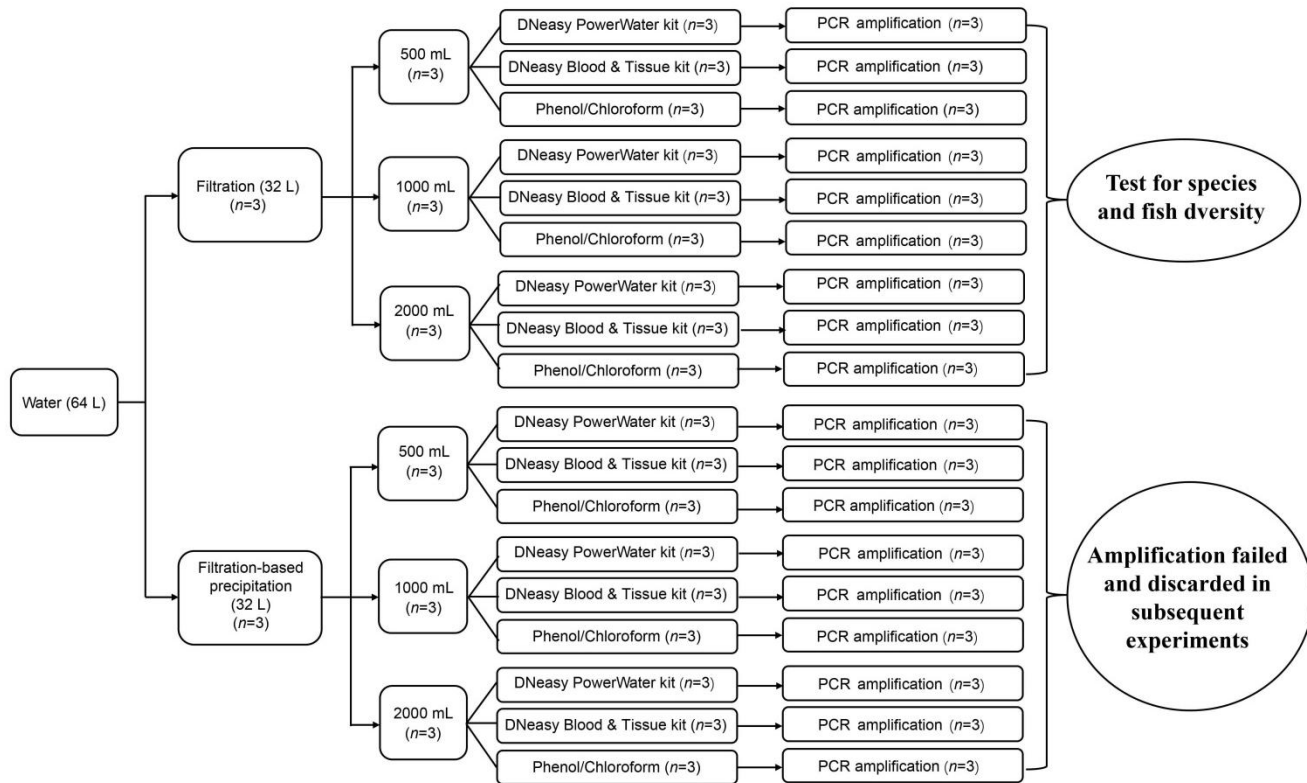
