E-Taxonomy of sponges

Sponges are important as habitat forming organisms, indicators of environmental health, known sources of biomedical compounds and amongst the top taxa that contribute to fouling. The available literature indicates that at present 327 sponge species are known from South Africa. The majority of these species have been described during the last century with sampling effort focused on the deepwaters of the south-east coast and shallow waters of the west coast of South Africa (see Samaai et. al., 2005). More recently, research by partner institutions and programmes such as DEFF, SAEON, SANBI and ACEP has been focused on broadening sampling effort and focusing on deeper water in order to gain a better understanding of the diversity of benthic invertebrate taxa with the South African EEZ. However, beyond the capacity of the current applicant no appropriate tools exist for the biodiversity applied researcher to identify sponge species (or more specifically those sponge species of interest). This project aims to provide modern e- taxonomy tools that include online image rich keys, genetic barcodes and high quality specimen occurrence data of South African sponge species that are collated from local and international natural history collections.