

Scientific information and studies

Here you will find a collection of interesting references and links to scientific publications and studies about food additives that we use in DR. BASSLEER BIOFISH FOOD.

Of course, this list represents only a small part of the information available on the internet. If you enter the relevant term in a search engine, you will receive numerous other passages on the relevant topics.

Basic scientific information

Miriam Reverter et al: Use of Medicinal Plants in Aquaculture, Diagnosis and control of Diseases of fish and shellfish, by Austin, Page 223 – 262)

Hongyu Pu et al: Research Progress in the Application of Chinese Herbal Medicines in Aquaculture: A Review (Engineering 3 (2017) 731-737)

Citarasu: Herbal biomedicines: a new opportunity for aquaculture industry. (2010, Aquaculture International, 18, 403-414)

Sataporn Direkbusarakom: Application of Medicinal Herbs to Aquaculture in Asia (2004, Walailak University)

Gerald Bassleer: Liens entre nourriture des poissons et pathologies (2017, AquaMag 34, p. 72-76 + Aquafauna 152, p. 20-27)

Gerald Bassleer: Fish Food and Fish Diseases (2017, Journal of Fisheries & Livestock Production 5: 1)

Gerald Bassleer: Fish Nutrition and Fish Health: Effects of diet on fish health (2017, OFI-Journal no. 84 + no.85)

[Dr. Gerald Bassleer: Dossier: Fish Nutrition and Fish Diseases, erhältlich in 6 Sprachen](#)

Gerald Bassleer: Fischfutter & Fischkrankheiten – richtig füttern und Fischkrankheiten vermeiden (2020, Das Lebendgebärenden-Magazin 1.2020, p. 14-21)

Prof. Dr. Leandro Melo de Sousa, Laboratório de Ictiologia de Altamaria, Federal University of Pará (Brasil) to a current study on the effect of nutrition on fertility of *Loricaridae* L333 (The study will be finished in 2020.)

“We finalized the first part of the experiment comparing 4 different foods. DR. BASSLEER BIOFISH FOOD is the one that gives the best results considering sperm quality. The fishes were analyzed in the day 0 and they were all with no viable sperm cells. After 25 days of DR. BASSLEER BIOFISH FOOD the fishes presented 90 – 100 % of active sperm cells. The other brands were not so good. Another difference, as we have only few DR. BASSLEER BIOFISH FOOD left, we are giving 0.5 % of the fish weight per day, while the other brands up to 2 %. Even in lower quantities DR. BASSLEER BIOFISH FOOD presented better results!”

Specialist book:

Gerald Bassleer: Diseases in marine aquarium fish, Causes – Symptoms – Treatment

GTIN: 9789081705554

The new edition provides important information on diseases of marine aquarium fish in a simple, easy to understand language.

Specialist book:

Gerald Bassleer: The Practical Guide to Fish Diseases

GTIN: 9789081053594

The Practical Guide to Fish Disease is ideal for anyone who is concerned with keeping aquarium fish, pond fish or shrimps. The most important diseases of ornamental fish are explained in easy to understand language. Approx. 250 images help with diagnosis. The most important treatments and applications are described in detail.

Specialist book:

Gerald Bassleer: The New Illustrated Guide to Fish Diseases

ISBN: 90-807831-2-9

This book is a lavishly-illustrated aid to making the right diagnosis, not only for the aquarium retailer or pond centre, but also for the veterinarian's or fish doctor's practice.

Specialist book:

Christian E. W. Steinberg: Aquatic Animal Nutrition

ISBN: 978-3-319-91766-5

The book defines gaps in the nutritional research and practice of farmed fish and invertebrates with reference to knowledge of marine and freshwater biology. It is also pointed out that the pros and cons of nutrition affect several successive generations. This suggests that a well-designed diet may have the potential to successfully improve breeding and breeding efforts.

Specialist book:

Carl D. Webster, Chhorn Lim: Nutrition and Fish Health

GTIN: 9781439800041

Diseases are a major threat to the sustainability of the fishing industry. As antibiotics have many disadvantages, it is becoming increasingly important to understand the mechanisms that make nutrition a key factor in the defense against pathogens.

