

Roselle Nail Henna

Fadzilah Mahmud^{1,*}, Norma Wan Ishaki², Norazadilla Mohd Noor³, An-Nur Ayesha Rabeya Abdul Malik⁴, Kethsara a/p Eh Tan⁵, and Sawanee a/p Eh See²

- 1 Kolej Vokasional Bachok; fadzrash@gmail.com
2 Kolej Vokasional Bachok; sya070587@gmail.com
3 Kolej Vokasional Bachok; norshamzulawati@moe.edu.my
4 Kolej Vokasional Bachok; aleeyaadrisha1208@gmail.com
5 Kolej Vokasional Bachok; azwazamry03@gmail.com
6 Kolej Vokasional Bachok; Ndiraamaleen05@gmail.com
* Correspondence: fadzrash@gmail.com

Abstract: *Rosella Nail Henna is our final year project based on Henna leaves as main dye and Rosella Flower as an addition dye. Lawsonia Inermis or better known as henna in the Malay community is a plant that is traditionally used in medicine and cosmetics by various cultures around the world. Henna leaves grow in pairs on the sides of the trunk and branches of the henna tree. It is very popular as a plant that has a natural colour. The content that gives colour to it is Quinone such as Lowson. It is used as natural dye for nail. Rosella flower works as an antibacterial and antifungal. In addition, the red pigment from the petals is used as an additional natural dyes for this product. The problem are polish nails in the market is not authentic to bring to prayer and have an unpleasant smell. The most important issue to use the "Halal" colouring agent on our nails. Other that, to reduce the infections that cause nails to turn black, dry nails that break easily and so on. The purpose of this product is for nail care because the henna produced is to treat nails from those infections. It is produced for everyone, especially Muslims, can use it because it is ablution-friendly. Its uniqueness is that it is in liquid form. Customers only need to apply on the nails in a short period to give amazing colour results; it has vitamin E and Vitamin C from lemon oil. It is long lasting. Vitamin E gives moisture on nails. Vitamin C as antioxidant agent. It is natural, easy to obtain and the low-production cost. It is very stable to heat, environment and ambient temperature, eco-friendly and biodegradable production. Lastly, friendly travel for everywhere.*

Keywords: henna; henna leaves; rosella; nails; dye



Copyright: © 2023 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. INTRODUCTION

Rosella Nail Henna is our final year project based on Henna leaves as main dye and Rosella Flower as an addition dye. Lawsonia Inermis or better known as henna in the Malay community is a plant that is traditionally used in medicine and cosmetics by various cultures around the world. Henna leaves grow in pairs on the sides of the trunk and branches of the henna tree. It is very popular as a plant that has a natural colour. The content that gives colour to it is Quinone such as Lowson. It is used as natural dye for nail. Rosella flower works as an antibacterial and antifungal. In addition, the red pigment from the petals is used as an additional natural dye for this product.

2. METHOD & MATERIAL

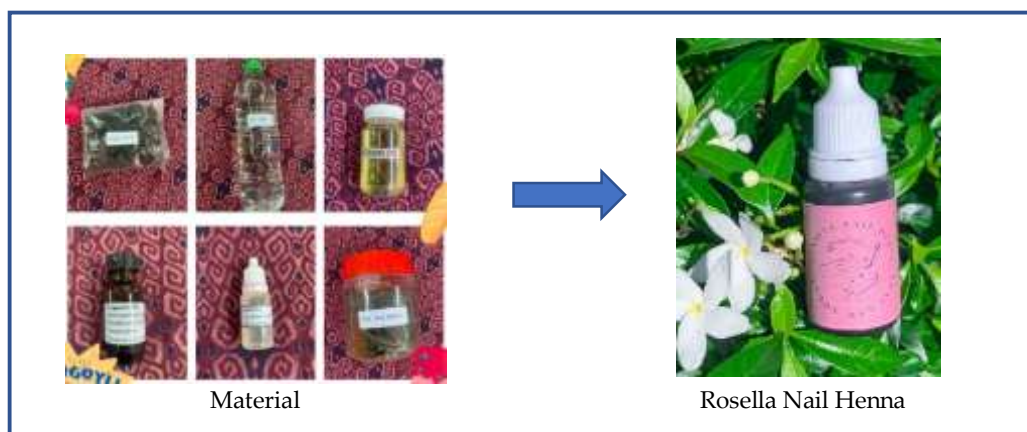


Figure 1. Material

The Rosella Nail Henna is produced by 'homemade' technique. In Figure 1, there are liquid Henna, Rosella extract, Vitamin E Oil, Isoguard, Lemon Oil as Fragrance and distilled water. Firstly, mix water with rosella extract. Secondly, mix all another ingredients one by one according to the predetermined measurements and stir until well combined. Thirdly, mix step 1 and step 2 and stir very well. Figure 2 show the flow chart about the method in using to study the effectiveness of Rosella Nail Henna based on Henna and Rosella leaves among children, teenagers and adults. 30 respondents among women aged 11 to 60 years who live around the area of Bachok village, Kelantan. The selected respondents must have nail problems, especially clove nail problems or dry nails. So, we can see the product results well.

