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モンゴル国ゴビ砂漠産 *Brachanthemum gobicum* から得た新規アシル化リグナン
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[Aims] The genus *Brachanthemum* (Asteraceae) is an endemic, ancient Asian flora that contains ten species in the world, three of them distributes in Mongolian Gobi. The shrub plant *B. gobicum* popularly known as an “Awful firewood”. In Mongolian traditional medicine, water and ethanolic extracts of aerial parts are used against ectoparasites, belonging to the *Linognatus*. In addition, the plant is widely used for livestock fodder in spring time. Herein, we are aimed to isolate and identify the effective compounds from *B. gobicum* that may be related to the biological activities in traditional usage.

[Material and Methods] The aerial parts of *B. gobicum* (469 g) were extracted with acetone-H₂O (4:1). The extract (63 g) was dissolved in H₂O (1 L) and extracted with Et₂O (2 x 1 L) to obtain H₂O (33 g), Et₂O (17 g) and non soluble (13 g) fractions. Et₂O fractions were subjected to silica gel column and separated using HPLC columns to obtain compounds. The structure of the isolated new compounds were elucidated by spectroscopic methods, including 1D, 2D NMR and mass experiments.

[Results and Discussion] Phytochemical investigation of aerial parts of *B. gobicum* resulted in the ten new compounds including as phenolic compounds (**1-3**) and acylated lignans (**4-10**). The new compounds were containing isovaleric acid in chemical structure, and it has been considered the responsibility for biological activity including as anti-parasite and anti-plasmodial activities. Even if the results of the present study suggest that chemical constituents of aerial parts including Et₂O fractions were containing a new compounds as an interesting structure, more though absolute stereochemistry, and their responsibility for biological activity are need to evaluate.