



Genetic selection for improved disease resistance in aquaculture with special reference to shrimp and tilapia breeding programs in Egypt

Mohamed Megahed

Owner, Lead Veterinarian at Zayed Veterinary Center Egypt

Abstract:

This review discusses the results of previous and current research on breeding for disease resistance in aquaculture with special reference to shrimp and tilapia breeding programs in Egypt. Disease prevention strategies such as elimination, eradication, and cultural control proved to be ineffective, costly, and unsustainable. Selective breeding offers a long-term sustainable disease control by improving genetics of disease resistance. Disease resistance has proved to be heritable trait; there are a number of applied breeding programs designed in several countries to select for improved disease resistance. Thus, Egypt has designed and implemented two breeding programs for genetic improvement of disease resistance in Indian white shrimp (*Fenneropenaeus indicus*) and red tilapia in late 2014 and early 2015, respectively. The objectives were to genetically improve disease resistance in red tilapia and develop a microsatellite-based genotyping system for *F. indicus* resistant to diseases for commercial aquaculture in Egypt.

Biography:

Dr. Megahed. My clients call me Dr. Mego. I decided to pursue veterinary medicine because it helps me to save the lives of innocent animals and assist them in their recovery to good health. While I currently have my own practice in Sheikh Zayed, Giza, Egypt, I am looking for other valuable opportunities, both nationally and internationally, to apply my academic work and experiences in a professional environment. After graduating from the faculty of veterinary medicine at Kafrelsheikh University in Egypt in July 2015, I developed my technical veterinary skills at two clinics, in addition to learning essentials of practice and client management. While at these clinics, I became skilled in internal medicine, orthopedic surgery, and diagnostics, including the use of radiography and ultrasonography. I decided to open my own 24-hour clinic, Zayed Veterinary Center, at which I am able to use the



skills I have learned to conduct routine checkups and vaccinations, emergency and critical surgical care, and house calls. Since opening my own clinic, my skills in practice management have developed greatly, I've also worked to develop my English language through this period in order to achieve my dream of traveling abroad to learn more advanced skills and global veterinary practices. I am currently studying to take the PAVE, and subsequently the NAVLE, in 2019. I look forward to connecting with you to further my goals, and assist you in achieving your own goals. Feel free to message me if you have any questions or would like to grow as colleagues. Best of luck to you in your work for animals.

Publication of speakers:

1. Genetic selection for improved disease resistance in aquaculture with special reference to shrimp and tilapia breeding programs in Egypt
2. Retraction for Megahed et al., "Complete Genome Sequence of White Spot Syndrome Virus Isolated from Indian White Prawn (*Fenneropenaeus indicus*) in Egypt"
3. Retraction for Megahed et al., "Complete Genome Sequences of Four Major Viruses Infecting Marine Shrimp in Egypt"
4. Complete Genome Sequence of White Spot Syndrome Virus Isolated from Indian White Prawn (*Fenneropenaeus indicus*) in Egypt

European Summit on Veterinary Medicine and Animal Sciences July 09-10, 2020. London U.K.

Citation: Mohamed Megahed, Genetic selection for improved disease resistance in aquaculture with special reference to shrimp and tilapia breeding programs in Egypt, Veterinary Medicine 2020, July 09-10, 2020. London U.K