

**Evidence-Based Potential of some Edible, Medicinal and Aromatic Plants as Safe Cosmetics and Cosmeceuticals**Bassam I. Amro¹, Maha N. Abu Hajleh², Fatma Afifi^{3*}¹Department of Pharmaceutics and Pharmaceutical Technology, School of Pharmacy, The University of Jordan, Amman, Jordan²Department of Cosmetic Science, Faculty of Allied Medical Sciences, Al-Ahliyya Amman University, Amman- Jordan³Department of Pharmaceutical Chemistry and Pharmacognosy, Faculty of Pharmacy, Applied Science Private University, Amman, Jordan

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ABSTRACT

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According to complementary and alternative medicine which is based primarily on traditional or folkloric medicines of different world civilizations there is a constant growing interest on cosmetics and cosmeceuticals using botanical ingredients. Since ancient times, humans used distinctive natural ingredients as medicine or cosmetic products. Cosmetics alone are not sufficient for skin care. Active ingredients from natural or synthetic sources have been added to prevent and/or to treat damaged and ageing of the skin. Herbal cosmetics are more prevalent than synthetic ones. Since synthetic cosmetic products may cause severe skin damage, natural herbs are included directly in the skin care formulations. Usually plant based cosmetics are made using plants well known throughout history to be safe and side-effects free. Aromatic plants and fixed oils were mostly used by different civilizations in religious rituals, and for the care, cleansing and decoration of the skin to enhance beauty and to promote good health. Additionally, in most cases the herbs used in cosmetics contain antioxidants and anti-inflammatory ingredient that can alleviate skin problems like rashes or skin itching. Given the emphasis on the trend in the use of natural sources in the cosmetics industry, in this review, effective skin care properties of some herbs and plants and their evidence-based benefits in the skin care, as well as in solving a multitude of skin problems are discussed, the international nomenclature of the cosmetic ingredients of the parts used are also mentioned.

Keywords: Medicinal plants, Aromatic plants, Herbal cosmetics, Cosmeceuticals, Skin care.

Introduction

Similar to the complementary and alternative medicine (CAM), which is based primarily on the traditional or folkloric medicines of different world civilizations, there is a constantly growing interest in cosmetics and cosmeceuticals using botanical ingredients.¹

Historically, by trial and error human experienced and learned that using their surrounding flora to distinguish between the edible, medicinal and toxic plants. Additionally, for centuries plant-based preparations, including aromatic and fixed oils were used by different civilizations in religious rituals, and for the care, cleansing and decoration of the skin to enhance beauty and to promote good health.²

³ The term "cosmetic" is derived from the Greek word "*kosmētikos; kosmein*" meaning skilled in ordering or arranging. The ancient science of cosmetology is believed to have originated in Egypt, Greece and India based on archeological evidence. Still in other parts of the world, by the Indus valley civilization in South America records indicated the use of cosmetic substances and their application in 2500 and 1550 B.C.^{3, 4} Cosmetics are articles proposed to be applied to the human body for cleansing, beautifying, stimulating attractiveness, or changing the appearance without affecting body structure or functions.^{1, 4} Currently, many cosmetics are formulated with

ingredients from natural origin. A great deal of interest has been developed toward cosmetics from natural resources because of their beneficial effects over synthetic ingredients which are enriched with chemical substances.⁴ Also, addition of herbal extracts into the skin care formulations have numerous benefits including antioxidant, anti-inflammatory, antiseptic and antimicrobial activities.⁵ Products or preparations in which herbs are used in their crude forms or in form of their extracts are referred as the herbal cosmetics or natural cosmetics. In the herbal cosmetics, one or more herbal ingredients are used to provide the defined cosmetic benefits. The most commonly used parts from the plants which are enriched with nourishing and healing elements include; leaves, bark, berries, roots, rhizomes, seeds, stems, fruits and flowers. Also, the herbal materials contain fresh juices, gums, fixed oils, essential oils, resins and dry powders of herbs.⁵ Recently, in addition to the terrestrial plants, studies revealed that bioactive substances derived from marine resources exert beneficial effects on human skin and are considered to be new lines in skin care and skin health.⁶

Over the years, the important role played by the natural cosmetics in rituals became a normal part of daily life of women and men for health, hygiene and beauty. Nowadays, these personal care products, natural and synthetic, along with the natural dermatological products is currently a constantly growing industry so that it became a difficult task for the practitioners as well as the consumers to select the appropriate product in evaluating potential risks, side effects and safety. A plethora of cosmetic and cosmeceutical preparations are available as OTC products. While cosmetics are addressing mainly skin care and beauty, cosmeceuticals refer to the combination of cosmetics and pharmaceuticals with medical and drug-like benefits, hence can be used as adjunct therapy to prescription medication.^{5, 7}

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Given the emphasis on the trend in the use of natural sources in the cosmetics industry, the present study lists the common fruits and vegetables, and their evidence-based benefits for skin care, as well as solving a multitude of skin problems. Additionally, cosmeceutical benefits of some well-established medicinal plants, used therapeutically and traditionally are included. Recently, the demand for herbal cosmetics is increasing since the natural component in the herbs may not display any side effect on the human body; relatively they supplement the body with nutrients and minerals that enhance beauty.⁵

Materials and Methods











Many steps were followed in the preparation of this review including identification of the role of herbs, fruits, and vegetables in cosmetics and cosmeceuticals. The review included only herbs, fruits and vegetables that have cosmetic effects and excluded non relevant studies of medicinal plants that have no cosmetic activity. Full texts were verified regarding their traditional uses as cosmetics. Relevant data were extracted and evaluated, and this was made possible by using different search engines such as Google Scholar, Science Direct, and PubMed through appropriate keywords, such as herbal cosmetics, cosmeceuticals, skin care, and medicinal plant (Table 1).

Table 1: Uses of some edible, medicinal and aromatic plants in cosmetics and in cosmeceuticals

Name	INCI Name	Properties	Parts used	Picture
Agrimony	<i>Agrimonia eupatoria</i> L.	Astringent, antiseptic, anti-wrinkle, healing ⁽⁸⁾	Leaves	
<i>Aloe vera</i>	<i>Aloe barbadensis</i> Mill.	Emollient, healing, accelerating the healing of injured surfaces, moisturizing, tonic, astringent ⁽⁹⁻¹¹⁾	Leaves' juice	
Anise	<i>Pimpinella anisum</i> L.	Astringent, skin conditioner, perfuming and masking, treatment of hair and scalp, used in mouth and tooth-care preparations ⁽¹²⁻¹⁴⁾	Seeds, flowers	
Arnica	<i>Arnica montana</i> L.	Anti-inflammatory, antimicrobial, healing, stimulates blood circulation, helps for acne, antiphlogistic, astringent, wound healing effect, anti-ecchymotic ⁽¹⁵⁾	Flowers	
Artemisia	<i>Artemisia vulgaris</i> L.	Tonic, astringent ⁽¹⁶⁾	Whole plant	
Asparagus	<i>Asparagus officinalis</i> L.	Soothing, toning, regenerating and revitalizing, healing, skin conditioning, help to clean blemishes on the face, used in moisturizing creams and skin tonics ⁽¹⁷⁾	Roots	
Apple	<i>Pyrus malus</i> L.	Firming, softening, sedative, soothing, antiseptic, refreshing, antioxidant ⁽¹⁸⁾	Fruit	









