

講演要旨集

千葉 2012

The 59th Annual Meeting of the Japanese Society of Pharmacognosy (Chiba, 2012) Abstract Papers



平成24年9月17日(月)・18日(火) かずさアカデミアパーク

日本生薬学会

共催:日本薬学会 協賛:ちば国際コンベンションビューロー 1P47 Phenolic Constituents from Bergenia crassifolia with Anti-lipid Accumulation and Vasorelaxant Activities (星薬大) ○Jenis Janar, 房梁, Chin Piow Wong, 平澤祐介, 金田利夫, 森田博史 (Al-Farabi カザフ国立大)Burasheva G.Sh., Abilov Zh.A.

[Introduction] Our research for novel lead natural products from Kazakh medicinal plants led to isolation of a new galloylbergenin 3,11-di-O-galloylbergenin (1) along with ten known phenolic constituents from the roots of *B. crassifolia*. Their structures were elucidated by spectroscopic and chemical analysis. They showed moderate anti-lipid accumulation and vasorelaxant activities.

[Results and discussion] The roots of *B. crassifolia* were extracted with 70% EtOH, and a part of the extract was partitioned with *n*-hexane, CHCI₃, *n*-BuOH, and H₂O. The *n*-BuOH layer was separated using a HP-20 column, a Sephadex LH-20 column, an ODS column, and preparative HPLC to afforded a new galloylbergenin, 3, 11-di-O-galloylbergenin (1) together with two known bergenin derivatives, two catechin gallates and six flavonoids. Their structures were determined on the basis of the 2D NMR and enzymatic hydrolysis. 3, 11-Di-O-galloylbergenin (1) and 4, 11-di-O-galloylbergenin (2) exhibited moderate anti-lipid accumulation activities, and quercetine-3-O-arabinoside(9) showed vasorelaxant activity.

