

## **Retting of *Musa sapientum* pseudostem with Pectin decomposing bacteria.**

### **ABSTRACT**

The upper and lower portions of *Musa sapientum* pseudo-stem sheaths were exposed in four types of treatments: pectin decomposing bacteria, magnesium oxide (MgO), both pectin decomposing bacteria and MgO and control. The fibre strength properties were tested using SIRIM Standard methods and colour changed using gray scale. The bioaugmentation of pectin decomposing bacteria together with MgO additions were found to enhance retting process and reduced retting periods 52% and yielded better strength on the fibres. The lower portion pseudo-stem sheaths gave the higher strength than upper portion. Colour changed showed that the bioaugmentation of pectin bacteria enhanced the degradation colouring compound in banana fibres.

**Keyword:** Banana pseudo-stem; Banana fibre; Retting; Pectin decomposing bacteria; Catalyst; MgO.