Conceptualisation and Characterization of Skin Beautifying Cosmetic Product

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Abstract- The objective of the research work was to formulate cleansing face suitable for all skin types using herbs such as Emblica officinalis (Amla), Moringa oleifera (Drum stick) as anti-tanning agents and Citrus sinesus (Orange), Solanum tuberosum (potato), Cucumis sativus (cucumber), Carica papaya lin. (papaya), Beta vulgaris (beet root), Vitis vinifera (grape), Malus (apple), Gram flour, multani mitti, rose water as skin protective agents. Rationale for selection for selection of plants in the present study plants was on the basis of their medicinal importance and literature survey. Selected plant parts were collected, dried and powdered. The physical mixture of the powders was then made into face pack by combining with different vehicles. The formulations were evaluated for organoleptic properties, physico chemical properties along with anti microbial activity. Results of the work revealed that the face pack is potential enough to impart glow and remove sun tan which can be prepared by easily available economical ingredients economically.

Index Terms- Anti Microbial, Organoleptic, Tanning. I.

I. INTRODUCTION

Irrespective of the age and gender now a days people were habituated to use cosmetics for various reasons. "Cosmetic product" can be defined as "any substance or preparation intended to be put in contact with the different superficial parts of the human body (epidermis, head and body hair, nails, lips and external genital organs), or with the teeth and the mucous membrane of the mouth in order to exclusively or generally clean, perfume, modify their appearance and/or correct body odours, and/or protect or keep them in good condition". The cosmetics products are classified according to their physical states in three main categories as solids, semi solids and liquids of all the cosmetics available, cosmetics related to face take a major role in the market. Common face problems occur are dark circles, dark spots, eye bags, dry skin, oilskin, face redness, dull face, rough texture, large pore, under eye wrinkles, hormonal acne, black heads,

sebaceous filaments, forehead wrinkles, razor bumps, acne, actinic keratoses, adult-onset dermatomyositis, aging skin, allergic contact dermatitis, Angioderma, angiofibroma, atopic dermatitis, comedons, steroid acne, steroid rosacea, systemic erythematous, trigeminal trophic syndrome, vitiligo

II. MATERIALS AND METHODS

Ingredients used were Emblica officinalis (Amla), Moringa oleifera (Drum stick) as anti-tanning agents and Citrus sinesus (Orange), Solanum tuberosum (potato), Cucumis sativus (cucumber), Carica papaya lin (papaya), Beta vulgaris (beet root), Vitis vinifera (grape), Gram flour, multani mitt.

• Preparation of face pack:

Face pack was prepared by trituration method. Selected plant parts were collected, washed thoroughly and shade dried. For drying, peels and fruits were made into very small pieces where as seeds and leaves were dried in actual form. Dried ingredient were powdered and passed through the sieve 100. Final concentration of the ingredients was optimized based on trails and literature survey. With the selected amount of powders face pack was prepared by varying the vehicle. Apple fruit juice and papaya fruit extract were selected as vehicles to change the powder as pack form.

Physical Appearance

Physical evaluation parameters include colour, odour and taste. These parameters can be checked by visual appearance and the texture can be checked by the sensation to the skin. Taste and odour can be checked by five different persons for effective result

Table:1 Composition of formulation blends

Ingredients	Activity	F,	F,	F,	F ₄
Amla	Antioxidant	8g	8g	8g	8g
Drum stick Antioxidant		4g	4g	4g	4g
Orange	Complexation	8g	8g	8g	8g
Grape	Anti-inflammatory	lg	lg	lg	1g
Beet root		4g	4g	4g	4g
Potato	Anti-aging	2g	2g	2g	2g
Gram flour	Astringent	3g	-	-	-
Multani mitti	Cleansing	-	3g	3g	3g
Papaya	Vehicle	30ml	-	-	30 ml
Cucumber	Vehicle	-	30ml	-	-
Rose water	Vehicle	-	-	30ml	-

• Application of face pack

Face pack was prepared with different vehicles. F1 was formulated with required quantity of gram flour with papaya extract. F2 was prepared using cucumber extract as a vehicle. F3 was prepared with rose water. F4 was prepared using papaya extract as a vehicle. All the formulations were applied to the face of the volunteers after taking acceptance.

• Stability studies

Stability testing of prepared formulations was carried out by placing the powdered packs at different temperature conditions like room temperature and 400 c for period of one month in glass vials and evaluated for physical parameters like colour, odour, pH, consistency and feel.