Apricot	<i>Prunus armeniaca</i> L.	Free radical scavenger, softening, filmogenic, moisturizing, anti-wrinkle ^(19, 20)	Fruit
Avocado	<i>Persea gratissima</i> C.F.Gaertn <i>P. americana</i> Mill.	Moisture balance, softening, healing, anti-wrinkle ^(21, 22)	Fruit
Banana	<i>Musa acuminata</i> Colla	Nutritive, purifying, remineralising, antioxidant ^(23, 24)	Dry & Fresh Fruit
Baobab	<i>Adansonia digitata</i> L.	Smoothing skin, emollient, cleaning sores, relieve (aches, pains and rheumatism)(25); treatment of skin irritations such as eczema and psoriasis ⁽²⁶⁾	Leaves, bark, seeds
Basil	<i>Ocimum basilicum</i> L.	Antiseptic, tonic, relaxing, (treating muscle aches and pains), antioxidant, antimicrobial and antibacterial ⁽²⁷⁻²⁹⁾	Leaves
Bearberry	<i>Arctostaphylos uva-ursi</i> (L.) Spreng	Clears the complexion, bleaching effect, antimicrobial ⁽³⁰⁻³²⁾	Leaves
Bengal Coffee	<i>Coffea benghalensis</i> B. Heyne ex Schult.	Used in anti-wrinkle and skin toning applications, imparting hydration activity in the keratinocytes and stimulating collagen synthesis in the fibroblasts ⁽³³⁾	Stem Cells
Bhringraj/ Maka/ False Daisy	<i>Eclipta alba</i> Hassk <i>Eclipta prostrata</i> L.	Hair darkener, skin toning and stimulation, stimulate hair growth, invigorate peripheral blood circulation of skin ⁽³⁴⁻³⁶⁾	Herbs, roots, leaves
Bilberry / Huckleberry	<i>Vaccinium myrtillus</i> L.	Antioxidant, collagen stabilizing, astringent, antiseptic. ^(37, 38)	Fruit, seeds



Bistort	<i>Polygonum bistorta</i> L. (<i>Bistorta officinalis</i> Delarbre)	Astringent ⁽³⁹⁾	Roots	
Bitteramandel, wild almond	<i>Brabejum stellatifolium</i> L.	Softening, antioxidant, nutritive ⁽⁴⁰⁾	Seeds	
Bitter Orange	<i>Citrus aurantium</i> var. <i>amara</i> L.	Stimulant, soothing, anti-cellulite, softening, anti-wrinkle ⁽⁴¹⁻⁴³⁾	Fruit Peel	
Blackberry	<i>Rubus fruticosus</i> L.	Skin conditioning, masking, astringent, perfuming, hydration and masking, tonic ⁽⁴³⁾ .	Leaves, seeds, fruit	
Black Seed	<i>Nigella sativa</i> L.	Healing, antimicrobial, stimulant ⁽⁴⁴⁾	Seeds	
Bladder Wrack	<i>Fucus vesiculosus</i> L.	Weight reducing, reconstituting action, Moisturising, antiphlogistic, toning, emollient, decongestant ^(45, 46) .	Seaweeds	
Blood Root	<i>Sanguinaria canadensis</i> L.	Antiseptic, for skin burns and sores, treatment of rheumatism and warts ⁽⁴⁷⁾	Roots	
Bog Labrador Tea	<i>Ledum groenlandicum</i> Oeder/ <i>Rhododendron</i> <i>groenlandicum</i> (Oeder) Kron & Judd	Tonic, masking, used in skin preparations for blemished skin, treatment of rheumatism ⁽⁴⁸⁾ .	Whole plant	
Borage	<i>Borago officinalis</i> L.	Emollient, Softening ^(49, 50)	Flowering top, seed	
Brussels Sprouts	<i>Brassica oleracea</i> (<i>gummifera</i>) L. <i>Gummifera</i>	Body slimming ⁽⁵¹⁾	Leaves	

Buckbean	<i>Menyanthes trifoliata</i> L.	Skin conditioning, tonic, used in bath preparations ⁽⁵²⁾	Leaves
Buckwheat	<i>Fagopyrum esculentum</i> Moench	Antioxidative, radical scavenger ⁽⁵³⁾	Leaves
Burdock	<i>Arctium lappa</i> L.	Bactericide, against dry and seborrheic scalp, antiseptic, used as an external wash for ulcers and scaly skin disorders ⁽⁵⁴⁾ useful against rheumatic conditions ⁽⁵⁵⁾	Roots, seeds
Butcher's Broom / Knee-Holly	<i>Ruscus aculeatus</i> L.	Vasoconstrictor, disinfibrating, decongestant, antiblotchiness, astringent, tonic ⁽⁵⁶⁾	Roots
Cabbage	<i>Brassica oleracea</i> L. (<i>capitata</i>)	Body slimming ⁽²⁰⁾	Leaves
Calendula	<i>Calendula officinalis</i> L.	Emollient, moisturizing, antiseptic, bactericide, anti-inflammatory, refreshing, remineralizer, antiseborrhea, healing, soothing ^(57, 58)	Flowers
Camphor Tree	<i>Cinnamomum camphora</i> (L.) J.Presl	Antiseptic, stimulant, reducing inflammatory conditions, used in cases of acne, burns and ulcers ⁽³⁴⁾	Leaves
Capsicum	<i>Capsicum frutescens</i> L.	Stimulating, strengthening, heating ⁽⁵⁹⁾	Fruit
Carrot	<i>Daucus carota</i> L.	Healing, tan prolonging, softening, cellular regenerating, free radical scavenger, coloring, local tonic, aids UV-protection, skin protective agent ^(49, 60, 61)	Fruit
Celery	<i>Apium graveolens</i> L.	Nutritive, strengthening, healing ⁽⁶²⁾	Whole plant



