

# CRYOPRESERVATION OF STRIPED BASS *Morone saxatilis* SPERMATOZOA

L. C. Woods III, S. He and K. Jenkins-Keeran

## 1. INTRODUCTION

Striped bass, of the genus *Morone*, were classified by Johnson [1] into their own family Moronidae, and this classification has been adopted by the American Fisheries Society [2]. Native to North America, they have been transported to numerous other countries including: France, Germany, Israel, Portugal, Russia, Taiwan [3], and most recently, China for aquaculture. Striped bass have an elongated body, silver in color and 7-8 narrow, black stripes running laterally along the sides of the body on alternate rows of scales. Striped bass are iteroparous, and once mature, spawn around vernal equinox annually. Males arrive to spawning areas before females and may remain on the spawning grounds for over a month compared to 7-10 days for females [4]. Testicular maturation is typical of most teleost species as described by Grier [5]. Seminal production, including proliferation and differentiation of spermatocytes as well as filling of testicular efferent ducts with semen has been characterized in wild [6] and domesticated stocks [7], as correlated to rising levels of the androgens testosterone and 11-ketotestosterone. The striped bass aquaculture industry utilizes the conspecific hybrid cross of white bass females and striped bass males [8]. Cryopreservation is of significant interest to the expansion of striped bass culture as it could help minimize spawning problems associated with temporal and latitudinal differences between strains as well as the two species used to make the hybrid cross [9].