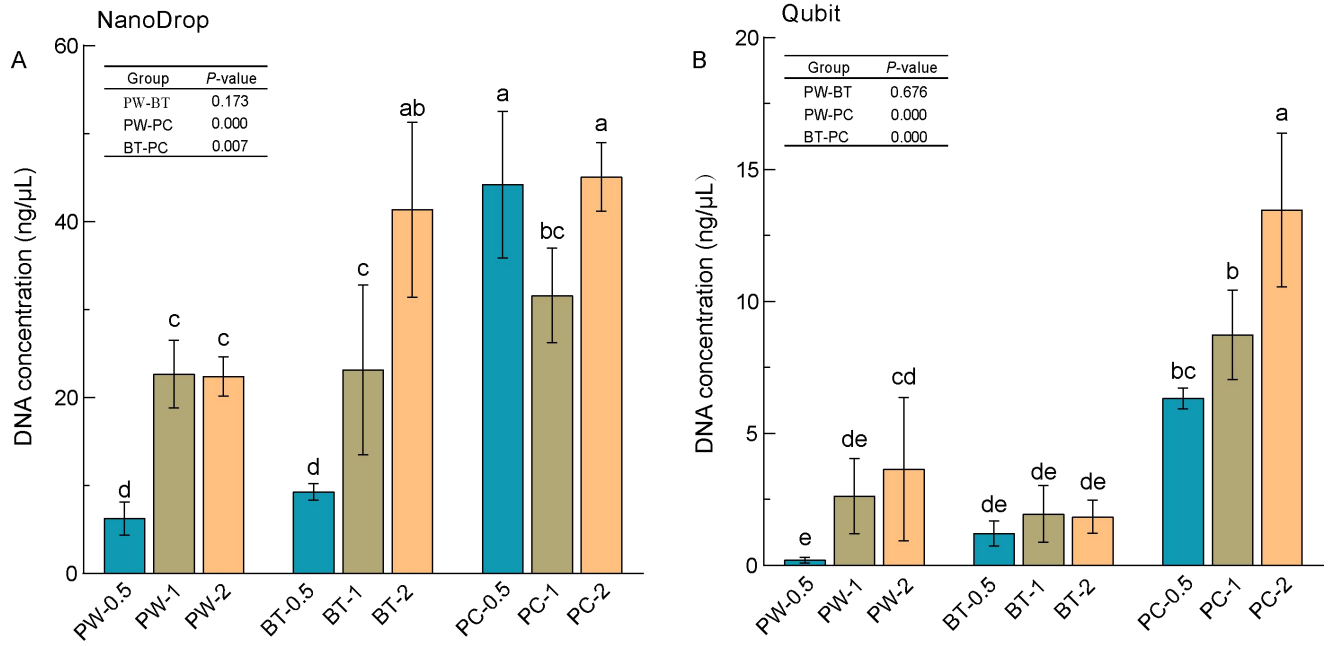


