



## On some species of *Chone* Krøyer, 1856 (Polychaeta: Sabellidae) from world-wide localities

MARÍA ANA TOVAR-HERNÁNDEZ

Laboratorio de Poliquetos, El Colegio de la Frontera Sur, Unidad Chetumal, Avenida Centenario km 5.5, 77900, Chetumal, Quintana Roo, México. E-mail: maria\_ana\_tovar@yahoo.com

### Table of contents

Abstract .....	32
Resumen .....	32
Introduction .....	32
Methods .....	37
Results .....	38
<i>Chone</i> Krøyer, 1856 .....	38
<i>Chone australiensis</i> Hartmann-Schröder, 1979 .....	38
<i>Chone costulata</i> (Grube, 1877) new combination .....	39
<i>Chone fauveli</i> McIntosh, 1916 .....	42
<i>Chone infundibuliformis</i> Krøyer, 1856 new synonymy .....	44
<i>Chone kroyerii</i> Sars, 1862 .....	45
<i>Chone letterstedti</i> (Kinberg, 1867) .....	47
<i>Chone murmanica</i> Lukasch, 1910 .....	49
<i>Chone normani</i> McIntosh, 1916 .....	50
<i>Chone oculata</i> Annenkova, 1952 new status .....	52
<i>Chone paracincta</i> Hartmann-Schröder, 1962 .....	53
<i>Chone rosea</i> Hartmann-Schröder, 1965 .....	55
<i>Chone</i> sp. Aleutian Islands .....	56
<i>Chone</i> sp. British Virgin Islands .....	58
<i>Euchone</i> Malmgren, 1866 .....	60
<i>Euchone eniwetokensis</i> Reish, 1968 .....	60
<i>Euchone perseyi</i> (Zenkewitsch, 1925) new combination .....	62
<i>Euchone rubrocincta</i> (Sars, 1862) .....	62
<i>Jasmineira</i> Langerhans, 1880 .....	63
<i>Jasmineira reayi</i> (McIntosh, 1916) new combination .....	63
Discussion .....	63
Acknowledgements .....	66
References .....	66

## Abstract

The present study deals with the revision of type and non-type material from species of *Chone* Krøyer, 1856 (Polychaeta: Sabellidae) that have been described from world-wide isolated localities. *Chone australiensis* Hartmann-Schröder, 1979, *C. fauveli* McIntosh, 1916, *C. kroyerii* Sars, 1862, *C. letterstedti* (Kinberg, 1867), *C. murmanica* Lukasch, 1910, *C. normani* McIntosh, 1916, *C. paracincta* Hartmann-Schröder, 1962, and *C. rosea* Hartmann-Schröder, 1965, are redescribed. Two additional forms are recognized as independent taxa, referred to as *Chone* sp. "Aleutian Islands" and *Chone* sp. "British Virgin Islands". These species are informally described since few specimens are available; however, they are included here in order to facilitate and encourage further research. *Sabella costulata* Grube, 1877, is transferred to *Chone*. *Chone suspecta* Krøyer, 1856, is synonymized with *Chone infundibuliformis* Krøyer, 1856; the name *infundibuliformis* has priority over *suspecta*. *Chone murmanica oculata* Annenkova, 1952, deserves specific status. *Chone eniwetokensis* (Reish, 1968) is returned to the original genus (*Euchone*). *Chone perseyi* Zenkewitsch, 1925, and *Chone rubrocincta* Sars, 1862, are transferred to *Euchone*. *Chone reayi* McIntosh, 1916, is transferred to *Jasmineira* Langerhans, 1880. Differences and similarities with members of *Euchone* Malmgren, 1866, and close genera are discussed.

**Key words:** Sabellidae, fan worms, *Chone*

## Resumen

Se revisó material tipo y no tipo de especies del género *Chone* Krøyer, 1856 (Polychaeta: Sabellidae) que han sido descritas para diversas localidades del mundo. *Chone australiensis* Hartmann-Schröder, 1979, *C. fauveli* McIntosh, 1916, *C. kroyerii* Sars, 1862, *C. letterstedti* (Kinberg, 1867), *C. murmanica* Lukasch, 1910, *C. normani* McIntosh, 1916, *C. paracincta* Hartmann-Schröder, 1962, y *C. rosea* Hartmann-Schröder, 1965, son redescribas. Se reconocen dos especies referidas aquí como *Chone* sp. "Aleutian Islands" y *Chone* sp. "British Virgin Islands". Dichas formas son descritas informalmente debido a que existe poco material, pero son incluidas en el presente estudio para promover investigaciones futuras. *Sabella costulata* Grube, 1877, es transferida a *Chone*. *Chone suspecta* Krøyer, 1856, es sinonimizada con *Chone infundibuliformis* Krøyer, 1856; el nombre *infundibuliformis* tiene prioridad sobre *suspecta*. *Chone murmanica oculata* Annenkova, 1952, merece un nivel específico. *Chone eniwetokensis* (Reish, 1968) se mantiene en su género original (*Euchone*). *Chone perseyi* Zenkewitsch, 1925, y *Chone rubrocincta* Sars, 1862, son transferidas a *Euchone*. Finalmente, *Chone reayi* McIntosh, 1916, es transferida a *Jasmineira* Langerhans, 1880. Se discuten diferencias y similitudes con miembros de *Euchone* y géneros cercanos.

## Introduction

Fifty-nine species have been formally described in *Chone* Krøyer, 1856 (Table 1), a genus of sabellid polychaetes frequently found in soft-bottom marine sediments. The world-wide revision of *Chone* has been carried out in a series of papers by Tovar-Hernández (2005), Tovar-Hernández and Sosa-Rodríguez (2006), Tovar-Hernández (2007) and Tovar-Hernández *et al.* (2007). The present manuscript constitutes the last contribution of these taxonomic series of papers; it includes the revision of some species described from world-wide isolated localities.

The genus *Chone* includes small to large-bodied species (2 mm to almost 20 cm). The body is cylindrical, except for a slight posterior dorso-ventral depression (Fig. 1). The branchial crown is composed of two structural components: branchial lobes (**1**) and radioles (**2**) (Fig. 2A). The branchial lobes are the proximalmost part of the crown and attached to the anterior end of the body. The lobes are curved, fused dorsally (**d**) (Fig. 2B) and located in a lateral position on either side of the mouth. A variable number of radioles are attached along the distal margins of the lobes (Fig. 2A). Along the inner margins of each radiole is a paired series of ciliated pinnules (**pi**), beginning just in the radiole base and continue towards the radiole tip (Fig. 2D). The radiolar skeleton extends through the long axis of each radiole and into the pinnules; it extends into the pinnules as a single row, usually being longer than wide (Fitzhugh, 1989).