

35TH ANNUAL SYMPOSIUM ON SEA TURTLE BIOLOGY AND CONSERVATION



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## AEROBIC BACTERIAL FLORA OF GREEN TURTLE (CHELONIA MYDAS) NESTS IN SUGÖZÜ BEACHES, TURKEY

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The aim of this study was to investigate the aerobic bacterial flora of the green turtle (*Chelonia mydas*) nests and studied as bioindicator to monitoring marine pollution in Sugözü Beaches, Turkey, which is one of the most important nesting beaches for green turtle. Sand and unhatched eggs which contains dead embryo from nest were taken randomly in four sub-sections of Sugözü Beaches. A total of 18 unhatched eggs from 11 nests and 22 sand samples from different nest were collected. All samples were transferred with sterile plastic bags during June–September of 2014. These samples were stored at 4°C prior to transport to the laboratory. Isolated cultures frozen at  $-80^{\circ}$ C for further analysis. Following DNA extraction, samples were analyzed using 16S rRNA gene that targeted group specific primers for Real-Time PCR analysis. The sequences can be compared to the GenBank database by using the NCBI BLAST serve. These dominant isolates were Pseudomonas spp., Bacillus spp. and Citrobacter spp. by sequencing the partial and complete PCR amplified rRNA genes. Furthermore, species as an indicator of farming soil and factory wastewater were isolated. This study was pointed out a significant problem over biology and conservation of endangered marine turtles. Therefore, even there were important conservation measures for nesting and foraging grounds, migratory ways and physiological aspects, conservation measure both for marine turtles and researchers on field.

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## HISTOPATHOGICAL AND MOLECULAR CHARACTERIZATION OF FIBROPAPILLOMATOSIS IN CARETTA CARETTA (TESTUDINES, CHELONIIDAE) CAUGHT AT BOCA DA BARRA, CEARÁ, BRAZIL

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Studies revealed that fibropapillomatosis (FP) has multifactorial etiology, in which several biological, genetic and environmental confactors would also play a significant role in the pathogenesis in addition to viral etiology hypothesis, considering the alphaherpesvirus Chelonid fibropapilloma-associated herpesvirus (CFPHV). Lesions like fibropapillomas were reported in Caretta caretta, Lepidochelys olivacea, Natator depressus and Eretmochelys imbricata but histophatological tests were confirmed FP in lesions from C. mydas, C. caretta and E. imbricata. In Brazil, many studies have been done in order to understand the development of FP and to clarify its physiopathogeny. The aims were characterize the FP by histopathological analysis and detected CFPHV by molecular tests in cutaneous growths obtained from one loggerhead sea turtle caught at Boca da Barra, Ceará, Brazil. The sampled specimen was captured incidentally in a fishing weir, known locally as "curral de pesca", at Boca da Barra, Ceará, Brazil in October 26, 2012. This loggerhead sea turtle was already captured in 2010, according to database of Projeto TAMAR-ICMBio, without lesions similar to fibropapillomas. This Brazilian region is considered an important feeding area for green sea turtles and reports of C. caretta, L. olivacea and E. imbricata. The studied turtle (84.6 cm and 64 kg) had thirteen tumors, which were classified according to size: A (< 1 cm), B (1 - 4 cm), C (> 4 - 10 cm) and D (> 10 cm) (Work and Balazs 1999) and anatomic region. Three tumors were obtained for histopathological and molecular analysis: (1) collected from right front flipper (category A), (2) obtained from neck (category D) and (3) collected from left front flipper (non-classified). Biopsies were collected using scalpel blade between the skin and tumor, with a margin of safety avoiding neoplasia recurrence and Povidine® solution was used for asepsis. Tumor biopsies were fixed in neutral buffered 10% formalin for histopathology analysis and kept in alcohol 70% and frozen at -20 oC until molecular processing. According to results, the samples analyzed were classified as papillomas or fibropapillomas, depending on epithelial proliferation and/or stromal, respectively. The presence of herpesvirus was confirmed in agarose gel and the amino acid sequence of the fibropapilloma sample suggests that is a fragment of the gene of DNA polymerase of ChHV-5, according to GenBank. However, new DNA extractions have been conducted to molecular characterization of ChHV-5. Financial support and acknowledgements: Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (Processes 2009/53956-9 and 2012/14319-6) and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). Authors wish to thank Projeto TAMAR-ICMBio that is, historically, a collaboration between the Brazilian government and Fundação Pró Tamar, officially sponsored by Petrobrás.

