

FORMULATION AND DEVELOPMENT HERBAL CREAM

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ABSTRACT

The cream was prepared by using the cream base that is bee's wax, liquid paraffin, borax, methylparaben, distilled water, rose oil, Aloe Vera gel, dimethyl sulphoxide extracts of Neem and Tulsi. The cream was prepared by using the slab technique/extemporaneous method for geometric and homogenous mixing of all the excipients and the herbal extracts. Aloe vera, amla and cucumber peel are medicinal plant they are used as traditionally from ancient year in various herbal medicines such as Ayurveda, Siddha, and Homeopathic. The Demand of herbal cosmetics due to the availability of new ingredients the financial rewards for developing successful products and maintained of quality standard. Cosmetics are the products applying on the body. Face cream are used as cosmetic for softening and cleansing action. The Ayurvedic system of medicine was one of the most important systems that uses herbal plant and extract of the treatment of management of various Diseases state.

KEYWORDS- HERBAL CREAM, HERBAL COSMETICS, TYPES, INGREDIENTS, HERBS, PHASES OF CREAM.

INTRODUCTION

Now-a-days herbal extracts are used in the cosmetic preparations for augmenting beauty and attractiveness. Herbal cosmetics are classified on the basis of dosage form like- cream, powder, soaps, solutions, etc. and according to part or organ of the body to be applied for like; cosmetics for skin, hair, nail, teeth and mouth etc.¹ Creams are semisolid emulsions intended for application to the skin or mucous membrane. A low fat moisturizer that disappears into the skin is called as a vanishing cream. It softens skin, leaving nothing behind.²

Herbal cream are o/w emulsion based preparations containing aqueous phase and oil phase.³ Depending on the proportion of water to grease, cream can be water miscible and washed away easily or be thick and sticky. It is perhaps the commonest prescribed topical medicament. As it is less oily, messy and sticky, most patients find it more user-friendly.⁴ The traditional systems of medicine, evolved over centuries had been responsible for safe guarding healthcare of the world until the advent of allopathic system of medicine. As the latter system used knowledge of modern biology and chemistry, for both discovery and treatment, it found fast acceptability among the users and now it occupies predominant space in the area of health care. In spite of this, the contribution of the traditional preparations, which are normally polyherbal, is increasing because of the general impression that these products are safe; while the single-molecule based modern drugs used in allopathic system can have severe adverse effects.⁵ The skin is the

body's first line of defense for external exposure. The signs of ageing are most visible in the skin. Although, ageing skin is not a threat to a person, it can have a detrimental effect on the psychology of a person.⁶ Much of the premature ageing occurs as a direct or indirect result of skin's interaction with the environment. Exposure to sunlight is a recognized as a major factor in the etiology of the progressive unwanted changes in the skin appearance.⁷

Photochemoprotective agents are capable of preventing the adverse effects of ultraviolet radiation on the skin, which are caused by excessive generation of reactive oxygen species.⁸ This herbal vanishing herbal cream consists of various crude drugs including *C. officinalis* (*calendula officinalis* family-compositae) and *A.indica* (*Azadirachta indica* family- meliaceae), Turmeric (*Curcuma longa*, family Zingiberaceae), Nutmeg (*Myristica fragrans*, family Myristicaceae), Cinnamon (*Cinnamomum zeylanicum*, family Lauraceae).

Creams are the semisolid dosage forms and intended for topical application to the skin, placed on the surface of eye, or used nasally, vaginally or rectally for therapeutic or protective action or cosmetic function. These preparations are used for the localized effects produced at the site of their application by drug penetration in to the underlying layer of skin or mucous membrane. These products are designed to deliver drug into the skin in treating dermal disorders, with the skin as the target organ. Creams are semi-solid emulsions of oil and water.

They are divided into two types: oil-in-water (O/W) creams which are composed of small droplets of oil dispersed in a continuous phase, and water-in-oil (W/O) creams which are composed of small droplets of water dispersed in a continuous oily phase. Oil-in-water creams are more comfortable and cosmetically acceptable as they are less greasy and more easily washed off using water.

