

# Amphipoda (Crustacea, Malacostraca) Risto Väinölä

Finnish Museum of Natural History, University of Helsinki





# **Amphipoda**

Brussels, 28-29-30 September

#### Brooding peracarid crustaceans – no larval stage / metamorphosis

- Size 1-3 cm usually (0.1-34 cm)
- In all marine habitats: often important in the ecosystem
  - + freshwater & terrestrial
- Benthic (infauna, epifauna), nektobenthic, pelagic, troglophilic, ectoparasitic...
- Herbivores, detrivores, predators, scavengers...

#### Photos from WoRMS





# Place of order **Amphipoda** within class **Malacostraca** (« macrocrustaceans »)

#### **Eumalacostraca** (subclass)

- Syncarida
- Eucarida
- Amphionidacea
- Euphausiacea
- Decapoda
- Peracarida (superorder)
- Amphipoda (order)
- Cumacea
- Isopoda
- Lophogastrida
- Mysida
- Tanaidacea

Hoplocarida Phyllocarida

### 10 000 species / 210 families total

#### 2 000 freshwater species (20 % of total)

- half of them subterranean
- most diverse in temperate environments

## Higher classification in flux

#### Suborders (as of 2013)

- Gammaridea (4000 / 100)
- Hyperiidea (300 / 17)
- Ingolfiellidea (40 / 2)
- Senticaudata (5500 / 93)





# Database & checklist history and status

1.

Freshwater species list compiled for FADA (Väinölä et al. 2008), but not released:

- goal of more complete documentation (referenced) not achieved (6 regional coeditors)
- FADA output & user interface (→ 2011)

2013 FADA amphipod project dismissed, all activity moved to WAD / WoRMS [to avoid repetition]



2.

- A. WoRMS growing from ERMS and RAMS (Costello, Bellan-Santini, Vader, DeBroyer...),
- B. Jim Lowry's private World List of Amphipoda (unpubl.)



2010 WAD = World Amphipoda Database (in WoRMS)

2013 Amphipod Editor Team: Tammy Horton + 30 taxonomic co-editors, incl. c. 10 freshwater editors (only partial overlap with FADA)

4. Editors inactive. FADA data not merged to WAD so far

**5.** 

2015 FADA is reactivated and FADA ← → WoRMS autotransfer developed?

New checklist project launched!

# World Amphipoda Database





# Freshwater amphipod checklist project (2000+ spp.)

- Fully referenced data entered & checked through WAD / WoRMS by c. 10 taxonomic editors
  - with help from WAD coordination (T Horton) & WoRMS data team (?)
- Aligned with previously compiled FADA data (so far owned by partly different editors)
- Streamlining input & output of specific fields (?)
- To be published also as a peer-reviewed publication, referenced for sources of taxonomy (status reference) and overall distribution of all species [as opposed to plain list based on personal authority] a main incentive to the authors
- A pilot case for the WoRMS FADA data link?
- Pilot of using the tools for building new-generation checklist (referenced + electronically linked)

# Expectations for the workshop

#### To learn:

Clarifying procedures for smooth output / input / output of specified fields during trimming of checklists, from the WoRMS/WAD interface

Learning about use of the WoRMS Distribution data input (gazetteer principles)

Why would FADA not be a «context« within WoRMS?