Centella Asiatica / Hydrocotyl/ Gotu Kola	<i>Centella asiatica</i> (L.) Urban (<i>Hydrocotyle asiatica</i> L.)	Astringent, healing, treating psoriasis ^(34, 63-65)	Whole plant	
Ceylon Leadwort	<i>Plumbago zeylanica</i> L.	Remedy for parasitic skin diseases like (acne vulgaris, surface sores and leg ulcers), antimicrobial ^(34, 66, 67)	Flowers, roots	
Chamomile	<i>Anthemis nobilis</i> L. (<i>Chamaemelum nobile</i> (L.) All.	Anti-inflammatory and anti-irritant {(-)- α -Bisabolol }, softening, antiseptic, tonic, healing, sedative, antipruritic, stimulating, bactericide, decongestant. ^(68, 69)	Flowers, aerial parts	
China Bark / Cinchona	<i>Cinchona succiruba</i> L.	Astringent, hair conditioning, skin conditioning, tonic, antiseptic, healing, degreasing ⁽⁷⁰⁾ .	Bark	
Cinnamon	<i>Cinnamomum zeylanicum</i> L.	Antiseptic, stimulant, astringent ⁽⁷¹⁾	Bark	
Clematis/ Old Man's Beard	<i>Clematis vitalba</i> L.	Anti-rheumatic, analgesic, common remedy for skin disorders (sores, cuts and itching) ⁽⁷²⁾ , for treating ulcers ⁽⁴⁷⁾ , used for infected skin eruptions ⁽⁷³⁾	Leaves, stem, roots, flowers	
Clove	<i>Syzygium aromaticum</i> (L.) Merr. & L. M. Perry <i>Caryophyllus aromaticus</i> L. <i>Eugenia aromatica</i> (L.) Baill. <i>E. caryophyllata</i> Thunb <i>E. caryophyllus</i> (Spreng) Bullock&s. G. Harrison	Stimulant, antiseptic, antioxidant ⁽⁷⁴⁾	The Buds	
Cockscomb/ Quail Grass	<i>Celosia argentea</i> L.	Astringent, used to treat itching and eczema, eyewash, used for arthritis ^(34, 75)	Seeds, leaves, flowers, roots	
Cocoa	<i>Theobroma cacao</i> L.	Stimulating blood circulation, anti- cellulite, relaxing, antioxidant, healthy hair growth ⁽⁷⁶⁾	Beans	

Coconut	<i>Cocos nucifera</i> L.	Emollient, skin conditioner, hair conditioner, antifungal (shell), prevents fluid secretion (coconut oil) ^(25, 77)	Fruit, seeds, shell
Coffee	<i>Coffea arabica</i> L.	Antioxidant (78), anti-cellulite, anti-edema, tightening ⁽⁷⁹⁾	Beans
Coltsfoot	<i>Tussilago farfara</i> L.	General tonic, healing, astringent, antiperspirant, anti-inflammatory, softening, antiscumous ⁽⁸⁰⁾	Flowers
Comfrey	<i>Symphytum officinale</i> L.	Healing, softening, astringent, emollient, decongestant ⁽⁸¹⁾	Leaves, flowers
Common Chickweed	<i>Stellaria media</i> (L.) Vill.	Emollient, antipruritic, vulnerary and antirheumatic ⁽⁴⁷⁾ ; treatment of eczema, psoriasis and ulcers ⁽⁸²⁾	The herb
Common Soapwort	<i>Saponaria officinalis</i> L.	Anti-seborrhea, tonic, antipruritic, cleansing agent, antioxidative; treatment of acne, psoriasis and eczema ⁽³⁴⁾	Leaves, Roots
Coneflower	<i>Echinacea angustifolia</i> DC.	Cellular regenerating, anti-dryness, post acne regulator, assistant in the treatment of stretchmarks, aids wound-healing effect, antiphlogistic, Antiseptic, effectiveness against eczema and acne ^(34, 47, 83, 84)	Leaves, flowers, roots
Coriander	<i>Coriandrum sativum</i> L.	Emollient and skin conditioner (seeds), perfuming (herbs), antimicrobial (fruit), humectant (leaves), antioxidant ⁽⁸⁵⁾ .	Seeds, herbs, dried fruit, leaves
Corn	<i>Zea mays</i> L.	Free radical scavenger, emollient, regenerating, softening, decongestant, nourishing, anti-inflammatory ⁽⁸⁶⁾	Seeds



Cornflower	<i>Centaurea cyanus</i> L.	Astringent, softening, antiseptic, anti-wrinkle ⁽⁸⁷⁾	Flowers
Cotton	<i>Gossypium herbaceum</i> L.	Conditioner, emollient, softening ⁽⁸⁸⁾ .	Seeds
Couch Grass	<i>Elymus repens</i> (L.) Gould	Antiseptic ⁽⁸⁹⁾ , used in skin care treatments for acne, a hair restorer, treatment of rheumatism ⁽⁹⁰⁾	Roots
Cucumber	<i>Cucumis sativus</i> L.	Softener, emollient, moisturizing, refreshing, astringent, regulating the skin's hydric balance, cleansing agent, moisturizing ⁽⁹¹⁾	Fruit
Cypress	<i>Cupressus sempervirens</i> L.	Astringent, antiperspirant, vasoconstrictor ⁽⁹²⁾ .	seeds
Damask Rose	<i>Rosa damascena</i> Mill.	Skin Conditioner, antisolar agent ⁽⁹³⁾ (soothing, astringent, anti-inflammatory) ⁽⁹⁴⁾	Flowers
Dandelion	<i>Taraxacum officinalis</i> (L.) Weber ex F. H. Wigg	Astringent, cleansing, lightening, sedative, recommended for skin complaints such as spots, pimples and acne; clearing the skin ^(34, 95)	Leaves, roots
Devil's Claw	<i>Harpagophytum procumbens</i> (Burc.) DC. Meisn.	Anti-inflammatory ⁽⁹⁶⁾	Roots
Edelweiss	<i>Leontopodium alpinum</i> Colm. Ex Cass.	Astringent, potent antioxidant with very effective anti-aging, anti-inflammatory and anti-septic properties, protects the skin before and after sun exposure ⁽⁹⁷⁾	Whole plant
Elderberry	<i>Sambucus nigra</i> L.	Anti-inflammatory, softening, whitening: clears up complexion ⁽⁹⁸⁾	Fruit



Elecampane	<i>Inula helenium</i> L.	Refreshing, toning ⁽⁹⁰⁾	Roots
Elm	<i>Ulmus campestris</i> Huds. <i>var. microphylla</i> Boiss.	Astringent, skin conditioner, antiphlogistic, used for the treatment of wounds ⁽⁹⁹⁾	Bark
Erythraea/ Centaury	<i>Centaureum erythraea</i> Rafn.	Used for (wound treatment, blood impurities and eczema) ⁽⁴⁷⁾ ; applied externally as a lotion for all types of sores, to cleanse a sore mouth and to cool inflamed gums ⁽¹⁰⁰⁾	The herb, flowers
Evening Primrose	<i>Oenothera biennis</i> L.	Cellular regenerating, anti-aging ⁽¹⁰¹⁾	Flowers
Everlasting	<i>Helichrysum italicum</i> (Roth) G. Don fil. (<i>H. angustifolium</i>)	Tonic, astringent, perfuming ⁽¹⁰²⁾	Flowers
Eucalyptus	<i>Eucalyptus globulus</i> Labill. <i>E. globulosus</i> <i>E. gigantea</i> Dehnh.	Antiseptic, anti-seborrhoea, astringent, tonic, refreshing, therapeutic and antimicrobial properties ^(103, 104)	Leaves (oil)
Eye-Bright	<i>Euphrasia officinale</i> L.	Antiphlogistic, antimicrobial, astringent, skin conditioning, soothing, tonic ⁽¹⁰⁵⁾	aerial parts
Fenugreek	<i>Trigonella foenum-graecum</i> L.	Elasticity, softening, anti-inflammatory, it is used externally for neuralgia, sciatica, swollen glands, wounds, sores and skin irritations and treating chapped lips and mouth ulcers ⁽²⁹⁾	Seeds
Fennel	<i>Foeniculum vulgare</i> Mill.	Relaxing, stimulant, anti-dandruff, antiseptic, moisturizing, sedative, anti-inflammatory ⁽¹⁰⁶⁾	Seeds
Fig Tree	<i>Ficus carica</i> L.	Remineralising, softening, emollient, skin conditioner ⁽¹⁰⁷⁾	Fruit