Water-in-oil creams are more difficult to handle but many drugs which are incorporated into creams are hydrophobic and will be released more readily from a water-in-oil cream than an oil-in-water cream. Water-in-oil creams are also more moisturising as they provide an oily barrier which reduces water loss from the stratum corneum, the outermost layer of the skin. World Health Organization (WHO) as well our country has been promoting traditional medicine because they are less expensive, easily available and comprehensive, especially in developing countries.

Creams are semisolid emulsions that are intended for application to the skin or mucous membrane. Depending on the ratio of water to grease, the cream can either be water-miscible and easily removed or thick and sticky. It's the topical drug that is suggested the most. Since it is less oily, dirty, and sticky, the majority of patients prefer it. [1] Herbal extracts are now often used in cosmetic products to improve attractiveness and appearance. Prior to the development of the allopathic medical system, traditional medical systems that had developed over centuries governed the world's healthcare. The latter strategy was swiftly embraced by consumers and presently has a dominating position in the healthcare industry since it depended on contemporary biology and chemistry for both research and therapy. [2] The dose form (cream, powder, soaps, solutions, etc.) and the body portion or organ to which they will be applied help categorize herbal cosmetics (cosmetics for skin, hair, nail, teeth, and mouth, for example). [3]

The stratum corneum's water content and the lipids on the skin's surface must be in balance to preserve the skin's look and functionality [4, 5]. Since the skin is the body's outermost covering, it is continually exposed to many external stimuli [6]. This equilibrium may be upset by both endogenous and exogenous influences [7, 8, 9]. Frequently using cleansers, detergents, and topical irritants like alcohol and hot water can also remove the lipids from the skin's surface

[10]. Different types of skin issues were caused by skin barrier disruption. most prevalent issue is a loss of water content which leads to dryness of skin such as roughness, scaling, fissures, redness and an uncomfortable sense of tightness, often with itching and stinging [11]. Treatment with moisturizer aims at keeping skin integrity and well-being by producing a healthy appearance of the individual. Numerous moisturizers are marketed as natural, secure, organic, and herbal, yet all moisturizers have the same fundamental qualities of humectancy, occlusivity and emolliency [7]. Most of the available moisturizers employ synthetic adhesives, emulsifiers, perfuming agents, colours, surfactants and thickeners to build the basis. Natural agents must be used in place of hazardous synthetic agents at the base.

Herbal sunscreen also known herbal sunblock .Herbal suntan lotion is a lotion ,spray or other topical product that helps protect the skin from the suns uv radiation and which reduce sunburn and other skin damage.

Sunscreen can be classified into two types sunscreen

1) Physical sunscreen

Those that reflect the sunlight.

2) Chemical sunscreen

Those that absorb the uv light

Sunscreen agents are for external use only .the use of sunscreen as photo protecting agents for uv protection.the sunscreen formulationis which when applied topically protect the treated area from sunburn sunscreen depends on ability to protect against uv induced sunburn and their chemopreventive activity . Excessivesolar ultraviolet radiationare responsible for various skin damages such as sunburn ,skin pigmentation premature aging and photo carcinogenesis .The main mechanism of skin damage by uv radiations is formation of Reactive Oxygen Species(ROS) that interact with proteins lipids and subsequently alter them.UVB and to a lesser extent UVA are responsible for inducing skin damages .

The concept of beauty and cosmetics is as ancient as mankind and civilization. Indian herbs and its significance are popular worldwide. An herbal cosmetic have growing demand in the world market and is an invaluable gift of nature. Herbal formulations always have attracted considerable attention because of their good activity and comparatively lesser or nil side effects with synthetic drugs.Herbal cosmetics are defined as the beauty products whichposses desirable physiological activity such as healing,smoothing appearance, enhancing and conditioningproperties because of herbal ingredient. Now-a-days theusefulness of herbs in the cosmeceutical production has beenextensively increased in personal care system and there is a great demand for the herbal cosmetics.Cosmetics are the substances intended to be applied to the human body forcleansing, beautifying, promoting attractiveness, andaltering the appearance without affecting the body's structureor functions. But the usage of synthetic products becomesvery harmful from long time for the youth as well as ourenvironment. Various synthetic compounds, chemicals, dyeand their derivative proved to cause various skin diseaseshaving numerous side effects. Thus we are using herbalcosmetics as much as possible.The basic idea of skin care

cosmetic lies deep in the Rigveda, Yajurveda, Ayurveda, Unani and Homeopathic system of medicine. These are the products in which herbs are used in crude or extract form.

