



SINCE 2010



NAAS Rating
2012:1.3; 2013-16: 2.69
2017-2020: 3.98



IMPACT FACTOR
2019-20: 2.40; 2021:1.09



IPI Value 2.78
SJIF 6.783

Received on:
21st May 2024

Revised on:
25th June 2024

Accepted on:
26th June 2024

Published on:
1st July 2024

Volume No.
Online & Print
171 (2024)

Page No.
24 to 34

*Life Sciences Leaflets
is an international
open access print &
e journal, peer
reviewed, worldwide
abstract listed,
published every month
with ISSN, RNI
Free membership,
downloads and access.*

DOCUMENTATION OF HERBAL COSMETICS USED BY TRIBAL PEOPLE OF VAPI TALUKA'S FOR SKIN AND HAIR CARE

SONAL PATEL¹, HITESH KUMARKHANIYA² AND BHARAT
MAITREYA³

1. PG student, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.
 2. PhD scholar, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.
 3. Professor, Department of Botany, Bioinformatics and Climate Change Impacts Management, University School of Sciences, Gujarat University, Ahmedabad-380009, Gujarat, India.
- Corresponding author's e-mail: drmuktajain1@gmail.com

ABSTRACT:

Vapi taluka, located in the Southern parts of Gujarat, India. In Valsad district, boasts a picturesque setting along the banks of the Daman Ganga River Surrounded by neighboring areas such as Daman, Umargam, Sanjan, Sarigam, Bhilad, Udvada, and Pardi. Vapi shares its borders with the union territory of Dadra and Nagar Haveli and Diu, as well as Maharashtra. The local population, predominantly belonging to various Adivasi sub-tribes such as Varli, Kokni, Patel, Ahir, Hadpati, Rabara, Maravedi, Harijan, Rohit, Kori Patel and Solanki, possesses rich traditional knowledge of herbal cosmetics. This study delves in to the usage of herbal cosmetics of Vapi taluka, documenting the methods of preparation and application of cosmetics products derived from indigenous plants species. The research reveals that (69%) of the plants are utilized for skin care, (38%) for hair, and (13%) for overall body care. Various plants families, including Rutaceae (13%), Zingiberaceae (7%), contribute to these herbal cosmetics practices. The methodology employed involves the collection and preparation of herbarium

organization of results based on plant scientific names, families, habits, cosmetics methods, and their respective usage among the tribal communities of Vapi taluka. This study underscores the significance of herbal cosmetics in traditional knowledge systems and highlights the valuable insights offered by the indigenous population regarding the utilization of plant resources for cosmetics purposes.

KEYWORDS: *Herbal cosmetics, Cosmeceuticals formulation for Skin care and Hair care, Tribal people, Vapi taluka.*

INTRODUCTION:

The Greek terms “kosm tikos,” which means to have the ability to organize, power or skill beautifying is where the word “Cosmetic” originated. In 1961, Raymond Reed, a founding member of the US Society of cosmetics chemist, coined the term “Cosmeceutical”. In fact, is briefed the science-based and active cosmetics using the world. The aforementioned phrase was also used. In 1984, Dr. Albert Kligam made reference to compounds that possess both medicinal dating back around six centuries are part of the history of the herbal cosmetics industry. Herbal cosmetics history in the 1940s demonstrates how popular at the time (Pandey *et al.*, 2010). Herbal source is typically high in Vitamin, antioxidants, hydrocolloids, proteins, terpenoids, oils essential etc., And other bioactive substances having applications in cosmetics like anti-aging, antioxidant and emollients effect (Yapar E.A., 2017). Personal care products made with ingredients derived from plants are becoming more and more popular in the pharmaceutical industry these days. The primary ingredients of hair care formulations including hair oil, hair wash shampoo, gel, lotions etc. plants like Neem, Henna, Coconut, Eucalyptus, Jatamansi, Retha, Shikakai, etc (Gupta *et al.*, 2010). Cosmeceuticals are the sector of the beauty business with the quickest growth. The skin care products of the future are these. Herbal cosmetics are plants-based products made of various parts combined with chemicals that are used to skin to improve its radiance, moisturize it, remove dead skin cells, bleach it, and apply different colors depending on the kind of skin or hair (Astha Kotnala *et al.*, 2019). Pure essential oils contain more than 200 ingredients, most of which are combinations of terpenes and phenylpropanoid. (Aziz *et al.*, 2018). Herbal cosmetics have become more well-known and we've liked them lately both in India and elsewhere. Active compounds in cosmetics are a variety of industries, including biotechnology, pharmaceutical, cosmetics, and natural all extract in cosmetics formulations (Chermahini *et al.*, 2011).

