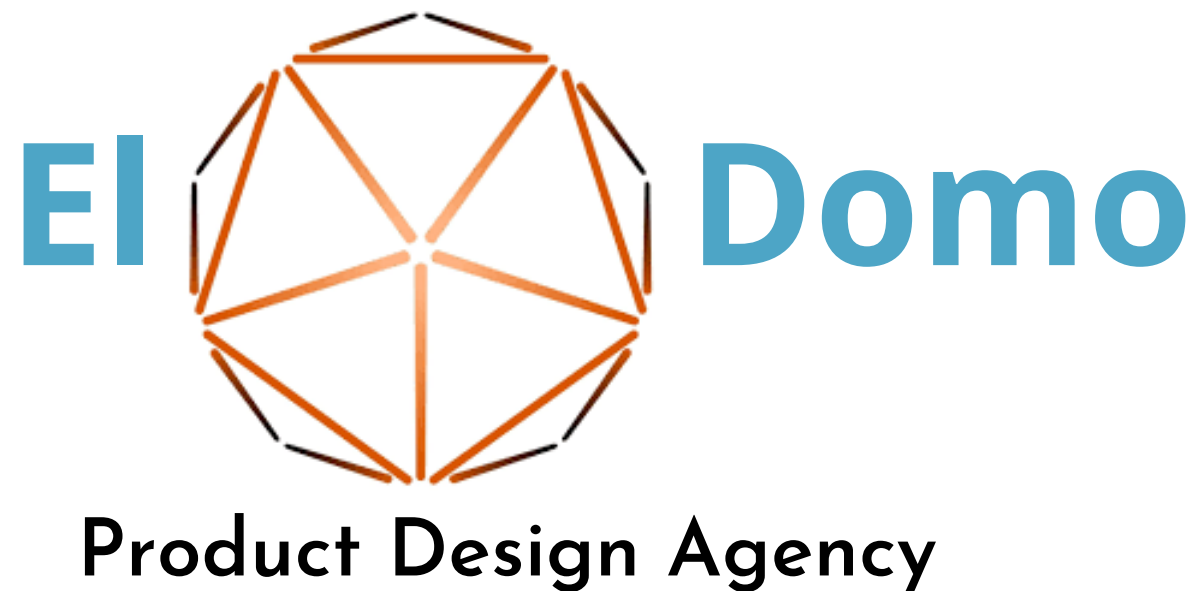




**IST 17J**  
INSTITUTO SUPERIOR TECNOLÓGICO "17 DE JULIO"  
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# DIY technical manual wealworm farm



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# INTRODUCTION

The mealworm is characterized by the high biological value of its protein, excellent fatty acid profile and good digestibility.

This project was carried out with the purpose of elaborating a manual for the construction of a mealworm farm system.





## GENERAL OBJECTIVE

To develop a mealworm farm, using different substrates to obtain biomass and use it as a protein supplement for fish.

## SPECIFIC OBJECTIVES



- Determine different substrates for the development of mealworms.
- Evaluate the behavior, conditions and life cycle of mealworms.
- Develop a manual for the rearing and development of mealworms.

