

Colourful plastic from coco!

Just when you thought the only thing you could do with the homely ground provision, coco, was make a good Saturday soup, young scientists from Jose Marti Technical blow this concept right out of the water. And with the most unlikely notion - plastic manufacturing.

Yes, the opaque white tuber with brown, somewhat hairy, skin was transformed into light, colourful, translucent plastics of lemon green, orange and related hues, and presented as jewellery - earrings, rings, etc in the project Fantastic Plastic, at the Kingston leg of the JPS Science & Technology Expo, held recently at the Jamaica Pegasus Hotel on Tuesday, March 30. The expo, presented in collaboration with the Scientific Research Council and the Association of Science Teachers of Jamaica, saw over 40 displays of creativity, from students from as young as eight years old, up to young adults, who presented innovations around the theme "Green Technology for Survival". The Jose Marti students produced plastic of three different consistencies, ranging from a rather flexible plastic to one of relatively brittle consistency. The group of grades 7-9 students, also produced a range of foods from the coco, and were awarded with the 1st place for the grades 7-9 category. They will go on to the National Finals, facing off against other Grades 7-9 winners from across the island, including Westwood High School with their solar hair dryer and Brown's Town High with their multiplicity of products derived from guinea corn. Other big winners at the expo were Calvary Preparatory School, with their Waste Wonder project which displayed a complete self-sustaining and recycling system for a poultry farm. They won the grades 4-6 top prize. The top team from the grades 10-11 category hailed from Penwood High School, with their project, Orange the Real Peel - an example of how everyday waste can become industrial raw material. This team used the oft-discarded peel to create lotions, scented candles, oils, and a variety of cosmetic products. They also copped the sectional prize for Best Use of Indigenous Material. The team which came out on top for the grades 12-13/tertiary category was Charlemont High School, with their Magna Generator. This group of 6th form scientists generated electricity by using magnets, thus avoiding the use of fossil fuels for electricity generation. Several other displays which earned awards included many-time winner, Excelsior Primary School, which presented two displays in the grades 4-6 category - the Disposable Pot and the Golden Triangle. The Disposable Pot's outer material was comprised, rather surprisingly, of treated newsprint -- with an inner surface of aluminium foil. The team was able to successfully cook soup in the single-use pot. The Golden Triangle was a simple yet effective structure, designed to double and even triple the productivity of small land spaces. The structure was a wooden right-angled triangular frame, which held trays of plants on the hypotenuse of the triangle. Each row of plants was connected to the row below, by way of tubes to catch the excess water and nutrients, which were then recycled for the benefit of the plants. Port Antonio High School, Merl Grove High School and Cumberland High also came in for recognition with their Energy from Chlorophyll, Ethanol from Food Products, and Solar Food Preserver, respectively. All top winners from the three regional expos will go on to the National Finals, to be held at the National Arena from April 29-30, where they will compete for attractive prizes amounting to over \$5.5 million.