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Natural habitat preference by macro invertebrates associated in streams of Northern Thailand

Four stream sites were sampled using surber sampler in three different seasons i.e.dry, wet and cool to investigate natural habitat preference by macro invertebrates. Samples were collected separately from three different natural substruates, i.e. sand, leaf litter and stones.

Log n transformed data of abundance of animals shows significance difference in number of animals found between, sites, seasons and substrate types ($p<0.05$). NOVA test reveals significant difference in mean number of animals was found in leaf litter

(84.28+2.38) and which is significantly different from animals found in sand and stone. The lowest number of animals was found in sand 929.05+2.86).

Highest number of animals and taxa richness were found in leaf litter in each site except site st3, which recorded the highest number of animals and taxa richness in stones. Taxa richness was lowest in sand in all sites. Dipterans, Trichopterans, Ephemeropterans and Coleopterans contribute more than 90% of animals in all seasons. Ephemeropterans, Dipterans, and Trichopterans equally prefer a stone substrate. In the dry and wet seasons, annelids found only in sand and leaf litter.

Highest taxa richness in leaf litter can be explained by provide of better food source as well as refuge compared to other substrates. The interspaces between leaf litters provide diverse microhabitat by accumulation of silt, mud and sand. Least number taxa and individuals found in sand substrate could be attributed to its high uncertainly along stream due to stream flow and less microhabitats in sand.