Isolation, partial purification, product formation and characterization of β-glucosidase from roots of *Hordeum vulgare* L.

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β-glucosidase (EC 3.2.1.21) was extracted from roots of *Hordeum vulgare* and was purified using ammonium sulphate fractional precipitation and sephadex G-25 chromatography. The molecular weight of enzyme was found in the range of 17-54KDa. The enzyme β-glucosidase has optimum pH 5.0 and the optimum temperature was found at 60ºC. Bioethanol was produced from roots of *Hordeum vulgare*.

**Key words**: *Hordeum vulgare*, β-Glucosidase, Purification, Characterization