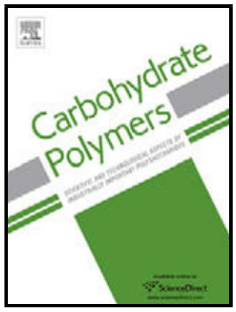

Title: Structural elucidation of a pectic polysaccharide from *Fructus Mori* and its bioactivity on intestinal bacteria strains

Authors: Saijuan Li, Meixia Li, Han Yue, Lishuang Zhou, Lulin Huang, Zhenyun Du, Kan Ding

PII: S0144-8617(18)30026-2
DOI: https://doi.org/10.1016/j.carbpol.2018.01.026
Reference: CARP 13176

To appear in:

Received date: 23-10-2017
Revised date: 20-12-2017
Accepted date: 9-1-2018

Please cite this article as: Li, Saijuan., Li, Meixia., Yue, Han., Zhou, Lishuang., Huang, Lulin., Du, Zhenyun., & Ding, Kan., Structural elucidation of a pectic polysaccharide from Fructus Mori and its bioactivity on intestinal bacteria strains.*Carbohydrate Polymers* https://doi.org/10.1016/j.carbpol.2018.01.026

Structural elucidation of a pectic polysaccharide from *Fructus Mori* and its bioactivity on intestinal bacteria strains

Saijuan Li[1,2], Meixia Li[2,*], Han Yue[1,2], Lishuang Zhou[1,2], Lulin Huang[2], Zhenyun Du[2], Kan Ding[1,2,*]

[1] *School of Pharmacy, Zunyi Medical University, 201 Dalian Road, Zunyi 563003, P. R. of China*

[2] *Glycochemistry and Glycobiology Lab, Key Laboratory of Receptor Research, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, 555 Zu Chong Zhi Road, Shanghai 201203, P. R. of China*

University of Chinese Academy of Science, No.19A Yuquan Road, Beijing 100049, P. R. China

*Corresponding authors

Glycochemistry and Glycobiology Lab, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, 555 Zu Chong Zhi Road, Pudong, Shanghai 201203, *P.R.* of China

Kan Ding: E-mail: dingkan@simm.ac.cn; Tel: +86-21-50806928; Fax: +86-21-50806928;

Meixia Li: E-mail: mislimeixia@126.com; Tel: +86-21-50806928; Fax: +86-21-50806928

Highlights

- The structure of a rhamnogalacturonan from *Fructus Mori* was characterized.
- The backbone of this polysaccharide was alternate 1, 4-α-Gal*p*A and 1, 2-α-Rha*p*.
- The branches contain T-, 1, 4- and 1, 3, 6-linked β-Gal*p*, T- and 1, 5-linked α-Ara*f*.
- This polysaccharide may promote growth of intestinal bacteria *B. thetaiotaomicron*.