

## [217] APPLICATION OF FLOW CYTOMETRY AND GAS CHROMATOGRAPHY TO STUDY FIBROPAPILLOMATOSIS IN CHELONIA MYDAS (TESTUDINES, CHELONIIDAE) IN BRAZIL AND THEIR CONTRIBUTIONS FOR CONSERVATION OF THIS SPECIES

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The fibropapillomatosis, disease characterized by benign skin tumors, is one of the greatest threats to the survival of green sea turtles (*Chelonia mydas*). Studies attribute the cause of the disease to the association of Chelonid fibropapilloma-associated herpesvirus, genetic and environmental factors like polychlorinated biphenyls (PCBs) and toxic potentially metals. This study aimed to assess the leukocytes function (phagocytosis and oxidative burst) by flow cytometry and investigate the PCBs presence in blood samples by gas chromatography (GC-MS/MS). Moreover, hemogram was carried out in the samples. Specimens of *C. mydas* were caught randomly or rescue in feeding areas: Ubatuba/SP (n=43), Almofala/CE (n=13), Vitória/ES (n=17) and Florianópolis/SC (n=3) and caught selectively in Fernando de Noronha/PE (n=17), a nesting and feeding area. PCBs (28, 52, 101, 118, 138, 153 and 180) were analyzed in the GC-MS/MS, operating in the Single Ion Monitoring mode. The preliminary results of the samples from Ubatuba/SP showed that the animals afflicted by the disease had a larger size and PCBs congeners monitored were detected. The statistical analyses showed that values of the hemogram parameters and in the flow cytometry between afflicted and non-afflicted turtles were similar ( $p \geq 0.05$ ). The samples from the other areas of the study are still being analyzed which allows the expansion of the preliminary results and the comparison between the areas of occurrence of *C. mydas* in Brazil.

Financial support: FAPESP, 2010/01781-8.

