

Study on pharmacological activities of the roots of *Cicorium intibus*

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Chicory is used popularly. We use leaves of the plant as ordinary meal, and roots as a substitute of tea materials. It also has been asserted that it has clinical effects on weakness, hepatic disease, diabetes, etc. However, experimental evidences are so insufficient that we started these studies.

For antiinflammatory activity, MeOH Ex. was orally administered to rats, and decreased amounts of paw edema induced by carrageenan injection were measured.

For bile secretion increament, rats were administered total MeOH, EtOAc fraction, and BuOH faction Ex. respectively. One hour later, bile ducts were cannulated, and we collected bile every 20 minutes for 4 hours.

For hepatoprotective activity, CCl₄-intoxicated mouse were treated with MeOH Ex., then s-GPT, s-GOT, and liver weight were measured.

For antidiabetic activity, rats were induced diabetes by streptozocin 45mg/kg(i.v) injection. One week later, 1000mg/kg of total MeOH Ex. of chicory root was orally administered. we divided rats into three groups. Group 1 rats were administered only once, group 2 ones once a day for one week, and group 3 ones for three weeks. The concentrations of serum glucose were measured before and after administration.

For antihypertensive activity, SHR were administrated total MeOH Ex. of chicory once a day for 8 days, and were measured blood pressure on 1st, 3rd, 6th and 8th day. Total MeOH, EtOAc fraction, and BuOH fraction Ex. increased bile secretion in rats, and decreased liver toxicity induced by CCl₄ in mouse. Total MeOH, Ex. of chicoy roots has antiinflammatory effect, and decreased blood glucose concentration in group 2 and 3 rats. It was revealed not lowering blood pressure significantly in SHR.