



## Nonmarine ostracods (Crustacea) from South Korea, including a description of a new species of *Tanycypris* Triebel (Cyprididae, Cypricerinae)

CHEON YOUNG CHANG<sup>1</sup>, JIMIN LEE<sup>1</sup> & ROBIN J. SMITH<sup>2</sup>

<sup>1</sup>Daegu University, 15 Naeri-ri, Jillyang-up, Gyeongsan 712-714, South Korea

<sup>2</sup>Lake Biwa Museum, 1091 Oroshimo, Kusatsu, Shiga 525-0001, Japan

### Abstract

Preliminary surveys of brackish and freshwater habitats in the southeast and east of South Korea produced a total of fifteen species. Ten of these species are new records for Korea, and one additional species, belonging to the genus *Tanycypris*, is newly described herein. Twenty-seven species of nonmarine ostracods are now reported from Korea, but this is probably only a small proportion of the actual number of species inhabiting the peninsula. The presence of *Dolerocypris ikeyai* Smith & Kamiya, 2006, *Cryptocandona brehmi* (Klie, 1934), *Cryptocandona tsukagoshii* Smith, 2011, *Physocypris nipponica* Okubo, 1990 and *Vestalenula cylindrica* (Straub, 1952) on the Korean Peninsula demonstrates that these species are also distributed on the continent, and are not endemic to Japan.

**Key words:** Freshwater, brackish, Podocopida, spring, seep

### Introduction

Sixteen named species of nonmarine ostracods have previously been reported from Korea. McKenzie (1972) reported three species/subspecies from a speleological survey of seven limestone caves in the northeastern part of South Korea, and this was followed by Kim & Min (1991a; 1991b), who recorded a further eight species from various freshwater habitats such as rice fields, ponds and bogs. During a survey of the ostracod fauna along the eastern coast of South Korea, Lee *et al.* (2000) added another five identified species to the list (Table 1). This low number of species is most probably a result of the lack of studies in Korea that have focussed on ostracods, rather than the ostracod fauna being particularly of low diversity on the peninsula. The purpose of this study is to conduct a preliminary survey of some nonmarine habitats in the south east and east coast of South Korea (Fig. 1) to expand the current knowledge of the country's ostracod fauna.

### Material, methods and terminology

Specimens were collected by sieving sediment from various habitats through a 125 micrometers sieve, or by scooping and filtering sediment through a net with 64 µm mesh size. The resulting sediment was transferred to the laboratory in sample pots, and the specimens picked while alive. For storage, specimens were transferred to 70% ethanol. Appendages were dissected and mounted in glycerol and drawn with the aid of a camera lucida. Carapaces are stored dry in micropalaeontological cavity slides. Carapaces used for SEM investigation were coated with gold before being photographed with a JEOL 5800 LV scanning electron microscope.

The type material of the new species is deposited in The National Institute of Biological Resources (NIBR), Korea (Numbers: NIBRIV0000243259 to NIBRIV0000243262). Other figured material is deposited in the Department of Biological Science, Daegu University (Numbers: DB40011 to DB40028). All material was collected by the authors.