These herbs should have varieties of properties like antioxidant, anti-inflammatory, antiseptic, emollient, anti-seborrheic, antikerolytic activity and antibacterial etc. Cosmetics are developed to reduce wrinkles, fight acne and to control oil secretion. For various types of skin ailments formulations like skin protective, sunscreen, antiacne, antiwrinkle and antiaging are designed using varieties of materials, either natural or synthetic. Cream is a polyherbal formulation that consists of extracts of Aloe barbadensis, Ocimum sanctum, Azadirachta indica, Curcuma longa, Cedro oil, Myristica fragrans, Olium rosae (Rose Oil), Orange Oil, Prunus dulcis, Ocimum sanctum.

HERBAL COSMETICS

The Demand of herbal cosmetics due to the availability of new ingredients the financial rewards for developing successful products and maintained of quality standard. Cosmetics are the products applying on the body. Face cream are used as cosmetic for softening and cleansing action. The Ayurvedic system of medicine was one of the most important systems that uses herbal plant and extract of the treatment of management of various Diseases state [1] Aloe vera Synonyms-Aloe Barbadensis Belong To Family- Liliaceae, which having 300 specie, Aloe vera is cactus like plant that grow readily in hot, dry climates, and Aloe vera cultivated in very large Quantities. Cosmetics and some medicinal products are made up from the mucilaginous tissue in the centre of aloe vera leaf and called Aloe vera gel. Aloe vera gel contains no Antraquinone. Which are Responsible for the strong laxative affects of aloes.

Herbal Cosmetics, referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as “Herbal Cosmetics”.

Herbs do not produce instant cures. They offer a way to put the body in proper tune with nature. A huge number of cosmetic and toiletry formulations have been designed and developed based upon Indian Herbs recently. Other than traditionally documented applications, some modern trials have also been using the utility of Indian herbs in Personal Care products.

The demand of herbal medicines is increasing rapidly due to their skin friendliness and lack of side effects. The best thing of the herbal cosmetics is that it is purely made by the herbs and shrubs and thus is side-effects free. The natural content in the herbs does not have any side effects on the human body; instead provide the body with nutrients and other useful minerals.

Types of Herbal creams

1. Herbal Cold Creams

They are Herbal cosmetic preparations, which are intended to be applied topically to the face or on the body surface, for the purpose of cooling and hydrating effects. The principle of their formulation is based upon the emulsification of emulsifying agent to water and oils using certain techniques.

2. Marketed Cold Cream



Fig. Herbal Cold Cream

3. Herbal Vanishing Creams

They are oil-in-water emulsions, the principle of their formulation is based upon emulsification of both stearic acid and water using alkaline substance such as sodium hydroxide, potassium hydroxide, and borax, tri-ethanolamine, etc. glycerin is also added. Stearic acid is the most important constituent of vanishing creams hence a good quality triple pressed stearic acid should be selected.



The Different Types Of Creams And Their Uses

1. Half and half cream

If you love coffee, then half and half cream is going to be your favourite. This type of cream consists of half milk and half cream with 10% to 12% fat. It's often used for coffees and beverages, and it can perfectly substitute milk in various recipes. Pan sauces, creamy pasta sauces, and gravies often use this cream because of its incredible thickness

2. Light cream

Also referred to as single cream or table cream, light cream helps bring moisture to desserts after you pour it over crumbles and pound cakes. Just like half and half cream, light cream can also be used for coffee. But this type of cream works best for soups and gravies because of its usual 12% to 18% fat content.

3. Heavy whipping cream

For those who are fond of mouth-watering desserts, heavy whipping cream is an ingredient that your recipe should not miss. Heavy whipping cream is a rich and thick cream that's usually added to decadent desserts and dishes. It typically consists of 36% to 40% fat. If you're looking to [order a birthday cake online for delivery](#), particularly, you might notice that many of the choices available are topped with a layer of heavy whipping cream frosting.