METHODS AND METHODOLOGY:

The area selected for the study was Vapi taluka, Valsad district, Gujarat, India. On the banks of Daman Ganga River, Site the lovely city of vapi. Herbal cosmetics plants were collected from this

site. To create an herbarium, following these steps: Collecting, Pressing, Drying, Mounting, Stitching, Labeling. An herbarium sheet should measure 41×29 cm. After identification by Botany department authority, we have properly labeled. Then conducting visits and creating a questionnaire starting from January 1st.

Questionnaire for the herbal cosmetics plants of Moti Tambadi Village:

1. The information about herbal cosmetics is Plant name, Common name, Cosmetic methods, Dose, Durations, also Name and Age of tribal people (Informer).
2. How important is the use of organic or sustainably sourced herbal ingredients in cosmetics to you?
3. What method or processes are employed in the production of herbal cosmetics at the plant?
4. How long has the plant been in operation, and what advancements have been made in herbal cosmetics production during this time?

RESULT AND DISCUSSION:

In my collected data on 70 plants in total, out of which 41 belong to families that are used in herbal cosmetics such as skin care, hair care, treatment of skin diseases, and other purposes. Various parts like leaves, stems, flowers, fruits, barks, root and gels are utilized in these herbal cosmetics, many of these plants possess antioxidant properties, phytochemicals medicinal, etc., making them increasingly utilized in contemporary times.

CONCLUSION:

The findings of this study highlight the potential of plants like *Acumella uliginosa* (Sw.) Cass, *Annona reticulata*, *Catharanthus roses*, *Cicer arietinum* L., *Euphorbia hitra* L., *Ficus religiosa* L., *Ipomoea batatas* L, *Oryza sativa* L, *Allium sativum* L, *Azadirachta indica* A. juss, *Lowsonia inermis* L, *Ocimum sanctum* L. *Sapindus mukorossi* Var. for herbal cosmetics, offering promising avenues for skin and hair care formulations. Further research into these botanicals could lead to the development of effective herbal cosmetics solutions for skincare and hair care needs. Based on the data provided, it seems that a total of 69 plants are beneficial for skin, 38 for hair, 13 for an overall body care, and 6 specifically for lip makeup. Additionally, 5 plants are useful for both manicure and pedicure purposes.

ACKNOWLEDGEMENT:

Special thanks are extended to all local people for helping during survey conducting and during prepare documentation of the data. Authors are thankful to Botany department for providing infrastructure and herbarium facility.

REFERENCES:

