



كلية الزراعة
قسم الميكروبيولوجيا الزراعية

ABSTRACT



جامعة الفيوم

البحث الأول

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مشارك مع آخرين داخل التخصص – منشور	1

Title	Structure of the 4-O-[1-carboxyethyl]-D-mannose -containing O-specific polysaccharide of a halophilic bacterium <i>Salinivibrio</i> sp. EG9S8QL.				
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ABSTRACT

The moderately halophilic strain *Salinivibrio* sp. EG9S8QL was isolated among 11 halophilic strains from saline mud (Emisal Salt Company, Lake Qarun, Fayoum, Egypt). The lipopolysaccharide was extracted from dried cells of *Salinivibrio* sp. EG9S8QL by the phenol–water procedure. The OPS was obtained by mild acid hydrolysis of the lipopolysaccharide and was studied by sugar analysis along with ¹H and ¹³C NMR spectroscopy, including ¹H, ¹H COSY, TOCSY, ROESY, ¹H, ¹³C HSQC, and HMBC experiments. The OPS was found to be composed of linear tetrasaccharide repeating units of the following structure:

→2)-β-D-Manp4Lac-(1→3)-α-D-ManpNAc-(1→3)-β-L-Rhap-(1→4)-α-D-GlcpNAc-(1→, where Manp4Lac is 4-O-[(R)-1-carboxyethyl]mannose.