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**Record 1 of 1****Title:** In vitro Evaluation of the Effect of *Pluchea indica* Extracts in Promoting Glucose Consumption Activity on A Liver Cell Line**Author(s):** Suriyah, WH (Suriyah, Wastuti H.); Ichwan, SJA (Ichwan, Solachuddin J. A.); Kasmuri, AR (Kasmuri, Abdul R.); Taher, M (Taher, Muhammad)**Source:** MAKARA JOURNAL OF HEALTH RESEARCH **Volume:** 23 **Issue:** 1 **Pages:** 48-52 **DOI:** 10.7454/msk.v23i1.10153 **Published:** APR 2019**Times Cited in Web of Science Core Collection:** 0**Total Times Cited:** 0**Usage Count (Last 180 days):** 1**Usage Count (Since 2013):** 1**Cited Reference Count:** 26

**Abstract:** Background: Type 2 diabetes mellitus is a chronic metabolic disorder that is associated with mortality and morbidity. Recently, several plant-based agents have been used in the management of diabetes. *Pluchea indica* has been traditionally consumed as a medicinal plant in Southeast Asia, and its leaves have demonstrated induction of hypoglycemic effect in normal rats. This in vitro study aimed to evaluate the potency of *P. indica* extracts in stimulating glucose consumption in human liver CCL-13 cell line model. Methods: *P. indica* leaves were dried and extracted using a series of organic solvents and water. The effect of the extracts on cell viability was determined by MTT assay. The glucose consumption was analyzed using glucose oxidase method. Results: Our results revealed that the methanol extract of *P. indica* could significantly increase glucose consumption of cells in a concentration-dependent manner, which suggests the usefulness of the extract as an antidiabetic candidate via stimulation of glucose uptake into the liver cells. Conclusion: Our study suggests that *P. indica* is a potential natural candidate for diabetes mellitus management.

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