

Effect of ficus deltoidea extracts on hepatic basal and insulin-stimulated glucose uptake

ABSTRACT

The present study was designed to evaluate the potential of five extract and three fractions of *Ficus deltoidea* to enhance basal and insulin-stimulated glucose uptake into Chang liver cell line. The results showed that all *Ficus deltoidea* extracts and fractions except petroleum ether extract have the ability to enhance either basal or insulin-stimulated glucose uptake into liver cell line. Ethanolic and methanolic extracts as well as acidified chloroform and bacified chloroform fractions possess insulin-mimetic activity. Of all extracts and fractions, ethanolic extract possess the highest insulin-mimetic activity. Methanolic extract and n-butanolic fraction possess insulin-sensitizing activity, with the highest activity shown by methanolic extract. There is no synergistic effect between *Ficus deltoidea* extracts or fractions with 100 nM insulin. It can be suggested that antidiabetic action of *Ficus deltoidea* is partly associated with glucose disposal into liver cells.

Keyword: *Ficus deltoidea*; Antidiabetic, Chang liver cell lines, Glucose uptake activity