

Huynh Nguyen Duy Bao
hndbao@yahoo.com

Department of Aquatic Processing Technology
Faculty of Food Technology
02 Nguyen Dinh Chieu St., Nha Trang City, Vietnam

EDUCATION

Tokyo University of Marine Science and Technology, Tokyo, Japan

Postdoctoral Study, Food Science and Technology, 2009-2010

Ph.D., Applied Marine Biosciences, 2006-2009

United Nations University, Fisheries Training Programme, Iceland

Postgraduate Study, Quality Management of Fish Handling and Processing, 2004 – 2005

Nha Trang University, Nha Trang, Vietnam

M.S., Aquatic Products Processing Technology, 1998 - 2001

Eng., Aquatic Products Processing Technology, 1990-1995

RESEARCH INTERESTS

- Extraction, characterization and application of natural bioactive compounds.
- Fish handling and processing.

RESEARCH EXPERIENCE

- Development of method for testing antioxidant activity based on Fenton reaction in lipid/myoglobin/H₂O₂ system.
- Completing the technological production process of chitin, chitosan and producing some industrial products from shrimp waste, crab shell 1999-2000.

TEACHING RESPONSIBILITY

Undergraduate Food product development

- Scientific research methodology
- The production of fishmeal and oil
- Seafood processing
- Seaweed processing
- Utilisation of seafood processing waste

Graduate

- Extraction, characterization and application of natural bioactive compounds.
- Scientific research methodology

PUBLICATIONS and PRESENTATIONS

Books:

1. **Huynh Nguyen Duy Bao**, Toshiaki Ohshima. 2013. Strategies to Minimize Oxidative Deterioration in Aquatic Food Products: Application of Natural Antioxidants from Edible Mushrooms. In: Lipid Oxidation: Challenges in Food Systems. Edited by Amy Logan, Uwe Nienaber, and Xiangqing (Shawn) Pan. AOCS Press.
2. Angel Balisi Encarnacion, **Huynh Nguyen Duy Bao**, Reiko Nagasaka, Toshiaki Ohshima. 2012. Novel Approach for Controlling Lipid Oxidation and Melanosis in Aquacultured Fish and Crustaceans: Application of Edible Mushroom (*Flammulina velutipes*) Extract *In Vivo*. In: Aquaculture. Edited by Zainal Abidin Muchlisin. InTech Publisher.
3. **Huynh Nguyen Duy Bao**. 2011. Effects of Dry Ice and Superchilling on Arctic Charr Fillets: Quality and shelf-life. LAP LAMBERT Academic Publishing.
4. **Huynh Nguyen Duy Bao**, Nguyen Huy Quang & Huynh Le Tam. 2005. Guidelines on Handling and Preservation of Cephalopods as Raw Materials, *Agriculture Publishing House*, Hanoi (in Vietnamese).
5. **Huynh Nguyen Duy Bao**, Huynh Le Tam & Else Marie Andersen. 2002. Guidelines on Handling and Preservation of Black Tiger Shrimp as Raw Material, *Agriculture Publishing House*, Hanoi (in Vietnamese).

Journals

1. Nguyen Hong Ngan, Nguyen Anh Tuan, **Huynh Nguyen Duy Bao**, The effects of enzymes and hydrolysis conditions on DPPH radical scavenging activity of Artemia protein hydrolysate. *Journal of Fisheries Science and Technology*, Vol. 1- 2013
2. Ngo Tho Hoai Duong, Dao Thi Tuyet Mai, **Huynh Nguyen Duy Bao**, Ngo Dang Nghia, Application of pepsin to integrate deproteinization and demineralization – saving time and chemicals in chitin production, *Journal of Fisheries Science and Technology*, Vol. 1- 2013
3. **Huynh Nguyen Duy Bao**, Phan Dinh Thuy, Antioxidative activity of chitosan hydrolysate prepared by using sulfuric acid. *Journal of Fisheries Science and Technology*, Vol. 4- 2012
4. Phan Thi Thanh Hien, Nguyen Anh Tuan, **Huynh Nguyen Duy Bao**, Hoang Van Ba, Artemia biomass quality change during storage. *Journal of Fisheries Science and Technology*, Vol. 3- 2012

