



Parmotrema cooperi 中的新型抗糖化物质和酶抑制剂

M. Iqbal CHOUDHARY^{①②③*}, Meher ALI^①, Atia-tul-WAHAB^②, Ajmal KHAN^①, Saima Rasheed^①, Sajan Lal SHYAULA (Shrestha)^{①④}, Atta-ur-RAHMAN^{①②}

① H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi-75270, Pakistan

② Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi-75270, Pakistan

③ Department of Chemistry, College of Science, King Saud University, Riyadh-11451, Saudi Arabia

④ Nepal Academy of Science and Technology, Khumaltar, Lalitpur, Nepal

* 通讯作者, E-mail: iqbal.choudhary@iccs.edu

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摘要 地衣是被广泛用于传统药物中的独特个体. 本文对一类地衣, *Parmotrema cooperi*, 进行了生物测定引导的植物化学研究和生物活性评价. 对该类地衣的首次生物测定引导的化学反应分离出了化合物 ethyl heamatomate (**1**), atraric acid (**2**), ethyl orsellinate (**3**), orsellinic acid (**4**), lecanoric acid (**5**), gyrophoric acid (**6**) 以及 licanorin (**7**). 化合物 **1**~**7** 的结构主要通过一维、二维核磁共振谱和质谱等谱学方法判定. 对这些化合物还进行了抗糖化活性以及尿素酶、 α -胰凝乳蛋白酶、 β -葡萄糖醛酸苷酶抑制活性的评价. 这些苯酚化合物没有显示特别好的活性, 但其中大部分对蛋白质糖化和尿素酶活性具有较好的抑制作用.

关键词 地衣 *Parmotrema cooperi* 尿素酶抑制作用 抗糖化作用

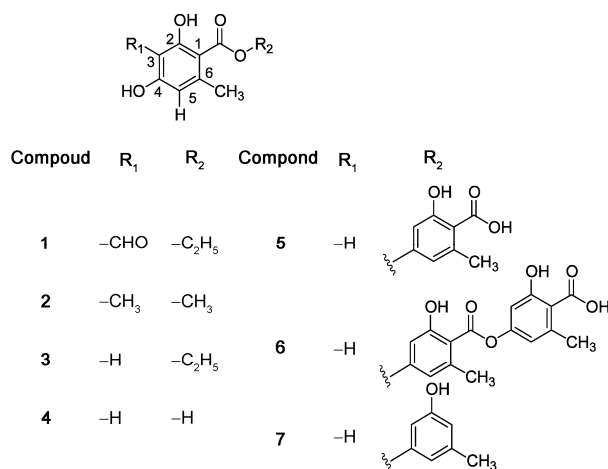


Figure 1 Structures of compounds 1–7.

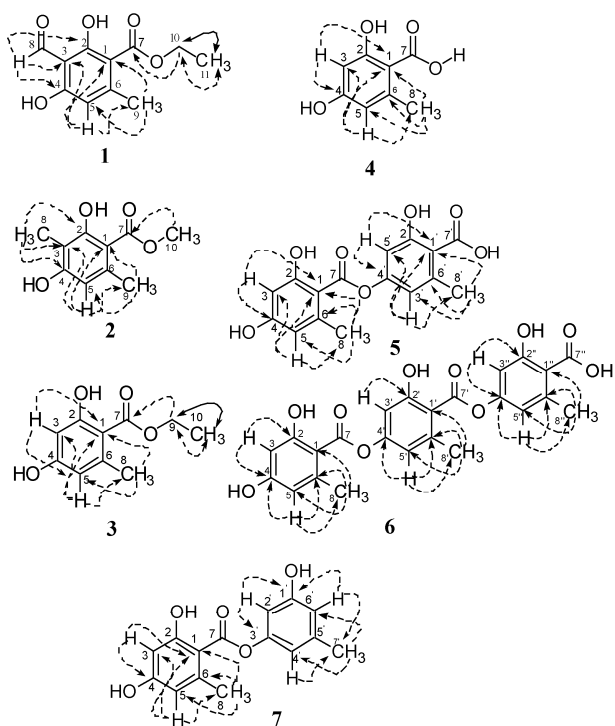


Figure 2 Key HMBC correlations represented by dotted arrows and COSY coupling showed by the plane arrow of compounds.

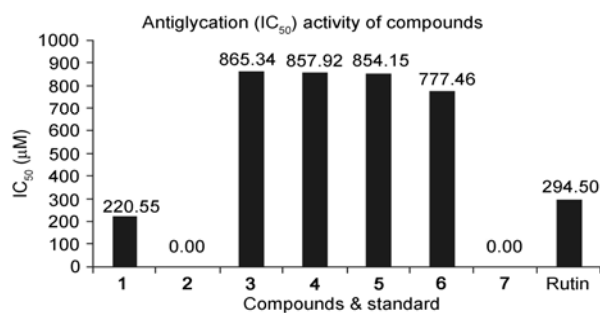


Figure 3 The graphical presentation of antiglycation (IC_{50}) activity of compounds 1-7. Compounds 2 and 7 showed no activity.

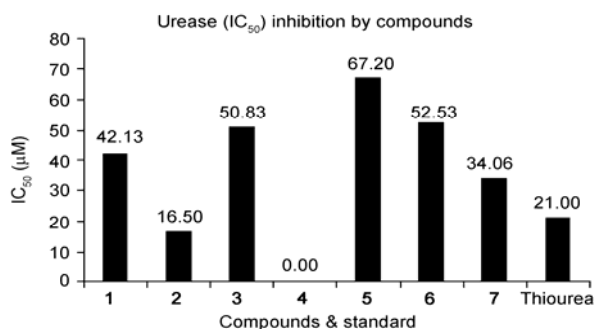


Figure 4 Graphical presentation of urease inhibition (IC_{50}) activity of compounds 1-7. Compound 4 was found to be inactive.

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