French Rose/ Rose of Provins	<i>Rosa gallica</i> L.	Astringent, skin conditioning, tonic, anti-aging (petal extract) ⁽¹⁰⁸⁾	Flowers
Garden Angelica\ Holy Ghost	<i>Angelica archangelica</i> L.	Tonic, perfuming and masking, skin conditioner, astringent, soothing, for the relief of rheumatism ⁽¹⁰⁹⁾	Roots, the herb, leaves
Garlic	<i>Allium sativum</i> L.	Antioxidant, anti-dandruff, anti-acne, antiseptic, antibacterial, antifungal, tonic, decongestant, stimulates blood circulation ⁽¹¹⁰⁻¹¹²⁾	Fruit
Gentian	<i>Gentiana lutea</i> L.	Toning, cleansing, tightens enlarged skin pores, decongestant, antiseborrheic ⁽¹¹³⁾	Roots
Geranium	<i>Geranium maculatum</i> L.	Astringent, antiseptic, (good cleanser and it is also good for dermatitis; dry eczema; inflamed and oily skin, it makes a very refreshing and relaxing bath oil and it is also a mild analgesic and sedative, and helps to reduce inflammation and speed healing) ⁽²⁹⁾	whole plant
Ginger	<i>Zingiber officinale</i> Roscoe.	Astringent, stimulant, anti-inflammatory, antibacterial, antioxidant ^(68, 114)	Roots
Ginkgo Biloba	<i>Ginkgo biloba</i> L.	Anti-free radical, anti-aging, decongestant, anti-inflammatory, peripheric vasodilatator , helps the sebaceous secretion of dry skin or dehydrated skin, antioxidative, antibacterial ⁽¹¹⁵⁾	leaves
Ginseng	<i>Panax ginseng</i> L.	Stimulant, anti-hair loss, tonic, revitalizing, hair and scalp tonic, astringent, activates the skin's metabolism ⁽¹¹⁶⁾ , reduces keratinization ⁽¹¹⁷⁾ , moisturizes and softens ⁽¹¹⁸⁾ , activates dermal blood circulation, alleviates wrinkling, assists hair growth, enhances skin's whiteness	Roots



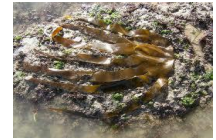
Goldenseal/ Orange-Root	<i>Hydrastis canadensis</i> L.	Tonic, for general ulceration, used as a general cleansing application ⁽⁵⁵⁾ , also used as a mouthwash for gum and mouth disease, applied to broken skin and eruptions ⁽¹¹⁹⁾ , disinfectant, antiseptic, astringent, treatment of rheumatic and muscular pain ⁽⁴⁷⁾	The herb, roots
Grape	<i>Vitis vinifera</i> L.	Emollient, purifying, softening ⁽¹²⁰⁾ .	Dry fruit
Grape Seed	<i>Vitis vinifera</i> L.	Anti-edema, antioxidant; hyper-pigmentation, premature aging, acne ^(61, 121)	Seeds
Grape Leaf	<i>Vitis vinifera</i> L.	Astringent, tonic, skin conditioner ⁽¹²²⁾	Leaves
Grapefruit	<i>Citrus paradisi</i> Macfad.	Astringent, antiseptic, tonic, refreshing, antibacterial, antioxidant ⁽¹²³⁻¹²⁵⁾	The peels
Green Tea	<i>Camellia sinensis</i> (L.) Kunze	Stimulant, astringent, anti-cellulite, Local tonic, antioxidant, anti-inflammatory and skin photoprotection against the adverse effects of solar ultraviolet (UV) light ⁽¹²⁶⁻¹²⁸⁾	Leaves
Hawthorn	<i>Crataegus oxyacantha</i> L.	Astringent, tonic, softening, antioxidative, cleansing agent, decongestant ⁽¹²⁹⁾	Stems, leaves, flowers
Hazelnut	<i>Corylus colurna</i> L.	Emollient, softening, anti-inflammatory ⁽¹³⁰⁾	Fruit






















Heather	<i>Calluna vulgaris</i> (L.) Hull.	Anti-inflammatory, skin conditioner, tonic, antisquamous ⁽¹³¹⁾	Whole plant	
Henna	<i>Lawsonia inermis</i> L.	Natural Coloring, toning, makes hair glossy, antiseptic, astringent, antimicrobial ⁽¹³²⁾	Leaves	
He-Shou-Wu	<i>Polygonum multiflorum</i> Thunb.	Anti-hair loss ⁽¹³³⁾	Leaves	
Hibiscus	<i>Hibiscus abelmoschus</i> Medik.	Anti-inflammatory, free radical scavenger, softening, astringent (flowers), emollient (leaves), it has anti-dandruff properties, stimulates hair growth and darkens the hair ⁽²⁹⁾	Flowers, leaves, roots fruit	
Hops	<i>Humulus lupulus</i> L.	Antiseptic, anti-seborrheic, anti-dandruff, stimulant, tonic, anodyne, astringent, sedative ⁽¹³⁴⁾	Flowers	
Horse Chestnut	<i>Aesculus hippocastanum</i> L.	Vasoconstrictor, anti-inflammatory, anti-cellulite, venous tonic, fluidizer blood, astringent, increases capillary resistance, cleansing agent, foaming effect, aids blood circulation ⁽¹³⁵⁾	Seeds	
Horseradish	<i>Armoracia rusticana</i> G.Gaertn., B.Mey. & Scherb.,	For the treatment of freckles and moles, skin stimulant, treatment of rheumatism, masking ⁽¹³⁶⁾	Roots	
Horsetail	<i>Equisetum arvense</i> L.	Emollient, soothing, refirming, remineralising, draining, astringent, hemostatic, slowing down of skin aging, anti-wrinkle, toning, healing, treating wounds ⁽⁹⁰⁾	Leaves	
Indian Cress/ Tropaeolum/ Nasturtium	<i>Tropaeolum majus</i> L.	Tonic, antimicrobial, skin conditioner, treatment of wounds ⁽¹³⁷⁾	Whole plant	