5. **Huynh Nguyen Duy Bao**, Toshiaki Ohshima. Mushroom feed additive stabilizes lipid, color of yellowtail meat. *Global Aquaculture Advocate*, 2011.
6. **Huynh Nguyen Duy Bao**, Yoshihiro Ochiai, Toshiaki Ohshima. Antioxidative activities of hydrophilic extracts prepared from the fruiting body and spent culture medium of *Flammulina velutipes*, *Bioresource Technology*, 2010
7. **Huynh Nguyen Duy Bao**, Kazufumi Osako, Toshiaki Ohshima. Value-added use of mushroom ergothioneine as a colour stabilizer in processed fish meats. *Journal of the Science of Food and Agriculture*, 2010.
8. **Huynh Nguyen Duy Bao**, Yoichi Shinomiya, Hiroaki Ikeda, Toshiaki Ohshima. Preventing discoloration and lipid oxidation in dark muscle of yellowtail by feeding an extract prepared from mushroom (*Flammulina velutipes*) cultured medium. *Aquaculture*, 2009.
9. **Huynh Nguyen Duy Bao**, Hideki Ushio, Toshiaki Ohshima. Antioxidative Activities of Mushroom (*Flammulina velutipes*) Extract Added to Bigeye Tuna Meat: Dose-Dependent Efficacy and Comparison with Other Biological Antioxidants. *Journal of Food Science*, 2009.
10. **Huynh Nguyen Duy Bao**, Hideki Ushio, Toshiaki Ohshima. Antioxidative Activity and Antidiscoloration Efficacy of Ergothioneine in Mushroom (*Flammulina velutipes*) Extract Added to Beef and Fish Meats. *Journal of Agricultural and Food Chemistry*, 2008.
11. **Huynh Nguyen Duy Bao**, Sigurjon Arason, Kristin Anna Thorarinsdottir. Effects of dry ice and superchilling on quality and shelf life of Arctic charr (*Salvelinus alpinus*) fillets. *International Journal of Food Engineering*, 2007
12. **Huynh Nguyen Duy Bao**. QIM Method Scores Quality, Shelf Life of *Pangasius* Fillets. *Global Aquaculture Advocate*, 2006.
13. **Huynh Nguyen Duy Bao**, The influence of handling temperature on shelf life and quality of post-harvest black tiger shrimp (*Penaeus monodon*). *Fisheries Reviews, Magazine of Ministry of Fisheries of Vietnam*. No. 11, 2005
14. **Huynh Nguyen Duy Bao**. 2005. Some factors influencing quality of catfish (*Pangasius*) during slaughtering. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 10, pp. 38-39 (in Vietnamese).
15. **Huynh Nguyen Duy Bao**. 2005. Superchilling: A Storage Method for Extended Shelf-life of Fish and Fishery Products. *Vietfish International Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 4, pp. 45-47.

16. **Huynh Nguyen Duy Bao**. 2004. Polyphenoloxidase: The Enzyme Catalyses Black spots forming of Shrimp. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 9, pp. 42-43 (in Vietnamese).
17. **Huynh Nguyen Duy Bao**. 2004. Cathepsin and Calpain: The Endogenous Enzymes Tenderize fish muscle. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 8, pp. 40-41 (in Vietnamese).
18. Huynh Le Tam & **Huynh Nguyen Duy Bao**. 2003. Nitrates and nitrites in food. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 4, pp. 31-33 (in Vietnamese).
19. Huynh Le Tam & **Huynh Nguyen Duy Bao**. 2003. Sulfites and their compounds in food. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 1, pp. 39-40 (in Vietnamese).
20. Huynh Le Tam & **Huynh Nguyen Duy Bao**. 2002. Borates and Analytical methods of borates. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 10, pp. 43-44 (in Vietnamese).
21. Else Marie Andersen, **Huynh Nguyen Duy Bao** & Huynh Le Tam. 2002. Quality Criteria and The Relation of Storage Temperature and Quality of Black Tiger Shrimp. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 4, pp. 39-41 (in Vietnamese).
22. Huynh Le Tam & **Huynh Nguyen Duy Bao**. 2001. Some measurements to improve quality of Black Tiger Shrimp in Ca Mau. *Fish Trading Magazine, Vietnam Association of Seafood Exporters and Producers*. No. 9, pp. 33-37 (in Vietnamese).
23. **Huynh Nguyen Duy Bao**. 1997. Initial Study on Preparation of Glucosamine from Chitosan. *Science & Technology of Fisheries Journal, Fisheries University*, No. 1, pp. 9-14 (in Vietnamese).
24. **Huynh Nguyen Duy Bao**, Do Minh Phung & Tran Thi Luyen. 1996. Utilization of shrimp shell for preparation of chitosan as technical and medical material. *Science & Technology of Fisheries Journal, Fisheries University*, No. 4, pp. 151-163 (in Vietnamese).
25. Nguyen Viet Dung & **Huynh Nguyen Duy Bao**. 1996. Influence of Temperature and pH on Activity of Enzyme Polyphenoloxidase from Black Tiger Shrimp (*Penaeus monodon*). *Science & Technology of Fisheries Journal, Fisheries University*. No. 2, pp. 3-8 (in Vietnamese).

