

## **ProtoGSD in the Catalogue of Life – a case study on Mollusca and Platyhelminthes**

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Mollusca is the second largest phylum in Animalia with estimated valid species of around 100K. Until recently the Catalogue of Life contained less than 15% of valid species of Mollusca and less than 18% of Platyhelminthes. In contrast, the average completeness of the entire CoL is 70%. Often large taxa with marine, freshwater and terrestrial species, like the phyla Mollusca and Platyhelminthes have no Global Species Databases (GSDs) yet and because of this are extremely underrepresented in the CoL.

In i4Life (EC-FP7-i4Life-project-261555) the new ProtoGSD procedure was applied. This brings data from different regional databases (e.g. Catalogue of Life China, ITIS for North- and Central America, NZIB for New Zealand) and thematic databases (e.g. WoRMS of marine species, FADA of freshwater species) together. The merging was not done automatically because of taxonomic conflicts. Preparing these new datasets by editorial checks we were able to make checklists of the phyla mentioned above with a much higher completeness. We took WoRMS taxonomy as a master classification and added data from MolluscaFW (freshwater gastropods), FADA Bivalvia (freshwater bivalves), AFD-Pulmonata (pulmonate land snails) and NZIB. Mollusca has been represented by 14,277 species in AC 2012 but by 41,655 in the AC 2013 and its completeness was almost tripled (approx. 45%). Platyhelminthes species has been increased using the same procedure from 3,577 in 2012 to 9,166 in AC 2013.

ProtoGSD is an efficient procedure to provide data with global coverage until GSDs become available. Several crustacean taxa are candidates for ProtoGSDs.