



 **9th INDES 2020**  
**LIMITLESS MIND:**  
EMPOWERING INNOVATION THROUGH VISUALIZATION



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ABSTRACTS BOOK

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## **EgNa 2.0**

Hakimi Hafiz Bin Hasbullah, Malik Bin Efendi\*, Muhammad Haziq Bin Mohammad Hisham and Nurul Ashikin Binti Mohamad

*SMK Gemereh, Segamat, Johor, MALAYSIA*

*\*E-mail: malikbinefendi@gmail.com*

### **ABSTRACT**

Eggs shells and banana skins are the domestic waste used to produce these organic fertilizers. It's effective. One innovation in organic fertilizer production. Can improve the economy of the local community. Reducing dependence on chemicals in the market. EgNa Fertilizer also serves as organic fertilizer and can solve local problems with dermal shell debris. This innovation can prove the effectiveness of egg shells to help tree growth. This product is environmentally friendly, easy & save and safer. The results of the experiments were neutral pH value and the tree became more fertile when added to the egg husk. Among the products contributed to reducing the number of dead plants caused by chemical fertilizers. Furthermore, it also improves the local economy and optimizes the use of egg shells and reduces pollution. No other fertilizers use the egg shell as the main ingredient. Easy to use. Saves natural resources. Improve the economy of the locals. Reduces the problem of dumping eggshells. This product has the opportunity to be marketed because the raw material is natural and it is profitable. Profit is expected as early as the first quarter of marketing. This product is very attractive to buyers, especially nature lovers. Its use is devoted to the agricultural industry. Target groups are farmers and growers. Method of production, Sifted egg shells to get the powder. Eggplant eggs are mixed with stripped bananas skin. Eggplant eggs are mixed with stripped bananas skin. Experimental results show that EgNa is very effective in helping tree seedlings, neutral, safe and portable. In conclusion, EgNa Fertilizer is the best product to solve the environment problem.

**Keywords:** EgNa, egg shell, banana

### **1. PRODUCT DESCRIPTION**

Egg shells and banana skin peels are known as local waste is key ingredient for organic fertilizer products. It is cost saving and effective. EgNa is a new invention and innovation in fertilizer industry. It helps to save the environment by reducing the amount of egg shell and banana skin being thrown as rubbish and reduce the pollution that may been cause by these substance. It also reducing dependence on chemicals products on the market. As we all know, agriculture industry like to use chemical based fertilizer that may pollute the environment. EgNa act as an alternative resource for the farmer to use in their field. The usage of EgNa may increase their crop yield. EgNa fertilizer comprise of the following component:

1. Egg shell
2. Banana leaves



**Figure 1.** Example of liquid EgNa

Table 1. Experiments result of liquid EgNa

EXPERIMENT	RESULT
pH value	pH 8
Egna present against plant growth	Egna increase the the plant growth
Comparison of EgNa Fertilizer's powder with EgNa Fertilizer's fluid	Liquid is more effective than powder.
Comparison of EgNa Fertilizer's ingredients with other fertilizer	EgNa Fertilizer is more effective than another fertilizer
Mass of EgNa against plant growth	If the mass of EgNa 20 g, so the number of leaves increase.

## 2. NOVELTY AND UNIQUENESS

EgNa uniqueness lies in its concept of making innovation in EgNa fast, easy and accessible, while keeping the design open sourced and the cost as low as possible. Futher more, EgNa also come in 2 types of packing which are liquid and powder form. EgNa helps to reduce the pollution cause by the dumping of domestic waste. Beside is acts as an alternative to the widely used chemical based fertilizer.

## 3. BENEFIT TO MANKIND

EgNa fertilizers is easy to use.It helps people to manage their time and increase their productivity. It also save nature's source by using waste material. The usage of EgNa can increase the local economy by increasing their yield of crop, providing new job opportunityand it can also decrease the dumped egg shell and banana skin problem.

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YBhg. Profesor Ts Sr Dr Md Yusof Hamid, PMP, AMP  
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2. Pihak Perpustakaan ingin memohon kelulusan YBhg. Profesor untuk membuat imbasan (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

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