

2002 TAIWAN INTERNATIONAL SCIENCE FAIR

CATEGORY : Engineering

PROJECT TITLE : The Sunflower Peeler

AWARD : Second Award

SCHOOL : Technical High School Kimberley

FINALISTS : Nathan Clive Ferris

COUNTRY : South Africa

ABSTRACT

CATEGORY **ENGINEERING**

TITLE: **THE SUNFLOWER PEELER**

NAME: **NATHAN CLIVE FERRIS**

COUNTRY: **SOUTH AFRICA**

PURPOSE OF THE RESEARCH

It is used by pigeon owners, farmers and squatters. The machine peels the sunflower seeds and leaves them separate from each other. The seeds can be used for pigeons, birds and making of flour. The shells of the seeds can be used as compost and fertilizer. This is an eco-friendly system.

PROCEDURES

Mount the motor section of an old vacuum cleaner in an upside-down position to a bar type stool with seating section removed. Attach +- 400mm gutter (down pipe) tampered to one side over the cutting blade.

Use an old 20 liter drum for separating the seeds and shells. Cut a hole and solder a small pipe +- 100mm from the top section of the drum.

Attach pool pipe from outlet of vacuum cleaner to the top of the drum. Use a pillow – case or old bag and attach it to the soldered section of the drum.

DATA

1. Gutter +- 400mm long
2. Top section of vacuum cleaner
3. Bar type stool seating section removed
4. Pool pipe +- 300mm long
5. Galvanized drum – 20 litre
6. Bag

CONCLUSIONS

Put plug in wall socket. Check if blades are clean. Pour seeds through the gutter. Pour a cup of seeds per 20 seconds. Let the machine run for 5 seconds after each cup for efficient separation of seeds. Pour seeds out when done.

評 語

本作品純屬實用導向，她的組件也能就地取材，這一項純工藝觀點很上乘的計劃。