



PROJECT PROPOSAL REPORT

HONEY VACUUM

DATE: 27 NOVEMBER 2020

CLASS: DKM5C

AHLI KUMPULAN:

MUHAMMAD FARHAN BIN FAZAL RAHIM

AMIRULZAMIR SYAZWAN BIN ROZMAN

NO. PENDAFTARAN

08DKM18F1089

08DKM18F1101

SUPERVISOR: NOR LIZA BINTI KASIM

JABATAN KEJURUTERAAN MEKANIKAL

JUN 2020

DECLARATION OF OWNERSHIP AND COPYRIGHT

TAJUK : HONEY VACUUM

SESI : JUN 2020

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1. MUHAMMAD FARHAN BIN FAZAL RAHIM
 2. AMIRULZAMIR SYAZWAN BIN ROZMAN

adalah pelajar tahun akhir Diploma Kejuruteraan Mekanikal, Jabatan Kejuruteraan Mekanikal, Politeknik Sultan Salahuddin Abdul Aziz Shah, yang beralamat di Shah Alam 40150 Selangor.

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oleh yang tersebut;

a) MUHAMMAD FARHAN BIN FAZAL RAHIM

(No. Kad Pengenalan: 000624-01-0507)

.....

(MUHAMMAD FARHAN BIN FAZAL RAHIM)

b) AMIRULZAMIR SYAZWAN BIN ROZMAN

(No. Kad Pengenalan: 000211-14-0805)

.....

(AMIRULZAMIR SYAZWAN BIN ROZMAN)

Di hadapan saya NOR LIZA BINTI KASIM

(680720-08-5690)

.....

NOR LIZA BINTI KASIM

Sebagai penyelia projek pada tarikh:

ACKNOWLEDGEMENT

Alhamdulillah, In the name of Allah the most gracious and the most precious, first and foremost , I would like extend our deepest praise to Allah SWT who given us the patient , strength ,determination, obstacle that helping us to think wisely in making a decision and courage to completed this project .Plus , many thanks and highest gratitude to Puan Nor Liza binti Kasim , our supervisor , which helps , lead and guides us with our project “Honey Vacuum”.

On this occasion, we would also like to express our sincere appreciation and gratitude to our lecturer, Pn Nor liza Binti Kasim for providing us with the guidance and the perfect explanation from the beginning of the our project until the project was completed. Again, thank you to you for giving us the confidence to make this project success.

III

ABSTRACT

This project is an invention where it uses materials that are easily available and easy to make by being able to meet the demand of the community, especially to beekeepers. Previously, there were tools often used by beekeepers to inhale honey like a syringe. Therefore, the project that will be created is to improve the work process of inhaling kelulut honey. Before this project was created there was a problem that had arisen among them was a tool to suck honey which is a syringe (syringe). This tool works manually and is less effective because it gets little honey yield, emits a lot of energy, adversely affects the body and neck. In this project there is an objective that is stored among them to create Honey Vacuum using battery energy to replace the use manually. In addition to creating an environmentally friendly Honey Vacuum and analyzing the capabilities of Honey Vacuum among the community especially on beekeepers. During the given period, we have purchased some materials to make the project and do some work such as punching holes in the bottle, cutting the PVC pipe and making the connection of the wire from the battery to the switch and attaching the battery to the PVC pipe. The proposed improvement of our project is to emphasize in terms of design, function and use of cheaper and effective materials.

Projek ini adalah ciptaan di mana ia menggunakan bahan yang mudah didapati juga senang dibuat dengan dapat memenuhi permintaan masyarakat khususnya kepada penternak lebah. Sebelum ini, terdapat alatan yang sering digunakan oleh penternak lebah untuk menyedut madu kelulut seperti picagari. Oleh itu, projek yang akan dicipta ini adalah untuk menambahkan proses pekerjaan menyedut madu kelulut. Sebelum projek ini dicipta terdapat masalah yang telah timbul antaranya ialah alat untuk menyedut madu iaitu picagari (syringe). Alat ini berfungsi secara manual dan kurang efektif kerana mendapat hasil madu yang sedikit, mengeluarkan tenaga yang banyak, memberi kesan yang buruk pada badan dan tengkuk. Dalam projek ini terdapat objektif yang disimpulkan antaranya untuk mencipta Honey Vacuum menggunakan tenaga bateri bagi menggantikan penggunaan secara manual. Selain itu mencipta Honey Vacuum yang mesra alam dan menganalisis keupayaan Honey Vacuum dalam kalangan masyarakat khususnya pada penternak lebah. Selama tempoh yang diberikan, kami telah membeli beberapa bahan untuk membuat projek dan melakukan beberapa kerja seperti tebuk lubang pada botol, memotong paip PVC dan membuat penyambungan wayar dari bateri ke suis dan melekatkan bateri pada paip PVC. Cadangan penambahbaikan projek kami ini adalah menekankan dari segi reka bentuk, fungsi dan gunakan bahan yang lebih murah dan efektif.

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CHAPTER 1

INTRODUCTION

1.1 RESEARCH BACKGROUND

Dwarf bees (also referred to as honeybees) are non-stinging bees that produce honey just like honey bees. Approximately 500 species of extinct species exist throughout Malaysia (staff, 2008). At least 32 species of insects have been identified and invented in the MARDI serpentine museum (Norowi et al., 2004). Usually, the bee will build its nest in hollow trees such as stems, tree branches, soil or rock cracks, house wall slabs and pvc pipes and something else

The honeycomb honey is produced by the honey bee, which is a small, non-stinging bee. The quantity of honey obtained from harvesting each nest is also lower than that of the normal beehive.

Just like honey bees, deer also form a complex colony for the breeding of some species of fruit with small flowers and honey production. More specifically, the bees are easy to fertilize with small-sized flowers that honey bees cannot.

1.2 PROBLEM STATEMENT

Nowadays, there is a lot of demand for kelulut honey from Malaysians because kelulut honey has many benefits for daily use for human health. honey farmers now have more work to produce honey and sell honey to the community. Some problems for honey growers to produce honey faster. One of the reasons is the device for inhaling honey using a syringe (syringe). This tool works manually and effectively because it gets little honey yield

In addition, this syringe tool takes a long time for farmers to earn a lot of honey production, it takes time to do inhalation, and even a lot of movement for farmers to take honey and fill honey to honey storage.

