September 2023 News Update

IFFO's monthly newsletter

Editorial

Carbon reduction targets are an important step in the journey towards meeting the commitment of the 2015 Paris climate accord. Businesses are important contributors to global warming and are equally important stakeholders in providing solutions to mitigate impacts and adapt. [...]

Read more

Takeaways from IFFO's webinar on Southeast Asia

Dave Martin, Programme Director at Sustainable Fisheries Partnership (SFP), provided an update on several ongoing fisheries projects in Southeast Asia.

Learn more

The IFFO Conference's detailed agenda is out

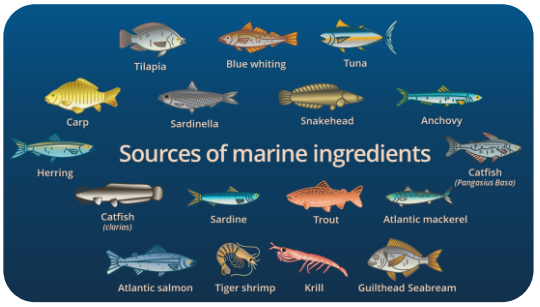
The IFFO Conference will take place in Cape Town from 23-25 October 2023. Registrations are open to both members of IFFO and non-members. Find out who the speakers and main themes are.

Read on

The large yellow croaker industry in China

This report is accessible to all IFFO Members. It was developed by the IFFO team and covers the industry's implications on fishmeal and fish oil consumption.

Log in to access



Marine ingredients from start to end

The IFFO website features new resources which give an in depth exploration into the sources, nutrient profiles, production; and how and why marine ingredients are used.

Read on

Introduction to IFFO's new Operations Manager

Silvana Baez has just joined IFFO's Operations team and will be supporting across membership and event operations.

Read on

The power of public-private partnerships

What is supposed to happen to those factories that cannot meet the expectations of a standard? A large share of the value chain follows a "support-not-avoid" approach relying on FIPs.

Read on

Membership information

New IFFO Members:

- **Industrial Maule Limitada,** Fish Oil Refiners, Chile
- **Pharmavite LLC,** Health Food Industry, USA
- **Seapromega,** Traders and Brokers, France
- **South African Fishmeal and Protein Company (Pty) Ltd,** Individual companies, South Africa
- **American Bioprocess SpA,** Traders and Brokers, Chile

No longer IFFO Members:
Marprot, Ecuador

Industry news

- AquaChile: Diets for salmon: evolution, efficiency and sustainability
- FeedStrategy: Peru's fishing shutdown drives global fishmeal shortage
- Intrafish: Canceled Peru anchovy season costs industry $1 billion
- DiarioCorreo: Peru fishing country, opinion by Eduardo Ferreyros
- Feed&Additive: Rabobank: Soft demand and El Niño to challenge aquaculture industry
- WorldFishing: Stress-busting fishmeal launches
- SeafoodSource: Norway adopts new regulations on catch sampling for industrial fisheries
- Aquahoy: How can marine aquaculture help reduce the impacts of fisheries?
- AllAboutFeed: Russian aquaculture demands a ban on fish meal export
- Taqadoum: Mauritanian fishmeal: from a limited issue to a shared concern
- AllAfrica: Gambia: Govt Launches Prorefish Gambia
- UndercurrentNews: Vietnam needs to address ‘underlying issues’ of traceability
- Feed&Additive: Tools for improving raw material efficiency and reducing emissions in aquaculture
- SeafoodSource: Partnership identifies optimal omega-3 content in algae-based aquafeed
- Ipacuicultura: Chinese consumers willing to pay more for certified aquaculture products
- Seafoodsource: China reaffirms expansion of krill production, much to conservationists’ dismay
- Aquafeed: F3 Krill Replacement Challenge: A microalgae oil
- WorldFishing: New alliance against IUU fishing launches

Innovation & Research

- **FISHMEALS and their competition**

A study aimed to compare the effects of different dietary inclusion levels (5, 10, and 15%) of **insect larvae meal** on European seabream sensorial, technological, and nutritional fillet qualities. Results showed that the inclusion of defatted insect larvae meal did not induce off-flavours in seabream fillets. No differences were found in appearance, mouthfeel, or texture. Fillet quality traits and proximate composition analyses did not show differences between the treatments. The fillet fatty acid content showed that higher inclusion of insect larvae meal led to higher saturated fatty acid levels, while no significant difference in polyunsaturated fatty acids was observed among treatments.