1. Aziz, Z. A., Ahmad, A., Setapar, S. H. M., Karakucuk, A., Azim, M. M., Lokhat, D., ... & Ashraf, G. M. (2018). Essential oils: extraction techniques, pharmaceutical and therapeutic potential-a review. *Current drug metabolism*, 19(13), 1100-1110.
2. Chermahini, S. H., Majid, F. A., & Sarmidi, M. R. (2011). Cosmeceutical value of herbal extracts as natural ingredients and novel technologies in anti-aging. *J. Med. Plants Res*, 5(14), 3074-3077.
3. Gupta, A., Malviya, R., Singh, T. P., & Sharma, P. K. (2010). Indian medicinal plants used in hair care cosmetics: a short review. *Pharmacognosy Journal*, 2(10), 361-364.
4. Kotnala, A., Verma, K., Sharma, A., Parashar, S., Rathi, B., Kumar, R., ... & Singh, J. (2019). Indian Medicinal Plants for skin care and cosmeceuticals: A review. *Journal of Biomedical and Therapeutic Sciences*, 6(2), 24-60.
5. Shivanand, P., Nilam, M., & Viral, D. (2010). Herbs play an important role in the field of cosmetics. *International Journal of PharmTech Research*, 2(1), 632-639.
6. Sripriya, D. (2023). A simple analysis on herbal cosmetics. *International Journal of Science and Research Archive*, 8(1), 001-016.
7. Yapar, E. A. (2017). Herbal cosmetics and novel drug delivery systems. *Indian Journal of Pharmaceutical Education and Research*, 51(3), 152-158.

Sr. No	Plant name	Common name	Scientific name	Family	Part use	Cosmetic uses	Dose / Duration
1	Marsh Para cress	Mako	<i>Acmella uliginosa</i> (Sw.) Cass.	Asteraceae	Fruits	Skin care	Weekly 2 time.
2	Chinese gooseberry	Kiwi	<i>Actinidia deliciosa</i>	Actinidiaceae	Fruits	Dark spots	2 days on 1 week.
3	Stone apple	Belpatra, Bilipatra	<i>Aegle Marmelas</i> L.	Rutaceae	Fruits	Scurvy disease	Week 1 Time. For 10min
4	Onion	Kando, Dungdi.	<i>Allium cepa</i> L.	Amaryllidaceae	Peels	Stops hair fall	Weekly 2 time.
5	Garlic	Lasan	<i>Allium Sativum</i> L.	Amaryllidaceae	Stem	Hair oil pimple clear Dandruff.	Apply on hair, Shelf life 2 Months.
6	Alovera	Kuver, Kuvpatho	<i>Aloe vera Barbados miller</i>	Asphodelaceae Liliaceae	Leaves	Reduce hair loss. Soft hair	3 Days on a 1 week.
7	Pineapple	Ananas	<i>Ananas Sativus</i> (L.) merr	Bromeliaceae	Fruits	Dark marks	Hold for 15 min. Weekly 2 time.
8	Soursop	Ramphal	<i>Annona reticulata</i>	Annonaceae	Fruits	Skin moisturizer	2 days on a 1 week.
9	Custard apple	Anachu, sitaful	<i>Annona squamosa</i> L.	Annonoaceae	Fruits	Pimples Skin infection	2 days on a 1 week
10	Neem	Limdo	<i>Azadirachta indica</i> A. juss	Meliaceae	Leaves	Hair growth Reducing dark spots	Before going hair wash.
11	Beet root	Beat	<i>Beta vulgaris</i> L.	Amaranthaceae	Stem	Brighten dark lips	Every day
12	Mustard	Rai, Sarso.	- <i>Brassica nigra</i> . - <i>Brassica rapa</i> , subsp	Brassicaceae	Seed	Wrinkles skin clean glowy	Daily at morning.
13	Palash	Kesudo	<i>Butea monosperm</i> (Lam.) Taub.	Fabaceae	Flower	Hair colour	Monthly 2 time.
14	Papaya	Papaya	<i>Carica papaya</i> L.	Caricaceae	Fruits	Bright & Glowing skin	Massage for 3-5 min.