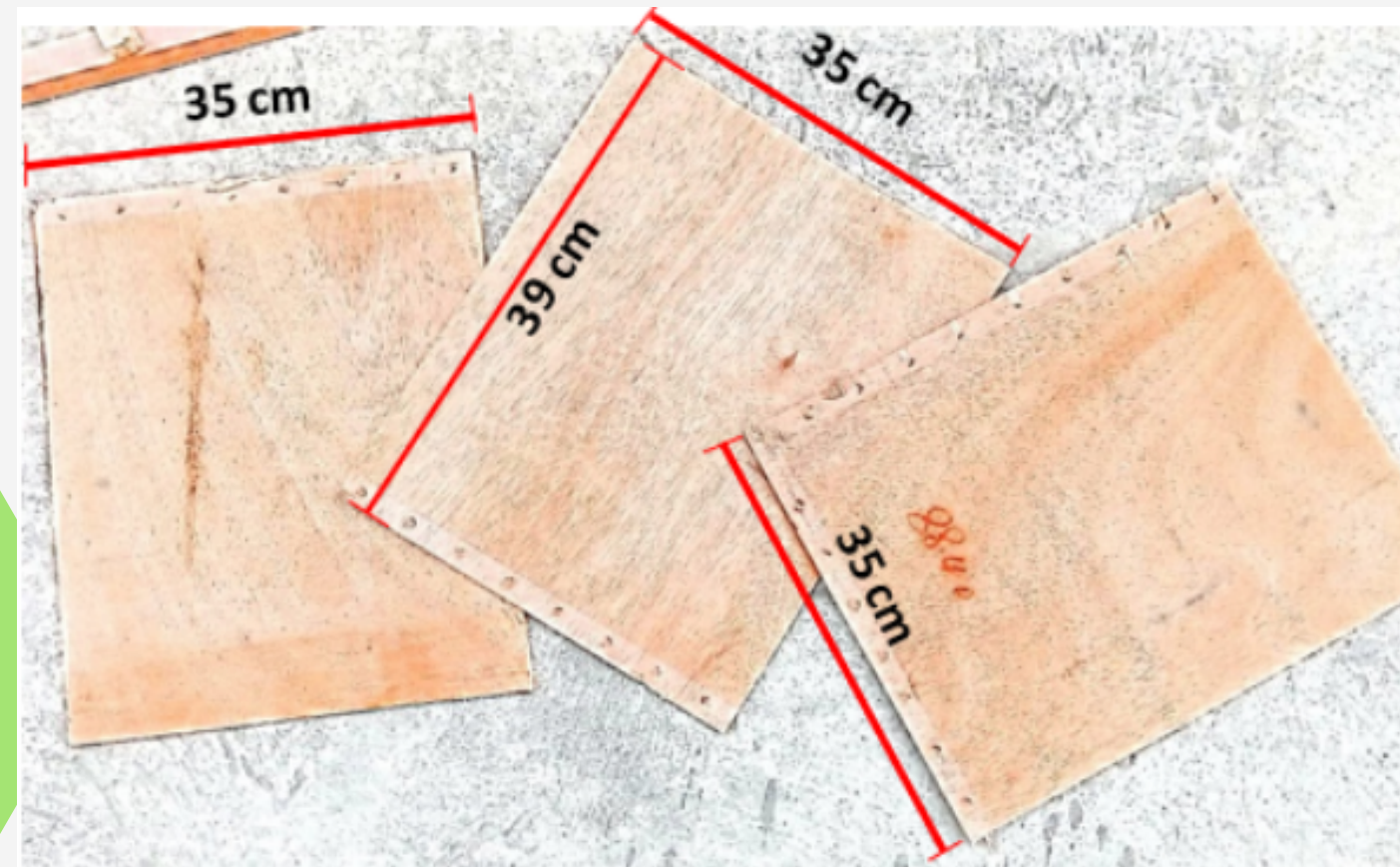
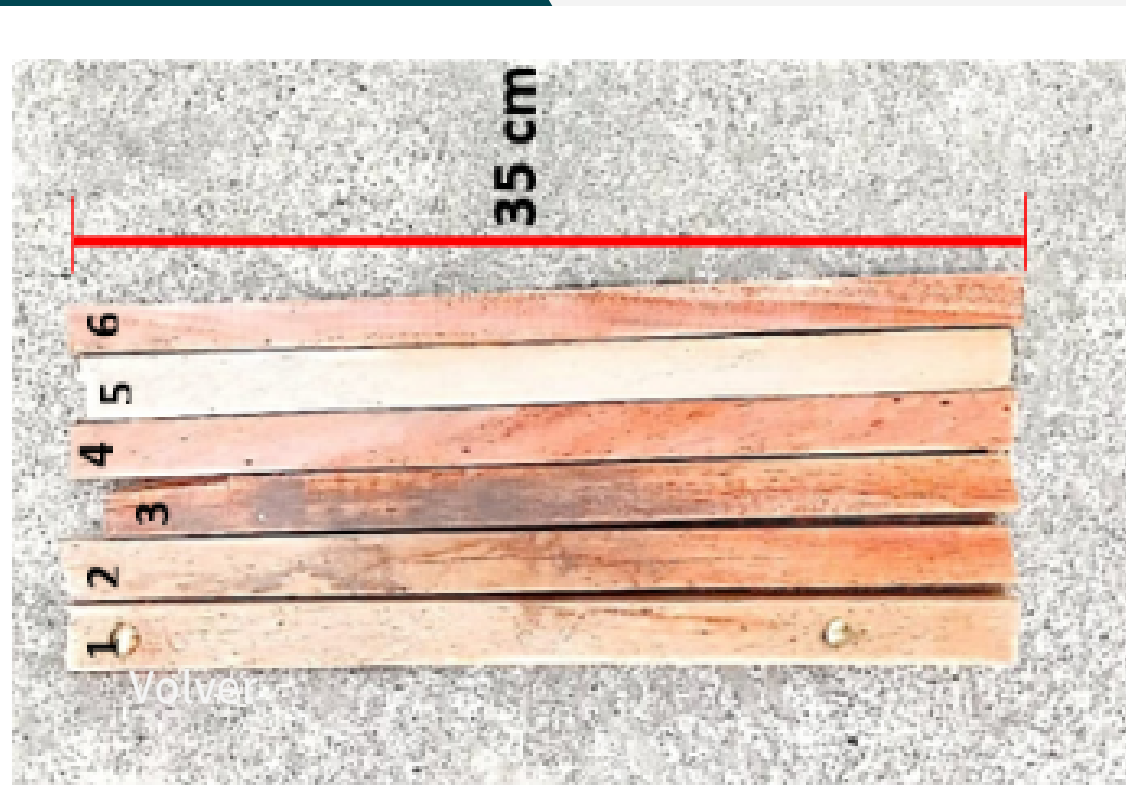
