**POSTER SUMMARY**

**REDUCING RAW SUGAR COLOUR BY WASHING WITH HYDROGEN PEROXIDE DURING CENTRIFUGATION**

BARKER B AND MADHO S

Sugar Milling Research Institute NPC, c/o University of KwaZulu-Natal, Howard College Campus, Durban, 4041, South Africa

bbarker@smri.org  smadho@smri.org

**Abstract**

Producing low colour raw sugar is highly desirable, as it reduces the amount of work required by a refinery. In some cases, if the colour specifications are met, low colour sugar can be sold to preferential markets at higher premiums. Hydrogen peroxide is a strong oxidant that is capable of lowering the colour of raw sugar. The advantage of using hydrogen peroxide in the centrifuge is that low dosages of the peroxide can be applied to only the thin film of molasses remaining on the crystal. Tests were conducted on a laboratory scale to investigate the use of hydrogen peroxide in centrifugal wash water. A batch laboratory basket centrifugal, which can cure about 7.5 kg of A-massecuite, was used to conduct the tests. Dosages of hydrogen peroxide from 200-3000 mg/kg sugar were used. The tests were also designed to investigate effects of a water pre-wash before peroxide addition during the wash cycle. The poster discusses the most effective method of peroxide addition. Results of the tests will be used to determine whether hydrogen peroxide would be a cost-effective decolourant.

*Keywords:* hydrogen peroxide, colour removal, centrifugal washing, A-massecuite, sugar quality, refinery