

## Hydraulic Analysis on Microhabitat of Benthic Macroinvertebrates at Riparian Riffles

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**Abstract :** Hydraulic analysis on microhabitat of Benthic Macro- invertebrates was performed at riparian riffles of Hongcheon River and Gapyeong Stream. As for the representative species, *Ecdyonurus kibunensis*, *Paraleptophlebia cocorata*, *Chironomidae* sp. and *Psilotreta kisoensis iwata* were chosen. They showed hydraulically different habitat types by flow velocity and particle diameters of streambed materials. Habitat conditions of the swimmers were determined mainly by the flow velocity rather than by flow depth or by riverbed materials. Burrowers prefer sand and silt, and inhabited at the riverbed. Sprawlers prefer cobble or boulder and inhabited for velocity of 0.05-0.15 m/s. Clingers prefer pebble or cobble and inhabited for velocity of 0.06-0.15 m/s. They were found to be determined mainly by the flow velocity.

**Keywords :** benthic macroinvertebrates, riffles, clinger, swimmer, burrower, sprawler

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