## FISHERY PRODUCTS Quality, safety and authenticity

Edited by

Hartmut Rehbein Jörg Oehlenschläger



A John Wiley & Sons, Ltd., Publication

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### Preface

The contribution of fisheries and aquaculture to the human food supply has increased very significantly in recent decades. What is remarkable for this part of the food sector is the large share of fish that enters international trade, with some 37% of all fish caught and cultured being traded across national borders. So it can be argued that fish and fishery products are in the forefront of globalization, as products from all corners of the world can be found on the international market. There are many interesting facets to how this came about, in particular how well developing countries have adapted to the strict trading regimes of the modern marketplace for fish and fishery products.

As food retailers consolidate in ever-larger units, the competition for customers intensifies. This has direct effects through the whole supply chain, not least primary producers. Besides, large retailers now have so much reputation at stake that they spend large sums of money to minimize the risk of 'food scandals' ever being attributable to the products they sell. This translates into ever more and stricter food safety and quality criteria with which all the actors in the food chain have to comply. This is one of the reasons for a rise in private standards of various sorts that are stricter than the standards set by governments. This rise in private standards is seen by many as a potential new form of protectionism. The objective of the World Trade Organization (WTO) is to facilitate free trade between nations to 'improve the welfare of the peoples of the Member Countries'. The WTO Agreements, particularly the Sanitary and Phytosanitary Agreement (SPS) and the Technical Barriers to Trade Agreement (TBT), were set as the framework within which technical standards would be operated. In 1995 it was decided that the food standards of the Codex Alimentarius would be the standards used to resolve safety and quality questions in international trade disputes.

Free trade is a very important issue on the international agenda. The international system created through the WTO is meant to create a 'level playing field' so that all can participate in international trade and to allow 'trade to flow smoothly, freely, fairly and predictably.' Thus, the importance of food standards to ascertain if they comply with agreed minimum criteria. The SPS Agreement stipulates that food standards should be based on sound science and be risk based. There is also a call for harmonization of standards and equivalence of different national standards relating to food safety management systems as long as they adhere to the same level of protection.

That is a brief description of the framework, but all food standards are linked to specific methods by which compliance with them is measured. This book deals with the methods commonly used to measure the quality of fish and fishery products. Going through it is truly a story attesting to the great progress that has been made in this area in recent decades. It is interesting to see how the science has moved forward to increasing automation and online, non-destructive methods to ascertain characteristics of the products. It is also interesting to see how sensory evaluation, which not so long ago was considered subjective and thus unscientific, has been turned into an objective scientific tool in its own right.

Competition in the food market makes it imperative for retailers not only to present products that are safe to eat and taste good, but also nutritionally balanced. Increasingly they