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Formulation and Evolution of Polyherbal Soap: A Review Article

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Abstract: The polyherbal soap are the one which contains nature herbal ingredients. Many herbal plants and products combines to from polyherbal product. These soaps arise to avoid the synthetic soap. This herbal soap reduces the side effect effects and gives good results to the human. Now a days herbal soap plays major role in the society. It avoids the pathogen infection caused by the environment.

Keywords: polyherbal soap, formulation, Antimicrobial

I. INTRODUCTION

Chemically soaps are the combination of fats, oils (of animal or vegetable origin) and Salt. Soaps are generally salts of free fatty acid made via saponification, where alkaline substances react with fatty acids in fats or oils[1]. Other substances are then added to this salt of free fatty acid or soap base, to produce the different types of soaps we have. They are normally used for the purpose of cleaning and bathing. So in the day by day life the synthetic soaps plays a major role among the people. It becomes popular due to the soap fragrance, look, color, and its ads. These synthetic soaps are used as detergent. So by using that soaps skin becomes damage and many infections occurs like rashes, skin allergy, fungus, psoriasis, acne, reduce the skin color and appearance.Human skin, the outer covering of the body constitutes the first line of defense protecting the body against various pathogens. Skin interfaces with environment, it is constantly exposed to different environmental stimuli. This makes the skin damage prone[2].

The soaps that are being used in our day to day life have a history going back for about six thousand years. The ancient Babylonians discovered that mixing animal fats with wood ash and water created a cleansing substance which was latterly known as “soap”[3].Medicinal soaps are a simple variation of the normal soaps where synthetic or natural bioactive ingredients are added into the basic soap medium to give a vastvariety of biological activities to the final product. Due to the undesirableside effects of synthetic substances, it is preferential to avoid the use harmful synthetic chemicals from medicinal soap products. In recent years, the plant based natural products have become an attractive alternative to enhance the important biological characteristics of medicinal soaps. This medicinal soap used as alternative for synthetic soap.

*vetiveriazizanioides*belongs to the family of poacea and it is is a fragment grass and its oil is used in cosmetics, aromatherapy and it is used for antiseptic and acne and sores. *Vintex negundo*belongs to the family of verbenacea and it is an aromatic shrub. The major phytochemical present in this plant are protocateochic acid, flavonoids,angusid, casticin, vitamin-c, nishinde, etc. it is found to be a good antioxidant, antifungal, anti-inflammatory,etc[4]. *Neem* is used for many purpose and its have the antibacterial activity, antimalarial, antiviral etc. *Tulsi* is used for various purpose and it have the property of anti aging, fights acne,etc.

By this the aim of the study is to form a polyherbal soap with many herbal ingredients (*vetiveriazizanioides, vitex negundo, neem, tulsi)* with the property of antibacterial and with various parameters and they can be standardized and further used commercially.

II. VARIOUS TYPES OF HERBAL SOAP

There are various types of herbal soaps are there and we choose some soaps and they are different from each other.

A. Combination 1[5]

In this the polyherbal soap is formulated by the plants of *cassia fistula, ficus religiosa, milletiapinnota.* This is an antimicrobial soap for the nascominal infection. In this soap formation the leaf extracts were collected and it is mixed with the basic glycerin soap(melted) and methanol is added and then stearic acid is added and the cinnamonoil and citronella oil was added and mixed well and allow to solidify and then the various parameters are carried out.

B. Combination 2[2]

In this combination the plants used are *H.indicus*(aanatamool), *s.lappa*(kushta), *c.rotundus*(mustaka). Three oil were taken and they are coconut oil, palm oil and castor oil was added. Then the lye solution was added and mixed and then three sample extract was added and heated and then it allow to solidify and then various parameters were carried out. It is a ayurvedic herbal soap and it has tyrosinase inhibiting property.

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C. Combination 3[6]

Curcuma longa, azadirachta indica, allium sativum, by taking these three plants the poly herbal soap is formulated. The three plant sample was extracted. The basic glycerine soap was taken and it is melted and then the sample extracts are added and then ethanol is added and stearic acid is added and almond oil is added and then it is allow to solidify and parameters are checked. Then the antimicrobial activity is carried out in the organism of *staphylococcus aures*. This soap is used as antibacterial soap.

D. Combination 4[7]

The polyherbal soap is formulated using *azadirachta indica, ocimumtenuiflorium*and*sapindusmukorossi*. These three powder extract was incorporated into soap formulated with basic glycerine soap was taken and then it is melted and the extract was incorp[orated into the melted solution and allow to solidify and then the soap is formed and then Ph is checked and the antimicrobial assasy is carried and there is a presence of zone of inhibition.