15	Vinca	Barmsi, sadaphuli	<i>Catharanthus roses</i>	Apocynaceae	Flower	Skin hair care	2 days on a one week.
16	Chick pea	Chana,	<i>Cicer arietinum</i> L.	Fabaceae	Seed	Dry skin.	Hold for 15 min wash. Weekly 2 time.
17	lemon	Limbu, Nebo.	<i>Citrus Limon</i> (L.)	Rutaceae	Fruits	Dandruff treatment.	-before hair wash -weekly 2 times.
18	Water melon	Tarbush	<i>Citrullus lamotus</i>	Cucurbitaceae	Fruits	Oily skin.	Weekly 3 days.
19	Orange	Narngi	<i>Citrus sinensis</i>	Rutaceae	Fruits	Glowing Skin.	Weekly 2 day.
20	Coconut	Nadiyer, Naroyal,	<i>Cocos nucifera</i> (L)	Arecaceae	Fruits	Oily skin	3 days on a one week.
21	Turmeric	Arad, Halder	<i>Curcuma longa Curcuma arometica</i>	Zingiberaceae	Stem	Brightens Skin. Sun damage	3 days on a one week.
22	Coriander	Dhana, Kothmir	<i>Coriandrum Sativum</i>	Apiaceae	Leaves	Wrinkles Glowing Skin.	Weekly 1time
23	Pumpkin	Kora, Kodu.	<i>Cucurbita pepo</i>	Cucurbitaceae	Fruits	Face, neck	Leave for 15 min.
24	Cucumber	Varku, Kakdi,	<i>Cucumis sativus</i> Linn	Cucurbitaceae	Fruits	Glowing skin.	Weekly 3 time.
25	Carrot	Gajjar	<i>Daucus carota sp. Sativus</i> (Hoffm)	Apiaceae	Stem	Oil, face massage	
26	False daisy	Bhangra	<i>Eclipta Prostrata</i>	Asteraceae	Leaves	Longhair	2 days 1 month
27	Eucalyptus	Nilgiri	<i>Eucalyptus Globulus</i>	Myrtle	Leaves	Hair wash.	Weekly 2 time.
28	Asthma weed	Dudhiyo	<i>Euphorbia hirta</i> L.	Euphorbiaceae	All part	Skin,cut recovery in (skin) & snake bite.	Weekly two time.
29	Fig	Umaro	<i>Ficus Racemose</i> L.	Moraceae	Stem	faceclean.	1 day on a 1month
30	Ficus	Pipdo, Pipal	<i>Ficus religiosa</i> L.	moraceae	Leaves	skin allergies, pimples.	Weekly 1 time.

31	Strawberry	Strobery	<i>Fragaria x ananassa</i>	Rosaceae	Fruits	spotless skin	Leave it for 15 min -weekly 2 days.
32	Soy bean	Soyabean	<i>Glycine max</i>	Fabaceae	Waste	Hair loss.	Weekly 2 times.
33	Cotton	Kapas,rui	<i>Gossypium herbaceum L.</i>	Malvaceae	Seed upper part	Makeup Removing cotton pads.	Used many
34	Sunflower	Surajmukh	<i>Helianthus Annuus L.</i>	Asteraceae	Seed	Massage Face, body	Weekly 3 day
35	Hibiscus	Jasud, jasvanti	<i>Hibiscus rosa – sinensis L.</i>	Malvaceae	Flower	-Increases hair growth.	2 days on a one week. 2 timefor
36	Sweet patato	Hakhrila Shakariya	<i>Ipomoea batatas (L) Lam</i>	Convolvulaceae	Stems	glowing Skins.	Weekly 3 times.
37	Bottle Gourd	Dudhi	<i>Lagenria Siceraria L. (Mol.)</i>	Cucurbitaceae	Fruit	Dandruff Hair fall.	Weekly 4 days.
38	Henna	Mehdi, Mehendi	<i>Lowsonia inermis L.</i>	Lythraceae	Leaves Seed	Natural hair colour	Oneday on a 1month
39	Kalat layu.	Bhajiya vel	<i>Lepisanthes rubiginosa L.</i>	Sapindaceae	Fruits	Hair colour	Monthly 2-3 time
40	Apple	Safarjan	<i>Malus domestica</i>	Rosaceae	Fruit	Smooth skin	Weekly 3 time.
41	Mango	Ambo, Keri	<i>Mangifera Indica (MI)</i>	Anacardiaceae	Fruits	Treats Dandruff. Skincare	Weekly 1 -2 time.
42	Sapodilla	Chiku	<i>Manikara zapota</i>	Sapotaceae	Fruits	Smooth Skin.	Weekly 2time
43	Spear mint	Pudina,	<i>Mentha spicata L.</i>	lamiaceae	Leaves	Pimples	Every day
44	Curry leaves	Mithi limdi	<i>Murraya koenigii (syn.)</i>	Rutaceae	Leaves	Hair care Dandruff free hair	Use for before hair Wash.
45	Banana	Kera, keda	<i>Musa paradisiaca L.</i>	Musaceae	Fruits	Skin whitening & glowing	1 day on a 1week.
46	Drumstick, moringa	Saragva	<i>Moringa oleifera L.</i>	Moringaceae	Leaves	Pimples	3 times in a Week.

