

Seasonal changes of nutrient distributions along Selangor River, Malaysia

ABSTRACT

Water samples were taken six times along Selangor River between January 2014 and May 2015 in order to estimate the nutrient changes in different seasons. In the upstream, the nutrient concentrations were higher during the wet period compared to the dry due to the nutrient loading from the eroded soils. Aquaculture ponds could also contribute to the nutrient elevation. Nearly 10 % of the increased nutrients between two sampling stations could come from the aquaculture waste. The relatively high ammonia concentrations were observed in the lower part of Selangor River due to a significant input of ex-mining ponds water and one major arm river which flows through large towns. Our results showed the water quality of Selangor River is clean enough to be suitable for drinking water, but the further study of other parameters such as heavy metals is necessary to ensure the water quality of Selangor River.

Keyword: Selangor River; Nutrient concentrations; Dry and wet seasons; Pollution sources