Plant feedstuffs usually contain high levels of non-starch polysaccharides that limit their utilization in aquafeeds for carnivorous fish. Solid-state fermentation is a cost-effective technological process that can reduce anti-nutritional factor levels while improving nutrient digestibility and enhancing feedstuffs' nutritional value. A study evaluated the effects of using a **plant protein mixture** (rapeseed, soybean, rice bran, and sunflower seed meals) that was **solid-state fermented**. The fermented plant protein was then included in diets at two inclusion levels (20% and 40%) which were fed to European seabass. Overall, fermented plant protein improved the overall feed digestibility, and utilization efficiency without negatively impacting fish growth performance at a 20% inclusion, but not at a 40% inclusion level.

- **FISHOILS and their competition**

The **requirements for n-3 LC-PUFA by juvenile largemouth bass** were evaluated in a study with four diets. A control diet using fish oil as the sole lipid source, and the other three diets using mixed vegetable oil as the main lipid source and supplemented with 0.50 %, 0.80 % and 1.10 % n-3 LC-PUFA, respectively. The results showed that the growth performance of 0.50 %-1.10 % groups were equal to that of control group. The results suggested that 0.80 % dietary n-3 LC-PUFA level is suitable for largemouth bass based on growth performance, muscle quality and hepatic lipid metabolism.

A study investigated the **effects of dietary fish oil replacement by poultry fat** on growth performance, fillet quality, and serum enzymatic activities in rainbow trout. The fish were fed three diets (0%, 50%, and 100% replacement) for 2 months with or without a washout period. No significant effects were observed among treatments on growth performance, viscerosomatic index or fillet composition. Increased poultry fat led to decrease in omega-3 fatty acids and increase in omega-6 fatty acids and monounsaturated fatty acids. The washout period restored most of the changes in fillet fatty acid profiles in the fish feed containing poultry fat.

- **CONTAMINANTS**

A study investigated the individual and combined impacts of **dietary methylmercury (MeHg) and fatty acids on lipid metabolism in juvenile rainbow trout** with a focus on two key organs, adipose tissue and liver. Fish were fed diets enriched in linoleic acid (LA, 18:2 n-6), α-linolenic acid (ALA, 18:3 n-3), eicosapentaenoic acid (EPA, 20:5 n-3) or docosahexaenoic acid (DHA, 22:6 n-3) for ten weeks, with the addition of MeHg to the diets during the last six weeks (0, 2.4 or 5.5 mg MeHg/kg dry matter). The results showed that the LA-enriched diet induced a higher whole-body lipid content compared to the three other diets. The addition of MeHg led to a significant reduction of the whole-body lipid content, regardless of the diet. This study highlights the significant impact of MeHg exposure and dietary fatty acids on lipid metabolism in fish.

- **SUSTAINABILITY**

Biological productivity goals for fish stocks operationalised through Harvest Control Rules (HCRs) are central to contemporary fisheries management. While fisheries policies often state socio-economic objectives, such as enhancing the livelihoods of coastal communities, those are rarely, if ever, incorporated into operationalised management procedures. The absence of social objectives and lack of monitoring of social outcomes around HCRs amounts to poor public policy. In an article, the authors explore the potential for social HCRs with reference points and agreed predefined actions to make the social dimensions of fisheries explicit.

Calendar

- 27 September: SeafoodSource webinar on 100% fish utilisation (Save the Date)
- 2-5 October 2023: Responsible Seafood Summit, Saint John, New Brunswick, Canada
- 23-25 October 2023: IFFO Annual Conference, Cape Town, South Africa
- 12 December 2023: IFFO China workshop, Guangzhou, China
- 23-25 January 2024: GOED Exchange, Athens, Greece
- 15-17 April 2024: IFFO's Members Meeting, Miami, USA

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THE MARINE INGREDIENTS ORGANISATION