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Visca, Baybay City, Leyte, 6521-A PHILIPPINES Telefax: +63 53 563 7064; Local 1005 Email: ovpre@vsu.edu.ph Website: www.vsu.edu.ph

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Vice President for Research, Extension & Innovation Visayas State University Visca, Baybay City, Leyte

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A. Articles in Peer-reviewed Publications

Author(s)	First Author/ Corresponding Author	Title of Paper	Journal Title, Issue No. and Pages	Year of Publication	Publisher	Place of Publication (City and Country)	Journal Status*	Impact Factor
Lauzon, Quenstein D.; Serrano, Augusto Jr. E.; Canillo, Shellah Dee; and Tumboko n, Barry Leonard	Lauzon, Quenstein D./Serrano, Augusto Jr. E.	Effects of High Carbohydrate and Benfotiamine on the Growth Performance and Feed Efficiency of Juvenile Nile Tilapia, Oreochromis niloticus	The Israeli Journal of Aquaculture (IJA), 71 and 8 pages	2019	Kibbutz Ein Hamifratz/ Aquaculture Hub	Israel	Indexed in Science Citation Index Expanded, Scopus	0.23

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Author(s)	First Author	Title of Book	Year of Publication	Publisher	Place of Publication (City and Country)	Level National or International)

C. Book Chapter

Author(s)	First Author	Title of Chapter	Pages	Title of Book	Year of Publication	Publisher	Place of Publication (City and Country)	Level (National or International)

Sincerely yours,

Name of Faculty: Quenstein Dizon Lauzon

Signature:

Department: Fisheries

College: College of Fisheries and Aquatic Sciences, VSU Tolosa

Mobile No: 09489201063

Email: quenstein.lauzon@vsu.edu.ph

^{*}International (ISI/Science Direct/Scopus Indexed Journal) International (Non-ISI/Science Direct/Scopus Indexed Journal) National



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Effects of High Carbohydrate and Benfotiamine on the Growth and Feed Efficiency of Juvenile Nile Tilapia, Oreochromis niloticus

Lauzon QD1,3, Canillo SDT2, Tumbokon BLM2, Serrano AE, Jr.1,2*

- ¹ Institute of Aquaculture, College of Fisheries and Ocean Sciences, University of the Philippines Visayas, Miagao 5023 Iloilo, Philippines
- ² National Institute of Molecular Biology and Biotechnology, University of the Philippines Visayas, Miagao 5023 Iloilo, Philippines
- ³ Visayas State University-Tolosa, Tanghas, Tolosa 6503 Leyte, Philippines

Key words: benfotiamine; high carbohydrate diet; Nile tilapia; growth enhancer; feed stimulant

Abstract

This study aimed to evaluate the effects of a high carbohydrate diet (HC) alone and HC supplemented with benfotiamine (HCB), a human anti-diabetic supplement, on the growth performance of Nile tilapia fry, Oreochromis niloticus. A total of 180 Nile tilapia fry (AWB=0.01g) were randomly distributed to 9 tanks and fed one of three experimental diets, namely, a control diet containing 15% carbohydrate; high carbohydrate diet (HC) containing 25% carbohydrate; and high carbohydrate diet supplemented with 0.02% benfotiamine (HCB) for 8 weeks. Increasing corn starch in the diet from 15% (i.e. control diet) to 25% (i.e. HC diet) did not have any effect on the growth performance nor feed efficiency of the Nile tilapia. In contrast, Nile tilapia fed the HCB diet exhibited significantly the highest final average body weight, weight gain, specific growth rate, feed intake and whole-body lipid content and the most efficient FCR among the treatments. Results of the attractability tests showed that the HCB diet significantly attracted the most percentage of fish. In conclusion, the findings indicated that the Nile tilapia efficiently utilized an increase of carbohydrate from 15% to 25% and that dietary benfotiamine significantly increased the utilization of this diet, enhancing further its growth performance and feed utilization; benfotiamine also increased the attractability of the diet.

^{*} Corresponding author. e-mail: serrano.gus@gmail.com