



9th INDES 2020
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The 9th International Innovation, Invention
& Design Competition
INDES2020

17th May – 10th October 2020

GARBAGE SMELLS! NO MORE WITH ODOUREPEL

Nemisha Suppiah, Sonisha Kunalan, Kaarthikhesan Suria Kumar, Veran Mohan and Thenesha Anendan

YEAR 6S, SJKT Simpang Lima, Klang, Selangor, MALAYSIA

E-mail: nemishasuppiah@gmail.com

ABSTRACT

In general, the negative image of garbage comes from the fact often smells when microorganisms grow on food waste. It contains decaying, putrescible materials such as meat or vegetables or diapers. As meat decays, it attracts bacteria that feast on the amino acids in the meat's proteins. Vegetable's rot and slowly liquefy as microbes attack the vegetables' cell structure and the fermenting liquids warm up the garbage bag. The odours from the decomposition process are a variety of goodies with nasty sounding names. After all, who wants to invite "cadaverine" or "putrescine" over for dinner? Although these smells are obnoxious, they do not pose a health threat. However, the rats and flies attracted by rotting garbage do. These "vectors" spread diseases that can be serious to humans if they get into our food supplies. The object of this invention is to treat the garbage by absorbing the discharged fluid and to repel the bad odour. The use of waste materials such as coco peat, corn cob and coffee ground in the muslin cloth pack is invented for this purpose. This ODOUREpel had received good feedback from the household residents. They feel relief from the bad odour of their garbage. This product is aligned with the green technology, where it is potentially important concept which plays a role to achieve the global sustainable development.

Keywords: green technology, invention, odour, waste materials, sustainable

1. INTRODUCTION

A bag of garbage smells for a very simple reason. It contains decaying, putrescible materials such as meat or vegetables or diapers. As these waste materials decay, as more gasses and liquids are produced, the bag may rupture. It may sound gross, but it is just garbage at work [1]. So, what can we do to combat bin-stink? The most important step to take in managing odours is to take odour complaints seriously, and then act to ensure that odours are controlled. Green technology is potentially important concept which plays a role to achieve the global sustainable development. Today the world needs a new serious innovation, which would lead for a better environment. The basic objective of the study is to realize the requirement of invention green products for today's global market. For the purpose of the study. The study reveals that the so-called green products or organic products has more positive impact to the mankind's and helps to eradicate certain issues pertaining to green technology. It helps for the sustainable development. With rapid population growth, especially in low-income and middle-income countries, the generation of waste is increasing at an unprecedented rate [2]. Despite incineration and other waste treatment techniques, landfill still dominates waste disposal in low-income and middle-income countries. There is usually insufficient funding for adequate waste management in these countries and uptake of more advanced waste treatment technologies is poor.

2. MATERIAL AND METHOD

A compact pack made from muslin cloth by using organic wastes such as coco peat, corn cob and coffee ground is produced. Our invention involving a medium size pack which has a total of 3 ingredients namely;

- a) 20 gram of coco peat
- b) 20 gram of corn cob
- c) 10 gram of coffee ground

These organics wastes are compacted and packed properly to form the ODOURepel. Moreover, the pack can be custom made according to the different standard size of the bin. Function of the ODOURepel is that it can eliminate the garbage discharge and most importantly get rid of the bad odour.

2.1 Coco peat

Cocopeat has been recognized to have high water holding capacity which causes poor air-water relationship and leading to low aeration within the medium, Incorporation of coarser materials into cocopeat could improve the aeration status of the media [3].

2.2 Corn cob

Corn cob is an enviro-friendly and biodegradable product that can be used to absorb a variety of fluids, including water, oil and grease. In addition, due to corncobs being lightweight in nature, they add less volume than other absorbents, thus reducing cost on material, transportation, and disposal.

2.3 Coffee ground

Coffee grounds can help eliminate those mischievous odours that cause us (mainly our nose) to reel. It is powerful enough to neutralize the air and eradicate the stringent odours that can come from garbage cans or foods, due to the strong scent that coffee omits [4]. Scientists at The City College of New York (CCNY) found that a material made from used coffee grounds can sop up hydrogen sulphide gas, the chemical that makes raw sewage stinky.

3. RESULTS

The ODOURepel has been tested by various age group people namely elderly, middle age, and youngsters. This is our results of the pilot project from 20 respondents after the kept the ODOURepel under the garbage bag in the dustbin for 3 days (Table 1). This ODOURepel had received good feedback from all parties namely elderly and the middle age (housewives). They feel relief without the watery and smelly garbage in their dustbin at home. The cost of one medium size pack of ODOURepel is about RM4 only.

Table 1 Respondents' Feedback

Respondent Type	Number of respondents	Feedback
Youngster	3	Good
Middle age	13	Relief, not watery
Elderly	7	No smell

4. CONCLUSION

We have chosen organic waste as our materials to design our ODOURepel. The selection of organic waste in line with our government effort to move from disposal to 4R, (Reduce, Reuse, Recover and Recycle) for waste management. This approach hope can minimise the major environmental issues as global warming, ozone layer depletion and deforestation.

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Surat kami : 700-KPK (PRP.UP.1/20/1)
Tarikh : 30 Ogos 2022

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Kelulusan daripada pihak YBhg. Profesor dalam perkara ini amat dihargai.

Sekian, terima kasih.

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