Information on the probiotic *Pediococcus acidilactici* (included in each granulated DR. BASSLEER BIOFISH FOOD)

The effect of *Pediococcus acidilactici* MA 18/5M on immune responses and mRNA levels of growth, antioxidant and immune-related genes in zebrafish (*Danio rerio*), by Ehsan Ahmadifar et al., Aquaculture Reports, volume 17, July 2020

Ali Al-Hisnawi et al, University of Karbala, Iraq: Dietary probiotic *Pediococcus acidilactici* MA18/5M modulates the intestinal microbiota and stimulates intestinal immunity in rainbow trout (*Oncorhynchus mykiss*)

Effects of chito-oligosaccharides supplementation on growth performance, intestinal cytokine expression, autochthonous gut bacteria and disease resistance in hybrid tilapia *Oreochromis niloticus* ♀ × *Oreochromis aureus* ♂.

Sascha "Remy" Brunner, MSc Marine Biology: Probiotics in fish aquaculture: The cure against parasitic disease?

Effects of dietary *Pediococcus acidilactici* GY2 single or combined with *Saccharomyces cerevisiae* or/and β -glucan on the growth, innate immunity response and disease resistance of *Macrobrachium rosenbergii* (SHRIMP). By Miao et al (2020, Fish & Shellfish Immunology, Vol 98, p. 68-76)

Information on Açai (*Euterpe oleracea*) (included in DR. BASSLEER BIOFISH FOOD ACAI)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL CARE)

Phytochemical composition and thermal stability of two commercial açai species, *Euterpe oleracea* and *Euterpe precatoria*. By Pacheco-Palencia et al (2009, Food Chemistry, 01.034)

Berries from South America: a comprehensive review on chemistry, health potential, and commercialization. Schreckinger ME, Lotton J, Lila MA, et al. (2010, *Journal of Medicinal Food*. 13(2):233-246)

Antioxidant capacity and other bioactivities of the freeze-dried Amazonian palm berry, *Euterpe oleracea* mart. (açai). Schauss et al. (2006, J. Agric. Food Chem. 54(22):8604-10.)

Information on *Aloe vera*

(included in DR. BASSLEER BIOFISH FOOD ALOE)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL TREAT)

Aloe vera enhances the innate immune response of pacu (*Piaractus mesopotamicus*) after transport stress and combined heat killed *Aeromonas hydrophila* infection. By Zanuzzo et al (2017, Fish & Shell Immunology, Vol. 65, 198-205)

The effects of different levels of *Aloe vera* extract on some of the hematological and non-specific immune parameters in Siberian sturgeon (*Acipenser baerii*) Bazari Moghaddam et al. (2017, Iranian Journal of Fisheries Sciences 16(4) 1234-1247)

Effect of oral consumption of *Aloe vera* on intestinal microflora and liver tissue in rainbow trout. By Parsa et al. (2016, Iranian Journal of Fisheries Sciences,, 15 (1) 591-596)

Evaluation of growth and metabolism of *Labeo rohita* fingerlings with *Aloe vera* supplementation diet. By Bishnoi et al. (2017, Journal of Entomology and Zoology Studies, 5(4):1595-99)

Positive effect of *Aloe vera* in *Litopenaeus vannamei* (SHRIMP) challenged with *Vibrio parahaemolyticus* and white spot syndrome virus. By Trejo-Flores et al. (2016, Aquaculture, Vol. 465, 60-64)

Influence of certain herbal additives (i.e. *Aloe vera*) on the growth, survival and disease resistance of goldfish, *Carassius auratus*. By Ahilan et al. (2010, J. Vet.Sciences, 6 (1) 5-11)

Information on the freshwater algae *Chlorella*

(included in DR. BASSLEER BIOFISH FOOD CHLORELLA)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL CARE)

