

**ABSTRACT****THE GENETIC STRUCTURE OF NILE SOFT-SHELLED TURTLES,  
*TRIONYX TRIUNGUIS* (TESTUDINES: TRIONYCHIDAE),  
POPULATIONS**

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**SUMMARY**

Turtles belonging to the Trionychidae family are dispersed in all continents except Antarctica and are currently represented by 30 species distributed in 14 genera. The Nile soft shell turtle, *Trionyx triunguis* (Forskal, 1775), is distributed in Turkey, Syria, and Israel in the Middle East and from Mauritania and North Namibia to Egypt in African continent. They are spread all over the vast majority of Africa, except in the southern part of the continent.

There are not a many studies about the population structure and genetics of *T. triunguis*. The aim of the study is to provide inventory data on the genetic structure of *T. triunguis* with the samples provided from different localities in the Mediterranean and African continent. With this purpose, mitochondrial DNA control region sequences (n=52) and nine microsatellite loci (n=102) are used.

The 13 haplotypes with the primers that we designed for mtDNA control region and 3 polymorphic microsatellite markers in 9 microsatellite loci are founded. Both mtDNA and microsatellite data showed genetic divergence between the eastern and western populations of Turkey and the African continent. This genetic structuring show us to evaluate the three population as an “Evolutionarily Significant Unit”.

**Keywords:** *Trionyx triunguis*, mtDNA, microsatellite, conservation genetics, population genetics