E. Combination 5

The combination of *vetiveriazizanioides, vitex negundo, neem, tulsi* formulates the poly herbal soap. This were used for the skin wellness. The samples were powdered and it is mixed with liquid NaoH and then the coconut oil is mixed with extract powder and filtered and then the filtered oil is added in the NaoH solution and then it is allow to solidify and then the antibacterial assay is carried out and characteristics are observed and there is presence of zone inhibited and various parameters are carried out.

III. CONCLUSION

Polyherbal soap contains full of natural products, it will not make any side effects. In the current study provided different combinations of soaps and their preparation. When compare five combination of sops, the combination of *vetiveriazizanioides, vitex negundo, neem, tulsi* has given good result and it also has antibacterial activity with improve the skin tone. Naturally plants produced many numbers of secondary metabolites, these compounds has huge medicinal value, so undoubtedly we can use herbal soaps. Nowadays most of people move on to herbal products. The result used for further development herbal soap production and also helpful for commercially.

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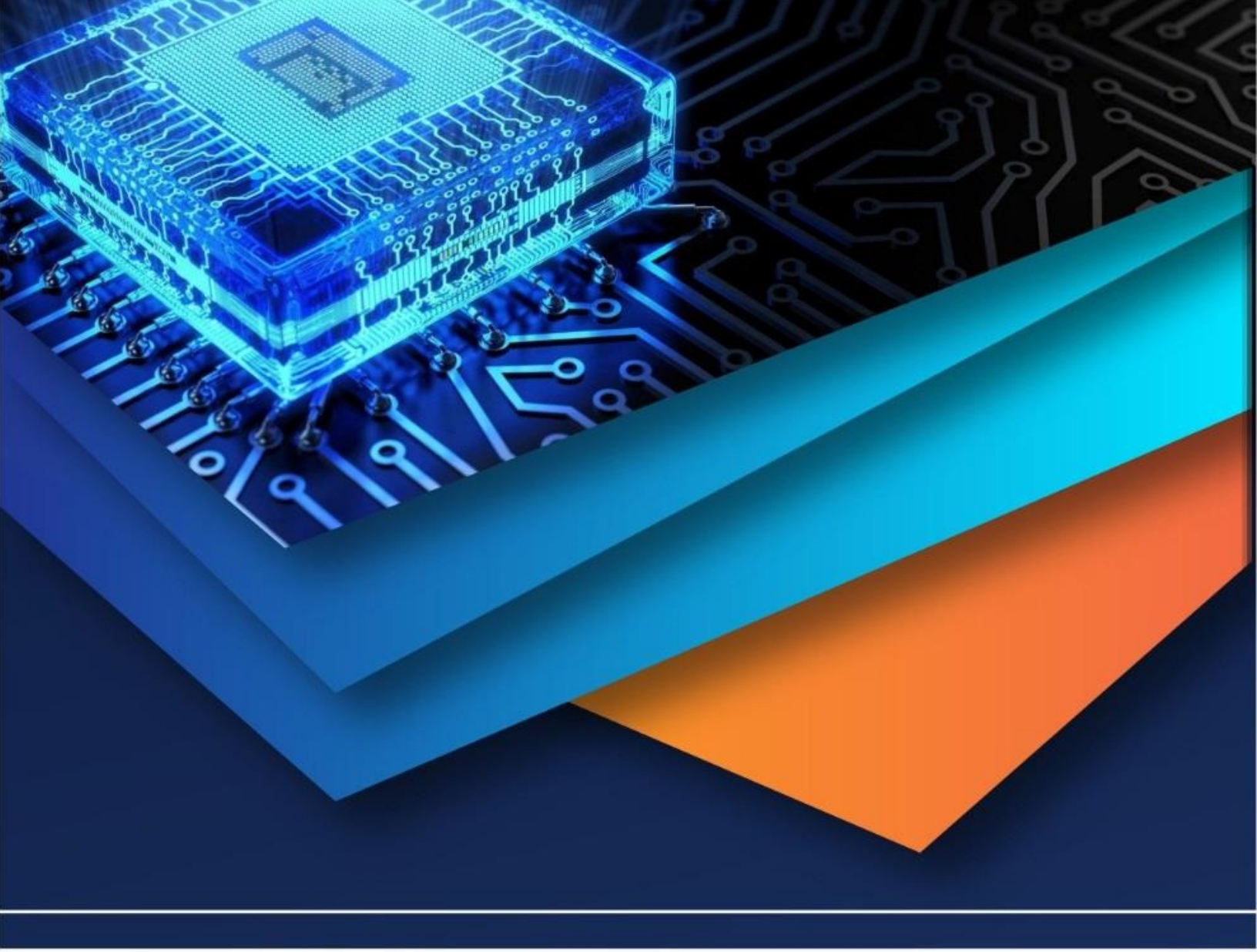

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