Antioxidative and immunoprotective potential of *Chlorella vulgaris* dietary supplementation against chlorpyrifos-induced toxicity in Nile tilapia. by Eman Zahran,

Samia Elbahnaswy, Engy Risha, Mansour El-Matbouli (2020-05-18, Fish Physiology and Biochemistry)

The use of macro- and microalgae as functional ingredients in diets for meagre

(*Argyrosomus regius*) By Monteiro et al. (2018, Frontiers in Marine Science 5)

Effects of *Chlorella vulgaris* on blood and immunological parameters of Caspian Sea Salmon (*Salmo trutta caspius*) fry exposed to Viral Nervous Necrosis (VNN) virus. By

Sabera et al. (2017, Iranian Journal of Fisheries Sciences, 16(2) 494-510)

Ameliorative effects of dietary *Chlorella vulgaris* and β -glucan against diazinon-induced toxicity in Nile tilapia (*Oreochromis niloticus*. By Abdelhamid-Gehad,

Elshopakey-Abeer, Aziza (2020, Fish & Shellfish Immunology, Vol 96, p. 213-222)

Information on yeast extracts (Beta glucane)

(included in DR. BASSLEER BIOFISH FOOD FORTE)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL CARE)

The role of β -glucan in the growth, intestinal morphometry, and immune-related gene and heat shock protein expressions of Nile tilapia (*Oreochromis niloticus*) under different stocking densities (Mahmoud A. O. Dawood et al)

Dietary β -glucans differentially modulate immune and stress-related gene expression in lymphoid organs from healthy and *Aeromonas hydrophila*-infected rainbow trout (*Oncorhynchus mykiss*). Douxfils, Fierri-Castro, a.o. (2017, Fish & Shellfish Immunology, Vol 63, p.285-296)

Modulatory effect of different doses of β -1,3/1,6-glucan on the expression of antioxidant, inflammatory, stress and immune-related genes of *Oreochromis niloticus* challenged with *Streptococcus iniae*. Salah AS, El Nahas AF, Mahmoud S (2017, Fish & Shellfish immunology, Vol. 70, p. 204-2013)

Immunostimulation and increase of intestinal lactic acid bacteria with dietary mannan-oligosaccharide in Nile tilapia juveniles. By Levy-Pereira, Yasui, a.o. (2018, R.Bras.Zootec., Vol 47)

Long-lived effects of administering beta-glucans: Indications for trained immunity in fish. By Jules PetitGeer &, Wiegertjes (2016, Developmental & Comparative Immunology, Vol 64, p. 93-102)

Effects of dietary *Pediococcus acidilactici* GY2 single or combined with *Saccharomyces cerevisiae* or/and β -glucan on the growth, innate immunity response and disease resistance of *Macrobrachium rosenbergii*(SHRIMP). By Miao et al (2020, Fish & Shellfish Immunology, Vol 98, p. 68-76)

Beta-glucan administration enhances disease resistance and some innate immune responses in zebrafish (*Danio rerio*). By

I. Rodriguez, R. Chamorro, B. Novoa, A. Figueras (2009, Fish Shellfish Immunol., 27, pp. 369-373)

Effects of short- and long-term glucan feeding of rainbow trout (Salmonidae) on the susceptibility to *Ichthyophthirius multifiliis* infections. By J.H. Lauridsen, K. Buchmann (2010, Acta Ichthyol. Piscat., 40 pp. 61-66)

Information on Fucoidan from seaweed (*Laminaria japonica*)

(included in DR. BASSLEER BIOFISH FOOD FUCO)

Can Fucoidan decrease the mortalities caused by Columnaris disease in Nile Tilapia.

By H. Mahgoub; (2018, World Journal of Agriculture Research, Vol 6, N° 1, 1-4)

Dietary Influence of Fucoidan supplementation on growth of *Lates calcarifer*. By Tuller et al. (2012, Aquaculture Research, 1-6)

Effect of fucoidan from *Turbinaria ornata* against marine ornamental fish pathogens.

