

Heavy metal concentrations and distribution of water, soil, and fish around the Qinghai-Tibet Plateau-A review

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The Qinghai-Tibet Plateau, known as the third polar and roof of the world, serves an important role in evaluating long-term ecologic conditions and environmental status and changes of the surroundings over time. Supported by 100-Talent Plan of Chinese Academy of Sciences (CAS), this study summarizes major concentrations in water, soil, and food around the Qinghai-Tibet Plateau based on the previously published data. The soil heavy metal contamination degree and the water heavy metal hazard index were respectively evaluated. The contamination degrees of two sampling areas around the Qinghai-Tibet Plateau showed extremely high levels with soil mC_d (modified degree of contamination) values exceeding 20. The hazard indexes of two important rivers have reached unacceptable level (>1). Heavy metals, especially Hg, were also frequently detected in fish of the Plateau. The potential risk might be beyond our expectation. Therefore, it should be an urgent and top priority to identify and confirm possible pollution sources around the Qinghai-Tibet Plateau to guarantee the ecological safety and food safety of this area.

Biography

Jun Wu has completed her PhD from Shanghai Jiao Tong University. She is working as a Professor at Qinghai Institute of Salt Lakes, Chinese Academy of Sciences. She has published more than 20 papers in reputed journals.

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