Double cream

When it comes to thickness, double cream reigns supreme. It boasts a 48% fat content, making it the thickest cream on the list. As such, there's a tendency to overwhip it, so you'll want to be mindful when using it in your recipe. This cream is an ideal pouring cream for ice creams, buttermilk scones, and chocolate truffles.

4. Sour cream

For other types of foods like sandwiches and salads, sour cream is a chef's choice. Sour cream is created by adding bacterial cultures to the cream to produce lactic acid. This lactic acid results in a slightly sour taste and a thicker-than-normal consistency in the cream. With its slightly tart flavour, you can use sour cream to make dips, salad dressings, and casseroles.

Table 1: Role of ingredients

S. No.	Ingredients	Roles
1.	Aloe Vera gel	Anti-ageing, anti-inflammatory, moisturizer, reduce acne and pimples.
2.	Tulsi	Antibacterial, adds glow to the face.
3.	Neem	Promote wound healing, relieves skin dryness, itching and redness.
4.	Bees wax	Emulsifying agent, stabilizer and gives thickness to the cream.
5.	Liquid paraffin	Lubricating agent

6.	Borax	Alkaline agent which reacts with emulsifying agent to form soap
7.	Methylparaben	Preservative
8.	Rose oil	Fragrance

TYPES OF SKIN CREAMS : They are divided into two types:

Oil-in-Water (O/W) : creams which are composed of small droplets of oil dispersed in a continuous phase, and an emulsion in which the oil is dispersed as droplets throughout the aqueous phase is termed an oil-inwater (O/W) emulsion.

Water-in-Oil (W/O): creams which are composed of small droplets of water dispersed in a continuous oily phase. When water is the dispersed phase and an oil the dispersion medium, the emulsion is of the water-inoil (W/O) type.

CLASSIFICATION OF CREAMS

Types of creams according to function, characteristic properties and type of emulsion:

1. Make-up cream (o/w emulsion):

- a) Vanishing creams.
- b) Foundation creams.

2. Cleansing cream, Cleansing milk, Cleansing lotion (w/o emulsion)

3. Winter cream (w/o emulsion): a) Cold cream or moisturizing creams.

4. All-purpose cream and general creams.

5. Night cream and massage creams.

6. Skin protective cream.

7. Hand and body creams.

Creams.

Pharmaceutical creams are semisolid preparations containing one or more medicinal agents dissolved in either an o/w or w/o emulsion. Creams find primary application in topical skin products and also in products used rectally and vaginally. Many patients and physicians prefer creams to ointments because they are easier to spread and remove than ointments. Pharmaceutical manufacturers frequently manufacture topical preparations of a drug in both ointment and cream bases to satisfy the preference of the patient and physician. Creams have a relatively soft, spreadable consistency. An example of an o/w cream is hydrophilic ointment and an example of a w/o cream is cold cream. When the term “cream” is used without further qualification, a waterwashable formulation is generally inferred

Preparation of creams.

Creams may be formulated from a variety of oils (both mineral and vegetable) and from fatty alcohols, fatty acids and fatty esters. Emulsifying agents include non-ionic surfactants and soaps. Preparation involves separating the formula components into two portions: lipid and aqueous. The lipid portion contains all water-insoluble components and the aqueous portion the water-soluble components. Both phases are heated to a temperature above the melting point of the highest melting component. The phases then are mixed, and the mixture is stirred until reaching ambient temperature or the mixture has congealed. Mixing is continued during the cooling process to promote uniformity. Highshear homogenisers may be employed to reduce particle or droplet size and improve the physical stability of the resultant dosage form.

Gels.

Gels are usually clear, transparent non-greasy semisolids containing solubilised active substances in an aqueous liquid vehicle rendered jelly-like by the addition of a gelling agent. Among the gelling agents used are synthetic macromolecules such as carbomer, cellulose derivatives as carboxymethyl cellulose or hydroxypropyl cellulose and natural gums as tragacanth.

