

**E2-51: Physical characterisation of natural product extracts**

**Part I. Characterisation of a natural polysaccharide from *Durio zibethinus* Seeds**

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Seeds of *Durio zibethinus* (Durian) when sliced and placed in water overnight, produces a thick viscous solution which is taken as a drink for its supposedly, beneficial effects. The viscosity of this aqueous extract suggests a possible application for the substance as a thickener in food and other industries.

In this paper, the isolation, purification and the partial characterisation of a polysaccharide from the Durian seed are presented and some results of viscosity studies on the isolated polysaccharide are discussed.

It was found that a 0.5% aqueous solution of the purified polysaccharide possessed a viscosity approximately 3.5 times that of water. Studies of the temperature dependence of the viscosity using a 0.25% solution of the purified polysaccharide revealed that the viscosity of the solution relative to water remained unchanged up to about 70°C, which is considered important in the industrial application of polysaccharides as thickeners.

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