

Valenciidae Family EEP

The family Valenciidae is one of the smallest families of teleost fish in the world, with only three species described globally. In the Western Mediterranean the Valencia toothcarp, *Valencia hispanica* is found and in the Eastern Mediterranean the Corfu toothcarp, *Valencia letourneuxi* and the recently described *Valencia robertae* are found. The family is confined to Europe, in lowland freshwater ecosystems in the Mediterranean Basin. These habitats are under extreme pressure due to human activities. Agricultural pollution, hydrological system modifications and irrigation, water reduction due to climate change and the introduction of alien species have led to all three species nearing extinction; two species have been assessed as Critically Endangered.

The family has an interesting biogeography, as it occupies lowland coastal areas that weren't covered by ice during the last glacial period in Europe. The toothcarps occupy spring-fed habitats with rich aquatic vegetation that supports a diverse aquatic biodiversity. All three species show sexual dimorphism with males being more colourful than females with some iridescent scales and barring. They occupy the upper layers of the water, feeding on invertebrates among the dense aquatic vegetation and avoiding predators by retreating under floating vegetation.

These fish are egg-layers and can be kept in aquarium environments. Many killifish hobbyists have kept them but only a few public aquariums and zoos have. The species are now protected from wild collection by European and national laws and animals currently living in aquariums are the ancestors of fish collected many years ago.

The EAZA EEP for this family aims to undertake the following:

- Create, maintain and monitor secure ex-situ populations of all three species as back up (insurance) due to the extreme vulnerability of wild habitats and the high risk of extinction due to the myriad of threats.
- Support research into the ecology, biology and behaviour of the species in the family that can aid the conservation of the species in the wild.
- Collaborate with in-situ partners and agencies working on research and conservation for the species in their natural habitats in Greece, Albania and Spain.



Figure 1Top: *Valencia robertae* male; Bottom: *Valencia leteourneuxi* male