



**Aquaculture Medicine.** Bright Singh, I. S. *et al.* (eds). Centre for Fish Disease Diagnosis and Management, Cochin University of Science and Technology, Kochi 682 016. 2003. 336 pp. Price not mentioned.

Aquaculture has emerged as the most promising food-production sector, with a consistent 11% annual growth. During recent years, the sector has been strangled by viral and other microbial diseases. Till date, no commercial vaccine for any disease of fishes has been made in India. It is in this context that the publication of a book on aquaculture medicine is timely. According to I. S. Bright Singh, the senior editor, aquaculture medicine is defined as a discipline to be practised at the field level on a wide range of issues related to diagnostics, antimicrobials and chemotherapeutics, probiotics, immunostimulants, vaccines and bacterins, anaesthetics, hormones, aquaculture pharmacology, population medicine, broodstock/seed certification, quarantine and so on; indeed the list is long and exhaustive. This book is claimed to represent an attempt to consolidate the state-of-the-art of processes and products in aquatic animal health management, which were presented by experts during the two national workshops, i.e. Aquaculture Medicine, 2001 and Aquaculture Drugs, 2002. The book contains 11 sections, each including a few articles on the above described issues. In all, there are 47 articles, including one by the reviewer.

There are many lessons for aquaculturists and funding agencies to be learnt from the book. Among the 47 articles, only 11 represent original contributions; the remaining are all reviews; many are authored by so-called experts, who have no publication to their credit on title of the review. Clearly, there is an urgent need for a huge investment to promote research and training for developing real expertise in this important food-production sector of our country. Again, among these articles,

only 17 are authored by scientists from a dozen and odd fisheries research institutions of the Indian Council of Agricultural Research (ICAR) and all the others are from fisheries colleges, and universities supported by the University Grants Commission. Incidentally, the following may also support this statement. A bioreactor has been designed by Bright Singh and colleagues at Cochin University of Science and Technology and is being fabricated for rapid removal of ammonia and nitrite from prawn larval rearing systems (p. 133). Likewise, a plant product has been identified by A. S. S. Hameed in a rural college and is being manufactured to contain viral disease. Therefore, the fisheries institutions under the ICAR alone cannot solve the huge and complex problems encountered by the aquaculture industry in our country. Thirdly, it is distressing to note that virtually no research work has so far been undertaken by the ICAR institutions, especially the Central Institute of Fisheries Technology, to develop techniques for microencapsulation or protocols for anaesthetics to handle and transport live fishes, which are virtually important for development of modern fisheries. Lastly, more than ten articles are authored by Bright Singh and his associates. For some reason, articles by experts like A. Chatterjee (Goa), A. S. S. Hameed (Tamil Nadu) I. S. Karunasagar, I. Karunasagar (Mangalore) and K. Pani Prasad (Mumbai) are disappointingly missing.

Bright Singh and his associates are to be complimented on bringing out this valuable book. Certainly, the book has pointed out the directions for future research and will serve as a useful starting point for those intending to practice aquaculture medicine. However, the reviewer is constrained to point out a large number of editorial errors. Among 47 articles, 11 alone have summary or conclusions. The section on 'References' in almost every article has received a raw deal by the respective author(s) and/or editors. For instance, volume and page numbers are missing for many references; the journal *Aquaculture* is wrongly spelt as '*Aqua culture*'; the standard abbreviations for journals are not followed; for instance, *Ind. J. Microbiology*, *Comp. Biochem. Physiology* (p. 177) and so on. A few grammatical errors (e.g. p. 89) and spelling mistakes (e.g. p. 269) may be seen. 'Technological use of ecological techniques...' is an example of language that is difficult to understand (p. 92).

However, the book represents the first milestone and has shown directions for future research in aquaculture medicine.

T. J. PANDIAN

*School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai 625 021, India  
e-mail: tgpandian@eth.net*



**Losing a Lost Tribe: Native Americans, DNA, and the Mormon Church.** Simon G. Southerton. Signature Books, Salt Lake City, Utah 84116-3411 USA. 2004. 270 pages. Price US\$ 24.95.

The origin and history of indigenous populations before their supposed 'discovery' by exploring civilizations the world over, largely remain unknown. Indigenous cultures believe in totemistic tales of creation that are verbally passed down across generations. Moreover, written languages are non-existent for most of these populations. Their history is, therefore, often subject to conjecture, on the one hand, and scientific debate, on the other.

This book explores the origins of native inhabitants of the Americas and Polynesia as deduced from various scientific streams, as opposed to the beliefs of the Mormons. The Mormons, who are followers of the Mormon church or the Church of Jesus Christ of Latter-day Saints (LDS), believe that all native inhabitants of the America and Polynesia are descendants of dispersed tribes from Israel. This belief is attributed to writings in the *Book of Mormon*, the sacred text of the Mormons. Published in 1830, this book, which is based on inscriptions on gold plates apparently handed over to their prophet Joseph Smith by an angel, describes the arrival of many dispersed tribes from Israel into the New World and subsequently traces their history.

To put things into perspective, the author Simon G. Southerton, a plant geneticist and once a practising high-priest in the LDS church, begins his account by examining the history and prevailing social currents at the time of the colonization of America and goes on to critically analyse