

Bisphenol A (BPA) is a toxic endocrine-disrupting chemical that has been proven to be widely spread in the aquatic environment. This study focused on the degradation of BPA, as microbeads, in an aqueous solution using two species of water fern: *Azolla cristata* and *Salvinia molesta*. Four trials per specie were conducted over 14 days. The results suggest that both species are able to degrade BPA, something previously unobserved. It is likely that the enzyme lignin peroxidase (LiP), as the oxy-ferryl intermediate [LiP]-Fe (IV), catalyzed a reaction that mineralized BPA into carbon dioxide and water. Furthermore, LiP is suggested to come from the roots of the water ferns. Further research should investigate other LiP emitting organisms as well as water ferns in general, to further improve the understanding of the BPA degradation pathway and to minimize the significant challenges that BPA poses to human life and the environment.