Therefore, breeders have more energy production and can even cause fatigue and lethargy in the body, and can even cause body aches and pains. in addition, breeders are also not required to work longer and use can sell the honey slower to sell to the community who need the honey.

1.3 RESEARCH OBJECTIVES

The objectives to this research are:

- 1 To design Honey Vacuum.
- 2 To analyze the ability of Honey Vacuum among breeders who use it.
- 3 Creates an environmentally friendly Honey Vacuum.
- 4 To fabricate Honey Vacuum , bottle of Honey Vacuum to inhale Honey in large quantities.

1.4 RESEARCH QUESTIONS

This study will answer the following research questions:

- i. Is it possible to create a high quality honey inhaler?
- ii. What kind of materials can be used to make honey inhalers?
- iii. Is it possible to make honey inhalers to make more honey?

1.5 SCOPE OF RESEARCH

The scopes and limits to this research are:

- I. This product could decompose naturally.
- II. Could last for a long time with a good care.
- III. not suitable for placement everywhere
- IV. This product could not be exposed to water frequently
- V. this product can speed up the job

1.6 SIGNIFICANCE OF RESEARCH

The purpose of this honeycomb is to solve the problem which is faced by breeders and deer entrepreneurs to get their results optima. The invention of this tool can directly help breeders collect honey in more volume, save time and energy.

1.7 DEFINITION OF OPERATIONAL TERMS

BATTERY: use a battery that can support power as an example of a powerbank

Drinking Bottles: can use any bottle but preferably use a shaker bottle

PUMP DIAPHRAGM: an inhalation pump that can be found in an electronics store

MICROCHIP: control switch to turn on or off the machine can be found in the electronics store

1.8 CHAPTER'S SUMMARY

In this chapter, the studies was explained about its origin of ideas and inspirations. All the objectives were made out of all the problem statements. The objective for this project along with the importance for getting a lot of results, takes a little time and doesn't require much a large workforce. This inhaler is portable and easy to use to get a lot of results. , this new prosthetic could be used for daily routine with a really good care for a longer lifetime.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Honey bee honey is produced by the honey bee, a small size honey bee. The color of the honeycomb is usually more transparent and resistant than honey bees and has a sweet, sour taste. Honeycomb honey is more expensive than regular honey bees because it is less available in the market. Honey bee honey has a variety of benefits for health and wellness purposes. Among the diseases reported using traditional treatments for bee products are: - Diabetes Mellitus, Stroke Hypertension, HIV and AIDS Reduce joint pain and Internal Injuries Breast bee breeders are one of the new phenomena in Malaysia. Many people think that honey bees do not produce enough honey. With the new technology introduced by MARDI the bee can produce up to 2 kg per colony / month. There are 33 species of extinct bees in Malaysia and they are important for pollination and among them are Trigona Atripes, Trigona Nitrienteris and Trigona Apicallis. The Cattle Honey project at KEDA Resort Bendang Man, Sik started in March 2012 with 10 nest sites and to date, KEDA Resort Bendang Man, Sik has 300 nest sites and has started producing honey products.

2.2 TYPE OF HONEY VACUUM

a) SYRINGE



Figure 2.2.1 Syringe

This tool is the first tool used in honey production for breeders who breed honey in honeycomb. This tool is very easy to find and also very cheap to have. This tool also makes it easier for breeders to inhale honeycomb, and it will not damage or destroy the honeycomb as it can continue to replenish the honey without having to rebuild the nest which would have taken longer.

The advantage of using this tool is that the breeders of honey prefer it because it enables the breeders to inhale more honey in a day. this tool can also save time for breeders to produce more honey. In addition, this tool can reduce energy consumption for farmers.

The tool also has its disadvantages, the disadvantage is that many use the movement of the breeders for example the breeders need to bend the body for inhalation, in this way the breeders can experience difficulties in body health for example body ache, spinal or foot pain.

b) PENYEDUT MADU 'ANNAHLI'



Figure 2.2.2 Penyedut Madu 'Annahli'

This tool is a tool created by a young entrepreneur from Terengganu state. This tool is designed to make it easier for breeders to inhale in a modern and more effective way. and even this tool is made with used materials such as car batteries, vacuum pods, rubber pipe wires, mineral water bottles and more.

The advantage of using this tool is that the breeders of honey prefer it because it enables breeders to inhale more honey at the optimum level of the day. this tool can also save time for breeders to produce more honey. In addition, this tool can reduce energy consumption for farmers.

This tool also has its disadvantages, the disadvantage is that it is heavy to carry or to be used anywhere as it has a lot of components. In addition, this tool can cause the breeders to have shoulder pain as well as body aches. In addition, this tool can only be performed with high skill to use this tool.

c) PAM MADU (MADU PLUS)

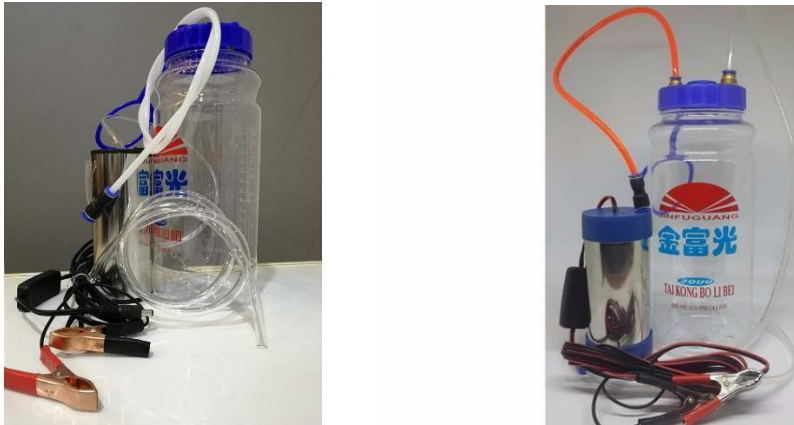


Figure 2.2.3 Pam Madu (MADU PLUS)

The device was designed by Maduplus Mart, an Inderapura Honey Processing Center located in Kuantan, Pahang. This tool is also very effective and modern for today's breeders. It also uses tools used in the market such as batteries, pump feeders, bottle bottles and so on.