Presentations

1. **Huynh Nguyen Duy Bao**, Natural Antioxidants, 4th Regional Aquafeed Forum, Nha Trang, Vietnam, 2012
2. **Huynh Nguyen Duy Bao**, Pham Thi Hien, Production of protein isolates from tuna by-product, 4th Regional Aquafeed Forum, Nha Trang, Vietnam, 2012

3. **Huynh Nguyen Duy Bao**, Yoichi Shinomiya, Hiroaki Ikeda, and Toshiaki Ohshima, Prevention of discoloration and lipid oxidation in dark muscle of yellowtail (*Seriola quinqueradiata*) by feeding the extract prepared from mushroom (*Flammulina velutipes*) cultured medium, The IFT Annual Meeting & Food Expo®. Anaheim, CA, USA, 2009
4. **Huynh Nguyen Duy Bao**, Yoichi Shinomiya, Hiroaki Ikeda, and Toshiaki Ohshima, Preventing oxidation of lipid and myoglobin in dark muscle of yellowtail by feeding the extract prepared from Enokitake cultured medium and vitamin complex, Spring meeting of the Japanese Society of Fisheries Science. Tokyo, Japan, 2009
5. **Huynh Nguyen Duy Bao**, Yoichi Shinomiya, Hideki Ushio, Toshiaki Ohshima, Application of Hydrophilic Extract from Mushroom (*Flammulina velutipes*) and Its Cultured Media for Color Stabilization of Fish Muscles, 5th World Fisheries Congress. Yokohama, Japan, 2008
6. **Huynh Nguyen Duy Bao**, Yoichi Shinomiya, Toshiaki Ohshima, Effects of dietary crude extract from Enokitake cultured media supplementation on color stability of fish muscle during chilled storage, Spring meeting of the Japanese Society of Fisheries Science. Shizuoka, Japan, 2008
7. **Huynh Nguyen Duy Bao**, Hideki Ushio, Toshiaki Ohshima, Antioxidant Activity of Enokitake Extract and Its Effects on Preventing Discoloration of Fresh Beef, Annual meeting of The Japan Society for Bioscience, Biotechnology, and Agrochemistry. Nagoya, Japan, 2008
8. **Huynh Nguyen Duy Bao**, Hideki Ushio, Toshiaki Ohshima, Anti-discoloration Efficacy of “Enokitake” Extract Added to Fish Muscle and Application of Image Analysis to Evaluate Discoloration, Autumn meeting of The Japanese Society of Fisheries Science. Hokaido, Japan, 2007
9. **Huynh Nguyen Duy Bao**, Sohn Jeong-Ho, Hideki Ushio, Toshiaki Ohshima, Anti-discoloration Efficacy of Crude Enokitake Extract Added to Fish Muscles, Spring meeting of The Japanese Society of Fisheries Science. Tokyo, Japan, 2007.
10. Dao Manh Son, Dang Van Thi, **Huynh Nguyen Duy Bao**. Some information on low value and trash fish in Vietnam. Paper presented at the REGIONAL WORKSHOP ON LOW VALUE AND “TRASH FISH” IN THE ASIA - PACIFIC REGION. Hanoi, Viet Nam, June 7-9, 2005.

Patents

Huynh Nguyen Duy Bao (Inventor). *Flammulina velutipes* extract-containing discoloration-preventing agent for meat product. Japanese Patent JP2008228702, 2008.