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TRACING THE TAXONOMIC JOURNEY OF OSTRACODS:  
FROM LINNAEUS TO LATREILLE, THROUGH  
MICHELI-TARGIONI TOZZETTI'S COLLECTIONS

In 1746, in his *Fauna Svecica* Carl Linnaeus described the ostracod genus *Monoculus* with the code 1185, as an apterous insect. In 1748, in his *Systema naturae* he named the first ostracod *Monoculus* as *Concha pedata* describing it as “*aquatic worm with tree-horned antennae*”. Ten years later, he renamed the same species as *Monoculus conchaceus*. Otto F. Muller renamed it as *Cypris pubera* O.F. Muller, 1776 (MESQUITA-JOANES *et al.*, 2020). Only in 1806, the French Pierre André Latreille (1762–1833) established the Subclass Ostracoda Latreille 1806. What happened to the classification of specimens stored in the collections of the scientists of that period? Were they following Linnaeus classification or were they following their own?

Pier Antonio Micheli (1679-1737) was a mentor and friend of Giovanni Targioni Tozzetti (1712-1783) who continued his scientific studies and between 1742 and 1745 conducted naturalistic explorations in Tuscany for the Botanical Society, documented in “*Viaggi fatti in diverse parti della Toscana*” (Reports of journeys through some parts of Tuscany). In 1763, he catalogued the Tribuna of the Medicean Gallery's collection. Known for his meticulous observations, Targioni Tozzetti gathered thousands of naturalistic samples, detailed in various documents, reflecting the history, scientific knowledge, environmental conditions, and life of his period where the origin of the material is reported.

The naturalistic specimens collected by Targioni Tozzetti are housed at the Museum of Natural History of Florence (Italy). Among his historical mollusk collection, 3 vials containing several dry ostracod carapaces and valves have been found. Each vial is labelled as “XV *Colymbis natatrix* Targ.” on the side and “Firenze” (Florence) with a progressive number from 1 to 3 on the top, closed by a cap. In the 11 tomes of his archive, the material is classified

under *Testacea fluviatila* section 3 *Conchae fluviatilis*, referring to GUALTIERI's book "Index Testarum Conchyliorum", published in 1742. Later, he referred to the ostracods as insects (TARGIONI TOZZETTI, 1768). Targioni Tozzetti described the samples as *Colymbis*, stating that some of them were previously part of the Micheli's collection. All of them were collected in Florence and its surroundings: a terracotta pot in the Giardino dei Semplici, a plant's pot in the terrace of Micheli's house, a plant's saucer in Targioni Tozzetti's garden.

The vials are capped by a cork and cannot be opened due to preservation issues. Analyzing the vials under a microscope, the ostracod could be determined as *Herpetocypris reptans* (vials 1 and 2), *Heterocypris incongruens* and *Cypridopsis vidua* (vial 3).

Targioni Tozzetti's observations on the movements of the ostracods led him to note that the animals were moving as shrimps. His observations of the swimming animals are extremely detailed and include some speculations about them having eyes. Targioni Tozzetti lived during a particular period when Linnaeus's ideas were beginning to make an impact in the academic world, though with many dilemmas and uncertainties. His son Ottaviano later worked on the malacological collection and on the catalogue adopting the binomial nomenclature and naming the specimens *C. natatrix*.

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