简 讯

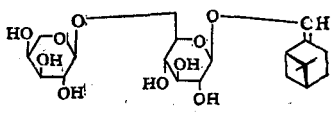
中药赤芍中化学成分的研究

郎蕙英 李守珍 梁晓天

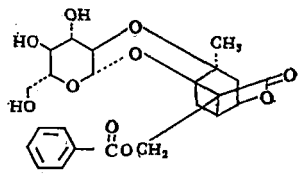
(中国医学科学院药物研究所，北京)

自中药赤芍 (*Paeonia lactiflora* Pall.) 根的乙醇提取物中，首次分得两个新单萜甙，经元素分析，制备衍生物并根据紫外光谱，红外光谱，质谱，核磁共振的氢谱和碳谱及X-射线单晶分析* 等数据，确定化合物 (I) 的分子式为 $C_{21}H_{34}O_{10}\cdot 2H_2O$，mp 112～116°C，$[\alpha]_D^{29}$-30.5° (c 0.87，乙醇)，命名为 (Z)-(1 S，5 R)-β-蒎烯-10 基 β-巢菜糖甙 [(Z)-(1 S，5 R)-β-pinen-10-yl β-vicianoside]，并确证其化学结构为 (I) 式所示；确定化合物 (II) 的分子式为 $C_{23}H_{26}O_{10}$，mp 195～198°C，$[\alpha]_D^{23}+37.2°$ (c 0.86，甲醇)，根据其光谱数据及与芍药内酯甙 (albiflorin)[1] 的生源关系，推测其化学结构为 (II) 式所示，并命名为芍药新甙 (lactiflorin)。

化合物 (I) 的甙元是醛的烯醇式，化合物 (II) 的糖与甙元之间有两个连接点，均无文献先例。



(I)



(II)

*X-射线单晶分析确定 (I) 的化学结构为美国康奈尔大学化学系 Clardy 教授所作，详情另文报道。

关键词 赤芍；(Z)-(1 S，5 R)-β-蒎烯-10 基 β-巢菜糖甙；芍药新甙；芍药内酯甙

参 考 文 献

1. Kaneda M, et al: Chemical studies on the oriental plant drugs XXXIII. The absolute structures of paconiflorin, albiflorin and benzoylpaeoniflorin isolated from Chinese Paeony root. *Tetrahedron* 28: 4309, 1972

本文于 1983 年 4 月 20 日收到。

STUDIES ON THE CHEMICAL CONSTITUENTS OF *PAEONIA LACTIFLORA* PALL.

LANG Hui-ying, LI Shou-zhen and LIANG Xiao-tian

(Institute of Materia Medica, Chinese Academy of Medical Sciences, Beijing)

ABSTRACT

Two new monoterpene glycosides were isolated from the ethanolic extract of the root of *Paeonia lactiflora* Pall. The structure of compound (I) has been identified as (Z)-(1 S, 5 R)-β-pinen-10-yl β-vicianoside; Compound (II) is named lactiflorin and tentatively assigned as (II).

Compound (I) is the glycoside of the enol form of an aldehyde. In compound (II), the sugar moiety is attached to the aglycone by two ether-like linkages. Both seem to be unprecedented.

Key words *Paeonia lactiflora* Pall.; (Z)-(1 S, 5 R)-β-pinen-10-yl β-vicianoside; Lactiflorin; Albiflorin