

The Phosphorus and Sulphur Distribution and Culturable Bacterial In Time Chronosequence of Ex-Tin Mining Ponds

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Abstract	The tin mining had caused ecological changes that can be occurred to macro- and microecosystem. This article aims to study the pattern distribution of element of phosphorus (P) and sulphur (S) and also to identify culturable bacterial that were isolated form ex-tin mining ponds in time chronosequence. The elemets of P and S were detected by X-Ray Fluorescence (XRF) and the bacteria was isolated in medium agar and biochemistry identification by microbact. The concentration of element of P and S showed the average of P concentration increased in time chronosequence of ex-tin mining ponds, whereas the average of S concentration showed dynamic pattern. In ex-tin mining pond with age < 1 year the average concentration of P was 33,725 mg.L-1 and S was 311,45 mg.L-1. In ex-tin mining pond with age 5-10 years were P (59,8 mg.L-1) and S (451,75 mg.L-1). In ex-tin mining pond with age > 15 years were P (67,44 mg.L-1) and S (386,125 mg.L-1). While, the culturable bacteria were Kurthia spp; Actinobacillus equuli; Bacillus amyloliquefaciens; Bacillus spp; Micrococcus sp; Enterobacter gergoviae; Veillonella sp; Enterobacter aerogenes; Moraxella bovis; Nitrobater spp; and Enterobacter agglomerans.
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