

PC-6.

4-chlorophenol 이 *Daphnia*의 급성독성에 미치는 영향

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Laboratory studies have suggested that some alkylphenol and pesticides elicit developmental toxicity to crustaceans. The purpose of the present study was to evaluate the possibility that the alkylphenol degradation product 4-chlorophenol is acute toxicity to the crustacean *Daphnia magna*. Arthropod (insects, crustaceans, and several minor phyla) endocrinology is dominated by the involvement of terpenoid, ecdysteroid, and peptide hormone. Some evidence suggests a role for vertebrate-type sex steroids (androgens, estrogens, progestogens) in regulating various reproductive processes in crustaceans. The paucity of the data argues that the observed effects of these steroids reflect the disruption of endocrine pathways that normally use other hormones rather than the stimulation of path way that are specifically responsive to the administered hormone. We had experiments for 5 times of 4-chlorophenol LC₅₀ finding study, that was 38.7 μ M of this chemical. This value compares favorably with previously reported values based on daphid toxicity. They do substantiate the need to evaluate the extent to which other crustacean species are susceptible to this mode of toxicity and to establish the susceptibility of other crustaceans relative to daphnids.