Formulation of cream

Heat liquid paraffin and beeswax in a borosilicate glass beaker at 75 °C and maintain that heating temperature. (Oil phase). In another beaker, dissolve borax, methylparaben in distilled water and heat this beaker to 75 °C to dissolve borax and methylparaben and to get a clear solution. (Aqueous phase). Then slowly add this aqueous phase to heated oily phase [7]. Then add a measured amount of aloe Vera gel, Neem extract, and Tulsi extract and stir vigorously until it forms a smooth cream. Then add few drops of rose oil as a fragrance. Put this cream on the slab and add few drops of distilled water if necessary and mix the cream in a geometric manner on the slab to give a smooth texture to the cream and to mix all the ingredients properly. This method is called as slab technique or extemporaneous method of preparation of cream. (For formulation table refer table 2) (For different cream formulations refer fig.

CREAMS : Creams are the topical preparations which can be applied on the skin. Creams are defined as “viscous liquid or semi-solid emulsions of either the oil-in-water or water-in-oil type” dosage forms which consistency varies by oil and water. (8) Creams are used for cosmetic purposes such as cleansing, beautifying, improving appearances, protective or for therapeutic function. These topical formulations are used for the localized effect for the delivery of the drug into the underlying layer of the skin or the mucous membrane. These products are designed to be used topically for the better site specific delivery of the drug into the skin for skin disorders. (9) Creams are considered as a pharmaceutical product as they are prepared based on techniques developed in the pharmaceutical industry; unmedicated and medicated creams are highly used for the treatment of various skin conditions or dermatoses. Creams can be ayurvedic, herbal or allopathic which are used by people according to their needs for their skin conditions. They contain one or more drugs substances dissolved or dispersed in a suitable base. Creams may be

classified as o/w or w/o type of emulsion on the basis of phases. The term 'cream' has been traditionally applied to semisolid formulated as either water-in-oil (e.g.: cold cream) or oil-in-water (e.g.: vanishing cream).

GENERAL INGREDIENTS USED IN SKIN CREAMS

The raw materials which are used in a manufacturing of skin creams include:

Water:

This is the most important and widely used raw material in any cream formulation. These are the cheapest and easily available. In skin creams, water is used as solvent to dissolve other ingredients of creams. Water, which is free of any toxins, pollutants, microbes, etc. is used in preparation of creams. Water can also form emulsions, it depends upon how much quantity of water is used in the formulation and sometimes referred to as oil-in-water emulsions and sometimes water-in-oil emulsions depending upon the quantities of oil phase and water phase used.

Oil, fats and waxes:

Oil, fats and waxes and derivatives there form comprise an essential portion of creams. Waxes act as an emulsifier, fats act as a thickener and oil act as a perfuming agent, preservative, etc. according to its function. Oil may be two types' mineral and glyceride.

Mineral oil:

Mineral oil consists of hydrocarbons derived from petroleum oil. Mineral oil is clear, odorless, and heavily refined oil and it is widely used in cosmetics. Mineral oil rarely causes allergic reactions and it cannot become solid and clog pores of the skin. It is light weight and inexpensive, it helps to reduce water loss from the body and keeps body moisturized. A number of mineral oils are used in cream formulation.

Examples:

- . Light liquid paraffin
- . Heavy liquid paraffin
- . Liquid petroleum
- . Glyceride oil:

Glyceride oil is mostly vegetable oils. Examples of glyceride oils are almond oil, arachis oil, castor oil, coconut oil, olive oil etc.

Vegetable oil:

Form a barrier on the surface of the skin and slow down the loss of water, helping to maintain plumpness of skin. Vegetable oils may also be used to increase the thickness of the lipid or oil portion of cream or personal care products. E.g. Almond oil, germ oil, avocado oil, sunflower oil etc.

Waxes:

Which are used in preparation of cream includes beeswax, carnauba wax, ceresin, spermaceti, etc. Waxes are used in cosmetics because it helps to keep an emulsion from separation of oil and liquid components. These waxes also increase the thickness of the lipid portion and sticks on the surface of the skin.

STEPS IN FORMULATIONS.

