

botanicals for well-being

Various components of plants, or botanicals, have been recognised for over 6000 years for their medicinal, preservative, cleansing, fragrance and mood-enhancing properties. These components are being rediscovered as we endeavour to restore the balance of our stressful modern-day lifestyle. When people discover that these time-honoured traditional qualities can assist them in enjoying a higher level of vitality and well-being the more they shift towards a holistic lifestyle.

The benefits of the use of botanicals were utilised by the world's ancient civilisations. Early man was in tune with nature and lived in harmony with his surroundings. The ritual use of botanicals and aromatics was a vital part of their cultural tradition and was inextricably linked to therapeutic and religious roles. This type of practice is still in evidence today: for example, frankincense is burned during the Roman Catholic mass, and juniper is burned in the temples of Tibet for purification purposes. The traditional Indian medicine, Ayurveda, has been practised for over 3000 years and uses both fresh and dried herbs as important ingredients in its treatments. The Indian Vedic literature, which dates back over 4000 years, lists over 600 plant materials such as ginger, sandalwood, cinnamon and myrrh. These materials were not solely used as aromatics, however, but also for both liturgical and therapeutic purposes.

There is evidence to suggest that the ancient Chinese civilisations were practising herbal medicine at the same time as the Egyptians. One of the earliest records of this herbal tradition is documented in Shen Nung's herbal book which dates back 4700 years and lists over 300 plants. The ancient Chinese also engaged in the burning of aromatic plant materials such as ginger, camphor and opium in their religious ceremonies and also in their therapeutic applications: massage and acupuncture. The Egyptians were renowned for their herbal preparations, balms and ointments. The ancient Egyptian papyrus manuscripts record the use of various medicinal herbs. Aromatic gums and oils including myrrh and cedar were used extensively in their embalming processes.

The Greeks learned a great deal from the Egyptians and continued the practice of using herbal and aromatic materials for cosmetic and medical purposes. Dioscorides, the Greek physician, undertook a comprehensive

study of the sources and uses of plants and aromatic materials used by the Greeks and Romans. The Romans' extensive development of the use of botanicals and aromatic materials meant Rome became the 'bathing capital' of the world and the popularity of its public bath houses, where scented baths were followed by massage with aromatic oils, is legendary. The demise of the Roman Empire brought with it the decline of the widespread use of botanicals and aromatic materials. The exception was the monasteries, where the monks continued to grow plants in their herb gardens for the production of herbal teas, balms, infused oils, ointments and medicines throughout the Middle Ages.

The Aztecs also used a wealth of medicinal plants and aromatic materials for centuries as the conquistadors discovered when they invaded South America and found a vast range of plants in Montezuma's botanical gardens.

Although western society now tends to take a sceptical view of the use of plants and their powerful effects, there is scientific evidence to show that natural herbal medicines can be effective when used safely. The art and science of aroma crafting with natural materials, incorporating herbal teas, infusions and aromatic herbal materials into the soap-making process, can harness the pure components of the various plant parts and work with our senses to restore a sense of well-being.

The quality of any soap can be significantly improved by making infusions and teas from leaves, flowers or by making decoctions with seeds, roots and barks and adding them as part or all of the water content of the soap recipe.

The colour of many botanicals will fade over time because they are natural ingredients. It is best to use organically-grown botanicals and, if at all possible, grow your own.

herbs and spices

Herbs and spices have been with us since the beginning of time. They are used in almost everything we eat and they are relatively inexpensive these days. It is difficult to imagine that these fragrant bits of barks, leaves, flowers, seeds and roots were once so coveted and very expensive. For centuries wars were fought, the earth circled and new lands discovered all in the quest for spices.

Herbs and spices have always cast their spells on our imaginations. In soap making they stimulate our senses: our sight with their colours, our smell with their enticing fragrances and our touch with their textures. It is hard to imagine soothing soaps without them.

The art of using herbs and spices in soap making is learning how much to add for texture, colour and how to combine to enhance fragrance. More than one herb or spice can be used in any soap recipe. When you start to create your own recipes, only use a few. As you gain experience in working with herbs and spices, fragrance and texture will determine if others might be added as well.

