder farmed the red porgy will be, the more likely it will be to sell at a higher price than farmed sea-bream.

Taste & other sensorial aspects

Since the major finding of the Sensorial Analysis was qualitatively "negative" for the farmed red porgy - less tender, more fibrous - it will be essential that larger-scale and systematic taste tests be carried out before the fish is put on the market in commercial quantities.

If the problems are confirmed, the fish will have to go "back to the drawing board" if it is to be valorised to consumers.

2.3 OPTIMAL SUPPLIERS

Getting fish directly from the producer generally makes it possible to get it at a lower cost and to ensure traceability. However, given the small volumes of farmed porgy implied, use of wholesalers will be necessary, at least at the beginning, for more flexibility.

The nationality of the farm does not really matter to the operators, especially if it is European, although some buyers did mention their preference for domestic production:

- for Greek operators it guarantees better freshness (plus the strong preference for Greek products among consumers)
- the major Italian retailer COOP ITALIA has as a part of its philosophy to favour domestic producers.

2.4 COMMUNICATION

In all four countries it will be important to make a strong communication campaign:

- to reassure both buyers and consumers in Greece about farmed porgy
- to make it known to the general public in the other countries.

Communication has to come from producers or international institutions (i.e. the retailers and wholesalers will not do it on their own).

Retailers are only ready to communicate about the quality and safety of the products for sale, helped by price promotions. Greek retailers which already sell farmed red porgy put the accent on the (Greek) geographical origin of the product.

Potential targets

The potential target for farmed red porgy is likely to be the same as for the other farmed species - a distributor in search of variety, regular supplies, traceability and good prices.

The consumer is more likely to be somebody middle aged or older, who can cook, but who is also curious to know new species.

Retailers are more likely to be interested by farmed porgy than are restaurants, which tend to favour wild fish – even though this is in the process of changing.

Information Required

The information required is the same as for any other farmed fish: farming methods, slaughtering, packaging.

2.5 OPTIMAL PRICE

The optimal selling price is not easy to define as the quality of the final product will influence demand, and thus its selling price. Right now operators will not make any judgement on quality, as they have not yet tasted the product.

The level of optimal selling price is likely to be very different from one country to the other, as is shown by the following table. Italy is the country with the lowest price suggested by far - exaggeratedly so, even if one must remember that this does not reflect the overall opinion in Italy.

Suggested Retail Prices per Country, EUR/kg

	Retailing price suggested	Comments
Italy	2	Sea-bream and sea bass only cost EUR 3.50/kg while they are already known and appreciated by the consumer
Spain	6-7	The price has to be similar or lower than the one of farmed sea bream, unless the fish is redder
France	12 (7-9, on promotion)	It has to be competitively prices to have success (at least 10% less than wild porgy), unless the taste is exceptionally good
Greece	Various	Depending on positioning

Source: GIRA from interviews

In all countries, the major point to take into consideration is the **competition** from:

- other farmed species
- existing cheap imported wild porgy.

However, the latter point is only really relevant today in Greece, given the existing offer. It is particularly important, on this more expert market, for the farmed product to be similar in colour and taste to its wild counterpart in order to be able compete at the imported Atlantic wild porgy price level (and not at that of farmed seabream).

Fixing the price at too low a level may make it easier to sell, however it will assimilate it in consumers' minds to a low quality product.

3.

CONCLUSION

We have tried to sum up the foregoing in the following table, and to indicate the levels of opportunity for farmed red porgy in the four markets.

It would appear that Italy is the main potential market for red porgy, and it has already been approached by Greek farmed red porgy producers. However the price Italian distributors are ready to sell it at is very low (as low as EUR 2/kg was suggested). This very low price is dictated by the fact that Italian operators consider that farmed red porgy will be in direct competition with farmed sea-bream.

<p>If - and only if - Italian consumers appreciate the taste of red porgy more than that of seabream, <i>and</i> if the colour and appearance of the current farmed red porgy are improved, <i>and</i> if a significant effort is made in consumer communication, <i>only then</i> could prices be higher than farmed seabream.</p>

There could be potential in Spain and France, providing an effort made in terms of shape and colour of the fish, as well as communication. However, in these two countries, particularly France, the fish will continue for a few years yet to suffer from consumer prejudice against farmed fish.

Paradoxically, since it is being farmed in Greece, the Greek market is the one that appears to show the lowest potential, given the existing offer of wild red porgy which already covers the whole quality and price range.

Red Porgy opportunities Summary Table

	France	Greece	Italy	Spain
Importance of Mediterranean fish		++++	+	
Perception of farmed fish	-	+	+	+/-
Red porgy markets	+	++++	+	++
Origin of red porgy	Various	Various	Various	Various
Size	Medium sized	Big sized	Big sized	Medium sized
Selling price	++	++++	+	++
Buyer red porgy knowledge	+	++++	++	+
Level of knowledge of farmed porgy	-/+	++	+	-
Opinion on farmed porgy		Bad	Buiding up	
Potential for farmed porgy	50 < 500 tonnes	No market gap	4 500 tonnes	500<1 500 tonnes
Optimal name	Farmed porgy	Farmed porgy	Farmed porgy	Farmed porgy
Optimal size	> 600g	> 300g	250-500g	400-600g
Importance of red colour	+	++++	+	+
Optimal supplier	European	European/domestic	European/domestic	European
Purpose of communication	Publicity	Reassurance	Publicity	Publicity
Optimal price (EUR/kg)	12	Depending on appearance	2	6-7

Source: GIRA