



## **Genetic Barcoding, Systematics, Fishery, Regulations and Conservation of Serranidae Species in Maltese Waters, Central Mediterranean**

**Adriana Vella\*, Noel Vella**

Conservation Biology Research Group, Department of Biology, University of Malta. Msida, Malta

### **Abstract**

Species of the Serranidae Family in Maltese waters have increasingly become considered vulnerable to endangered in conservation status due to increasing exploitation by various fishermen and the changing marine environment. To investigate the extent of these threats, it is important to be sure of the genetic identity and relationship between these species found in this part of the Mediterranean with similar species elsewhere within and outside the Mediterranean region. *Serranus cabrilla*, *S. scriba*, *S. hepatus*, *S. atricauda*, *Epinephelus marginatus*, *E. costae*, *Hyporthodus haifensis*, *Anthias anthias* are some of the species that have been genetically barcoded and assessed for their genetic identity and phylogenetic relationships. The analyses were conducted using two protein coding mtDNA genes (COI and cytb). Considerations of the fisheries aspects of these species are briefly reviewed.

### **Keywords:**

Serranidae, DNA barcoding, phylogenetics, Maltese waters, Central Mediterranean

---