The benefits of this tool can help breeders produce more honey per day. In addition, this tool is very easy to use and can also save time for farmers to produce honey.

This tool also has its disadvantages, one of the disadvantages is that it is not easy to carry anywhere because it is not well organized it can easily damage the tool. Even this tool is very expensive to own. In addition, this tool can make it easier for farmers to diagnose diseases for the body.

2.3 CHAPTER'S SUMMARY

Overall, the results obtained from this chapter are experiments that will be made to refer to previous research sources to complete the work done. In addition, some information from the history of the manufacture and production of crutches as well as the adjustment system identifies its function. This implementation can provide various benefits to breeders or consumers.

CHAPTER 3

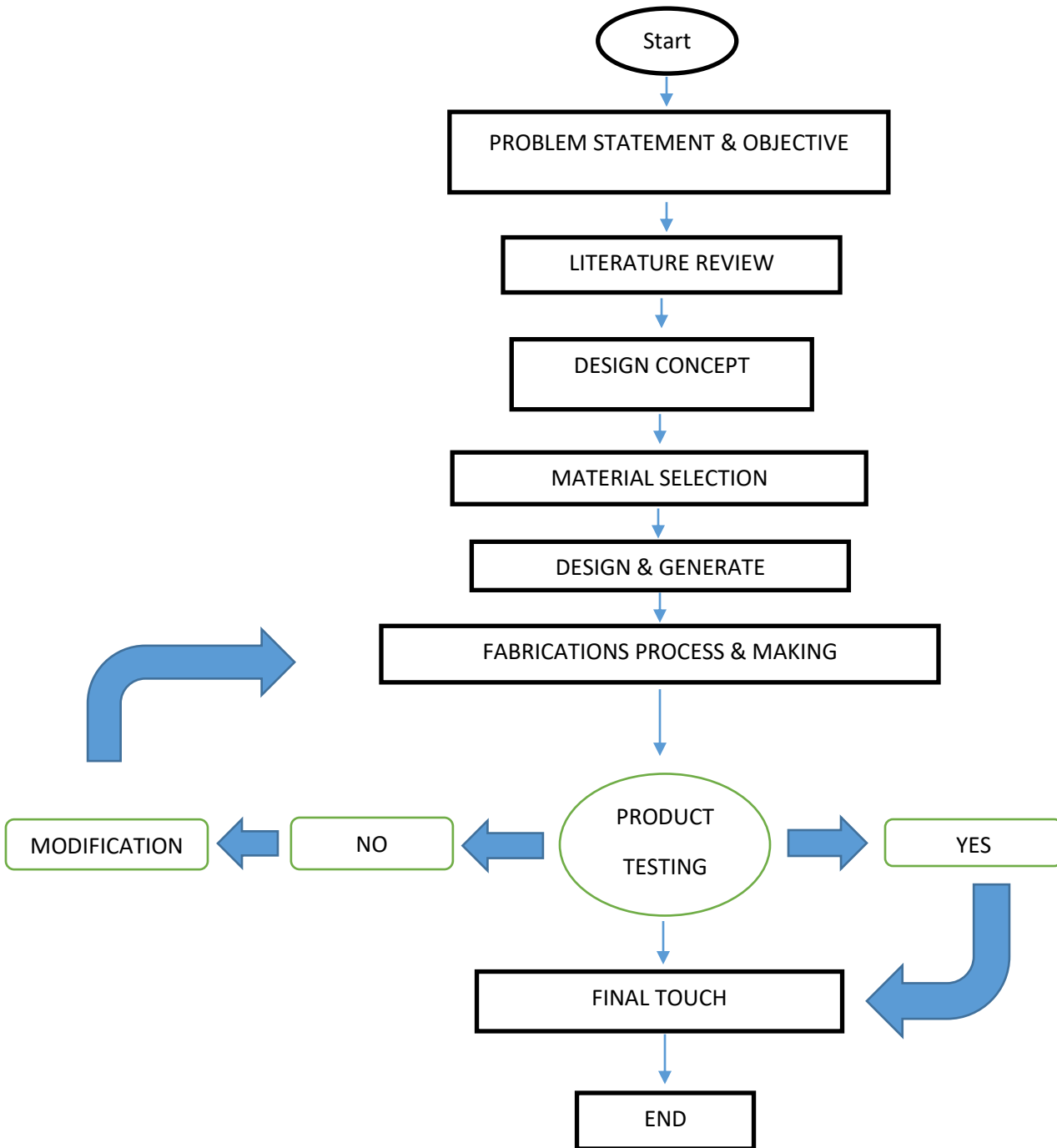
METHODOLOGY

3.1 INTRODUCTION

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. , for example, use various methodologies as they perform experiments. It might seem like the world is nothing but chaos and disorder. But actually, sometimes there is a method to this madness. And sometimes there's a methodology.

In this chapter, there will be a lot of information about the process and journey through out the making of our final project. There will be flow chart showing the process of us making the whole project. This flow chart will explain the processes we took. Next, is the Gantt Chart, which will show the actual and planning throughout all the 13 weeks of our final year project journey.

3.2 FLOW CHART



3.3 FLOW CHART EXPLANATION

3.3.1 PROBLEM STATEMENT

- A device for sucking honey is a syringe. This tool works manually and is less effective because it gets little honey yield.
- This syringe takes a long time for the farmer to get a lot of honey production, it takes time to do the inhalation, and even a lot of movement for the farmer to take the honey and put the honey into the honey storage.
- Breeders produce more energy and can even cause fatigue and lethargy in the body, and can even cause body and neck pain.
- Breeders are also uncomfortable to do work longer and it can cause the sale of the honey is slower to sell to the community in need of the honey.

3.3.2 LITERATURE RIVIEW

- We explain the background of Honey Vacuum
- In the literature review we also talk about the material we use in the production of Honey Vacuum.
- We started a project called a Honey Vacuum.
- Our project priority is to make it easier to use at work place , school or anywhere.

3.3.3 DESIGN CONCEPT

- We discussing about the materials and design to make sure that our project could be produced in good order.

