Molecular systematics of two Mediterranean blennioid species from the genus *Salaria* (Perciformes, Blenniidae): *Salaria basilisca* and *S. pavo*

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The genus *Salaria* (Perciformes, Blenniidae) is represented on the Tunisian coast by two species *Salaria basilisca* and *S. pavo*. *Salaria basilisca* (Valenciennes, 1836) is an endemic species of the Mediterranean Sea, associated to seagrass beds and showing a very fragmented distribution (Tunisian coasts, Toulon, Sardaige and Genoa). Conversely, *S. pavo* (Risso, 1810) is widespread in the atlanto-Mediterranean region. It occurs both on rocky marine habitats and coastal lagoons, in the intertidal or in the first meters of the subtidal (Heymier, 1985). However, in the light of the recent discovery of a noteworthy cryptic diversity among the freshwater populations of the genus *Salaria*, we aimed to characterize genetically some Mediterranean populations of these two species and to study the phylogenetic relationships between them. The phylogenetic relationships of *Salaria pavo* and *S. basilisca* were thus investigated through the amplification and sequencing of three mtDNA markers 12S (453 pb), 16S (604 pb) and Dloop (475 pb). Samples were collected from Tunisian coasts and one from Thau lagoon (France). Including some freshwater blenny *S. fluviatilis* as an outgroup. Both distance-based and Bayesian trees showed largely congruent topologies, where the investigated *Salaria* specimens cluster in clades lacking any geographical or morphological structure. Accordingly, no support is given for the monophyly of *S. pavo* and *S. basilisca*, which are thus indistinguishable based on the implemented molecular markers. This unexpected result can be interpreted through two mutually-exclusive hypotheses: the first is the fact that we can have a single species with two distinct morphotypes and the second is the lack of mitochondrial divergence between these closely related and possibly recently-diverged blennioid species. Further analyses are currently underway in order to better understand this unexpected decoupling between the observed morphological and molecular diversity patterns.

**Keywords:** *Salaria*, Blenny, Tunisia, Mediterranean, molecular marker.

Correlation between Hox code and vertebral morphology in archosaurs

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This work is a morphological comparison of two species: *Phorcas turbinatus* (Born, 1778) and *Phorcas articulates* (Lamarck, 1822), performed at 31 stations along the rocky coasts of Tunisia during spring 2013. Geometric morphometry was performed to realize canonical analysis of variance (CVA) and deformation grid. *P. turbinatus* was often encountered in the interstices at the mediolitoral of exposed stations whereas *P. articulates* was mainly concentrated at the infralittoral of quiet habitats. The CVA in *P. turbinatus* (16 stations) showed that samples from the northern coasts deviate from those of the South. This projection also suggested that samples from the Gulf of Tunis are stretched toward the positive side of the axis 2 and those from the Gulf of Hammamet are excluded to its negative side. As for the samples of Cape Bon, they are overlapping with the two sets. Furthermore, CVA in *P. articulates* (9 stations) revealed overlapping sets from the Gulf of Tunis and Cape Bon and stretched samples from the Gulf of Gabes. Moreover, the comparison of the mor-