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Author	権田, 良子(Gonda, Ryoko) 友田, 正司(Tomoda, Masashi) 清水, 訓子(Shimizu, Noriko) 山田, 陽城(Yamada, Haruki)
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Structure and Anticomplementary Activity of an Acidic Polysaccharide from the Leaves of *Malva sylvestris* var. *mauritiana**

Ryōko GONDA, Masashi TOMODA, Noriko SHIMIZU and Haruki YAMADA**

権田良子, 友田正司, 清水訓子, 山田陽城**

A main polysaccharide, designated as MSL-P, was isolated from the leaves of *Malva sylvestris* var. *mauritiana* by extraction with water followed by fractionation with DEAE-Sephadex A-25 (carbonate) and purification by gel chromatography with Sephacryl S-300 and Sephadex G-25. It was homogeneous by electrophoresis and gel chromatography, which gave a value of 1.1×10^4 as molecular mass.

It is composed of L-rhamnose, D-galactose, D-galacturonic acid and D-glucuronic acid in the molar ratio of 22:6:22:11, and it contains 7.7% peptide moiety.

The structure of the polysaccharide component was elucidated by methylation analysis, partial hydrolysis and ^{13}C-NMR studies. The backbone of the polysaccharide is composed of alternating α-1,4-linked D-galacturonic acid and α-1,2-linked L-rhamnosyl residues. Approximately 50% of the 1,4-linked D-galacturonic acid residues are also substituted at position 3 with terminal, non-reducing β-D-glucuronic acid groups. Some of the 1,2-linked L-rhamnosyl residues are also substituted at position 4 with oligosaccharides containing β-1,4-linked D-galactosyl residues.

MSL-P had potent anti-complementary activity, which was nearly equal to that of the positive control, AR-4, from the root of *Angelica acutiloba*.

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