Iris	<i>Iris versicolor</i> L.	Moisturizing, emollient, tonic ⁽¹³⁸⁾	Roots	
Irish Moss	<i>Chondrus crispus</i> Stackh.	Antiphlogistic, cleansing agent ⁽¹³⁹⁾	Seaweeds	
Ivy	<i>Hedera helix</i> L.	Antibacterial, antifungal, anti-inflammatory, anti-cellulite, anti-edema, vasoconstrictor, foaming effect, degreasing ⁽¹⁴⁰⁾	Leaves, stems	
Joboba	<i>Simmondsia chinensis</i> (Link) C. K.	Anti-inflammatory ⁽⁴⁷⁾ , moisturizing, emollient, non-tacky, non-greasy, elasticity, hair conditioner ⁽¹⁴¹⁾ , treatment of wounds, promotes hair growth ⁽¹⁴²⁾ , (improves nail and cuticle condition, reduction of visual scaling associated with severely dry skin) ⁽¹⁴³⁾	Fruit	
Jonquil	<i>Narcissus jonquilla</i> L.	Softening, anti-wrinkle, tonic ⁽¹⁴⁴⁾	Flowers	
Juniper	<i>Juniperus communis</i> L.	Antiseptic, anti-seborrheic, anti-inflammatory, toning, antioxidant, antimicrobial, (treats hair loss and skin problems; for the skin it particularly alleviates acne, oiliness, eczema, dermatitis and seborrhea of the scalp) (distilled bark), combats alopecia (the branches) ⁽²⁹⁾	Fruit, bark, branches	
Kiwi	<i>Actinidia chinensis</i> Planch.	Anti-wrinkle, antioxidant, moisturizer, regeneration ⁽¹⁴⁵⁾	Fruit	
Lady's Bedstraw	<i>Galium verum</i> L.	Antioxidant, anti-wrinkle, tightening ⁽¹⁴⁶⁾	Leaves, flowers	
Lady's Mantle	<i>Alchemilla vulgaris</i> L.	Anti-aging, regeneration ⁽¹⁴⁷⁾	Flowers	



Laminaria	<i>Laminaria</i> J. V. Lamouroux	Accelerates the exchanges in the cells, blood circulation stimulating, remineralizing, weight reducing (148)	seaweeds
Lavender	<i>Lavandula angustifolia</i> Mill.	Soothing, antiseptic, healing, softening, antipruritic, caring, sedative (149)	Flowers
Lavendula	<i>Lavandula stoechas</i> L.	Antiseptic, healing, anti-inflammatory, used for wounds and rheumatic pain (150)	Flowers
Laurel	<i>Laurus nobilis</i> L.	Antiseptic, healing, blood circulation (151)	Leaves
Lemon	<i>Citrus medica limonum</i> L.	Cleansing action, antiseptic, astringent, bactericide, antipruritic, healing, moisturizing, clears up complexion (152)	Peels
Lettuce	<i>Lactuca sativa</i> L.	Softening, anti-inflammatory (153)	Leaves
Lemon Balm	<i>Melissa officinalis</i> L.	Antiseptic, healing, relaxing, tonic, sedative, astringent (154)	Leaves
Licorice/ Liquorice	<i>Glycyrrhiza glabra</i> L.	Bleaching and skin lightening effects through inhibition of melanin formation, antibacterial, anti-seborrheic, anti-inflammatory (54), softening, healing (61)	Roots
Lily	<i>Lilium candidum</i> L.	Softening, anti-wrinkle (155)	Flowers
Lime-Blossom	<i>Tilia sylvestris</i> L.	Sedative, emollient, softening, decongestant, clears up complexion, antiphlogistic (156)	Flowers













Linden Tree	<i>Tilia platyphyllos</i> Scop.	Softening, decongestant, moisturizing, refreshing, calming, astringent ⁽¹⁵⁷⁾	Leaves	
Linseed	<i>Linum usitatissimum</i> L.	Anti-inflammatory, softening, moisturizing, skin conditioning, perfuming ⁽¹⁵⁸⁾	Seeds	
Loddon Lily	<i>Leucojum aestivum</i> L.	Anti-aging benefits including reducing age spots and slow cellular aging, reducing wrinkle formation by inhibiting muscle cell contractions, smoothing skin, antioxidant activity, skin protecting ⁽¹⁵⁹⁾	Bulbs	
Lupin	<i>Lupinus albus</i> L.	Emollient, protector, tightening, (reinforces the natural restructuring systems of the epidermis, limits water loss and regenerates the barrier function of the skin) ⁽¹⁶⁰⁾	Seeds	
Macadamia	<i>Macadamia ternifolia</i> F. Muell.	Excellent dermal penetration, emollient ⁽¹⁶¹⁾	Fruit	
Magnolia	<i>Magnolia grandiflora</i> L.	Anti-inflammatory and antibacterial, antioxidant, used in acne treatment, skin conditioner, it inhibits many of the bacteria responsible for caries and periodontal disease ⁽¹⁶²⁻¹⁶⁶⁾	Stem bark, flowers buds	
Mallow	<i>Malva sylvestris</i> L.	Emollient, moisturizing, anti-inflammatory, softening, sedative, slimming, calmative ⁽¹⁶⁷⁾	Flowers, leaves	
Mango	<i>Mangifera indica</i> L.	Antioxidant, astringent, antiseptic, conditioner, moisturizing, emollient, antifungal ^(168, 169)	Fruit	
Marjoram	<i>Origanum majorana</i> L.	Astringent, antiperspirant, tonic ⁽¹⁷⁰⁾	Leaves	

Marshmallow	<i>Althaea officinalis</i> L.	Very softening, emollient, sedative, skin protection, amelioration of skin irritations, humectants, soothing ⁽¹⁷¹⁾	Leaves, roots	
Meadowsweet	<i>Spiraea ulmaria</i> L.	Tonic, astringent ⁽¹⁷²⁾	Aerial parts	
Millet	<i>Panicum milliaceum</i> L.	Nutritive, stimulant, softening ⁽¹⁷³⁾	Seeds	
Mimosa Tenuiflora / Tepezcohuite	<i>Mimosa tenuiflora</i> (Willd.) Poir.	Aids wound healing effect, antiphlogistic, treating lesions of the skin ⁽¹⁷⁴⁾	Bark	
Mistletoe	<i>Viscum album</i> L.	Decongestant, vasodilator ⁽¹⁷⁵⁾	Whole plant	
Mouse-Ear	<i>Hieracium pilosella</i> L.	Disinfiltrating, decongestant ⁽¹⁷⁶⁾	Aerial parts	
Muskmelon	<i>Cucumis melo</i> L.	Anti-aging, moisturizing ⁽¹⁷⁷⁾	Fruit	
Mustard	<i>Brassica juncea</i> (L.) Czern.	Skin conditioner, skin stimulant, treatment of rheumatism ⁽¹⁷⁸⁾	Seeds	
Myrrh	<i>Commiphora myrrha</i> (Nees) Engl.	Stimulant, anti-inflammatory, antiseptic, softening, astringent ⁽¹⁷⁹⁾	Gum	
Myrtle	<i>Myrtus communis</i> L.	Astringent, hair care, masking, tonic ⁽¹⁸⁰⁾	Leaves	

