

# Darwin Initiative for the Survival of Species

## Half Year Report (due 31 October each year)

<b>Project Ref. No.</b>	162/10/027
<b>Project Title</b>	Darwin Initiative for the Sustainable Use of Sea Cucumbers in Egypt
<b>Country(ies)</b>	UK and Egypt
<b>UK Organisation</b>	University of Hull
<b>Collaborator(s)</b>	Suez Canal University, Egyptian Environmental Affairs Agency, Red Sea Governorate
<b>Report date</b>	2 November 2004
<b>Report No. (HYR 1/2/3/4)</b>	4
<b>Project website</b>	

### **1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).**

In relation to the stock assessment, work is continuing on the identification of the final species of sea cucumber through collaboration with Dr Yves Samyan. In addition, production of the field guide, the Fishery Management and Monitoring Plan, several scientific papers and MPhil thesis is on-going. In addition, Mr Mohammed Ismail's offer to continue to complete a PhD has been refused by his home University for internal reasons. Consequently he will now submit the work as an MPhil. The Darwin Secretariat has been informed of this. In addition, however, he will also complete a course and training in Remote Sensing and GIS in early 2005. This will provide the training agreed in the original proposal and should help in the reporting of his results in his MPhil.

In relation to the work on bioactive substances further purification and fractionation of active substances is continuing. A series of solvent systems including a mixture of different proportions of polar and non polar solvent have been tried to obtain the best solvent system suitable to separate the active fraction on thin layer chromatography. The active butanol fraction was then separated by column chromatography into fractions and the fractions eluted from these tested for bioactivity. The active fractions are now being purified, separated and partially identified by HPLC and LC/ MS. Activity in specific peaks continues to be tested using the bioassays previously developed.

In relation to mariculture, spawning trials continued with *Actinopyga mauritiana* throughout the summer. In addition caged mesocosm experiments were set up in the field to assess the impact of sea cucumber removal on habitat quality together with laboratory based trials. Spawning has continued to be unsuccessful. However, following agreement from the Darwin Initiative Secretariat, a period of training in sea cucumber mariculture techniques, including spawning and fertilization methods, rearing of larvae etc, has been organised for Mr Wael Hefny in China. This training will take place in the first half of 2005.

### **2. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

Problems continue to be encountered in the mariculture aspect of the project due to a lack of animals for broodstock and failure of spawning trials. In addition, other field based studies have been attacked by