Figure below using Autodesk Inventor

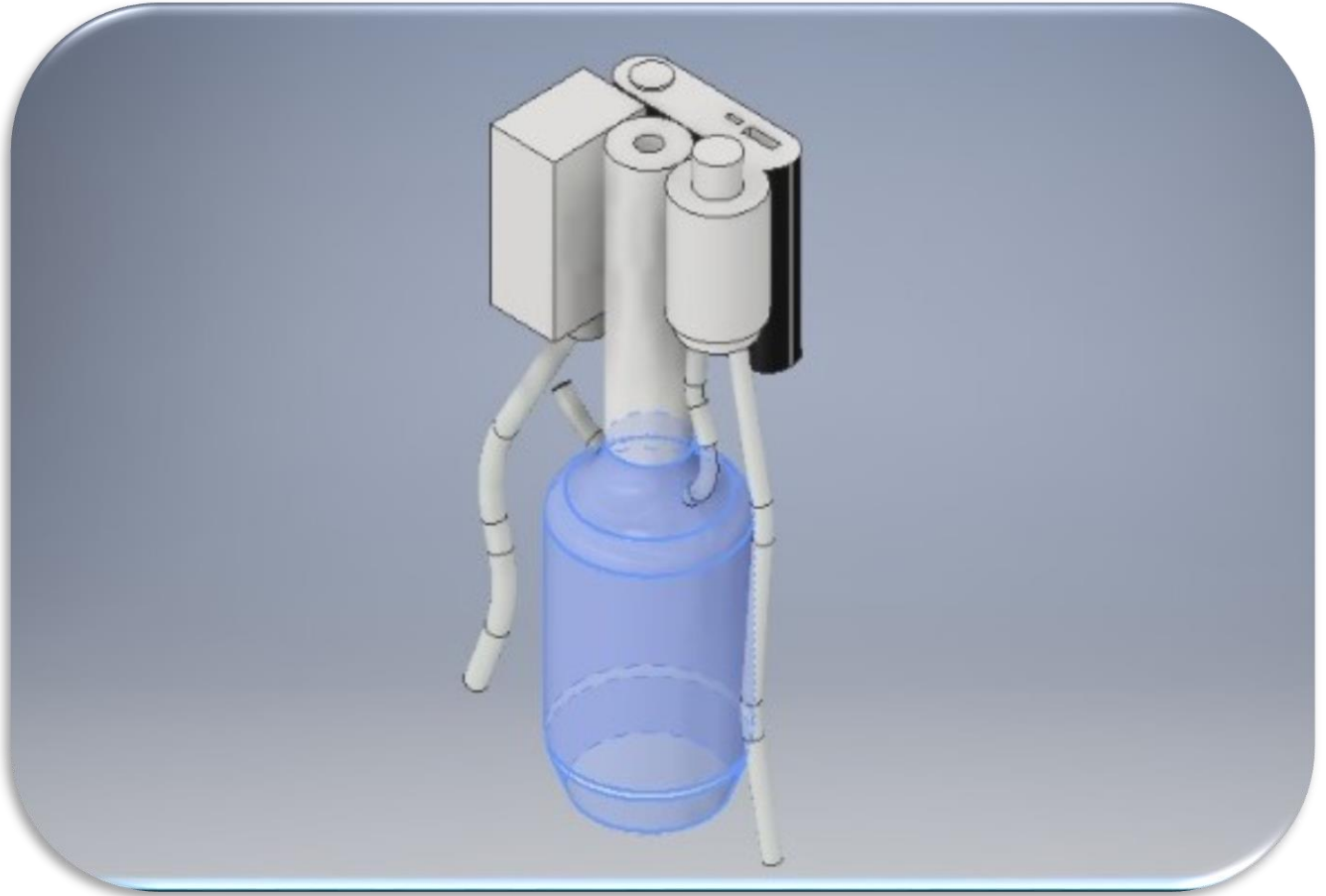


Figure 3.3.3.1

Figure below using AutoCad

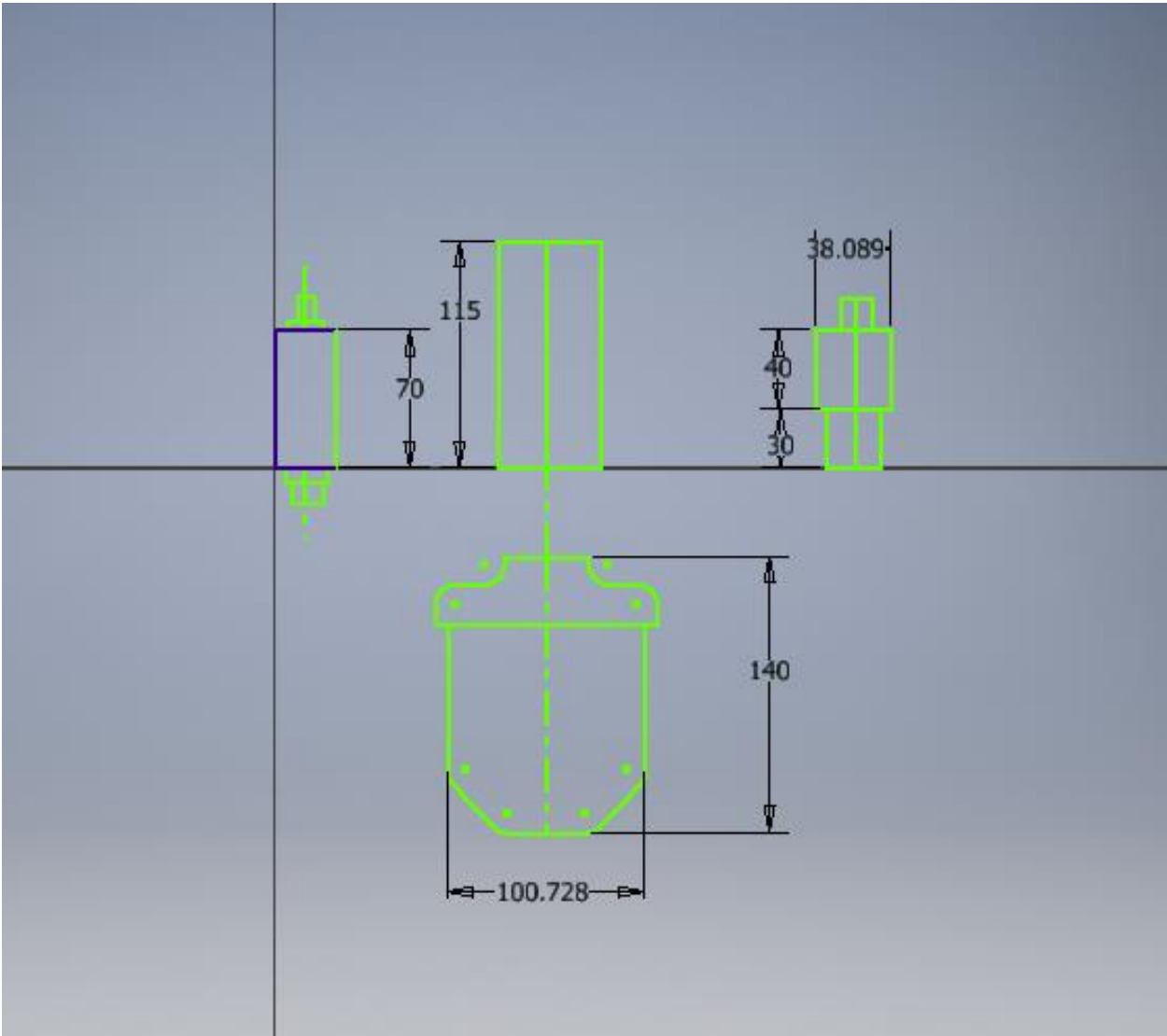


Figure 3.3.3.2

Figure below showing part of Honey Vacuum

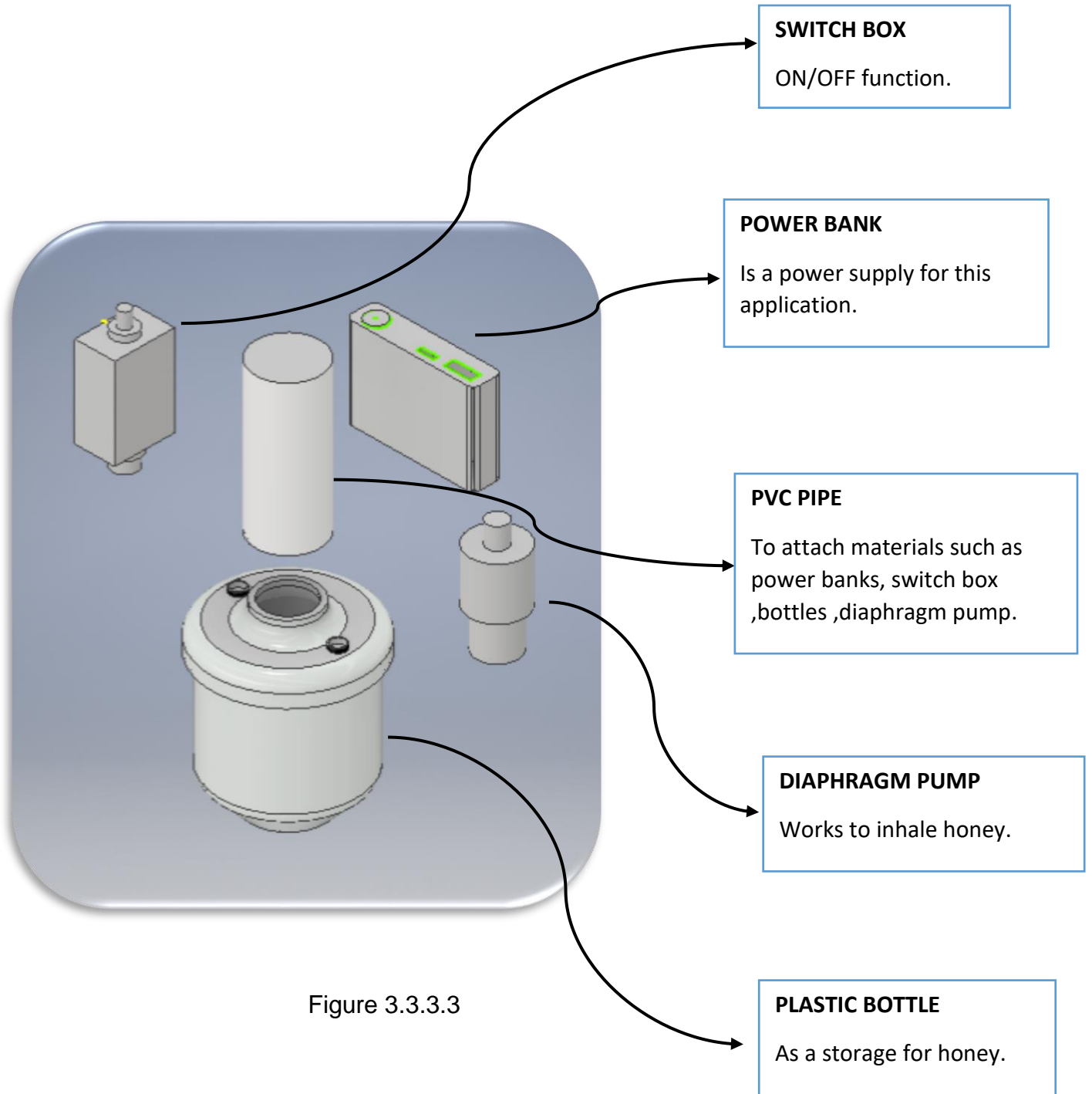


Figure 3.3.3.3

3.3.4 MATERIAL SELECTION

- The process of material selection is one of the most important process in this final year project. The main factor of material selection is to discuss and finalized which materials that will be use in the project in order to avoid wasting of money and time. The material selection need to be done precisely so that the risks could be avoided.

a) Polivinyll chloride (PVC)



Figure 3.3.4.1 Polyvinyl chloride (PVC)

PVC Pipe is a modern technology product that offers reliable and durable services to a wide range of users including contractors, engineers, operators, industries, utilities and irrigation areas. Some performance advantages mean that PVC Pipes are now replacing many traditional materials. it also has the flexibility and materials to be safe. This material is also non-flammable and is suitable for our Honey Vacuum project as it is easily cut to the desired size. That why we use this product in our project (Honey Vacuum).