Neem/	<i>Azadirachta indica</i> A. Juss.	Treatment of eczema and skin ulcers, anti-inflammatory, antibacterial, tonic ^(34, 181)	Leaves, seeds, roots	
Neroli Oil	<i>Citrus aurantium subsp. amara</i> or <i>Bigaradia</i> L.	Energizer, stimulant, have a soothing effect on the nervous system ⁽¹⁸²⁾	Flowers	
Oak	<i>Quercus robur</i> L.	Astringent, antiperspirant ⁽¹⁸³⁾	Bark	
Oat	<i>Avena sativa</i> L.	Sedative, emollient, moisturizing, softening, antioxidant, revitalizing, anti-itch and anti-irritation properties ⁽¹⁸⁴⁾	Seeds	
Olive	<i>Olea europaea</i> L.	Nutritive, healing, stimulant, moisturizing ⁽¹⁸⁵⁾	Leaves, fruit	
Onion	<i>Allium cepa</i> L.	Anti-inflammatory, healing, antibacterial, antimicrobial, nutritive, stimulant, moisturizing, used for blemished skin ⁽¹⁸⁶⁾	Dry fruit	
Orthosiphon	<i>Orthosiphon stamineus</i> L.	Disinfiltrating, skin conditioning ⁽¹⁸⁷⁾	Leaves	
Pansy/ Heartsease	<i>Viola tricolor</i> L.	Foaming effect, skin clarifying, antioxidant, tonic, decongestant, antipruritic, healing, soothe and relieve pain; effective against skin diseases such as acne, pruritis and eczema; antiphlogistic, treatment of abscesses ^(34, 188, 189)	Herbs, flowers	
Papaw / Papaya	<i>Carica papaya</i> L.	Lifts impurities, cleansing, healing, antimicrobial, anti-inflammatory, moisturizing, useful in treating sores and psoriasis ⁽³⁴⁾ , used to treat toothache (inner bark) ⁽¹⁹⁰⁾ , speed wound healing ^(191, 192)	Fruit, inner bark	








Parsley	<i>Petroselinum crispum</i> (mill.) Fuss	Antiseptic, tonic, antioxidant, cleansing agent, antimicrobial ⁽¹⁹³⁾	Leaf	
Pea	<i>Pisum sativum</i> L.	Used on faded and wrinkled skin, relieves itching and reduces marks ⁽³⁴⁾ , treatment of acne ⁽¹⁹⁴⁾ , self- tanning agent ⁽¹⁹⁵⁾	Whole plant	
Peach	<i>Prunus persica</i> (L.) Batsch	Energizing, refreshing, softening, emollient, revitalizing, tonic ⁽¹⁹⁶⁾	Fruit	
Pear	<i>Pyrus communis</i> L.	Antiseptic, sedative, moisturizing, softening ⁽¹⁹⁷⁾	Fruit	
Pellitory	<i>Parietaria officinalis</i> L.	Emollient, soothing ⁽¹⁹⁸⁾	leaves and stems	
Peppermint	<i>Mentha piperita</i> L.	Antiseptic, anti-inflammatory, refreshing, astringent, local tonic ⁽¹⁹⁹⁾	Leaves	
Periwinkle	<i>Vinca minor</i> L.	Tonic, astringent ⁽²⁰⁰⁾	Leaves and herb	
Pine	<i>Pinus brutia</i> Tenore / <i>Pinus sylvestris</i> L.	Relaxing, stimulant, anti- inflammatory, anti-dandruff, anti- microbial, anti-fungal, anti-acne, smoothness, balsamic antiseptic, softening, revitalizing, tonic, stimulates blood circulation ⁽²⁰¹⁾	Leaves	
Pineapple	<i>Ananas sativus</i> (L.) Merr.	Anti-inflammatory, astringent, moisturizing, elasticity, softening, cleansing, lifts impurities ⁽²⁰²⁾	Fruit	
Plantain	<i>Plantago lanceolata</i> L.	Antibacterial, anti-inflammatory, healing, astringent ⁽²⁰³⁾	Leaves	

Pollen	<i>Pulvis</i>	Nutritive, cellular balance, anti-wrinkle, emollient ⁽²⁰⁴⁾	Flowers	
Pomegranate	<i>Punica granatum L.</i>	Antioxidant, astringent, moisturizing ⁽⁶¹⁾	Seeds	
Prickly Pear/ Barbary Fig	<i>Opuntia ficus-indica (L.) Mill.</i>	Skin conditioning, moisturizer (extract from the leaves) ⁽⁴⁷⁾ , anti-inflammatory and analgesic ⁽²⁰⁵⁾	Leaves, pulp from the leaf, flowers, stem, fruit	
Primula/ Cowslip	<i>Primula officinalis L./ Primula veris L.</i>	Blood fluidizer, stimulates blood circulation, skin conditioner ⁽²⁰⁶⁾	Roots, aerial parts	
Provence Rose / Cabbage Rose	<i>Rosa centifolia L.</i>	Astringent, antiseptic, softening ⁽²⁰⁷⁾	Flowers	
Pumpkin	<i>Curcubita pepo L.</i>	Treatment of acne vulgaris and stubborn leg ulcers, applied as a poultice on sprains and pulled ligaments, used on pimples and blackheads, antiseborrhea agent ^(47, 208)	Seeds, leaves	
Quillaja/ Panama Bark	<i>Quillaja saponaria Molina</i>	Cleansing agent, emulsifying, detergent, skin conditioner ⁽²⁰⁹⁾	Bark	
Red Clover	<i>Trifolium pratense L.</i>	Skin conditioner, hair conditioner, a useful remedy in certain cases of eczema ⁽²¹⁰⁾ treatment of psoriasis and external sores ⁽⁴⁷⁾	Whole plant	
Red Poppy	<i>Papaver rhoeas L.</i>	Softening, decongestant, anti-wrinkle, soothing, emollient ⁽²⁰⁰⁾	Petals	
Red Raspberry	<i>Rubus idaeus L.</i>	Emollient, astringent, tonic, anti-inflammatory, antioxidant ^{(211, 212).}	Seeds, fruit, leaves, stem cells	

Rhatany	<i>Krameria triandra</i> L.	Astringent, antioxidative ⁽⁴⁹⁾	Roots	
Rice	<i>Oryza sativa</i> L.	Astringent, softening, toning ⁽²¹³⁾	Seeds	
Rose hip / Wild Rose	<i>Rosa canina</i> L.	Nutritive, moisturizing, cellular regenerating, healing, antioxidant, astringent, local tonic, anti-wrinkle ^(214, 215)	Seeds, leaves	
Rosemary	<i>Rosmarinus officinalis</i> Spenn.	Antioxidant, anti-dandruff, antiseptic, healing, stimulant, tonic, cleansing agent, astringent, antibacterial, anti-aging ⁽²¹⁶⁾	Leaves	
Sage	<i>Salvia officinalis</i> L.	Antiseptic, healing, astringent, antiperspirant, anti-inflammatory, anti-alopecic, foaming effect, stimulant, antisudorific, antifungal, tonic ⁽²¹⁷⁾	Leaves	
Saint John's Wort	<i>Hypericum perforatum</i> L.	Antiseptic, healing, astringent, soothing, co-assistant in cellulite cosmetics, antimicrobial, anti-inflammatory, protective, antiphlogistic, tonic, desensitizing, remedy for (wounds, abrasions, burns, and muscle pain) ⁽²¹⁸⁾	Flowers, Leaves, stem	
Sandalwood	<i>Santalum album</i> L.	Astringent, deodorant, disinfectant, stimulant and tonic, antiseptic, skin softener, removes skin blemishes, soothing cutaneous inflammation. ⁽³⁴⁾	Whole Plant	
Sarsaparilla	<i>Smilax regelii</i> Killip & C. V. Morton	Effective for (eczema, psoriasis, arthritis and rheumatism), antioxidant. ^(34, 218-221)	Roots	
Sesame	<i>Sesamum indicum</i> L.	Moisturizing, nutritive; emollient and softening ⁽⁵⁴⁾	Seeds	



