

## 아시아 원산지 부유 수생식물 부레옥잠의 항산화 효능 분석

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### **Anti-Oxidant Activity of *Eichhornia crassipes* Native to Asia**

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Kadsura heteroclita (Roxb.) Craib and *Eichhornia crassipes* (Mart.) Solms. have been known to give effects on pimple. *Jatropha gossypifolia* L., *Anisomeles indica* (L.) Kuntze, *Kadsura heteroclita* (Roxb.) Craib extracts have been used for cough cold for a long time. To test whether *Jatropha*, *Anisomeles*, *Kadsura* and *Eichhornia* have anti-oxidant activity, we performed DPPH assay.

*Jatropha* showed 91.98% anti-oxidant activity and *Anisomeles*, *Eichhornia* and *Kasuda* showed 47.91%, 47.35% and 32.00% anti-oxidant activity, respectively, compared to Ascorbic acid control.

To further determine whether these extracts have any cytotoxic effects, we used MTT assay with these extracts in Raw264.7 cells. *Jatropha* showed 45.10% survival rate and *Anisomeles*, *Eichhornia* and *Kasuda* showed 76.78%, 86.24% and 82.88% survival rate, respectively, compared to negative control.

Taken together, these results suggest that *Jatropha* showed higher anti-oxidant activity than other plant extracts, however it has cytotoxic effect. Therefore, we consider *Anisomeles*, *Eichhornia* and *Kasuda* extracts might be a good candidate to develop as a therapeutic agent with higher anti-oxidant activity and lower cytotoxic effects among the tested plant extracts.

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