The anti-inflammatory activity of Kalopanax pictus bark extract (II). Isolation of pictoside A, a new saponin

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In the previous study⁽¹⁾ we have reported that the anti-inflammatory component of kalopanaxsaponin A (1) was isolated from the secondary fraction (Fr. 8-2) of EtOAc fraction of *Kalopanax pictus* bark extract through an activity-guided isolation technique. In the present study a new saponin (2), named pictoside A, was isolated from another secondary fraction of Fr. 8-4 which showed inhibitory activity of vascular permeability at an oral dose of 50 mg/kg in mice. Its structure was elucidated as $3-O-\alpha-L$ -arabinopyranosyl- $(1\rightarrow 2)-\alpha-L$ -rhamnopyranosyl- 16α -hydroxyhederagenin by spectral analyses of 1D and 2D NMR and MS.

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Evaluation of the herbal extract mixture for the effects of Hair Re-growth

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The hair cycle consists of three phase, growth (anagen), involution (catagen) and quiescence (telogen) phases. Herbal extract mixture (STC-2) containing the extracts of Polygonimultiflori radix, Mori cortex radicis, Gingco biloba foilum, Silk protein, Cinnamomum camphora and Pine bud have been subject to investigation with specific interest in hair growth activity. To make sure of the effects on hair re-growth by STC-2, we should evaluate the induction of the anagen phase and/or elongation of the anagen period. Morphological examination of the experimental group treated by STC-2 has shown more active than vehicle in hair re-growth. Enzyme activities as a biochemical marker of hair cycle were investigated in the third hair cycle period of C3H mice after depilation. gamma-Glutamyl transpeptidase (gamma-GT) and alkaline phosphatase activities correlated well with the hair growth cycle and gamma-GT activity changed significantly with the hair cycle of the mice. STC-2 treatment may cause an early initiation of anagen, but both the STC-2 and vehicle-treated group entered telogen at the same time. The activities of glutathione peroxidase (GSH-Px) and glutathione reductase (GSH-Rd) have no decisive effect on hair re-growth. In the effect of human hair folicle cell in vitro, STC-2 treated cells expressed more 2 times phospho-Erk1/2 than control cells.

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Hypoglycemic effect of Cordyceps militaris Polymolecules in Streptozotocin-Induced Diabetic Rats.

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Cordyceps militaris(CM) has been used as a tonics traditionally. Recent research has shown the effect of