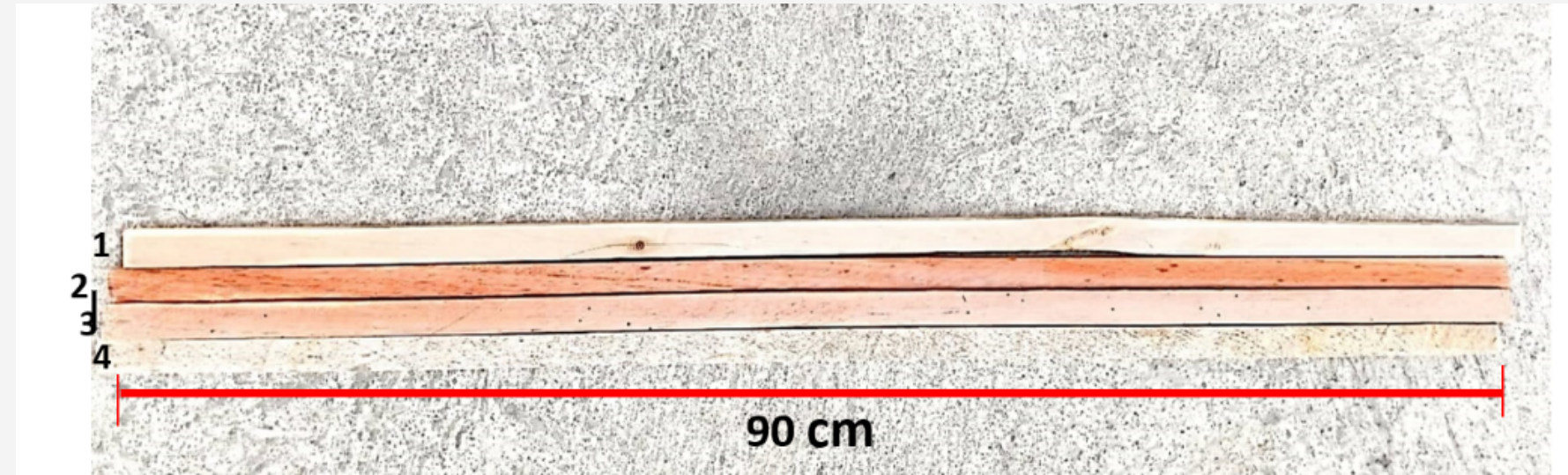
# Materials