By Marudhupandi et al., (2013, Journal of Coastal Life Medicine, 1 (4): 282-286)

The effect of fucoidan from brown seaweed *Sargassum wightii* on WSSV resistance and immune activity in shrimp *Penaeus monodon*. By Immanuel et al, (2012, Fish Shell Immunolog. 32 (4): 551-564)

Gerald Bassleer: Mycobacterium und davon ausgelöste Fischtuberkulose (Magazine "Amazonas" no. 88, p. 56-59)

Biomedical Applications of Fucoidan, Seaweed Polysaccharides By Senthilkumar et al (2017, Seaweed polysaccharides Isolation, Biological and Biomedical Applications, p. 269-281)

Fucoidan Extracted from *Undaria pinnatifida*: Source for Nutraceuticals/Functional Foods. By Zhao et al. (2018, Mar. Drugs, 16(9), 321))

Marine Seaweed Polysaccharides)Based engineered Cues for the modern biomedical sector; By Bilar & Iqbal (2020, Marine Drugs, 18 (7))

Information on garlic (*Allium sativum*)

(included in DR. BASSLEER BIOFISH FOOD GARLIC)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL TREAT)

Alternative treatment for *Anacanthorus penilabiatus* (Monogenea: *Dactylogyridae*) infection in cultivated pacu, *Piaractus mesopotamicus* (Osteichthyes: *Characidae*) in Brazil and its haematological effects. (M. L. Martins, et al., Parasites 2002, Page 175 – 180)

Dietary supplementation of garlic (*Allium sativum*) to prevent monogenean infection in aquaculture (Thane A. Militz et al., Aquaculture 2013, Page 95 – 99)

Effects of garlic-supplemented diet on growth performance and intestinal microbiota of rainbow trout (*Oncorhynchus mykiss*) Büyükdeveci, Balcázar, Demirkale, Dikel; (2018, Aquaculture, Vol 486, p. 170-174)

Evaluation of Dietary Addition of Garlic (*Allium Sativum* L.) Lobes on Growth Performance, Feed utilization, and Physiological Responses of *Oreochromis niloticus*, Fingerlings. Mehrim, A.I., Khalil, F.F. and Refaey, M.M.; Abbassa (2014, Int.J.Aqua., Vol 7, N° 2)

Individual and combined Effects of Moringa leaf and Garlic powder on growth and plasma biochemical indices of *Clarias gariepinus* juveniles. Adeneiji, Wusu, Falana (2019, American Journal of Food Science and Technology, Vol 7, N° 5, 137-145)

Effects of Garlic and Allium-derived products on the growth and metabolism of *Spironucleus vortens*. Millet, Loyd, et al. (2011, Experimental Parasitology Vol 127, p.490-499)

The redox-active drug metronidazole and thiol-depleting garlic compounds act synergistically in the protist parasite *Spironucleus vortens*. By Williams, Vacca, et al. (2016, Molecular & Biochemical Parasitology Vol 206, p.20-28)

Antimicrobial properties of allicin from garlic, Ankri, & Mirelman; (1999, Microbes & Infection 2, p.125-129)

Epizootics of *Pseudomonas anguilliseptica* among cultured seabream (*Sparus aurata*) populations: Control and treatment strategies (Garlic); By Amr. Fadel et al. (2018, Microbial Pathogenesis, Vol. 121, pages 1-8)

Effect of Garlic and allium-derived products on the growth and metabolism of *Spironucleus vortens*; Coralie Millet et al. (2011, Experimental Parasitology 127 (490-499))

Information on Grapefruit Seed Extract (*Citrus x paradisi*)

(included in DR. BASSLEER BIOFISH FOOD GSE/MORINGA)

Effects of dietary grape seed extract, green tea extract, peanut extract and Vitamin C supplementation on metabolism and survival of greenlip abalone (*Haliotis laevis*) cultured in high temperature. Duong et al. (2016, Aquaculture, Volume 464, p. 364-373)

The effectiveness of processed grapefruit-seed extract as an antibacterial agent; By Reagor et al. (2002, J. Altern. Complement Med. (3):325-32)