b) Plastic bottle



Figure 3.3.4.2 Plastic bottle

Bottles are narrow containers made of non-recyclable materials such as clay, glass, plastic, aluminum and others in various shapes and sizes for storing and transporting water, milk, beer, wine, ink, cooking oil, medicine , soft drinks, shampoos, and chemicals, etc. We chose to use plastic bottles on our projects because they were cheaper than other bottles. it is also durable and will not rust and is light to use. these bottles are also not too big and small and are suitable for use in our project. That why we use plastic bottle in our project (Honey Vacuum).

c) Diaphragm Pump



Figure 3.3.4.3 Diaphragm Pump

A diaphragm pump (also known as a Membrane pump) is a positive displacement pump that uses a combination of the reciprocating action of a rubber, thermoplastic or teflon diaphragm and suitable valves on either side of the diaphragm (check valve, butterfly valves, flap valves, or any other form of shut-off valves) to pump a fluid. . A pair of non-return check valves prevent reverse flow of the fluid. We use this product because its suitable in our project like it can handle a wide variety of fluids with high solids content , cannot overheat and ability to run dry . That why we use this material in our project (Honey Vacuum) .

d) Motherboard



Figure 3.3.4.4 Motherboard

A motherboard (or better known as a leaderboard, main circuit board, system board, dashboard or logic board. It is the main printed circuit board. It holds, and enables, communications between many of the most important electronic components of the system, such as central processing units (CPUs) and memory, and provide connectors for other hardware. The motherboard usually contains important sub-systems such as central processors, input / output chipsets that can be used on tools that involve circuits. connecting small wires to power suites as well as a size suitable for our project. That why we use this material for our project (Honey Vacuum).

e) Powerbank



Figure 3.3.4.5 Powerbank

The power bank can be defined as a mobile battery that uses a circuit to control any power and power. They can be charged using a USB charger when power is available, and then used to charge battery-powered items such as mobile phones and a variety of other devices that typically use USB chargers. we use this material because its battery lasts longer than other batteries. it is also lightweight and can take up to 3 - 4 hours of work. That why we use this material for our project (Honey Vacuum).

f) Transparent PVC hose



Figure 3.3.4.6 Transparent PVC hose

Transparent PVC blankets always use high quality virgin PVC material. It can be used for many types of air, water, liquid oils and chemicals. Its can inhale the honey in good condition. it's also easy to find and the price is very low. That why we use this material for our project (Honey Vacuum).

3.4 FABRICATION PROCESS AND MAKING



Figure 3.4.1 show fabrication process and making

As shown in Figure 2, the fabrication process begins by attaching PVC to another PVC using screws. Then attach the switch box to PVC also using screws until tight. After that we insert the diaphragm pump into the PVC and connect the wires to the battery. Next, we attach the PVC plate to the PVC using screws and then attach the powerbank to the PVC plate using double foam until it sticks firmly. After that, we attach the plastic bottle to the PCV with the bottle cap first because it is easier to install also using screws. after that, just insert the bottle on the bottle cap.

