

# CHAPTER 8

## ANALYSIS OF BACTERIAL CONTAMINATION AND DEVELOPMENT OF A BIVALVE DEPURATION SYSTEM FOR ASIAN CLAMS

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### INTRODUCTION

#### **Bivalve Growth Out and Depuration System**

Based on the literature survey, there is no record or documentation on the study of growing and purifying Asian clam in the existing literature. Only a little information about Asian clam growth in their habitat was described. Furthermore, no depuration system of Asian clam was developed ever recorded to enhance the quality of the clam for human uses. Hence, this is the first study recorded Asian clam growth performance using indoor system and development of Asian clam depuration system, aimed at producing high-quality clams.

In the existing literature, there are many studies on the growth of Asian clams in their natural habitat rather than indoor systems. An early study on Asian clam was about the growth rates in the Kanawha River, the United States of America (USA), documented in the year of 1984 (Welch and Joy, 1984). In the study, clams were distributed into 3 cages in the Kanawha River. Cage 1 contained 30 clams with the sizes less than 10mm, Cage 2 carried 25 clams with sizes ranging from 10 mm to 11.9 mm and Cage 3 possessed 25 clams with sizes ranging from 12 – 14 mm. The growth of Asian clams was monitored for 12 weeks from summer to winter. The findings of the study showed Asian clams have higher growth rate during the summer season in terms of