Effects of Cu2+, Ni2+, Pb2+, Zn2+ and pentachlorophenol on photosynthesis and motility in Chlamydomonas reinhardtii in short-term exposure experiments

ABSTRACT

Copper and pentachlorophenol were found to be particularly toxic to PE in C. reinhardtii, with zinc being moderately toxic and nickel and lead acting as stimulants on PE. High variation in the molecular model makes it difficult to use motility as a reliable way to assess the toxicity of these compounds using Cryoma pneumoniae.

INTRODUCTION

Coccinellus is a common plant, growing to about 40 cm high. A few species have been found to be used as a food source, and are known to be rich in chlorophyll. The common name for this species is 'coccinellus', although others such as 'coccinellus conciliatus' or 'coccinellus concellus' are also used.

The species is widely grown in the United States, and is grown in many different forms, including shrubs and trees. It is grown for its leaves and leaves are often used in the preparation of medicinal products.

The leaves are a Despite the negative effects of heavy metals on land and aquatic ecosystems, their accumulation can differ depending on the type of organism. In order to assess these pollutants in freshwater, it is essential to use model organisms. Previous studies have shown that C. reinhardtii is highly sensitive to copper, nickel, lead, and zinc, which make its photosynthetic efficiency and motility important. Furthermore, pentachlorophenol was used as an additional test substance to its previous use as a bleaching agent at pulp and paper factories in Sweden.

CONCLUSION

Remarkable conclusions Copper and pentachlorophenol were found to be particularly toxic to PE in C. reinhardtii, with zinc being moderately toxic and nickel and lead acting as stimulants on PE. High variation in the molecular model makes it difficult to use motility as a reliable way to assess the toxicity of these compounds using Cryoma pneumoniae.