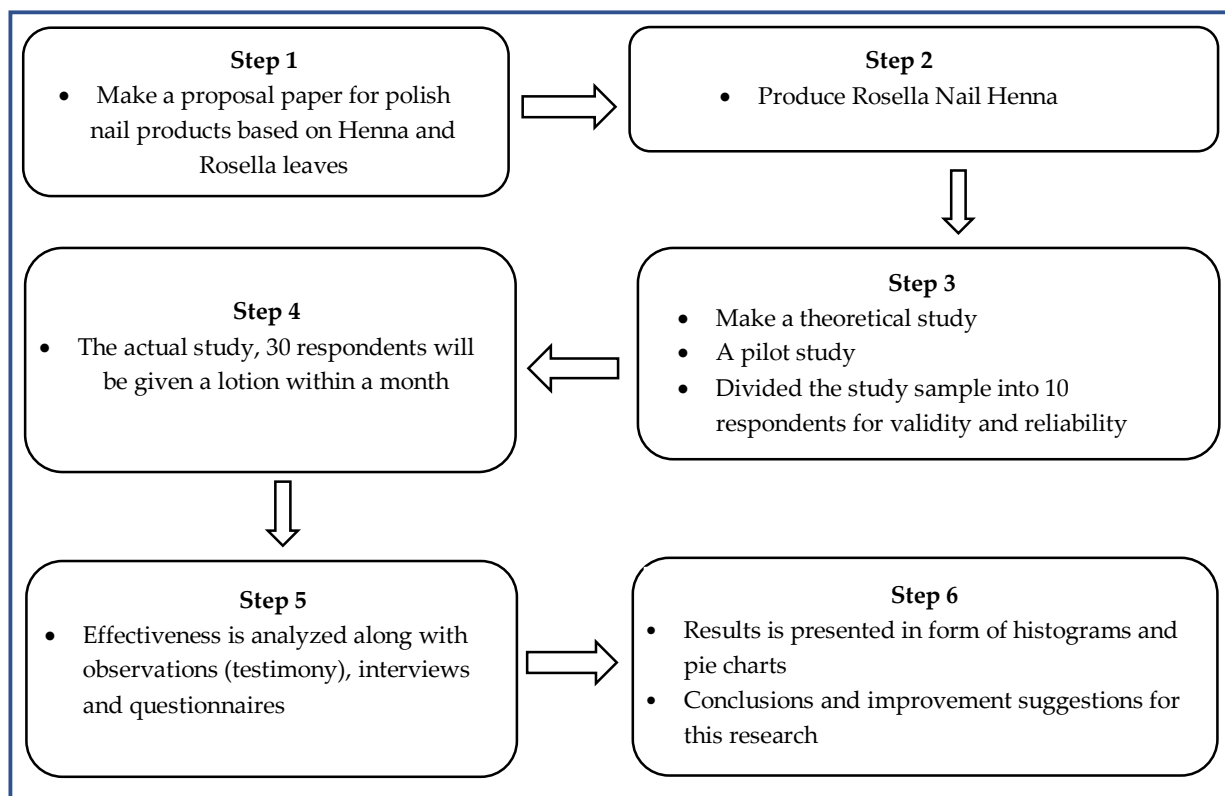


Figure 2. Method

3. FINDINGS

Firstly, to identify the level of effectiveness of henna on nails. Secondly, to identify the level of knowledge of the henna ingredients. Lastly, to identify hand and nail care practices in daily life. The effectiveness of henna is analyzed through observations (testimony or feedbacks), interviews and questionnaires. An effectiveness study was conducted on 30 respondents between women aged 11 to 60 years who live around the area of Kg Bachok, Kelantan. The selected respondents must have nail problems, especially clove nail problems or dry nails.