1. Identification and characterization of drug:

The identification of characterization of drug is so much important because it very much affect the final product and also the effect of various

characters make drug more potent or toxic

2. characters make drug more potent or toxic

More the excipient compatible with drug more the chances of drug formulation success and effect of drug also increase

3. Formulation development:

The next stage deals with the formulation development so that witch chemicals goes with witch and witch excipients is suitable for drugs

4. Formulation Optimization :

In this stage formulation like vaccine are produces this type of formulation have lots of studies than normal formulation and large amount of the knowledge needed

5. Formulation Evaluation:

The evaluation studies help to improve the already ,made formulation by changing the part of formulation like the vehicle type FORMULATIONS OF

Herbs

Herbs are the leaf part of a plant that is used in cooking - these can be used fresh or dried.

Any other part of the plant, which is usually dried, is referred to as a spice. These include, for example, barks (cinnamon), berries (peppercorns), seeds (cumin), roots (turmeric), flowers (chamomile), buds (cloves) and stigmas of flowers (saffron).

Herbs are a fantastic way to add flavour and colour to any sort of dish or drink, whether sweet or savoury, without adding fat salt or sugars. In addition to flavour and colour, they each also tend to have their own set of health-promoting properties.

Generally, fresh herbs are delicately flavoured, so if adding them to your cooking, do so in the last few minutes. Tasting your dish as you go along will help you tell if you've added enough. If not enough herbs are used, then little difference will be made to the flavour of the dish, but if too many herbs are added, their flavour will overpower other ingredients.

Health benefits of herbs

Consuming herbs may help to prevent and manage heart diseases, cancer and diabetes. It may also help to reduce blood clots and provide anti-inflammatory and anti-tumour properties. Research is ongoing but studies have shown that:

- Garlic, linseed, fenugreek and lemongrass may help lower cholesterol.
- Garlic is useful for people with mildly elevated blood pressure. Fenugreek can help control blood sugar and insulin activity (as can linseed, flaxseed and cinnamon).
- Garlic, onions, chives, leeks, mint, basil, oregano, sage and many other herbs can help protect against cancer.
- Herbs are rich in antioxidant especially cloves, cinnamon, sage, oregano and thyme, by helping to reduce low-density lipoproteins ('bad' cholesterol).

Fresh herbs often contain higher antioxidant levels compared to processed or dried herbs. If you are using herbs in order to harness their health-promoting aspects first and foremost, aim to add your fresh herbs at the end of cooking or as you serve to preserve these properties.

Herb combinations

Although you can use one type of herb at a time, there are many great combinations that work well too.

Some traditional combinations are:

- basil - with chives, chilli, garlic, oregano
- bay - with parsley, thyme, garlic, oregano, marjoram
- chilli - with coriander, garlic, ginger, lemongrass, mint, oregano
- chives - with basil, garlic, tarragon
- dill - with chives, garlic, parsley, tarragon
- garlic - with basil, rosemary, sage, fennel, chilli, coriander
- oregano - with basil, parsley, chives, thyme, bay, chilli
- sage - with rosemary, garlic, marjoram
- thyme - with bay, parsley, garlic, rosemary.

As our food landscape is ever-evolving, particularly with the influence new migrant groups bring with them, so does the availability of herbs that previously were uncommon in Australia. For example, Vietnamese food is known for using herbs with such abundance that, at times, there are more herbs than salad leaves in a Vietnamese salad.

Native ingredients like lemon myrtle, river mint and pepperberry, for example, are also starting to become more widely available.

This article is about culinary, medicinal, and spiritual herbs. For the botanical usage, see herbaceous plant. For other uses, see herb disambiguation.



A variety of herbs are visible in this garden including mint

In general use herbs are a widely distributed and widespread group of plants, excluding vegetables and other plants consumed for macronutrients with savory or aromatic properties that are used for flavoring and garnishing food, for medicinal purposes, or for fragrances. Culinary use typically distinguishes herbs from spices. *Herbs* generally refers to the leafy green or flowering parts of a plant (either fresh or dried), while *spices* are usually dried and produced from other parts of the plant, including seeds, bark, roots and fruits.