Silver Birch / Birch	<i>Betula pendula</i> Roth / <i>Betula alba</i> L.	Antiseptic, anti-hair loss, anti-cellulite, bleaching effect, for large pores and greasy skin, stimulates of scalp, aids anti-acne effect ^(222, 223)	Leaves, bark
Silverweed	<i>Argentina anserina</i> (L.) Rydb., <i>Potentilla anserina</i> (L.), <i>P. yukonensis</i> (L.)	Tonic, astringent ^(200, 224)	Herbs
Silymarin/ Marian Thistle	<i>Silybum marianum</i> (L.) Gaertn.	Cell restorative, skin conditioner ^(225, 226)	Seeds
Soybean	<i>Glycine soja</i> Siebold & Zucc.	Purifying, remineralising, stimulant, antioxidant, revitalizing, nutritive, photo-protective ⁽²²⁷⁾	Beans
Star Anise	<i>Illicium verum</i> Hook. F.	Antiseptic, stimulant, masking, perfuming, antimicrobial, antibacterial, antioxidant ⁽²²⁸⁾	Fruit
Stinging Nettle	<i>Urtica dioica</i> L.	Tonic, astringent, aids anti-dandruff effect, decongestant, anti-hair loss, deodorant ⁽²²⁹⁾	Leaves
Strawberry	<i>Fragaria vesca</i> L.	Moisturizing, remineralising, lightening, astringent ⁽²³⁰⁾	Fruit
Stroblume/ Dwarf Everlast	<i>Helichrysum arenarium</i> (L.) Moench.	Cellular regenerating, antioxidant, skin-conditioning agent ^(231, 232)	Flowers
Sunflower	<i>Helianthus annuus</i> L.	Anti-inflammatory, antimicrobial, antioxidant, lowers transepidermal water loss and helps eliminate scaly lesions (Sunflower oil) ⁽²³³⁾ , relieves the pain of arthritis ⁽⁷⁷⁾ , and it is used on bruises ⁽²³⁴⁾	Seeds



Sweet Almond	<i>Prunus amygdalus</i> L. var. <i>amara</i> and <i>dulcis</i>	Softening, antioxidant, nutritive (235)	Seeds	
Sweet Clover	<i>Melilotus officinalis</i> (L.) Pall.	Antiseptic, blood fluidizer, astringent, masking, soothing (236, 237)	Aerial parts	
Sweet Orange	<i>Citrus sinensis</i> (L.) Osbeck.	Capillary protector, antibacterial, skin-conditioning agent (238, 239)	Fruit (pulp)	
Tea Tree	<i>Melaleuca alternifolia</i> (Maiden & Betche) Cheef	Antiseptic, antibacterial, anti-acne, anti-dandruff (240)	Leaves	
Thorny Pigweed /Spiny Amaranth	<i>Amaranthus spinosus</i> L., <i>Amaranthus viridis</i> L.	Treatment of eczema, psoriasis and rashes (241)	Leaves	
Thuja / Cedarwood	<i>Thuja occidentalis</i> L.	Treatment of psoriasis and rheumatism and warts, relief of muscular aches and pains, skin conditioner, can affect hair growth and helping to prevent alopecia (leaves) (47, 242, 243)	Leaves, roots, bark	
Thyme	<i>Thymus vulgaris</i> L.	Antiseptic, anti-seborrhoea, anti- dandruff, astringent, amelioration of skin irritation, sedative, fungistatic, antibacterial (244, 245)	Whole plant	
Tobacco	<i>Nicotiana quadrivalvis</i> Pursch.	Firming, astringent (246).	Leaves	
Tomato	<i>Solanum lycopersicum</i> L.	Remineralising, antioxidant, sebum balancer, anti-acne, astringent, refreshing, revitalizing, cellular balance, refreshing, detoxicating, UV-protection, anti-inflammatory (247)	Fruit	
Toothbrush Tree	<i>Salvadora persica</i> L.	Antiseptic, anti-inflammatory (248)	Bark	

Tormentil	<i>Tormentilla erecta</i> (L.) Raeusch.	Tonic, astringent, healing ⁽²⁴⁹⁾	Roots	
Turmeric	<i>Curcuma longa</i> L.	Antimicrobial, improve the skin tone and tan, anti-aging agent, used in the formulation of some sunscreens, perfuming and masking, it has skin-lightening properties ^(250, 251)	Rhizomes	
Valerian	<i>Valeriana officinalis</i> L.	Sedative, masking, skin conditioning, soothing ^(252, 253)	Roots	
Vanilla	<i>Vanilla planifolia</i> Jacks ex. Andrews	Moisturizing, energizing, aromatic stimulant ⁽²⁹⁾	Fruit	
Verbena	<i>Verbena officinalis</i> L>	Blood Circulation tonic and decongestive, arterial vasodilator ⁽²⁵⁴⁾	Herb, roots	
Wall Pellitory	<i>Parietaria officinalis</i> L.	Antiseptic, anti-seborrhoea ,anti-inflammatory ⁽²⁵⁵⁾	Leaves	
Walnut	<i>Juglans regia</i> L.	Antiseptic, anti-seborrhoea, anti-dandruff, purifying, antiperspirant, softening, antipruritic, cleansing, astringent ^(34, 256)	Walnut husk, leaves, fruit, bark	
Watercress / Nasturtium	<i>Nasturtium officinale</i> W. T. Aiton	Anti-hair loss, moisture stabilizer, refreshing, tonic, hair and scalp tonic, stimulates the vitality of hair roots, antiseborrhea, dandruff control ⁽²⁵⁷⁾	Whole plant	
Watermelon	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Emollient, protects skin cells (keratinocytes and fibroblasts) against daily stress induced by UV light and free radicals, reduces the break-down of DNA in human skin cells; reduces erythema after UV irradiation ^(258, 259)	Fruit, seeds,	

