

Biology Symposium 2006



Professor Victor Axiak (centre), Pro-Rector Professor Richard Muscat and Minister George Pullicino opening the 2006 Biology Symposium (Photo: DOI)

The opening sentence in the foreword by Professor Victor Axiak in the abstracts booklet for this year's Biology Symposium could not be more eloquent: "This year's booklet... is indeed a bumper one". And in fact, the symposium (held yesterday week) was endowed with no fewer than 29 presentations, including 22 B.Sc. dissertations, six M.Sc. ones and one for a Ph.D. However, only 17 could actually be delivered at the symposium.

The team behind the renewed success of this 14th biology symposium is a well-oiled one, featuring the Biology Department (namely Professor Axiak, as head of the department, David Dandria, as editor of the abstracts booklet, John Camilleri and Ramon Grech as lab officers and Tiziana Bartolo as departmental secretary) and the Environment Protection Department of MEPA, which kindly contributes financially towards its organisation.

As aptly expounded by Mr Dandria, the number of research projects makes it difficult to elaborate on every project, for reasons of space - hence, I will limit myself to a brief description of each.

The event has now established itself firmly in the calendar of the local biology community as it serves as the nexus between biology lecturers and teachers, students and researchers, and also helps to make biological research more easily comprehensible to the layman.

This year's symposium was opened by Environment and Rural Affairs Minister George Pullicino, by the Pro-Rector of the University of Malta, Professor Richard Muscat, and by Professor Axiak.

We then had research presentations supervised by Edwin Lanfranco, Professor Axiak, Professor Carmelo Agius and Dr Adriana Vella.

Turning the limelight on the first set of presentations, Mr Lanfranco's B.Sc. research projects took the lion's share of proceedings (in terms of numbers). They featured a seasonal vegetational survey of the best-preserved sand dune locality in Malta - White Tower Bay (Sarah Camilleri), an *in vitro* cultivation of the stonefruit tree species *Amygdala communis* var. *amara*, the almond (Donna Louisa Cardona), ecological appraisals of Wied il-Faham in Gharghur/Naxxar (David Mallia) and of Wied Hoxt and Wied iz-Zurrieq (David Farrugia), phenotypic variations on Maltese populations of *Cynodon dactylon*, Bermuda grass (*nigem*), which belongs to the grass family (Diane Scerri) and an ecological appraisal of the Salina saline marshland (Fiona Schembri).

In the M.Sc. dissertation projects, under the same supervisor, Claudette Gambin conducted an in-depth palynological (i.e. microscopic analysis of the shape and the complex sculpturing of pollen grains) study of Maltese honey, Jonathan Henwood focused on the algal ecology of three Maltese saline wetlands (Ghadira, Ta' Qassisu and il-Ballut), Monique Hilli dealt with the micropropagation of two critically endangered plant species - *Sarcopoterium spinosum* (Thorny Burnet) and *Aristolochia clusii* (Green-flowered Birthwort, Papra selvagga), while Robert Tanti scoured for incidence of round rot and brown rot diseases in Maltese cultivated potato populations. The latter research project was also co-supervised by Professor Agius.

Of Professor Axiak's B.Sc. research students, Joanne Attard Baldacchino focused on the environmental impacts of the 81 parish feasts organised locally (this was also the theme of a prayer issued by the Church's Green Commission), Sharon Galea conducted a review of the occurrence of imposex in the gastropod *Hexaplex trunculus*, Matthew Grima Connell conducted a preliminary assessment of the benthic and sediment impact of IC-Cumnija sewage outfall, and

Elaine Saliba focused on beach management and bathing water quality at Xghajra. Ruth Guillaumier, for her M.Sc. research, characterised the impacts of local marine wastewater discharges.

Under Professor Agius's supervision, Audrey Anne Anastasi investigated the possibility of reducing the use of the brine shrimp *Artemia* in the farming of gilthead sea bream larvae, Saviour Caruana focused on the nutritional and meat quality aspects of tuna penning in the Maltese Islands, Deborah Anne Cefai focused on the effect of TEX-OER and disease on the melano-macrophage centres in sea bream, and Flavia Zammit studied the effects of *Opuntia* (prickly pear) on vibriosis in gilthead sea bream,

As for Professor Schembri's B.Sc. research projects, Colbert Balzan focused on patterns of abundance and biomass of echinoids and selected decapods in trawling area FAO GSA 15 in the Central Mediterranean, Francesca Galea Bonavia studied a psammophilic (restricted to sandy habitats) isopod (*Tylos europaeus*) from the beach of Ramla l-Hamra in Gozo, Daniela Grech dealt with aspects of the ecology of the amphipod genus *Gammarus* as found in sublittoral accumulations of *Posidonia oceanica* litter (this project was also co-supervised by Dr Borg), and Graziella Muscat looked at fouling assemblages (groups of organisms that settle on/colonise submerged anthropogenic surfaces) from two Maltese harbours within the ambit of the PORTAL project (port surveys of alien species introduced by shipping).

As for the M.Sc. research projects, Marika J. Gauci conducted an inter-seasonal investigation of biotic and physical factors on selected Maltese shingle beaches, while the only Ph.D. graduate (the undersigned) focused on an inter-annual and inter-seasonal faunistic survey of selected sandy beaches in the Central Mediterranean (Maltese Islands, Sicily, Lampedusa, Favignana and Calabria). Details of my research were published in *The Sunday Times* of September 12.

Dr Vella's B.Sc. research projects included a study on the population genetics (with an eye on conservation implications) of the local bat species *Myotis punicus* (Byron Baron), a biodiversity assessment of two country walks in Malta, with ecotourism considerations (Robert Formosa), a molecular genetic analysis of local populations of the decapod *Clibanarius erythropus* (Michaela Hili) and ecotourism considerations for two country walks in Gozo (Luana Ronsisvalle).

I end by supporting calls made at the symposium for such a wealth of research and knowledge to be used by the authorities as a cogent tool in tackling Malta's pressing environmental challenges. Kudos go to the Biology Department for its sterling contribution over the years to awareness of the local natural heritage.