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Study of Trophic Level in Daecheong Reservoir from 1997 to 2002

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This study investigated the water quality and trophic level in Daecheong reservoir from Mar 1997 to October 2002. Trophic level parameters (TN, TP, Chl *a*, and Secchi disc transparency) were collected at five sampling sites of Daecheong reservoir. Lake Trophic State Index (LTSI) and Trophic State Index (TSI) were applied to value trophic level.

The trophic level of Daecheong reservoir showed the difference as used index. LTSI was 5.5 ± 2.3 . TSI(TN) was 62.3 ± 4.2 . These values were correspond to eutrophic level. But it was correspond to mesotrophic that the values of TSI(SD) and TSI(CHL) were 48.8 ± 7.1 and 48.0 ± 9.1 . The merit of trophic level index is definiteness to value trophic level, but demerit has difficulty to standardize in use.

Key words: Trophic level, Daecheong reservoir, LTSI, TSI.