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HILL PADDY PLOUGH

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ABSTRACT

Hill paddy is widely grown small-scale by farmers mostly in Sabah and Sarawak. Hill paddy has special characteristics in terms of smell, colour, size and shape. The agronomic practices of hill paddy are not the same as those done to paddy fields. This is due to geographical factors when the location of cultivation of hill slope paddy seeds makes it difficult for residents to use machinery compared to flat border areas such as paddy field. It is a major requirement for farmers to acquire practical tool that make holes in the soil to insert paddy into the soil and to plant paddy. So, we introduce an innovative tool called the Hill Paddy Plough to lower labour consumption. It can assist farmers to complete the task at the hilly areas with lesser time. In the future, improvements will be made and brought significant efficiency involving time and energy usage of all farmers.

Keywords: geographical factors, lowering labour consumption

INTRODUCTION

Consumption of rice for nutrition is increasing every year due to lifestyle and population growth in Malaysia. This caused the country to import rice from outside to meet public demand. There are two types of paddy grown in Malaysia which is paddy field widely grown while hill paddy is widely grown small-scale by farmers mostly in Sabah and Sarawak. Hill paddy has special characteristics in terms of smell, colour, size and shape. Paddy hill or called as PADI HUMA (Padi bukit) is a type of paddy that is grown in mineral soils or soils without air stagnation in hillside areas. The agronomic practices of hill paddy are not the same as those done to paddy fields. Currently, many paddy cultivation industries in our country are of the type of paddy (Wet Paddy). Hill paddy is mostly only grown in rural areas by the Orang Asli community in Peninsular Malaysia and also the indigenous people in the interior of Sarawak and Sabah. This

paddy crop is still an important crop by the locals as one of the crops cultivated in the past to cover their food supply apart from cassava, corn and yams.

PROBLEM STATEMENT

Nowadays, most farmers in Malaysia work twice while making holes and sowing paddy to be planted specifically for paddy hill. Most of the time, it takes extra farmers to do the job because hill paddy planting activities in this modern era still require the cooperation or communal spirit (gotong-royong) of the residents. The main reason for that extra manpower because big machinery and technology are impossible to be placed at hilly slopes. So, during the paddy planting and harvesting on the hill are heavily on manpower compared to flat border areas such as paddy fields. Due this problem, the farmers need a practical tool that can be useful for them.

OBJECTIVES

1. To create tools to help farmers ploughing paddy on the hilly farm.

NOVELTY

It is difficult for farmers to do farming on unbalanced landscape such as the hill paddy cultivation. Farmers previously only used conventional materials, such as ordinary wood or iron, to create holes in the soil to make it easier to insert paddy into the soil. This system is obsolete and has been used by farmers since the time of our forefathers. Thus, our team has made improvements and created a special tool called Hill Paddy Plough. This special tool will improve time paddy planting and reduce energy usage of all farmers.

SPECIAL CRITERIA

This new tool has several special criteria such as it is lighter and easier to go anywhere if there is a communal spirit (gotong-royong) among farmers to plant paddy. Farmers will do less work in filling rice seeds into rice planting holes. In addition, farmers do not need to go back and forth sharpening the tip of the paddy planter.

IMPACT/ USEFULNESS

This Paddy Pen technology will help the farmer to finish their work without consuming more time. Not only that, this product also will be reducing the labour consumption. As an example, like the farmer will finish to planting paddy with less time even with a small number of workers. So, we can see that this paddy pen will really useful in helping the farmer to planting paddy even with the landscape of the land is uneven and hilly.

PROCESS OF CONSUMING THE PRODUCT SPECIFICATION

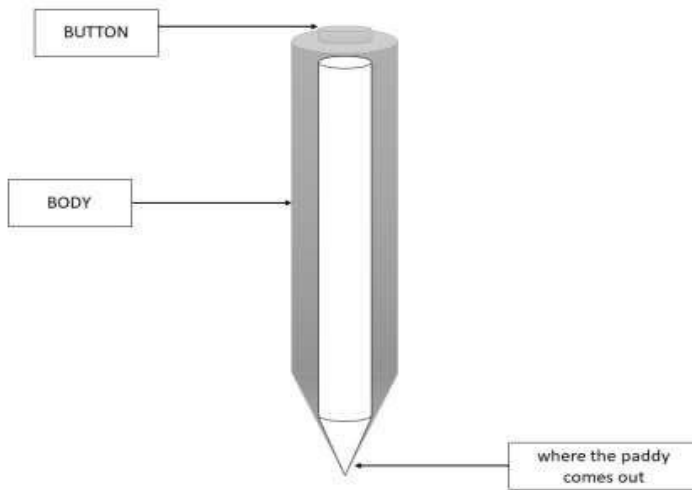


Figure 1. Illustration of Hill Paddy Plough

How to use:

1. Put the paddy seeds in the tool by opening/ unlocking the button of the product.
2. Prick the ground using the product.
3. Then, press the button on the top of the tool, then the paddy seeds will drop into the soil that has been pricked.

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