EXPANDING THE KNOWN DISTRIBUTION OF CHIROCEPHALUS KERKYRENSIS PESTA, 1936 (BRANCHIOPODA, ANOSTRACA) IN ITALY

BY

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ABSTRACT

A recent Italian record of Chirocephalus kerkyrensis Pesta, 1936 expands the known distribution of the species in Italy and provides new information about its supposed home range. The discovery of C. kerkyrensis at 508 m a.s.l. raises questions about our previous knowledge of the species and illustrates the problem of inadequate information about Anostraca in Italy.

INTRODUCTION

First described by Pesta (1936) from temporary waters on the island of Corfu (Greece), Chirocephalus kerkyrensis was recorded by Stella (1963) in the province of Latina (Latium, central Italy). Further studies reported that this fairy shrimp was confined to temporary waters in the plain south of Rome, where it occurred with several populations (Cottarelli, 1965; Stella & Margaritora, 1966, 1968; Mura & Cottarelli, 1984, 1986; Mura & Rinaldi, 1986; Mura & Saltini, 1989). However, recent investigations revealed that the former populations have been progressively eliminated by increasing urbanization and agricultural expansion (Mura, 1999). Consequently, C. kerkyrensis must now be considered a rare species, with only...
four previously known localities with extant populations (fig. 1). Two of these are
conserved in the protected areas of the Circeo National Park (Province of Latina)
and the Castelporziano Presidential Estate (now a Nature Reserve), respectively,
whereas the other two (pools in the Foglino wood near Nettuno and a pool near
Ardea) have an uncertain future and are very likely endangered.

Here we report a fifth, exceptional record of the species in the Pollino National
Park (Calabria-Basilicata, southern Italy), where it was found during a faunal
survey of the Park’s temporary and permanent water bodies.

METHODS

Specimens (8 ♂♂ and 7 ♀♀ adults) were collected on 6.i.2004 (G. Alfonso
and S. Moscatello legerunt) with a plankton net (200 µm mesh size). They were
preserved in 80% alcohol and examined under a stereomicroscope; some of them
were prepared for SEM observations as described in Mura (1991).

DESCRIPTION OF THE SITE

The area where the anostracan specimens were collected is characterized by
woods dominated by Turkey oak (*Quercus cerris* L.). The dominant species of
the underbrush is bramble (*Rubus* sp.). The pool (20 × 10 m, max. depth 30 cm)
is situated at 508 m a.s.l. in the “località Lago Avena” in the municipality of
Francavilla sul Sinni (Basilicata) (40°02′59″N 16°14′45″E), within the Pollino
National Park (fig. 1).

RESULTS

The male and female characters of the adult specimens are consistent with the
morphology originally described for the species (Pesta, 1936; Cottarelli, 1965).
Species identification was based on male secondary sexual characters and female
trunk ornamentation (fig. 2). However, because of the small sample size, it was not
possible to evaluate the extent of intraspecific variation in the above characters.

CONCLUDING REMARKS

The new record of *Chirocephalus kerkyrensis* raises questions about our pre-
vious knowledge of the ecological requirements and distribution of the species
(Cottarelli & Mura, 1979; Mura, 1995, 1997; Mura & Dowgiallo, 1996). Past