III. RESULTS AND DISCUSSIONS

Herbal powder face packs were prepared using various plants namely Emblica officinalis (Amla), Moringa oleifera (Drum stick), Citrus sinesus (Orange), Solanum tuberosum (potato), Cucumis sativus (cucumber), Carica papaya lin (papaya), Beta vulgaris(beet root), Vitis vinifera (grape), Malus (apple) as skin protective agents.

Tabe:2 Micromeritic characterization of formulation blend

S. No.	PARAMETERS	F ₁	F ₂	F,	F ₄
1.	Angle of repose	25.17	16.69	20.88	23.42
2.	Bulk density	0.4545	0.500	0.4166	0.4545
3.	Tapped density	0.625	0.635	0.555	0.555
4.	Carr's index	27.28	20.00	24.93	18.10
5.	Hausner's ratio	1.375	1.256	1.330	1.221
6.	pH	4.9	5.5	5.4	5.2

Table:3 Stability studies for every formulation blend

S.No	Parameters	F1	F,	F,	F ₄
1	Colour	Green	Brown	Brown	Brown
2	Odour	Tangent	Characteristic	Characteristic	Characteristic
3	Smoothness	No gritty particles were observed	No gritty particles were observed	No gritty particles were observed	No gritty particles were observed

Table:4 Results for every formulation after the application

S.No	Formulations	Result		
1	F,	Cleans dirt and brightens the skin and felt smooth skin		
2	F,	Cleans the dirt on the face and brightened the face skin		
3	F ₃	Felt freshness and brightened the face skin		
4	F ₄	Clears the dirt on the face		

CONCLUSION

The present study was based on face care products and attempt was made to formulate skin brightening face pack using easily available ingredients. All the formulations have smooth texture and ease of application when mixed with vehicles. Formulations prepared with cucumber showed cooling sense when applied when compared with papaya extract and rose water. Cleansing and skin glowing affect was clearly observed after application to face. Hence formulation with satisfactory with expected results were obtained. The prepared face pack can be used for instant face brightening along with cleansing which can be stored for a long time if once prepared in large quantities without any degradation or microbial growth. As natural ingredients are safe to us, gives long lasting effect when compared to the synthetic products herbal face pack is suggested for regular healthy skin maintenance. Further studies on the work are needed for development into a marketed formulation.

REFERENCES

- [1] Amreen Fatima, Shashi A, Agarwal P, Prem Prakash Singh, Amita V. Benefits of herbal extracts in cosmetics: A review. International journal of pharmaceutical science and research. 2013; 4(10): 3746-3760.
- [2] Nitin J, Ganesh SK, Maria N. Skin disease conditions among students. In Dermatol. 2014; 5(1):19-24.
- [3] Nayana nimje. Cosmetics formulation, manufacturing& quality control: slideshare. 2018; 3(4):445.
- [4] Himaja N, Ashok Kumar, Bhart kumar B. Preparation and Evaluation of Poly Herbal Fruit Face Mask. Quest Journal. 2015; 2(11): 07-13.
- [5] Panchal Roshni S, Shinde R. Hingane LD. Formulation and evaluation of face pack from papaya seeds. International journal of all

- research education & scientific methods. 2021; 9 (12): 2455-6211.
- [6] Bhutkar. KG and Shah M. Formulation and evaluation of herbal anti-bacterial face pack. Journal of emerging technologies and innovative research. 2019; 6(5)
- [7] Bhawana Bhatt, Preethi Kothiyal, Sudhakar Kaushik, Sonia Badoni. Preparation and Evaluation of herbal face pack. Indo American journal of pharmaceutical research. 2018; 8(5): 2231-6876.
- [8] Anil kumar V, Kalyani R, Padmasri. B, Prasanth. D. In house preparation, development and evaluation of herbal cosmetics face pack using various natural powders. Journal of drug delivery and therapeutics. 2020; 10(5): 2250-1177.
- [9] Rubina SK, Neelofar SS, Mohana Priya.R, Parameswari.CS, Ramana BV, Badrinath AV. Formulation and evaluation of natural herbal face pack, World journal of pharmaceutical research. 2017; 6(8): 1561-1573.
- [10] Maske. AO, Sahare AY, Sanket S. Preparation and evaluation of poly herbal face pack, International journal of chemical and pharmaceutical analysis. 2019; 7(1): 0028.
- [11] Kolhe Rohini, Chatur vibhavari. M, Patil Sheetal. V. and Ghode Shweta. P. Design, development and evaluation of poly herbal face packs for cosmetic purpose. International journal of all research education & scientific methods. 2020; 4(5):27-32.
- [12] Aishwarya Avinash Shinde and Hase. DP. In house preparation and standardization of papaya face pack. Research journal of pharmacognosy and phytochemistry. 2020; 2: 15-19.