

## 橐吾属植物中新苯并呋喃倍半萜二聚体的结构确定

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菊科橐吾属黄帚橐吾少头亚种植物为西北高原地区特色植物, 资源丰富。黄帚橐吾是常用的中草药, 具有治疗胃痛和呕吐等功效。我们首次就黄帚橐吾少头亚种全草的乙醇提取石油醚萃取部分进行了化学成分研究, 从中发现 5 种倍半萜类, 其中一种为结构新颖的苯并呋喃倍半萜二聚体, 通过现代各种先进的光谱和波谱技术(如: HR-ESI-MS, 1D-NMR, COSY, gHMBC, gHMBC, UV, IR)确定了它们的结构, 这个新二聚体被命名为: ligulolide D (1)。

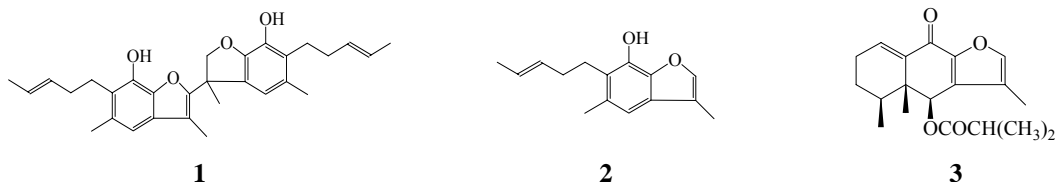


Fig.1 Structures of sesquiterpenoids 1-3

关键词: 橐吾; 菊科; 倍半萜; 二聚体。

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基金项目: 国家自然科学基金资助项目, 编号: 20021001, 20372029 和 20475057。

## A Novel Dimeric Eremophilane from *Ligularia virgaurea* spp. *oligocephala*

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*Ligularia virgaurea* spp. *oligocephala* has long been used as a traditional folk medicine for the treatment of stomachache and nausea<sup>1</sup>. A novel dimeric eremophilane, ligulolide D (1) and four known sesquiterpenoids (2-5) were isolated from the alcoholic extract of the whole plant of *Ligularia virgaurea* spp. *oligocephala*. Their structure were elucidated by various spectroscopic methods including intensive 2D NMR techniques (<sup>1</sup>H-<sup>1</sup>H COSY, gHMBC, gHMBC and <sup>1</sup>H-<sup>1</sup>H NOESY) and HR-ESI-MS.