# Peran eceng gondok (eichhornia crassipes) sebagai biofilter dan fitoremediasi terhadap logam cu, cd, pb, dan zn dalam rangka restorasi situ = Role of water hyacinth (eichhornia crassipes) as a biofilter and phytoremediation for metal cu, cd, pb and zn for aiding the restoration of lake

Astri Ratnasari, author



---

Abstrak

Eceng gondok (Eichhornia crassipes) merupakan tumbuhan air tawar yang berpotensi dijadikan biofilter padatan tersuspensi dalam air. Eceng gondok termasuk tanaman hiperakumulator karena kemampuannya dalam mengakumulasi logam terlarut dalam perairan. Kemampuan tersebut memungkinkan eceng gondok dijadikan sebagai tanaman fitoremediasi. Penelitian terdiri dari tiga kelompok, yaitu eceng gondok sebagai biofilter padatan tersuspensi, penentuan titik jenuh pengikatan padatan tersuspensi oleh akar eceng gondok dan fitoremediasi logam Cu, Cd, Pb, dan Zn. Hasil penelitian menunjukkan bahwa eceng gondok dapat digunakan sebagai biofilter padatan tersuspensi dan agen fitoremediasi Cu, Cd, Pb dan Zn dalam waktu lebih dari 7 hari.

<hr>Water hyacinth (Eichhornia crassipes) is a freshwater plant that has potential as bio-filter of suspended solid in the water. Water hyacinth is one of the hyper-accumulator plants because of its ability to accumulate metals dissolved in water. Such capability can be  used as phytoremediation plant. The study consisted of three groups, namely water hyacinth as a bio-filter of suspended solid, determining point of saturation binding suspended solid by its roots and phytoremediation of Cu, Cd, Pb, and Zn. The results showed that water hyacinth can be used as a bio-filter of suspended solid and phytoremediation agent of Cu, Cd, Pb and Zn in more than 7 days.