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The Distribution of Chlorinated Pesticides in Surfance Sediments from Masan-Chinhae Bay

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The chlorinated pesticides concentrations in surface sediment from Masan-Chinhae Bay were the highest among that of ten major harbors in Korea (Sokch'o, Uljin, P'ohang, Ulsan, Pusan, Masan, Chinhae, Mokp'o, Kunsan, and Manrip'o). In this study, the surface sediments from twenty station in Masan-Chinhae Bay were investigated.

The concentrations of total chlorinated pesticides (27 compounds) in sediments were in the range of 0.67 – 94.2 ng/g. The highest concentrations were found in J1 and M5. The concentrations were higher in Masan Bay than in Chinhae Bay and tend to higher near urban areas. Chlorinated pesticides in twenty stations were dominated by DDT compounds (o,p'-DDT, p,p'-DDT, o,p'-DDD, p,p'-DDD, o,p'-DDE, p,p'-DDE). The average concentrations of DDE, DDD, and DDT were 6.46, 3.58, and 4.35ng/g dry weight respectively. β-HCH and γ-chlordane were the dominatn in hexacychlohexane and chlordane compounds respectively. The concentrations of dieldrine (degradation product of aldrine) were higher than those of aldrine.

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Species Diversity and Niche Breadth of the *Zalkova serrata* community in Mt. Daedun

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As general, the species diversity (H′), probability of interspecific encounter (Δ_1), Levin's niche breadth (Sh), Simpson's measure of diversity (Δ_2), ratio of interspecific to intraspecific competition (Δ_4) were decreasing as the altitude develops. Whereas the intraspecific competition ($1-\Delta_1$) was increasing. And by Shannon-Weaver formula, the maximum possible diversity (H′max), eveness (J′) and dominance were represented as irrelevant to the altitude.

On the other hand, upper layer was decreasing as Simpson's measure of diversity (Δ_2) going higher, but it was increasing as D.B.H. getting lower. And Levin's niche breadth (Sh) was proportioned to the size of D.B.H..