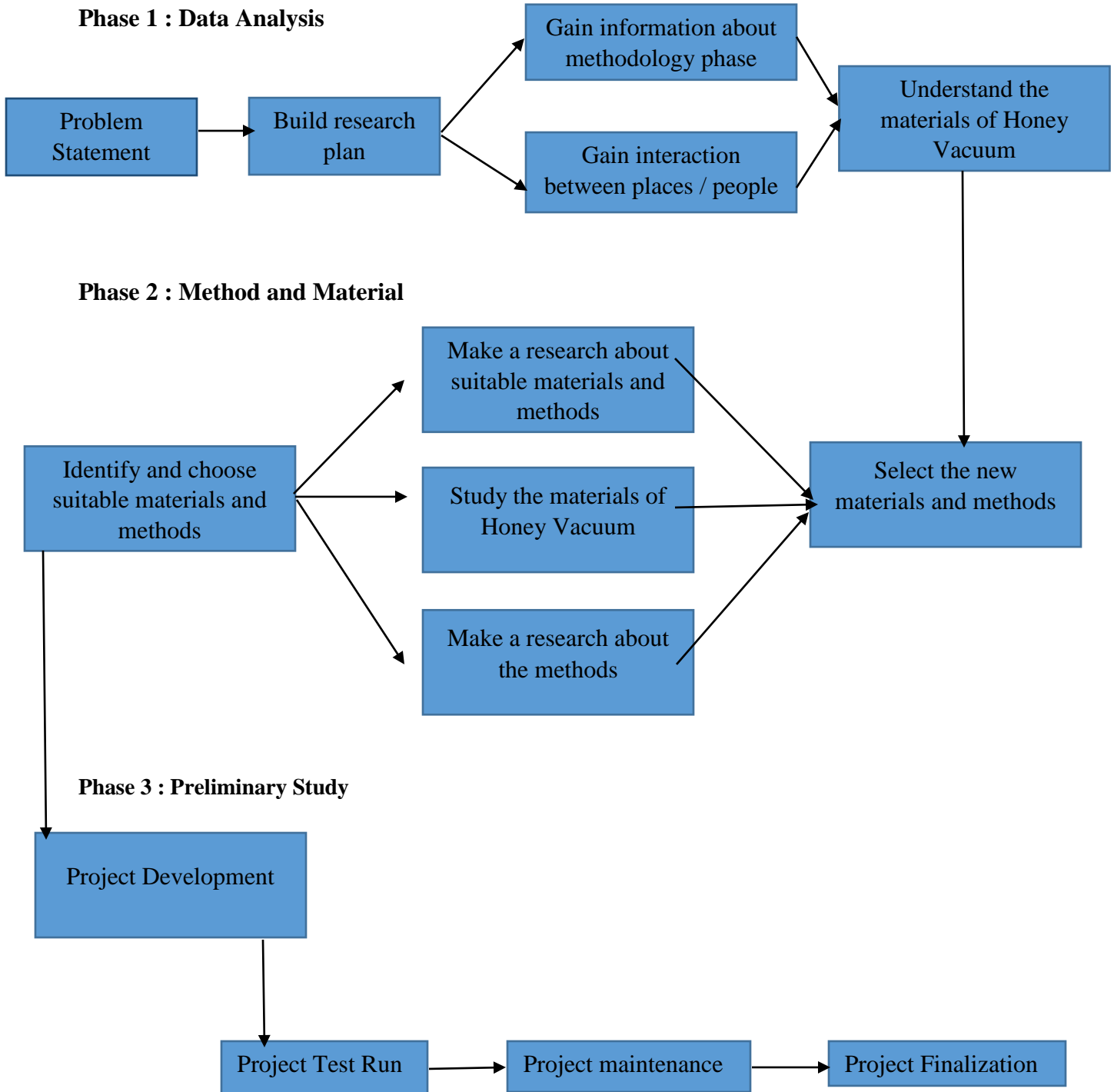
3.5 PRODUCT TESTING

Honey Vacuum d has been tested on water but has not been tested on honey to assess the ability and speed of the honey being inhaled. We have tried this project on water but not yet on honey. Data were collected by student observations and feedback during practical work. It is divided into two sessions namely before and after the use of innovation. Honey Vacuum that has been tested for inhalation but we can only test it on not yet on honey. And after we tested the Honey Vacuum it works well and can inhale water well and quite quickly because water is a liquid, not like liquid honey that is concentrated and will probably take longer than water.

3.6 FINAL TOUCH

After completed our process to making the project, we start used our Honey Vacuum at water, We also try our project at thick liquid for its working successful or not. Our project has been done and we have submit our project video to supervisor.

3.7 METHODOLOGY PHASE



3.8 BUDGET CALCULATION

No	Materials / Equipment	Amount	Price
1.	Polyvinyl chloride (PVC)	1 unit	RM6.00
2.	Plastic bottle	1 unit	RM3.00
3.	Diaghagram pump	1 unit	RM14.50
4.	Motherboard	1 unit	RM40.00
5.	Powerbank	1 unit	RM60.00
6.	Transparent PVC hose	1unit	RM3.00
7.	Skru	1 set	RM7.00
8.	Foam double tape	1 pcs	RM4.00
Total			RM137.50

Table 3.8 show the cost of material allocated to implement the Honey Vacuum project.

PRESENTATION (Present the product why the product is more effective)															
Submit log book	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Submit report															/

3.10 CHAPTER'S SUMMARY

In conclusion for this chapter, the methodology has been created. the ingredients used in Vacuum Honey have many advantages but there are every disadvantage for good. Therefore, these challenges are taken as opportunities for further improvement and expansion for future generations as well as increasing their knowledge of the projects we are undertaking. Future tests are underway to determine the full potential of Honey Vacuum and it is proven to work.

CHAPTER 4

FINDINGS AND ANALYSIS

4.1 INTRODUCTION

This chapter combines the data and analysis of Honey Vacuum and the computation of the materials we obtain. This data and analysis is very important for the project to achieve the goals and scope of the project. This data shows the results of successful testing of the materials we create. After getting all this data, we analyze every possibility to make it perfect without any problems.

4.2 ADVANTAGE AND DISADVANTAGE

Each project has its own advantages and disadvantages, it will benefit the people and the environment. However, existing weaknesses need to be repaired or modified in the future so that we can improve our products better and more efficiently which is difficult to find project weaknesses.

Honey Vacuum has many benefits to help the industry and the environment. In addition to these advantages, the project is also detrimental that we must overcome future problems for the greater good

4.3 SURVEY

A survey has been conducted to identify problems about the available honey vacuum and the things that need to be improved on the honey vacuum to make it easier for farmers or everyone to use. From the survey, we can determine the important parts that need to be improved on the honey vacuum at the request of people. This can help us produce good products that can help farmers or consumers do the work more easily and safely .

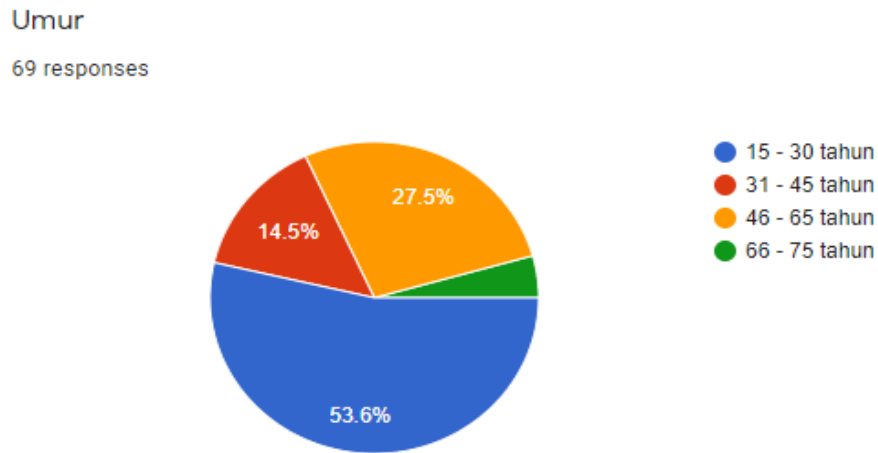


Figure 4.3.1



Figure 4.3.2

Disini kami mencipta sebuah alat iaitu Honey Vacuum yang boleh menyedut madu secara cepat dan selamat , Adakah anda rasa projek kami ini bagus untuk industri terkini ?

68 responses

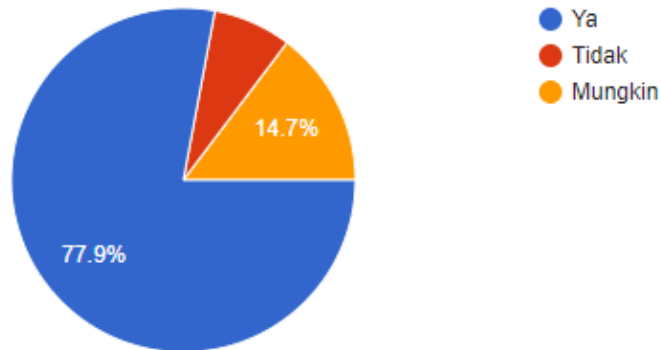


Figure 4.3.3

Berikut adalah cadangan beberapa responden bagi menambahbaik Honey Vacuum ini;

- 1) Teruskan usaha anda
- 2) Honey Vacuum dibekalkan kepada pengusaha madu kelulut secara sewa beli
- 3) sesuai digunakan untuk semua kategori had umur
- 4) Minta tunjukkan gambar dan tunjuk cara penggunaan honey vacuum untuk keesahan penggunaannya.
- 5) Teruskan usaha anda. Semoga berjaya.
- 6) Buat secara teliti, selamat digunakan.
- 7) Lebih memudahkan pengguna untuk membawa ke mana-mana sahaja.
- 8) Harga mampu milik dan kualiti baik

