Studies on Angelica Keiskei "Ashitaba"

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Summary
Angelica keiskei KOIDZUMI (Japanese name 'ashitaba' Umbelliferae) is a hardy perennial herb, growing in the Izu islands of Japan, that is traditionally used as a diuretic, laxative, analeptic and lactagogue. It is classified into two types (Hachijo and Ohshima) on the basis of morphological characters and the HPLC profiles of coumarin components. We had isolated nine chalcones (xanthoangelol, 4-hydroxyderricin, xanthoangelol B-G and isobavachalcone), which are characteristic of the yellow pigment of this plant.

The main constituents, xanthoangelol and 4-hydroxyderricin, were found to show antibacterial activity against gram-positive pathogenic bacteria. Xanthoangelol further, demonstrated an antiulcer effect, thought to be due, in part, to its suppression of gastric H\textsuperscript{+}, K\textsuperscript{+}-ATPase activity and an ability to inhibit human immunodeficiency virus type 1 (HIV-1).

Xanthoangelol E, the hydroperoxy adduct of 4-hydroxyderricin, also effectively inhibited the production of TXB\textsubscript{2} and HHT from exogenous AA in platelets.

The actions may participate in the documented pharmacological effect of this plant.