Wheat	<i>Triticum aestivum</i> L.	Regenerating, nutritive, softening, remineralising, emollient, antioxidant, tonic, clears up complexion, moisturizing ⁽²⁶⁰⁾	Seeds	
Willow	<i>Salix alba</i> L.	Decongestant, astringent, anti-inflammatory, antibacterial, anti-dandruff effect, antiphlogistic ⁽⁶¹⁾	Bark	
Witch-Hazel	<i>Hammamelis virginiana</i> L.	Vasoconstrictor ⁽²⁶¹⁾ , venous tonic, regulator and toning of blood, astringent [19], decongestant, recommended for certain skin conditions such as ulcers, itching eczema and bruises ⁽²⁶²⁾	Leaves, bark	
White Nettle	<i>Lamium album</i> L.	Tonic, astringent, vasoconstrictor, revitalizing, stimulates and regularizes the function of the sebaceous glands ^(263, 264)	Flowers	
Withania/ Ashwagandha/ Indian Ginseng	<i>Withania somnifera</i> (L.) Dunal	Anti-inflammatory, used for the management of swelling and ulcerations, calms and strengthens the nerves, skin conditioner, antimicrobial, antioxidant, emollient, improving the structure of the hair, in preparations against greasy hair and dandruff ^(34, 141)	Leaves, roots, flowers, fruits	
Wood Avens	<i>Geum urbanum</i> L.	Tonic, astringent, skin conditioning, skin protecting ⁽²⁶⁵⁾	Herbs, roots	
Woolly Burdock	<i>Arctium tomentosum</i> Mill., <i>A. leptophyllum</i> Klokov, <i>Lappa</i> <i>tomentosa</i> (Mill.) Lam	Anti-hairloss, anti-seborrhoea, anti-dandruff ⁽²⁶⁶⁾	Leaves	
Wormwood- Wermuth	<i>Artemisia absinthium</i> L.	Antibacterial, antifungal, antimicrobial, tonic, antiseptic ⁽²⁶⁵⁾	Flowers	
Yarrow/ Milfoil	<i>Achillea millefolium</i> L.	Astringent, decongestant, anti-inflammatory ⁽²⁶⁷⁾ healing, anti-blemishing, softening, venous tonic, Sedative, aids blood circulation, antiphlogistic, antibacterial ^(267, 268) , rejuvenating the appearance of skin surface by	Flowers, leaves	

		improving wrinkles and pores appearance and enhancing skin softness ⁽²⁶⁹⁾		
Yeast	<i>Saccharomyces cerevisiae</i> Meyen ex E. C. Hansen	Restoring cellular balance, skin conditioner ^(270, 271)	Yeast cells	
Zanthoxylum/ Prickly-Ash	<i>Zanthoxylum alatum</i> L.	Reducing cutaneous thermal sensitivity, soothing the scalp during hair dyeing treatments skin conditioner ⁽²⁷²⁾	Fruits, bark	

Results and Discussion

Since the very beginnings of human medicine, physicians and health practitioners have relied on chemical compounds produced by animals, plants and microorganisms, so-called natural products, to treat diseases and to overcome health problems. In today's drug development environment and in the commerce, their importance and role have been expanded to cosmetics, cosmeceuticals, nutraceuticals, dietary supplements, natural foods and insecticides because of their diverse biological activities. The link between beauty and cosmetic products dates back to ancient civilization. In fact, natural cosmetics are formulated, using different chemical and natural cosmetic ingredients to form the basic formula in which one or more plant ingredients are used to give various benefits to hair, skin, nail and dental products. Plants are used in many cosmetic, cosmeceutical and pharmaceutical applications, in form of their crude extracts or isolated active ingredients.

The wide-spread "back-to-nature" philosophy of the last century has influenced also the cosmetic industry, obvious in the more and more increasing number of the products beautifying the skin and addressing multiple skin conditions such as delaying ageing of the skin and improving/healing minor and major problems of the skin like dryness, pimples, acne, skin rash or eczema.²⁵¹ The awareness in the use of natural products is increasing due to their mildness and safety. Usually plant based cosmetics are made using plants, well known throughout history to be safe and side-effects free. In general, majority of plants used in cosmetics are rich in secondary metabolites with antioxidant and anti-inflammatory propensities which can alleviate skin problems like acne, dryness, pimples, rashes or skin itchiness. Based on FDA classification, labelled products that contain vegetable matter as ingredients are categorized as a drug (including biological drugs), a food (including a dietary supplement), a medical device or a cosmetic.²⁷³ Plants, edible or medicinal, do contain huge number of bioactive substances, vitamins, minerals and trace elements which are responsible for the multiple activities of the same plant species. These components are best described as "Drug-likeness" and "biological friendliness".

Nowadays, natural cosmetics are gaining popularity, as most people prefer natural products over chemicals in personal care products for skin enhancement, hair and body beauty and health with relatively less side-effects compared to the synthetic cosmetic ingredients. Vegetable oils for example are natural and free from all the harmful effects of mineral and synthetic emollients like silicone oils, which are toxic to the skin. Contrary, natural oils rich in Vitamin E and polyphenols are antioxidants that keep skin healthy and beautiful. Natural cosmetic ingredients are safe to use and are hypo-allergenic and tested and proven by scientists in many international cosmetic companies to be safe for use in their cosmetic formulations. Nowadays there are many natural based international cosmetic products in the market, and many publications recommend the use of cosmetic products which are made from natural ingredients.

Amro *et al.* (2013) studied the antimicrobial and anti-inflammatory activities of some Jordanian plant extracts as potential target for *Acne vulgaris*, a common youth skin condition all over the world.²⁷⁴ Issa *et al.*, studied the anti-tyrosinase activity of *Arbutus andrachne* extracts for their skin lightening activity.²⁷⁵ Chemical hair dyes are well known to damage the hair structure and to have irritant and toxic effect on both the skin and hair follicles. In contrast, natural hair dyes like Henna, Walnut leaves and Pomegranate peels extracts which were studied for their optimum dyeing variables for best hair colouring, all have hair conditioning properties without damaging the hair fiber,²⁷⁶ Therefore as shown in Table 1, edible plants such as asparagus have potential activities in regenerating, revitalizing, and in skin conditioning,²⁷⁷ or medicinal plants such as *Cinnamomum camphora* have antiseptic, anti-inflammatory properties in the treatment of acne, burns and ulcers.⁶²

Conclusion

Cosmetics alone are not satisfactory for skin care, and addition of some active ingredients are necessary to treat aged and damaged skin. Cosmetics and cosmeceuticals from different edible, aromatic plants prepared in the form of topical preparations as well as in oral dosage forms are useful for numerous skin problems and contribute to health and natural beauty. Due to their broad acceptance as safe, environmentally friendly and relatively cost-effective preparations they are a good alternative to their synthetic analogues. In some cases, synthetic cosmetic products may contain harmful chemicals that may cause severe damage to the human skin. This review focused on some common and existing natural herbs, fruits, vegetables which are highly potent for skin care purposes and have been used by both men and women worldwide. Products based on these plants can be randomly used in various skin care formulations in form of face creams, face washes, face packs, scrubs, body lotions, soaps, body oils, and cleansers.

Conflict of interest

The authors declare no conflict of interest.

Authors' Declaration

The authors hereby declare that the work presented in this article is original and that any liability for claims relating to the content of this article will be borne by them.

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