Herbs have a variety of uses including culinary, medicinal, aromatic and in some cases, spiritual. General usage of the term "herb" differs between culinary herbs and medicinal herbs; in medicinal or spiritual use, any parts of the plant might be considered as "herbs", including leaves, roots, flowers, seeds, root bark, inner bark (and cambium), resin and pericarp.

Herb garden at Hardwick Hall, Derbyshire, England originally planted in the 1870s by Lady Louisa Egerton, recreated by the National Trust largely following the original design.



Herb garden at Hardwick Hall, Derbyshire, originally planted in the 1870s by Lady Louisa Egerton, recreated by the National Trust largely following the original design.

In botany the term herb refers to a herbaceous plant defined as a small, seed-bearing plant without a woody stem in which all aerial parts (i.e. above ground) die back to the ground at the end of each growing season. Usually the term refers to perennials although herbaceous plants can also be annuals (plants that die at the end of the growing season and grow back from seed next year),¹ or biennials. This term is in contrast to shrubs and trees which possess a woody stem.¹⁷ Shrubs and trees are also defined in terms of size, where shrubs are less than ten meters tall, and trees may grow over ten meters.¹⁷ The word herbaceous is derived from Latin *herbāceus* meaning "grassy", from *herba* "grass, herb".¹

History.

Ancient Greek philosopher Theophrastus divided the plant world into trees, shrubs, and herbs. Herbs came to be considered in three groups, namely pot herbs (e.g. onions), sweet herbs (e.g. thyme), and salad herbs (e.g. wild celery).¹ During the seventeenth century as selective breeding changed the plants size and flavor away from the wild plant, pot herbs began to be referred to as vegetables as they were no longer considered only suitable for the pot.

Reproduction.

Perennial herbs are usually reproduced by stem cuttings, either softwood cuttings of immature growth, or hardwood cuttings where the bark has been scraped to expose the cambium layer. A cutting will usually be approximately 3 to 4 inches in length. Plant roots can grow from the stems. Leaves are stripped from the lower portion up to one half before the cutting is placed in growth medium or rooted in a glass of water. This process requires high humidity in the environment, sufficient light, and root zone heat

Uses

Culinary.



A bundle of thyme (*Thymus*)

Culinary herbs are distinguished from vegetables in that, like spices, they are used in small amounts and provide flavor rather than substance to food

Herbs can be perennials such as thyme, oregano, sage or lavender, biennials such as parsley, or annuals like basil. Perennial herbs can be shrubs such as rosemary (*Rosmarinus officinalis*), or trees such as bay laurel (*Laurus nobilis*) – this contrasts with botanical herbs, which by definition cannot be woody plants. Some plants are used as both herbs and spices, such as dill weed and dill seed or coriander leaves and seeds. There are also some herbs, such as those in the mint family, that are used for both culinary and medicinal purposes.

Medicine.

Main articles: Medicinal plants and Herbalism

See also: List of plants used in herbalism



Herbs were used in prehistoric medicine. As far back as 5000 BCE, evidence that Sumerians used herbs in medicine was inscribed on cuneiform.^[16] In 162 CE, the physician Galen was known for concocting complicated herbal remedies that contained up to 100 ingredients.^[1]

Some plants contain phytochemicals that have effects on the body. There may be some effects when consumed in the small levels that typify culinary "spicing", and some herbs are toxic in larger quantities. For instance, some types of herbal extract, such as the extract of St. John's-wort (*Hypericum perforatum*) or of kava (*Piper methysticum*) can be used for medical purposes to relieve depression and stress.^[18] However, large amounts of these herbs may lead to toxic overload that may involve complications, some of a serious nature, and should be used with caution. Complications can also arise when being taken with some prescription medicines.

Cosmetics.

Originally there was always doubt in ancient societies, especially in the sceptical medium of western traditions, as to the efficacy of herbal medicines. The use of herbal cosmetics dates back to around six centuries ago in the European and Western countries. Mixtures and pastes were often concocted to whiten the face. During the 1940s, herbal cosmetics took a turn with the emerging red lipstick color, with every year gaining a more intense red. Herbal cosmetics come in many forms, such as face creams, scrubs, lipstick, natural fragrances, powders, body oils, deodorants and sunscreens. They activate through the epithelium of sebaceous glands to make the skin more supple. Ayurvedic oils are widely used in India, prized for their natural health-giving properties.