Which botanicals you choose to add greatly depends on what you desire from the finished soap. Combine herbs and spices at early 'trace' and mix thoroughly to avoid lumps in the soap mixture. Herbs and spices can also be used as a decorative topping on your soap.

Become both an artist and a scientist as you learn to work with herbs and spices. Start with a limited range, learning to know their fragrances, colours and textures and how they can complement different designs, then progress from there.

fresh fruits and vegetables

Fresh fruits and vegetables can be liquidised and used as part or all of the water weight in the recipes; however, they tend to turn brown and reduce the life of the soap. It is a good idea to use soaps made with fruit and vegetable juices as quickly as possible.

botanicals for skin nourishment

For centuries botanicals have been used as a source of disease prevention, healing and general well-being. I have listed below a few botanicals that are of particular benefit for skin and hair care with a brief description of their uses and preparation, but if you are not familiar with plants and their uses it is best to consult a good book on the subject as some plants are poisonous or irritants, see *resources* page 159. With the exception of *Aloe vera* it is best to use these dried or in powdered form in your soap.

allspice (*Pimenta dioica*)

Allspice is one of Jamaica's main exports. The tree grows up to 20 metres tall with fragrant white flowers and aromatic small berries. It is used mainly as a spice but it has other medicinal uses.

preparation

Boil a handful of leaves in a litre of clean fresh water and allow it to cool. Use as the full water content of the soap recipe. Add a tablespoon of the powder to the soap mixture at 'trace' for added fragrance and texture.

aloe (*Aloe vera*)

This plant is used to treat a wide range of health problems. The gelatine inside the leaf is used to treat skin problems including sunburn, insect bites, eczema and acne and it is also used as a hair conditioner and beauty treatment.

preparation

Fillet a fresh leaf to remove the gelatine, it doesn't matter how big or small it is. Cut the leaf in half lengthwise and remove the translucent 'flesh', discarding the green skin, then add it to a litre of clean fresh water and blend in a blender for a few minutes. Strain and use the liquid as the full water content of the soap recipe.

citrus (*Citratu*s spp.)

This is one of nature's gifts for good health. The leaves and rind contain essential oils and are good to mix with other herbs such as ginger and lemongrass for a lovely fragrant tea for soaps.

preparation

Boil a handful of leaves and rind in a litre of clean fresh water and allow it to cool. Strain and use the liquid as all or part of the water content of the soap recipe. Add a tablespoon of powdered rind and leaves to the soap mixture at 'trace' for added fragrance and texture.

chamomile (*Anthemis nobilis* and *Matricaria chamomille*)

There are two types of chamomile – Roman and German. They are difficult to distinguish, however the German chamomile is considered to be more medicinal and is one of the most popular herbal teas. It adds a lovely fragrance to soaps.

preparation

Make an infusion by steeping 3 tablespoons of dried herb in a litre of hot boiling water and then leave it to cool. Strain and use the liquid as the full water content of the soap recipe. Add 2 tablespoons of the powdered herb to the soap mixture at 'trace' for added fragrance and texture.

comfrey (*Symphytum officinale*)

The leaf and root of comfrey have been used medicinally for centuries. It is known for its healing and emollient properties; it is helpful in treating bites, cut, stings and skin infections.

preparation

Boil approximately 100g of fresh, peeled root or dried root and leaves in 500ml of clean fresh water for fifteen minutes. Leave it to cool. Strain and use the liquid as all or part of the water content of the soap recipe. Add 2 tablespoons of dried powdered root at 'trace' for added colour and texture.

elderberry (*Sambucus nigra*)

Elderberry is a valuable home-garden medicinal plant that is easy to grow although it grows wild throughout the UK. An infusion of the leaves can be used as a hair wash. A decoction of the leaves, berries, bark or root is used as a wash for external skin problems.

preparation

Boil a handful of root, bark, leaves or berries in a litre of fresh clean water. Leave it to cool. Strain and use the liquid as the full water content of the soap recipe.

frankincense (*Boswellia thurifera*)

Frankincense has a long history of use in perfumery and cosmetics and is held in high esteem for its purifying properties. It has a rejuvenating effect on the skin and is commonly used in anti-wrinkle skin care products. It helps in the treatment of wounds and sores.