- 9) Semoga Berjaya.
- 10) Dicadangkan projek ini di tempat/rumah khas di luar rumah atau di tanah kebun.
- 11) Gunakan bahan yg.mesra pengguna, dari bahan yg.halal dan tidak merosakkan Alam sekitar.
- 12) Practical dan userfriendly boleh dipasarkan
- 13) Perbesarkan saiz penyedut
- 14) Idea yang bagus. Perlukan lokasi yang bagus juga untuk penggunaannya.
- 15) Projek anda lebih baik fokus kepada pembekal atau pengeluar madu-madu atau ladang leba.
- 16) pastikan ianya mudah di pegang, dan ringan agar boleh digunakan oleh mana2 peringkat umur dan jantina
- 17) Lebih mesra alam dan tidak menghasilkan pencemaran bunyi
- 18) Honey Vacuum boleh ditingkatkan lagi kuasa penyedutan dan kepantasan.... Dengan ini dapat menghasilkan lebih banyak madu kelulut
- 20) Harga mesti murah dan berpatutan
- 21) Biar terjamin penggunaannya dan boleh dikitar semula
- 22) Alat ni perlu selamat dan bersih
- 23) Maaf, saya tidak dapat memberi idea atau cadangan sebab saya tak dapat bayangkan bagaimana bentuk fungsi alat tersebut
- 24) Gunakan sumber tenaga / bahan yang boleh diperbaharui / dikitar semula
- 25) Make sure the price is affordable
- 26)Make sure the price you want to solve is affordable. Thank you.

4.4 TEST RUN



Figure 4.4: Honey Vacuum testing

Table 3 shows the test results on water. This is a simple method and has better safety and convenience features than the usual method. Honey Vacuum uses manpower where the user only needs to insert the hose into the water to inhale and turn on the switch to turn on the project. It can be done by sitting. No need to stand. Just hang the Honey Vacuum on the neck using the straps provided. It only takes about 40 seconds to inhale the water until it is full in a bottle or storage container.

Table 4.4.1: Test results on Water



TEST ON WATER			
Time taken to full in bottle	40 – 50 seconds		
Required manpower	1 person		

Table 4 shows the test results on. This is a simple method and has better safety and convenience features than the usual method. Honey Vacuum uses manpower where the user only needs to insert the hose into the water to inhale and turn on the switch to turn on the project. It can be done by sitting. No need to stand up and just hang the Honey Vacuum on the neck using the rope provided. It only takes about 80 seconds to inhale the honey until it is full in a bottle or storage container.

Table 4.4.2: Test results on Honey

TEST ON HONEY			
Time taken to full in bottle	80 – 100 seconds		
Required manpower	1 person		

4.4 STRENGTH OF HONEY VACUUM

- 1) This product can speed up the job.
- 2) Could last for a long time with a good care.
- 3) This product could decompose naturally.
- 4) Easy to used.
- 5) Easy to wash.

4.6 STIFFNESS OF HONEY VACUUM

- 1) Not suitable for placement everywhere.
- 2) This product could not be exposed to water frequently.
- 3) The battery have to charges after use

4.7 ANALYSIS

Based on our project of Honey Vacuum , we can conclude our project still has high capacity to use although there are some disadvantages but our project can be used well and perfectly. With proper use, you will get good results.

4.8 CHAPTER'S SUMMARY

As a conclusion to this chapter, analysis and findings have been made. Honey Vacuum has many advantages but there are each disadvantages for good. As such, these challenges are being taken as an opportunity for improvement and further development for future generations as well as enhancing their knowledge of the projects we are working on. Future tests are being conducted to determine the full potential of Honey Vacuum and it is proven that it can work.

CHAPTER 5

DISCUSSION, CONCLUSION AND UPGRADE PLAN

5.1 INTRODUCTION

Honey bee honey is produced by the honey bee, a small size honey bee. The color of the honeycomb is usually more transparent and resistant than honey bees and has a sweet, sour taste. Honeycomb honey is more expensive than regular honey bees because it is less available in the market. Honey bee honey has a variety of benefits for health and wellness purposes. Among the diseases reported using traditional treatments for bee products are: - Diabetes Mellitus, Stroke Hypertension, HIV and AIDS Reduce joint pain and Internal Injuries Breast bee breeders are one of the new phenomena in Malaysia.

5.2 DISCUSSION

In this project, we have done some analysis on our project so that we can discuss what the problem is with our project. we consider our project to be imperfect and there is much to improve in different aspects such as ergonomics, realistic and so on. With the availability of resources, we can look for information on our projects to improve our project We also hope that this project will work well for the public and for sale in the market

5.3 BENEFITS FOR THE SOCIETY AND INDUSTRY

With the creation of our project, it can help the people outside who are raising bees or selling honey, as our project can ease their burden and not have to spend a lot of money to do their work. The benefit of the industry is that it can reduce the capital of one company to produce another product. Our products are suitable for use in the beekeeping industry where by using this product, work can be done quickly and workers will not be able to produce large amounts of energy and will be able to perform smooth and stable work.

5.4 SUGGESTION TO FURTHER THIS STUDY IN THE FUTURE

Our Suggestion is that our project will be marketable and applicable to the community at home and abroad. We hope that this product will be useful in the future and can be improved in terms of shape, appearance and so on so that it looks more valuable than the original product, it can also be marketable and help some of the people who need this product to use it or for work or personal use. We hope this product will help with the problem.

5.5 CONCLUSION

As conclusion, this Honey Vacuum is a product created for inhalation of honey and can be used by anyone for their own purposes. we hope that our products can reach a high level of satisfaction when used. Therefore, we hope this product can be marketed to the market to help local or overseas industries in the field of bees. With this product, it can reduce the workload and fatigue of the employees and make the job faster and easier.

5.6 CHAPTER'S SUMMARY

In this chapter , we learned about to solve or to make our product better than before . All the objectives dan information were made out of all the problem statements. The objective for this project along with the importancefor getting a lot of results, takes a little time . we are also analyzing how to develop our project for the future so that it can be used more effectively and to the satisfaction of the public.

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