{rokbox title=|Megalopa de Ergasticus clouei :: Foto: Asvín Pérez-Torres (COB-IEO)| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-2013-ergasticus-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-2013-ergasticus.jpg{/rokbox}

Elena Marco-Herrero, **Asvin P. Torres**, José A. Cuesta, Guillermo Guerao, Ferran Palero, Pere Abelló, (2013). **The systematic position of *Ergasticus* (Decapoda, Brachyura) and allied genera, a molecular and morphological approach**. Zoologica Scripta, DOI: 10.1111/zsc.12012

Abstract: The complete larval series (zoea I, zoea II and megalopa) of the crab *Ergasticus clouei* is described and illustrated based on plankton samples from Mediterranean waters. The zoea II and megalopal stages, previously unknown, are described here for the first time. Nucleotide sequence analysis of two gene regions (16S rDNA and Cox1 genes) confirmed the assignment of these larvae to *Ergasticus clouei*. The molecular analyses and the morphology of the larval stages revealed large differences between *Ergasticus* and *Inachus*, the type genus of the family Inachidae. In fact, *E. clouei* larvae presented a series of morphological characters, such as antennal shape and mouthparts setation pattern that placed them closer to the family Oregoniidae. The phylogenetic analyses also showed significant support for the monophyly of the Oregoniidae + Ergasticus group. The data argue for removal of *Ergasticus* and the related genera (Bothromaia, Pleisticanthoides, Parapleisticantha and Pleistacantha) from the Inachidae and their placement within the Oregoniidae as a separate subfamily, Pleistacanthinae Števčić, 2005. Our results demonstrate that larval stages provide reliable morphological traits, independent from those of adults, to help resolving relationships among Majoidea genera.

Keywords: Decapod larvae, larval morphology traits, molecular analyses, *Ergasticus clouei*, Oregoniidae subfamily, Majoidea Superfamily