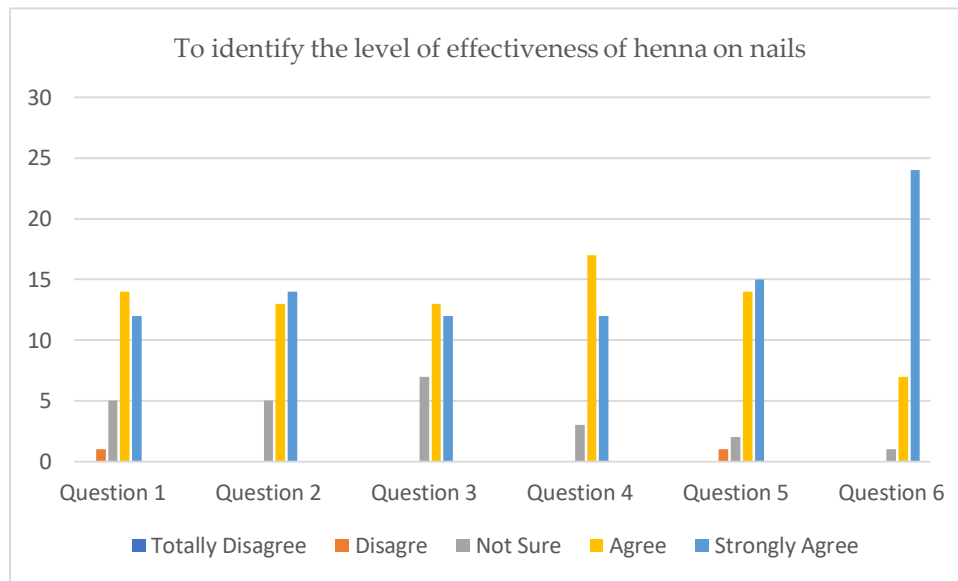


Figure 3. Identify the level of effectiveness of henna on nails

In Figure 3, the graph shows the number of respondents who know to identify the level of effectiveness of henna on nails. The questions are:

- Question 1: The surface of my nails became moist
- Question 2: My nail texture looks beautiful after using this henna
- Question 3: I was able to treat the edges of the cracked nail
- Question 4: This Henna colour lasts longer on nails than other henna
- Question 5: I have less nail problems after using this henna
- Question 6: This henna is easy and quick to apply on the nails

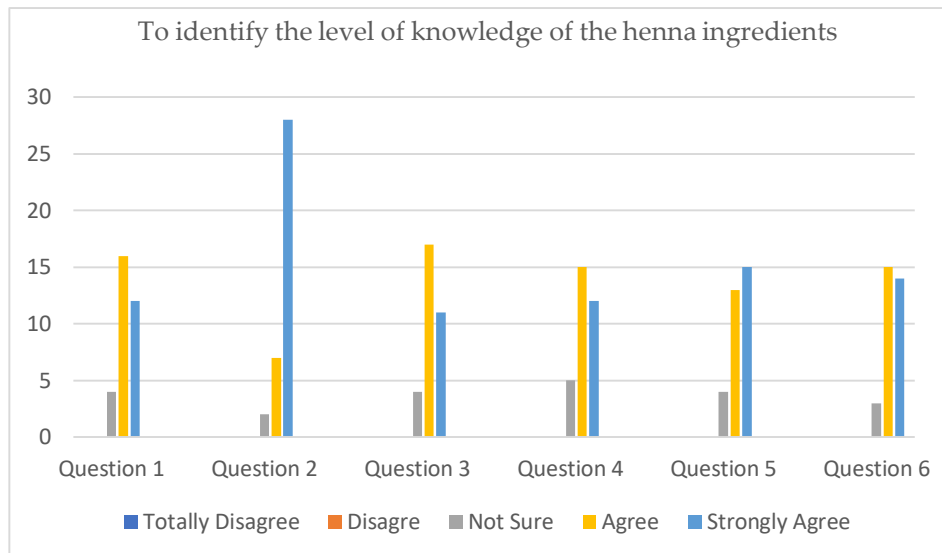


Figure 4. Identify the level of knowledge of the henna ingredients

In Figure 4, the graph shows the number of respondents who know to identify the level of knowledge of the henna ingredients. The questions are:

- Question 1: I know what is in the henna I use
- Question 2: I know henna that is ablution-friendly or not
- Question 3: I know the type of dye that is placed in henna
- Question 4: I know using henna can treat nail problems
- Question 5: I know there is lemon extract in henna to preserve the color
- Question 6: I know the henna products I use are of high quality

