INTRODUCTION
The algal bloom due to cyanobacteria, such as Microcystis, Anabaena, and Planktothrix, may cause serious environmental problems. Cyanobacteria can produce a large spectra of toxins that can have effects on human health and/or on aquatic living organisms. Lately, Planktothrix rubescens is the dominant species in a large number of subapine European lakes (Briand et al., 2005) but it also proliferates in Southern Italy (Matti and Stefanelli, 2008). P. rubescens can produce mainly microcystin, an highly hepatitis cytotoxic hepatopatidities, of which about 80 different structures are known. Microcystins differentiate each other on the basis of two L-amino acid (X and Z) and a number of 

RESULTS AND DISCUSSION

Microcystosis toxicity is mainly due to the "Adda" amino acid, typically produced by cyanobacteria and by few other organisms. The Adda is the functional group that causes toxic effects, because it allows the binding of the toxin to the protein phosphatases causing enzymes inhibition and liver diseases.

Acute toxicity tests (24 h exposure) with Thamnocephalus platyurus were performed with endocellular and extracellular water extracts. Toxin content was detected and quantified, using high performance liquid chromatography (HPLC-DAD). No microcystin was detected in endocellular water extracts from the four-year study. Results showed that toxins were mainly present in the cells; after algal cell dying, microcystin was released into the medium where it can be detected. Different microcystins, (Fastner et al., 1999) typically demethylated microcystins, like [D-Asp

STUDY AREA AND METHODS

Lake Occhito is an artificial lake with a dam built on the Fortore River between Puglia and Molise regions. The reservoir has a volume of 3.33x10^8 m^3, and a surface area of 13 ha and a maximum depth of about 30 m. Its waters are mainly used for irrigation of about 1,100 km^2 of agricultural soils, but also as drinking water production for the Foggia Province. Sampling campaigns were undertaken between April 2009 and April 2010, collecting water from lake and from the main irrigation of the nets. Microcystins dissolved into the water were separated from solid samples by centrifugation. The lake sample collected on April 2010 showed low levels of toxins in endocellular and extracellular water extracts.

Acute toxicity tests were performed using endocellular and extracellular water extracts.

CONCLUSION
P. rubescens bloom on April 2009 into Lake Occhito confirm the presence of this cyanobacterium in Southern Italy. Microcystins production can be effectively monitored using an anostracan crustacean that allows to detect WHO limits for drinking water. A simple and rapid toxicity test is useful to evaluate the potential toxicity of P. rubescens.