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[\[PDF \(327K\)\]](#) [\[References\]](#)**Structural Studies on a New Water-absorbing Polysaccharide from the Family *Oxalobacteraceae***Kazutoshi Ogawa¹⁾, Yoko Ikeda²⁾ and Kazuyuki Umemura¹⁾

1) Department of Environmental Science, College of Science and Engineering, Iwaki Meisei University

2) Microbial Chemistry Research Foundation

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The chemical structure of a new water-absorbing polysaccharide (WAP), which was isolated from a liquid culture of bacterium belonging to the family *Oxalobacteraceae*, was analyzed by fragmentation analysis and methylation techniques. Mild acid hydrolysis of WAP gave six di-, four tri-, two tetra-, two penta-, and one hexasaccharides composed of mannose, glucose and/or galactose. These structures were elucidated by extensive 2D NMR spectroscopic analyses. The structure of the WAP has been proposed to have a new heptasaccharide as a repeating unit, $\rightarrow 4$)- β -D-Glcp-(1 \rightarrow 4)- β -D-Manp-(1 \rightarrow 4)- β -D-Glcp-(1 \rightarrow 4)-[β -D-Galp-(1 \rightarrow 3)- β -D-Glcp-(1 \rightarrow 3)- β -D-Galp-(1 \rightarrow 3)]- β -D-Galp-(1 \rightarrow .

Key words: polysaccharide, oligosaccharides, water-absorbing polysaccharide, *Oxalobacteraceae*

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