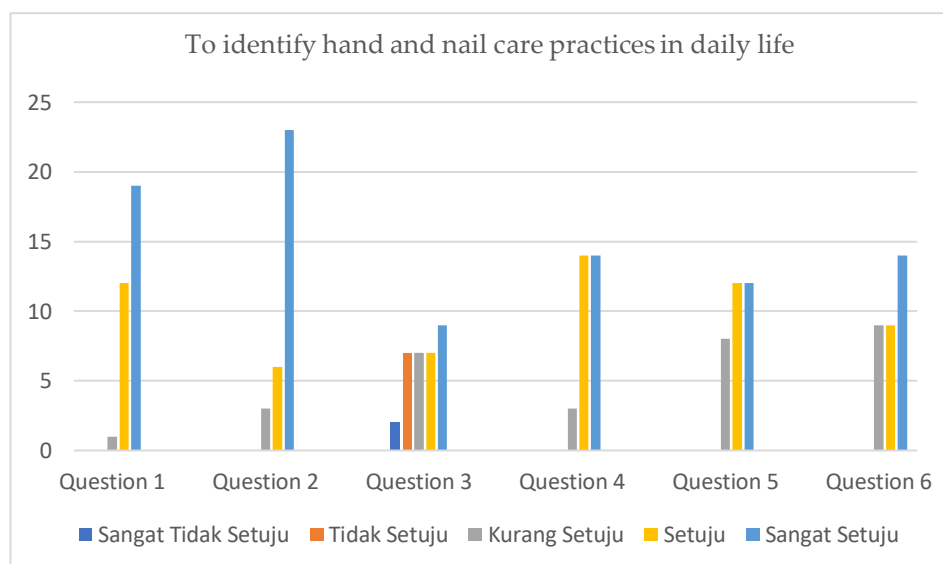


Figure 5. Identify hand and nail care practices in daily life

In Figure 5, the graph shows the number of respondents who identify hand and nail care practices in daily life. The questions are:

- Question 1: I always wash my hands thoroughly after doing activities
- Question 2: I always cut the nails when the nails are long

- Question 3: I do manicure treatments 2 times a week
- Question 4: I always avoid nail biting
- Question 5: I take foods that contain calcium every week
- Question 6: I always put lotion on my hands every day

4. DISCUSSION

Natural materials are materials based on plant, animal or mineral sources without undergoing any chemical process or containing any chemical compounds. It is usually added to a cosmetic and personal care product and serves as the main ingredient in the product. Example Henna and Rosella leaves. So, this dyes nails are natural, easy to obtain and the low- production cost. It is very stable to heat, environment and ambient temperature, eco-friendly and biodegradable production. Other that, the packaging of it more travelling friendly.

The problem are polish nails in the market is not authentic to bring to prayer and have an unpleasant smell. The most important issue to use the “Halal” colouring agent on our nails. Other that, to reduce the infections that cause nails to turn black, dry nails that break easily and so on. The purpose of this product is for nail care because the henna produced is to treat nails from those infections. It is produced for everyone, especially Muslims, can use it because it is ablution-friendly. Its uniqueness is that it is in liquid form. Customers only need to apply on the nails in a short period to give amazing colour results; The pigments colour in henna have reacted with pigments colour in rosella to produced new colour. It has Vitamin C from lemon oil. It is long lasting. Vitamin C as antioxidant agent. Lemon Oil is used to thicken the colour of henna because lemon acid in it works to accelerate the colour of henna to absorb into the cuticle nails. At the same time, it can also treat the skin around nails and make your nails fresh and cool. The rate of absorption of it to cuticle nails faster and not have any layer on the nails. So, the water can through of it. Vitamin E gives moisture and nourish dry or problematic nails. Vitamin E is an effective treatment for dry and cracked cuticles and nails.

Consistent use helps reduce nails problems and giving the beautiful nails. The free chemical colouring nails homemade is natural and directly giving the knowledge or education for community to choose the free chemical product. It is biodegradable product and eco-friendly. The commercial value is it is user friendly and can be scientifically commercialized to use as make up nails tools for women every time or everywhere.



Figure 6. Feedback

In Figure 6, it is a testimony or feedbacks of the effectiveness of Rosella Nail Heena.

5. CONCLUSION

Overall, the results of testimonials and questionnaires on the effectiveness of this product can be used as a yardstick for the level of effectiveness of using henna and rosella leaves. This study was done on 30 respondents between women aged 11 to 60 years who live around the area of Kg Bachok, Kelantan. This product can be marketed to the public. The high demand for beauty products has a wide opportunity for it.

Acknowledgments: Thank you to all lecturers of the cosmetology program for their help, support and guidance in the implementation of this project.

References

- Alifah, Azreen (Ogos, 2022). *Mengkaji keberkesanan bahan semulajadi ke atas kecantikan tubuh badan*. Projek Tahun Akhir. Kolej Vokasional Bachok.
- DM Sakarkar, UM Sakarkar, VN Shrikhande, JV Vyas, et. al. (2004). *Wound healing properties of Henna leaves*
Retrieved from: <http://nopr.niscpr.res.in/handle/123456789/9467>
- H Al-Sehaibani (2002). *Evaluation of extracts of henna leaves as environmentally friendly corrosion inhibitors for metals*.
Retrieved from: [https://onlinelibrary.wiley.com/doi/abs/10.1002/1521-4052\(200012\)31:12%3C1060::AID-MAWE1060%3E3.0.CO;2-K](https://onlinelibrary.wiley.com/doi/abs/10.1002/1521-4052(200012)31:12%3C1060::AID-MAWE1060%3E3.0.CO;2-K)