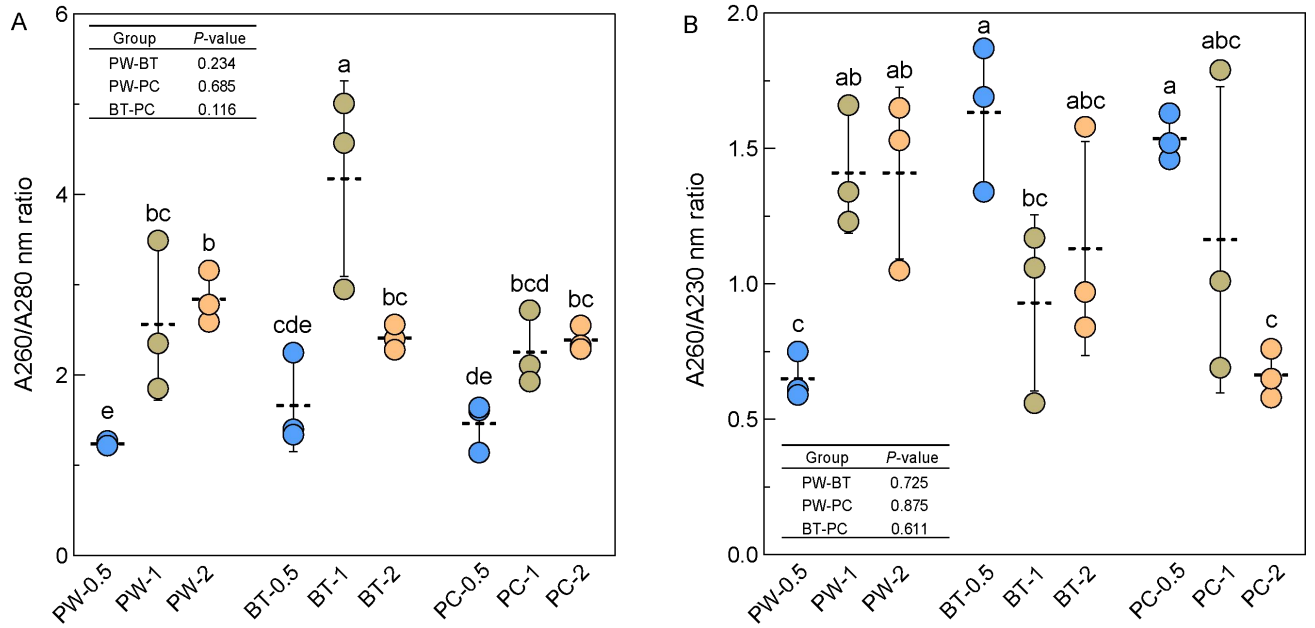
## Supplementary Materials



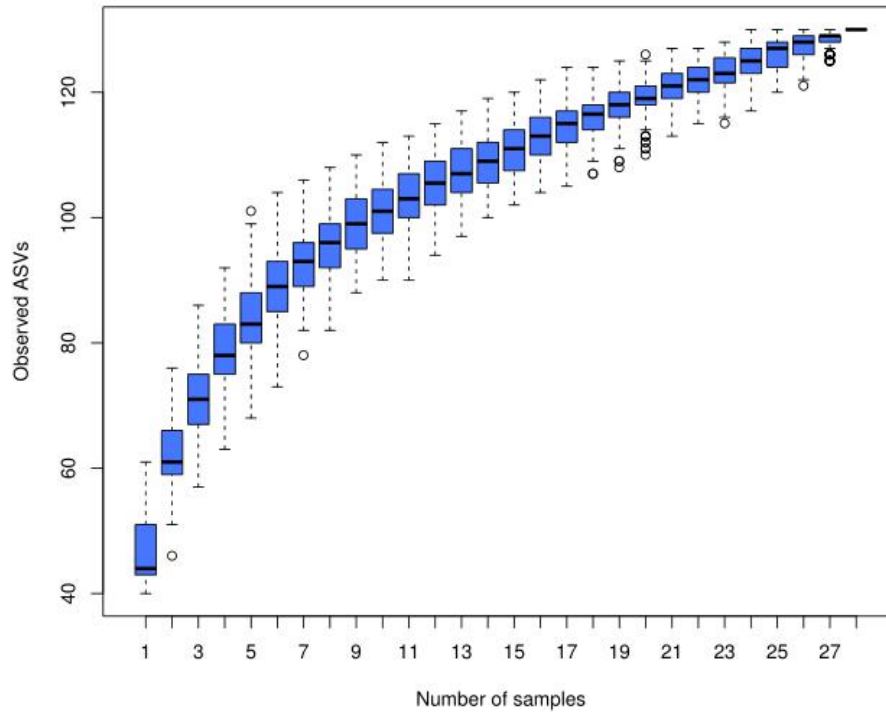
Supplementary Figure S1 Molecular workflow of the experiment.



**Supplementary Figure S2** DNA concentrations (ng/μl) captured by different filtration water volumes and extraction methods with filtration-based precipitation in PRE. (a) DNA concentrations measured by NanoDrop; (b) DNA concentrations measured by Qubit fluorimeter.



**Supplementary Figure S3** DNA quality produced by different filtration water volumes and extraction methods with filtration-based precipitation in PRE. (a) A260/A280 ratio; (b) A260/A230 ratio. Dotted line indicates means of each group; error bars show standard deviation.



**Supplementary Figure S4** Accumulation analysis of ASV richness of eDNA replicates.