47	Holy basil	Tulsi	<i>Ocimum sanctum</i> L.	Lamiaceae	Leaves	Strengthens our hair roots.	Every day before. storage 4month
48	Rice	Bhat, Chokha	<i>Oryza sativa</i> L.	Poaceae	Leaves	Clean skin.	Hold for 30 min. 2 days on 1month
49	Indian gooseberry	Amla	<i>Phyllanthus emblica</i> linn	Phyllanthaceae	Fruit	Prevents dandruff	Weekly 2-3 time
50	Almond	Badam	<i>Prunus dulcis</i> ,syn	Rosaceae	Seed	Glowing, soft skin.	Massage for 20-25min
51	pomegranate	Dadam	<i>Punica granatum</i>	Punicaceae	Fruit	Dull skin Dark spots	Weekly 2 time
52	Guava	Jamrukh	<i>Psidium guajava</i> L.	Myrtaceae	Leaves	face dark spots wrinkles	Leave for 15-20min weekly 2 time.
53	Castor oil	Divela, Arandi.	<i>Ricinus communis</i>	Euphobiaceae	Fruit	Massage hair oil, & skin	Daily at night.
54	Rose	Gulab	<i>Rosa rubiginosa</i>	Rosaceae	Flower	Glowing skin.	Every day
55	sandalwood	Chandan	<i>Santalum album</i>	Santalaceae	Stem	Glowing skin.	Keep for 10 min.
56	Soapberries	Aritha, Reetha.	<i>Sapindus mukorossi</i> var.drummondii L.	Sapindaceae	Fruit	Natural Hair wash	Leave for 10 min. Weekly 1times.
57	Sesame	Til, Tal	<i>Sesamun indicum</i> L.	Pedaliaceae	Seed	body massage.	Winter season. every day
58	Patato	Bataka, Bateta.	<i>Solanum tuberosum</i> L.	Solanaceae	Stem	all over Skin glow	Leave it 10 min & then wash. weekly 1 time.
59	Tamato	Tameta	<i>Solanum lycopersicum</i>	Solanaceae	Fruit	Clear skin.	Wash after 15 min. 1 day
60	Spinach	Palak	<i>Spinacia oleracea</i>	Amaranthaceae	Leaves	Skin glow	2 days on a1 week.
61	Tamarind	Amali	<i>Tamarindus indica</i> L.	Fabaceae	Fruits	Anti-dandruff.	One day on a 1 week.
63	Baheda	Baheda Beda.	<i>Terminalia bellirica</i>	Combretaceae	Fruit	Hair loss, whitehair	2 days on a 3 week.