Ritual

Main article: Sacred herb



Commiphora gileadensis (Gilead myrrh)

Herbs are used in many religions. During the monastic era, monks would cultivate herbs alongside vegetables, while others would be set aside in a physic garden for specific purposes. For example, myrrh (*Commiphora myrrha*) and frankincense (*Boswellia* species) in Hellenistic religion, the nine herbs charm in Anglo-Saxon paganism, neem (*Azadirachta indica*) leaves, bael (*Aegle marmelos*) leaves, holy basil or tulsi (*Ocimum tenuiflorum*), turmeric or "haldi" (*Curcuma longa*), cannabis in Hinduism, and white sage in Wicca. Rastafari also consider cannabis to be a holy plant.

PHASES OF CREAMS

The Water Phase

Water constitutes the major ingredient (61-77%) of most creams. The lighter and more cosmetic-type creams contain more water and less oil. This phase contains the water-soluble herbal ingredients of a cream. In our creams, the water phase is never tap or deionised water as is the case with most creams, except in our base cream. We always incorporate beneficial high quality active ingredients into the water phase in the form of distilled aromatic waters, strong infusions and decoctions and cold percolates of organic herbs.

The Oil Phase

Oils make up, anywhere between 11 and 24% of the bulk of a cream. The heavier purely medicinal creams contain a higher proportion of oil but water is still their major ingredient. Oil-soluble herbal ingredients like resins dissolve and become incorporated into this phase which gives creams a richer and heavier feel. Many oils are susceptible to oxidation or rancidification over a period of time. This process is hindered by the addition of antioxidants like vitamin E, to all our creams and lotions.

Oil in water emulsions

are prepared by dispersing a lesser quantity of oil in a greater quantity of water. The oil phase is called the 'internal phase' because the emulsifier molecules enclose the minute oil droplets as they disperse them through the water medium, which is referred to as the 'external phase'. The oil is 'wrapped within the water'. Such creams have a lighter feel, are more easily absorbed into the skin without leaving an oily residue.

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The main aim of our work is to develop an herbal cream which can give a multipurpose effect like moisturizer, reduce acne and skin irritation, dry skin, wrinkles, rashes, etc. Cosmetics are the products applying on the body. Herbal cosmetics are products that are used to improve one's look.

The oil phase contains organic compounds, as well as salts, and reaches a water concentration of ca. 40%. The oil phase can be thermally recycled or fed into a further re-refining process. The water distillate from evaporation is almost free of heavy metal and salts and almost completely free of bacteria.

Multiphase Lubricant Concentrates

Multiphase lubricant concentrates as an additive for water-based drilling fluids and borehole servicing fluids have been described in Ref. [186].

The oil phase can be an ester mixture of substantially saturated fatty acids based on palm kernel oil and 2-ethylhexanol, hydrogenated castor oil, or glycerol monolaurate.

Heating of the multiphase formulations to temperatures in the phase inversion temperature range or higher followed by cooling to temperatures below the phase inversion temperature leads to water-based oil-in-water emulsions with an extremely fine-particle oil phase. The particle fineness of the emulsions can be so great that their particles are no longer optically visible. Instead, the emulsions have a transparent, opalescent appearance. This state can be preserved over relatively long periods of storage by adequately lowering the temperature of the mixture below the phase inversion temperature range.

CONCLUSION

The herbal cream of crude drugs with the best properties and having nutritional value was to be prepared by simple methods and less equipment are required. The prepared herbal cream also has antioxidant and antibacterial activity due to this it retards aging signs and pimple formation on the face. Further studies are required for this vanishing herbal cream. It was found that this type of formulation of the vanishing herbal cream was not prepared earlier. Oil in water emulsion-based cream was formulated using natural ingredients and was evaluated. By combining all these ingredients it can be concluded that this cream can be used as a multipurpose cream and the ingredients mixed can produce synergistic effect of the other.

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