Cultivation method of *Eleocharis acicularis* on phytoremediation

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**Abstract**  
Regarded as a highly promising technology, phytoremediation uses plants that absorb contaminants, such as toxic heavy metals, to remediate polluted soils, and has the benefits of low cost and low environmental impact. *Eleocharis acicularis* is well known as a heavy metal hyperaccumulating aquatic plant and expected as the strong candidate for application to phytoremediation of polluted water. The objectives of this study were to examine cultivation method of *E. acicularis* on phytoextraction of heavy metal polluted water. In order to establish a cultivation method of *E. acicularis*, three methods have been experimented; (1) direct, (2) pot cultivation, and (3) floating cultivation.

Based on the cultivation experiments the floating cultivation method is most suitable for phytoremediation of heavy metal polluted water by *Eleocharis acicularis*.

**Keywords**: macrophytes, *Eleocharis acicularis*, phytoextraction, heavy metal, contaminated water, mine site, floating cultivation method