

NATIONAL SCIENCE WEEK 2014

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It was that time of the year again when the Forestry and Agricultural Biotechnology Institute (FABI) through its DST/NRF Centre of Excellence in Tree Health Biotechnology (CTHB) programme made their way to the Mondi Science Centre in Piet Retief (Mpumalanga) to take part in the National Science Week (NSW). This event organised by the Department of Science and Technology and took place simultaneously in all nine provinces from 4 – 9 August 2014. The main objective of the week was to attract learners to Science, Engineering and Technology (SET) careers, through the 2014 theme: “Today’s science, tomorrow’s world.”

Representing FABI in this year’s NSW in Piet Retief was Amy Wooding (MSc student), Teboho Letsoalo (MSc student), Kay Bophela (MSc student), Godfrey Kgatle (PhD student) and Juanita Avontuur (MSc student) (all members of the CTHB Outreach Group). These FABians were fired up with more than 20 exciting experiments for the wide range of learners (grades 0 – 12). Within five days, the group presented experiments to 4678 learners from 53 schools, 201 educators and 1181 community members. Each session started with a war cry, which learners shouted with great passion and enthusiasm. Active participation from learners was also essential as assistants were needed for most experiments. The learners took to the role of ‘experimenter’ without hesitation. Thereafter, “Amys” (Amy), “Te-boo-ho” (Teboho), “sis Kay” (Kay), “G man” (Godfrey) and “Miss Jay-Jay” (Juanita), took the learners on a journey of how today’s science can be tomorrow’s world.



Learners performing the ‘*human table trick*’

The learners were enthralled by all of the experiments, although they definitely had their favourites. *Cabbage juice* entailed using the juice of a boiled red cabbage as a pH indicator, a property imbued by the chemical compound anthocyanin which is contained in the cabbage. *Non-Newtonian fluid* entailed punching into a cake saver containing a corn starch and water mixture, which turns into solid when you apply pressure (punching) but is a fluid when you gently place your hand into the mixture. The *human table trick* required the assistance of four learners, each person sat on a chair and leaned backwards and rested their shoulders on the legs of the person behind them. The secret of this trick was to balance the downward force of gravity against the upward force of the legs supporting each person. To the presenters' amazement this human table trick was successfully accomplished by the majority of the learners who participated and even held their positions for longer than one minute after the chairs they were sitting on were removed. Each of the experiments conducted demonstrated to the learners how everything around us in one way or another involves science.

National Science Week 2014 soon came to an end, however the CTHB Outreach Group returned to FABI knowing that they fulfilled each of the objectives of NSW 2014. Namely that science is relevant today and that scientific endeavour, interest and literacy is for everyone. That the youth should select science as the key to our future and that there are many new frontiers of science today that are worth celebrating and which will enable us to build our future in making "Today's science, tomorrow's world."