64	Fenugreek	Methi	<i>Trigonell foenum-Graecum.</i>	Legumes	Seed	Hair growth	1day on a 2 week.
65	Kalar	Kalar, kalhar	<i>Verbascum Chinese (L.)</i>	Asteraceae	Leaves	Recovery in skin.	2-3 day on a one week.
66	Negundo	Nagod	<i>Vitex negundo L.</i>	Verbenaceae	Leaves	Hair wash.	Monthly 15 days.
67	Graps	Darakh, drakx	<i>Vitis vinifera L.</i>	Vitaceae	Fruit	Enhancing shine.	Weekly 1time.
68	Indian Winter cherry	Ashwagandha	<i>Withania somnifera L.</i>	Solanaceae	Leaves	-Dark spots	Leave it 15 min weekly 3 tine.
69	Maize	Makai	<i>Zea mays L.</i>	Poaceae	Seed	Skin Brightening	2 days on 1 week.
70	Ginger	aadu	<i>Zingiber officinal roscoe.</i>	Zingiberaceae	Stem	Stronger hair	1 day on a week.
71	Indian Jujube	Bor, Rambor.	<i>Ziziphus Maritiana</i>	Rhamnaceae	Fruits	Wrinkles Darkening	1 day on 1 week.

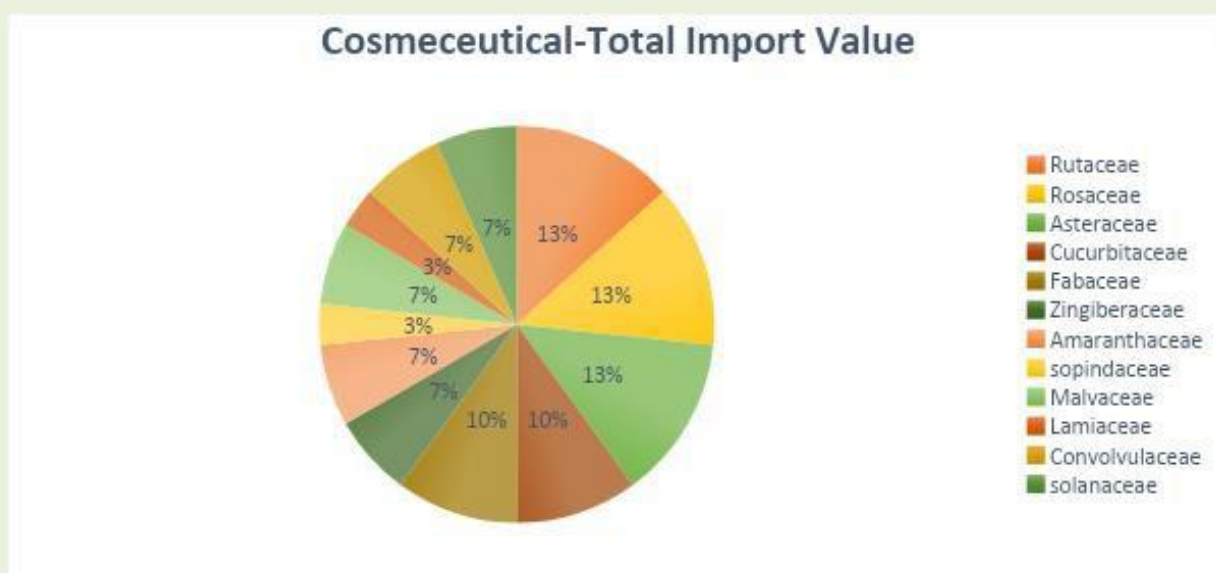


Fig 1: Char of family of plants which are used in herbal cosmetics

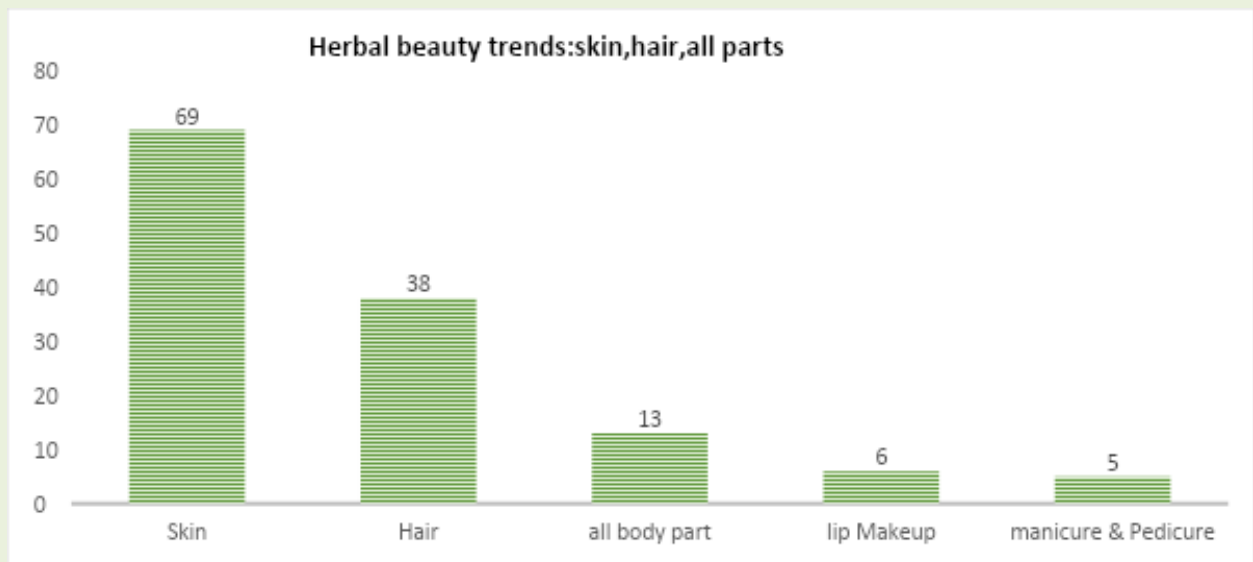


Fig 2: Chart of plants used for different cosmeceuticals

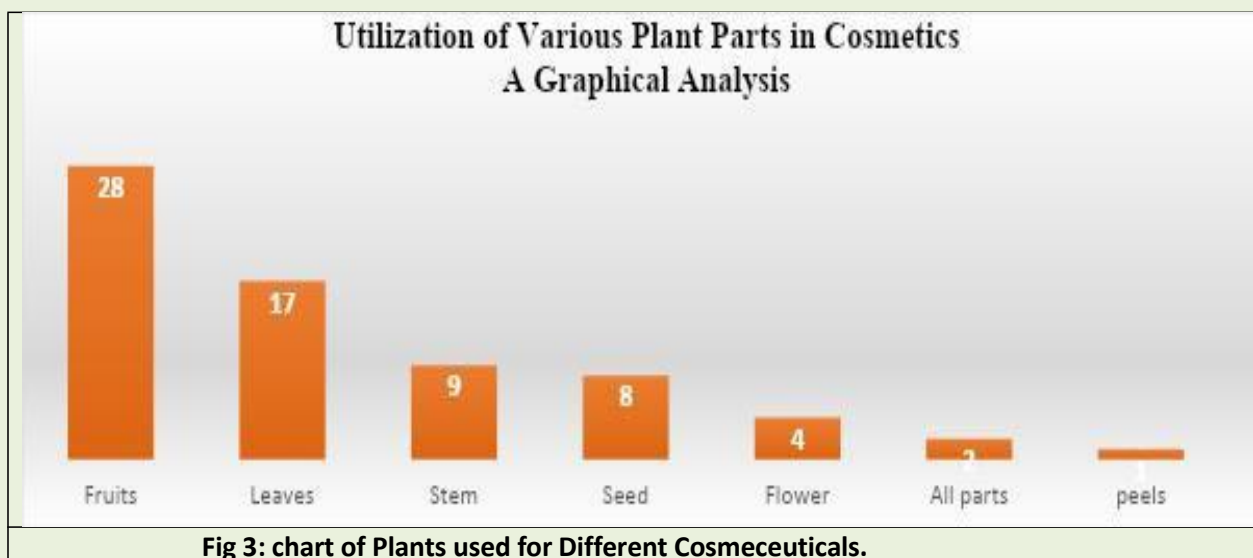


Fig 3: chart of Plants used for Different Cosmeceuticals.