Antimicrobial activity of grapefruit seed and pulp ethanolic extract. By Cvetnic & Knezevic, (2004, Acta Pharm. 54 (3):243-50))

Information on herbs (peppermint, thyme, mugwort, chickweed)

(included in DR. BASSLEER BIOFISH FOOD HERBAL)

(included in DR. BASSLEER BIOFISH FOOD PROFESSIONAL TREAT)

Plant-derived compounds as an alternative treatment against parasites in fish farming: a review. By Wunderlich et al. (2017, INTECH, chapter 5, Doi.org/10.5772)

Research Progress in the application of Chinese Herbal Medicines in Aquaculture: A Review; by Hongyu Pu et al. (2017, Engineering Vol.3, p. 731-737)

Application of Medicinal Herbs to Aquaculture in Asia. By Direkbusarakom (2004, Walailak J. Sci. & Tech; 1 (1):7-14)

Effects of thymol (THYME) supplementation on performance, mortality and branchial energetic metabolism in grass carp experimentally infected by *Aeromonas hydrophila* by Morselli, Baldiserra et al. (2019, Microbial Pathogenesis)

A preliminary investigation into the potential effect of *ARTEMISIA afra* on growth and disease resistance in sub-adults of *Oreochromis mossambicus*. By Mbokane & Moyo (2018, Aquaculture 418, p. 197-202)

The influence of some phytobiotics (*THYME*) on growth performance at *Oreochromis niloticus* reared in intensive recirculating aquaculture system. By Antache et al. (2013, University of Agricultural Sciences and Veterinary Medicine, p. 204-208)

Information on Lapacho tree (*Tabebuia impetiginosa*)

(included in DR. BASSLEER BIOFISH FOOD
LAPACHO)

Naphthoquinone: bioactivity and green synthesis. By Peralta et al. (2015, The Battle against microbial pathogens, Mendez-Vilas, Ed., p.542-550)

Antiplasmodial activity of naphthoquinones related to lapachol and bata-lapachol. By Perza-Sacau (2005, Chem. Biodivers. 2(2): 264-74)

Information on matrine and oxymatrine (from *Sophora flavescens*)

(included in DR. BASSLEER BIOFISH FOOD
MATRINE)

Antiparasitic effect of matrine and oxymatrine (quinolizidine alkaloids) on the ciliate *Cryptocaryon irritans* in the red sea bream *Pagrus major*. By Goto et al. (2015, Aquaculture Vol. 437, p.339-343)

Antiparasitic effects of *Sophora flavescens* root extracts on the ciliate, *Cryptocaryon irritans*. By Goto et al (2015, Aquaculture, Vol.435, p.173-177)

Information on the “Miracle tree” *Moringa oleifera* (included in DR. BASSLEER BIOFISH FOOD GSE/MORINGA)

Dietary supplementation of drumstick tree, *Moringa oleifera*, improves mucosal immune response in skin and gills of seabream, *Sparus aurata*, and attenuates the effect of hydrogen peroxide exposure. By Abdallah Tageldein Mansour et al (2020, Fish Physiology and Biochemistry, p. 1-16)

Pomegranate peel and moringa-based diets enhanced biochemical and immune parameters of Nile tilapia with *Aeromonas hydrophila*. By Mohamed AliAbdel-Rahman, SaadEl-Din Hassan, El SayedMansour, Somayah M.M.Awad, WalidMonier

Information on pumpkin (*Cucurbita*)

(included in DR. BASSLEER BIOFISH FOOD
PUMPKIN)

Effect of *Cucurbita mixta* (L.) seed meal enrichment diet on growth, immune response and disease resistance in *Oreochromis mossambicus*: by Musthafa et al. (2017, Fish & Shellfish Immunology, Vol 68, p. 509-515)

Evaluation of Anthelmintic Activity and composition of Pumpkin (*Cucurbita pepo*) Seed Extracts – In Vitro and in Vivo Studies. By Grzybek et al. (2016, Int. J. Mol. Sci. Ref. 1422-0067)