- 4 sticks of 2 meters
- 1 large Triplex of 1m x 1m
- 3 32cm x 37cm plastic containers
- 1 box of 1.5 inch nails
- One hammer
- One drill
- Mealworms

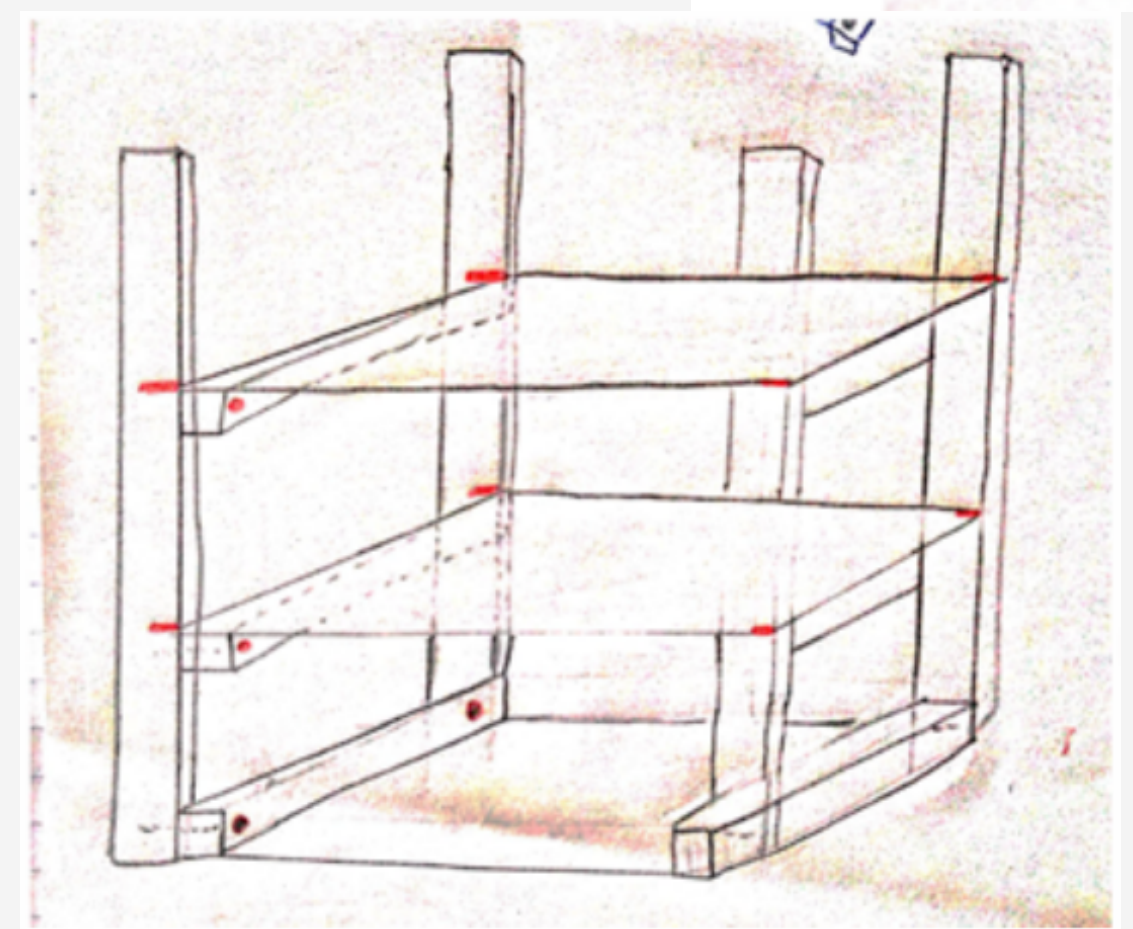
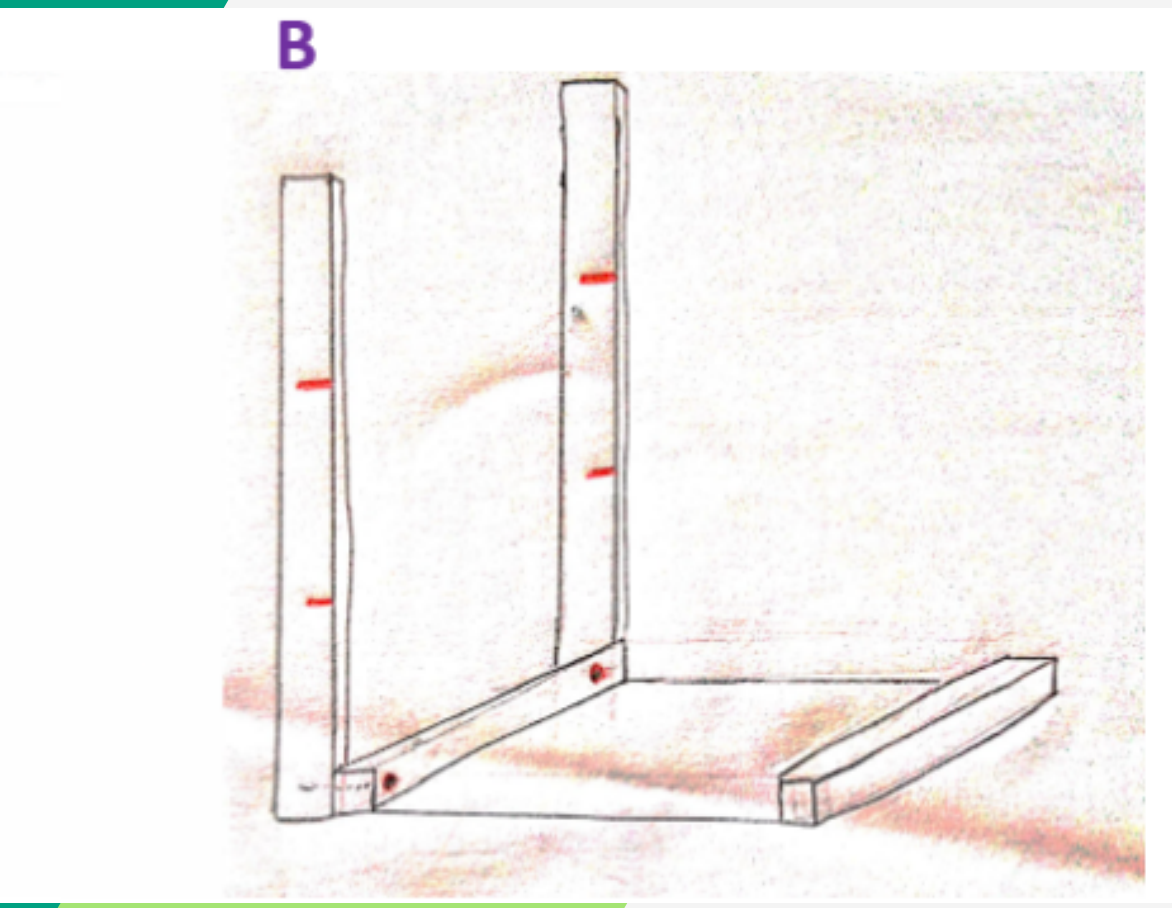
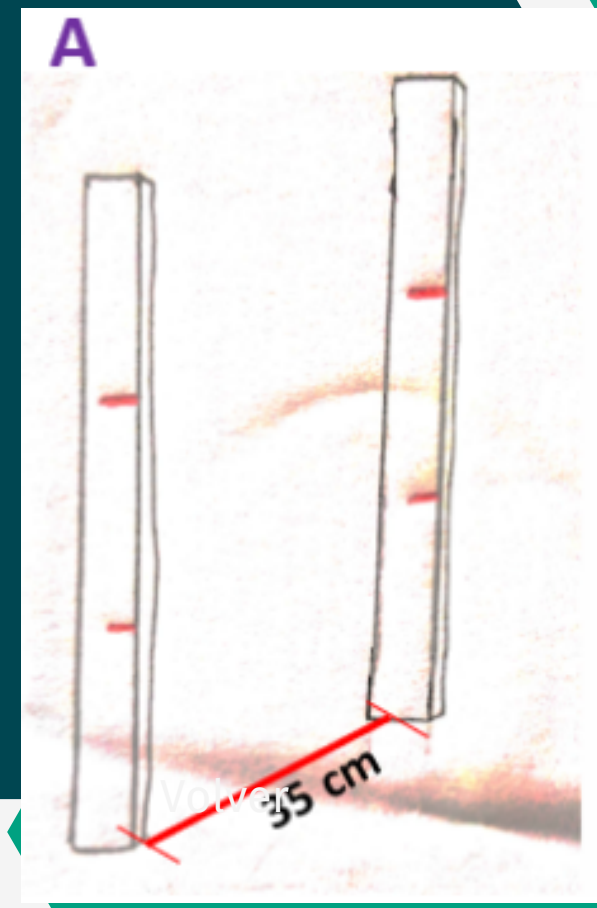
