

Mobile Maturity Tester

Introduction

The **Mobile Maturity Tester** is a new generation of high-throughput, go anywhere sugar cane tester for maturity testing. The **Mobile Maturity Tester** is the result of four years of research and development by BSES (now SRA) and has been tested on all commercial sugar cane varieties.

Main features

- > Fully automated cane juicer which can process up to 120 sugar cane stalks per hour.
- > Uses robust digital Brix refractometers, which are easy to read and use.
- > Can operate in the field or in a harvester shed.
- > Can log field information in an easy to use database.
- > Calculates CCS, fiber and pol using a juice sample.
- > Determines 14, 28 and 42 day maturity forecasts.
- > Trends field maturity.

Standard process of sampling

Six to ten random sugar cane stalks are crushed in the **Mobile Maturity Tester** and the juice is measured with a digital Brix refractometer. CCS predictions are then made using the SRA Calculator Software. Sugar cane tops can also be measured to see how much CCS can be gained or lost by different types of harvesting. Under development is the sampling process fact sheet. The **Mobile Maturity Tester** can be used on all commercial sugar cane varieties and all crop classes including stand-over cane.

When to use

The **Mobile Maturity Tester** can be used from March till harvesting. Early testing in March or April can be used to rank different fields and track how each sugar cane variety matures.

Testing can also be done at the beginning of each round to assist in harvester deployment.

Development

SRA prototype automated **Mobile Maturity Testers** are being trialled and commercial units will be available from 2015. A mobile phone App controlled version is being planned.



Above: SRA employees taking samples with the Mobile Maturity Tester.



Above: The prototype automated Mobile Maturity Tester.