

论文

西陵知母中甾体皂苷的分离与鉴定

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摘要:

目的:从新鲜西陵知母(*Anemarrhena asphodeloides* Bunge.)根茎中分离出有生理活性的化学成分一甾体皂苷。方法:用柱色谱法分离纯化,通过理化方法及光谱分析(UV,IR,¹HNMR,¹³CNMR,EI-MS,ESI-MS,HMBC,HMQC)鉴定化学结构。结果:从新鲜西陵知母根茎的乙醇提取物中分离得到西陵知母皂苷A与B,其化学结构分别为萨尔萨皂苷元-3-O-β-D-葡糖基(1→2)-O-β-D-半乳糖苷和萨尔萨皂苷元-3-O-β-D-葡糖基(1→3)-O-β-D-葡糖基(1→2)-O-β-D-半乳糖苷。结论:西陵皂苷B为一新化合物。

关键词: 知母 甾体皂苷 西陵皂苷A 西陵皂苷B

ISOLATION AND IDENTIFICATION OF STEROIDAL SAPONINS FROM ANEMARRHENA ASPHODELOIDES BUNGE.

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Abstract:

AIM: To isolate and elucidate the chemical structures of the steroidal saponins possessing physiological activity from the fresh rhizoma of *Anemarrhena asphodeloides* Bunge. (Xilingzhimu). METHODS: The constituents were isolated and purified by repeated column chromatography on silica gel. The molecular structures were elucidated on the basis of chemical evidences and spectral analysis (UV, IR, EI-MS, ESI-MS, ¹HNMR, ¹³CNMR, HMBC and HMQC). RESULTS: Two steroidal saponins, xilingsaponin A and B were obtained from the fresh rhizoma of Xilingzhimu. They were elucidated as sarsasapogenin-3-O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)-β-D-galactopyranoside respectively. CONCLUSION: Xilingsaponin B is a new compound.

Keywords: steroidal saponin xilingsaponin A xilingsaponin *Anemarrhena asphodeloides*

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