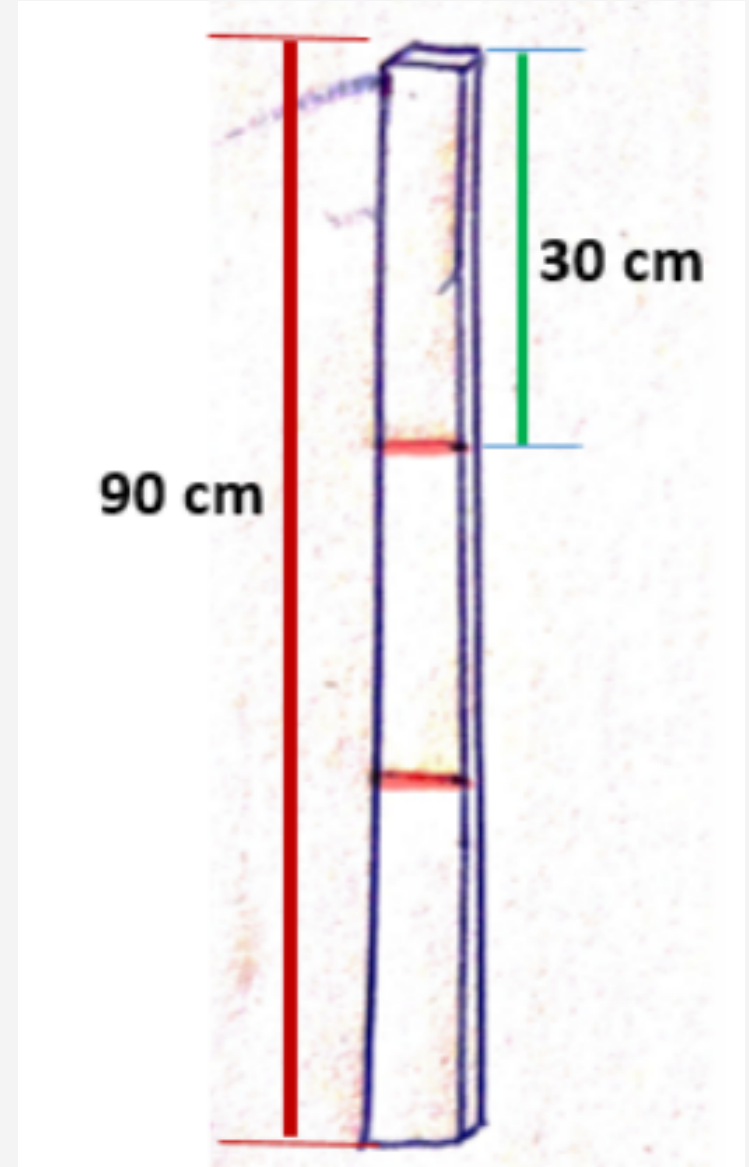
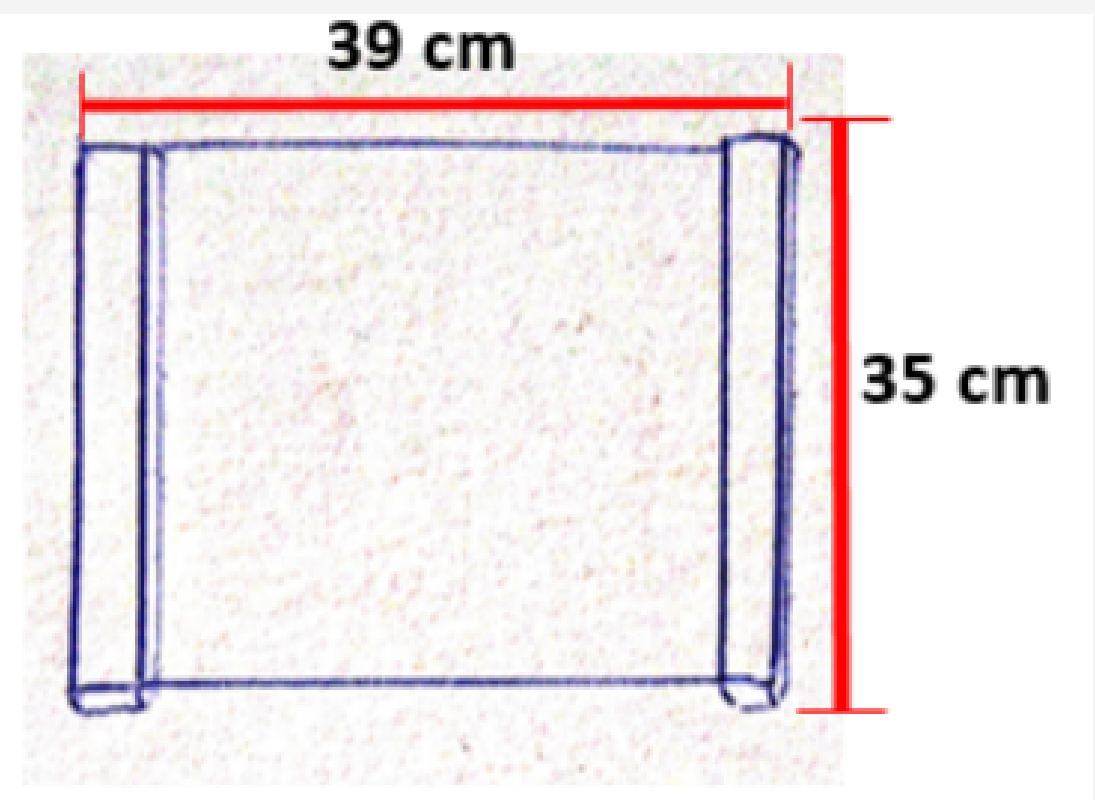
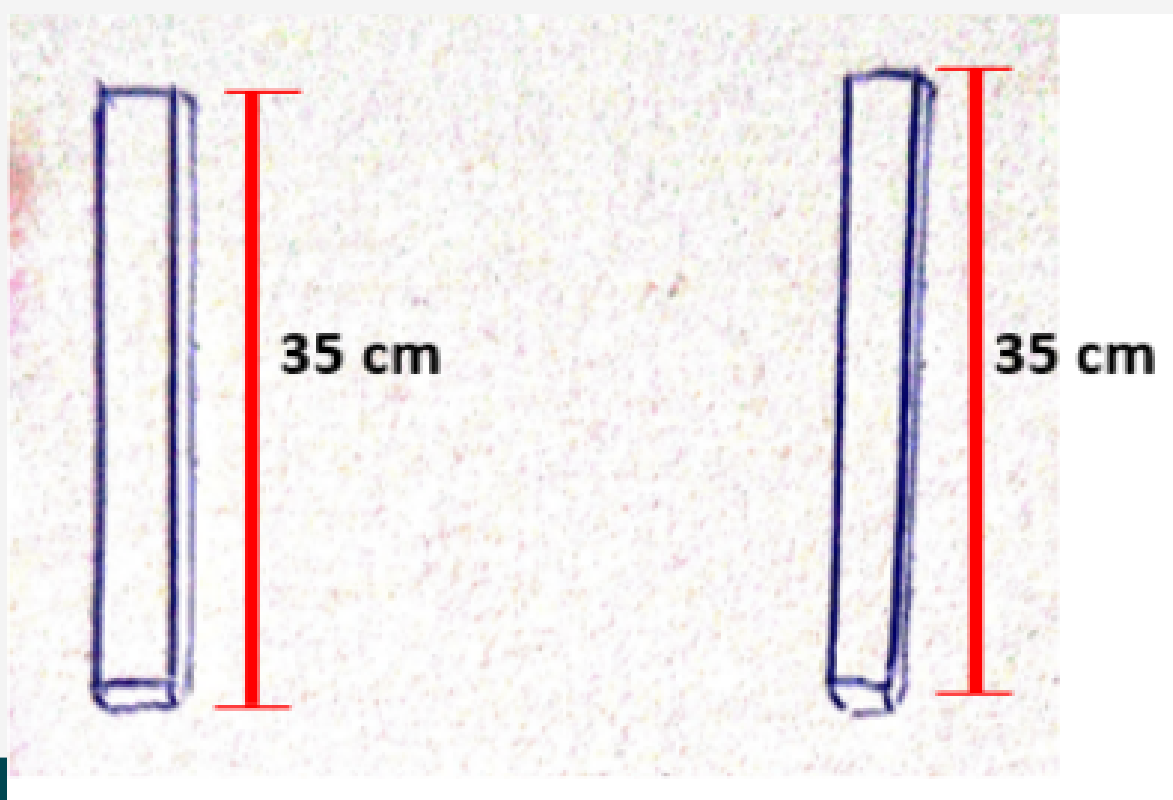


