

ON THE STRUCTURE OF THE STOMACH AT *MESONISCUS*  
(ISOPODA, ONISCIDEA, MICROCHETA).  
THE CONSTITUTIVE ELEMENTS OF THE STOMACH  
AT ISOPODA

IONEL TABACARU, ANDREI GIURGINCA

Sur les relations phylogénétiques ainsi que sur la position systématique des Mesoniscidae (Microcheta, Oniscidea) ont été argumentées des opinions très différentes. En vue de contribuer à l'élucidation du problème, après une succincte analyse des principaux éléments constitutifs de l'estomac des Isopodes, on donne une description de l'estomac chez les espèces du genre *Mesoniscus*.

1. INTRODUCTION

Considering their morphological structures and their varied way of life, the Isopoda represent one of the most complex and diversified orders of the Malacostraca. They inhabit seas and oceans, from the abyssal zone to the seashore and brackish, surface and subterranean freshwaters, as well as the terrestrial environments from wet areas to arid, desertical ones.

The terrestrial Isopoda, respectively the suborder Oniscidea, are remarkable through the high number of representatives (approx. 400 genera and 4000 species) and being the sole group of Crustaceans which really conquered the terrestrial domain from sandy seashores to altitudes of 4700 m (Vandel, 1943, 1960; Gruner, 1995/1996; Schmalzfuss, 1983; Wägele, 1989; Tabacaru & Danielopol, 1996a, 1996b, 1999; Roman & Dalens, 1999).

Contrary to the opinion sustained especially by Vandel (since 1943 to the end of his life) that terrestrial Isopods represent a heterogenous ensemble formed by phyletic lines with different origins, more recent researches (Schmalzfuss, 1989; Wägele, 1989; Tabacaru & Danielopol, 1996a, 1996b, Tabacaru, 2002) proved the monophyly of this order.

The stomach of the Malacostraca has a very complex constitution and numerous authors emphasized the importance of its study from a phylogenetic and systematic point of view (Vandel, 1943; Siewing, 1956; Mathes, 1956; V.V. Radu, 1959, 1961; Flasarova, 1967; Tomescu, 1974; Scheloske, 1976a; V.Gh. Radu, 1983; Wägele, 1989; Tabacaru et Danielopol, 1996b; Tabacaru & Platvoet, 2000). We should specify that studying the stomach of the crustaceans has numerous difficulties. First of all, there is the inherent and objective difficulty of investigating and understanding the structure of a very complicated, tubular internal