

# Experimental antihyperglycemic effect of diterpenoids of *Ilareta Azorella compacta* (umbelliferae) phil in rats

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Aqueous or ethanol infusions of *Azorella compacta* (*Ilareta*) in common with many other plants have been used as antidiabetic in the popular medicine in the altiplanic region of Chile. In order to determine if the diterpenic compounds chemically elucidated and isolated from this plant are responsible for this effect, streptozotocin diabetic rats ( $507 \pm 67$  mg/mL glucose) were injected with two injections of diterpenic compounds mulinolic acid, azurellanol, and mulin-11,13-dien-20-oic acid at 180 mg/mL. Glycemia of animals treated with mulinolic acid and azurellanol was decreased to  $243 \pm 2$  and  $247 \pm 14$  mg/mL respectively, values very close to those reached by chlorpropamide injection used in controls. After 3 h treatment with mulin-11,13-dien-20-oic acid no effect was detected. The blood serum insulin in diabetic rats ( $146 \pm 58$  pg/mL) was lower than in control rats. After injection of azurellanol, insulin was elevated to  $247 \pm 23$  pg/mL but with mulinolic acid, insulin was not changed. The