# Procedure

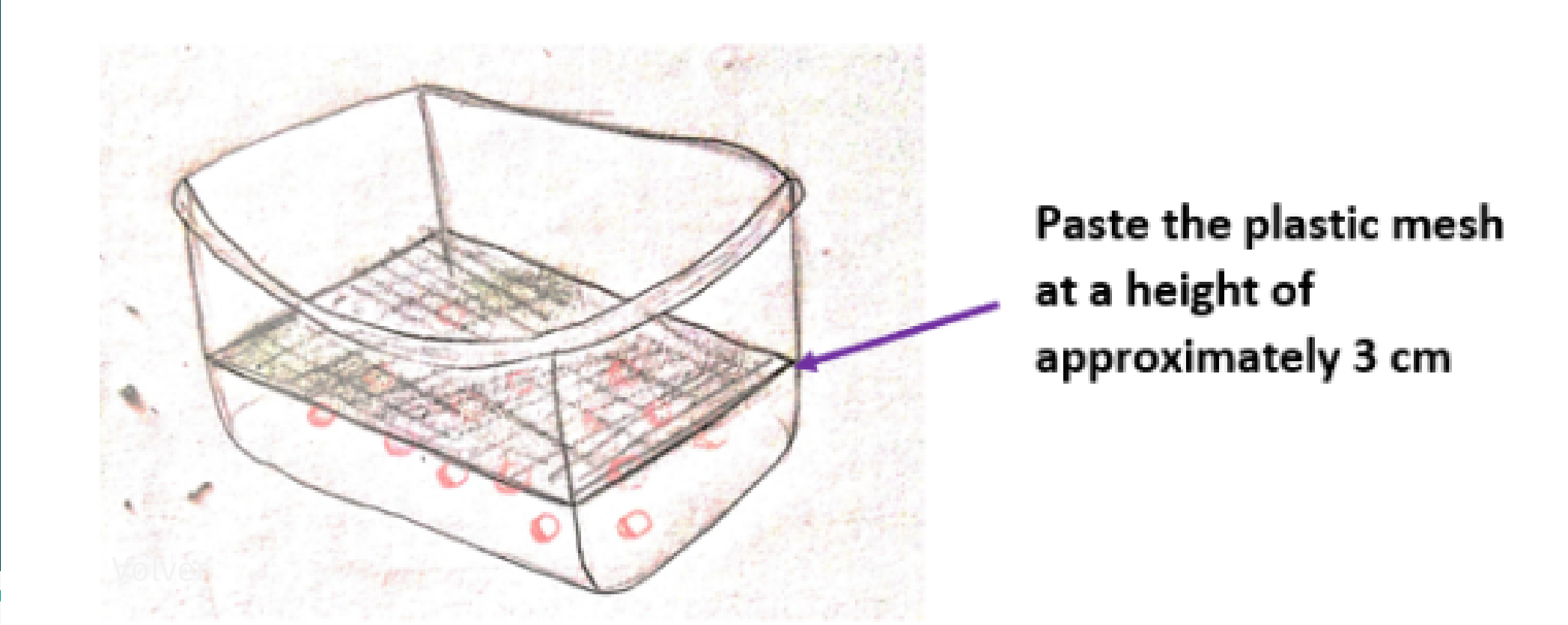
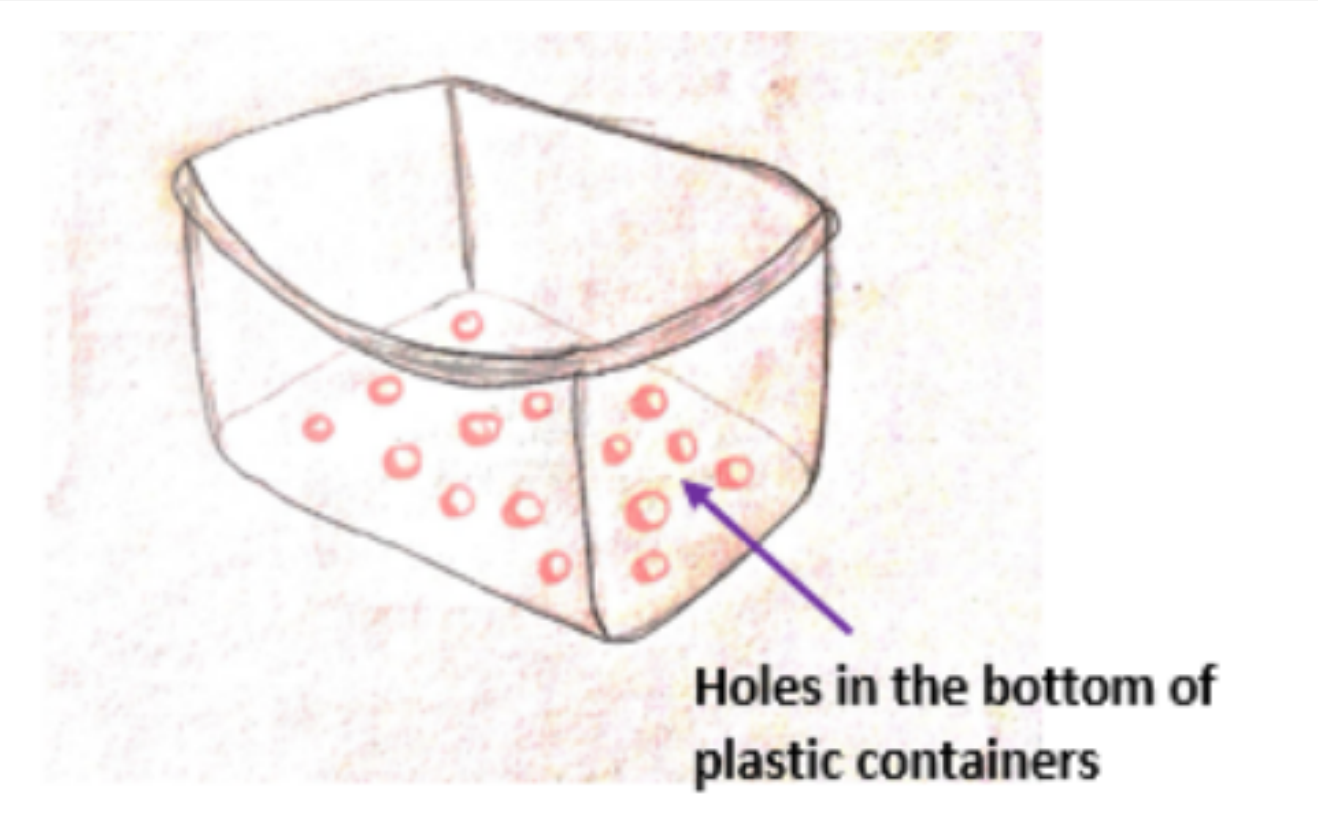
STEP 1.- Preparation of materials for the support of a 90cm high and 35cm wide base.



