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## Difference research of pectins extracted from tobacco waste by heat reflux extraction and microwave-assisted extraction

Maolan Zhang<sup>1\*</sup>, Guoming Zeng<sup>2\*</sup>, Yuzhu Pan<sup>1</sup>, Na Qi<sup>1</sup>

<sup>1</sup>College of Chemical Engineering, Sichuan University of Science & Engineering, Zigong 643000, China

<sup>2</sup>School of Civil Engineering and Architecture, Chongqing University of Science and Technology, Chongqing 400030, China

Email: maolanzhang@126.com(Maolan Zhang)

Zeng373064894@126.com(Guoming Zeng)

530112519@qq.com(Yuzhu Pan)

1054912091@qq.com(Na Qi)

**\*Corresponding author should be addressed: Maolan Zhang, College of Chemical Engineering, Sichuan University of Science & Engineering, Zigong 643000, China. Tel: +86 18708392487. Email: maolanzhang@126.com(Maolan Zhang)**

**\*Corresponding author should be addressed: Guoming Zeng, School of Civil Engineering and Architecture, Chongqing University of Science and Technology, Chongqing 400030, China. Tel: +86 13996471404. Email: Zeng373064894@126.com(Guoming Zeng)**

### Abstract

Pectin was extracted from tobacco waste using two different extraction methods of conventional heat reflux extraction(HRE) and microwave-assisted extraction(MAE) respectively. The yield of pectin extracted by the two methods were studied rightfully. Then, the differences in the physicochemical properties of the pectins obtained by the two methods mentioned above were investigated. The results showed that, the two methods may result in different pectin structures, and which will further affect the properties of the pectin. Among them, the influence of microwave frequency on the structure and properties of pectin was particularly significant, excessive frequency always leads to a decrease in pectin properties.

**Keywords:** Tobacco waste, Pectin, HRE, MAE, Physicochemical properties

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