**STEP 2.- Joining of each part of the materials**



### Step 3.- Preparation of containers



# FOOD AND TEMPERATURE CONDITIONS

Volver

## POWER SUPPLY

- Tenebrios feed on all types of cereals and grains, preferring those that are moist and decaying.

## TEMPERATURE - HUMIDITY

- The optimum temperature should be between 25° C and no more than 32° C.
- Humidity should be around 60%.





# Conclusions

Of the 70 Tenebrio larvae were divided into two containers, half of them were placed in:



**Wheat brand Substrate**



**Oat Substrate**

The farm was maintained 3 times a week by changing the sources of humidity.

# Results of pupae obtained



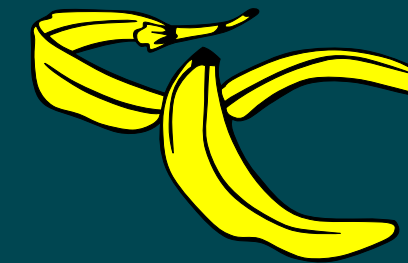
Day	Oat	Wheat brand
Wednesday March,15	1	
Friday March,17		2
Monday March,20		9
Monday March,20	3	
<b>TOTAL:</b>	<b>4</b>	<b>11</b>

# Recommendations

- If what is sought is an accelerated development, a temperature of 25 to 35°C is recommended.



- To avoid the presence of mold in the substrate, do not place fruit peels



- It is necessary to change the substrate every three or two days to keep the containers free of contamination.



**Thank you for your  
attention to this matter**