preparation

It is best to use in its powdered form. Add a tablespoon of powdered gum to the soap mixture at 'trace' for texture and fragrance fixing.

ginger (*Zingiber officinale*)

This is a succulent herbaceous plant, which grows from a rhizome with a pungent taste. Ginger has been used for centuries as a spice and medicine. It is a cleansing and tonic herb for the whole body. It adds a lovely fragrance to soap.

preparation

Boil 100g of fresh ginger root in 2 litres of fresh clean water for 20 minutes. Leave it to cool. Strain and use as the full water content of the soap recipe. Add a tablespoon of powdered ginger to the soap mixture at 'trace' for added colour and texture.

juniper berries (*Juniperus communis*)

Juniper berries are a great way to add juniper scent to your soap without the use of the essential oil.

preparation

Boil 30g of ripe berries in 500ml of clean fresh water for 20 minutes and leave the mixture to cool. Strain and use the liquid as part or all of the water content of the recipe.

Add a tablespoon of powdered berries to the soap mixture at 'trace' for added colour, fragrance and texture.

lemongrass (*Cymbopogon citratus*)

This is a favourite medicinal plant seen growing in gardens and on patios in the tropics. It has many medicinal uses as well as being an insect repellent.

preparation

Make a decoction by boiling the stem, root and leaves in clean fresh water. Allow the liquid to cool. Strain and use as the full water content of the soap recipe.

Add a tablespoon of the powdered leaves to the soap mixture at 'trace' for added fragrance and texture.

marigold (*Calendula officinalis*)

Marigold is an antiseptic useful in combating a wide range of bacterial and fungal infections and relieving minor burns and skin disorders. The dried petals add lasting colour to soap.

preparation

Infuse a cup (240ml) of dried flower petals in 8oz (227g) of olive oil for a week then strain off the oil and use it as a super fatting oil.

myrrh (*Commiphora myrrha*)

Myrrh has a long history of use in perfumery and cosmetics. It is a powerful antiseptic with strong cleansing and healing properties. The gum resin and oil are the components mostly used.

preparation

It is best to use the powdered form. Add a tablespoon of powdered gum to the soap mixture at 'trace' for texture and fragrance fixing.

nettle leaves (*Urtica dioica*)

This is considered a noxious weed for the rash it gives when handled. The plant is fortified with many minerals and vitamins that can be used to replenish deficiencies in the body that often cause health problems. It is said to be a good hair tonic.

preparation

Use either fresh or dried plant material. Make a tea from the plant. Strain and use as the full or a part of the water content of the soap recipe.

Add the powdered dried leaves at 'trace' to add texture to the soap.

rosemary (*Rosmarinus officinalis*)

Rosemary is a favourite garden plant. An infusion is often used as a hair rinse to improve the health of the scalp and hair.

preparation

Add a handful of fresh leaves to a litre of fresh boiling water and allow it to cool. Strain and use the liquid as the full water content of the recipe.

Add a tablespoon of powdered leaves to the soap mixture at 'trace' for added fragrance and texture.

other botanicals for skin nourishment

flours

Flours and starches can be added to soap to add texture and fix scents in soaps. These include cassava, cornmeal, linseed meal, oatmeal, plantain and wheatgerm to name a few. It is best to add these ingredients after 'trace' when using the cold processed method and after cooking the soap when using the hot process method.

honey

Honey can be added to soap but can be a little tricky to handle. If you want a very aromatic honey scent then it is best to source the honey directly from a beekeeper if at all possible. Honey should be added sparingly to a maximum of no more than 5 per cent of the total weight of the base oils, as it causes the soap mixture to overheat, possibly leading to boiling over and scorching.

For the cold process method it is best to mix the honey with the full water content of the recipe and use the honey water mixture with the caustic soda to make the caustic solution.

When using the hot process method it is best to add the honey (diluted in a little water) after cooking the soap mixture.

milk

All types of milk can be used including vegetable and nut milks such as almond, coconut and soya. Milk from an animal source behaves in a peculiar fashion due to its fat and sugar contents; these react with the caustic solution and tend to change the colour of the soap mixture to anything from yellow through to brown while giving off an ammonia-like smell. Having said that, with a little practice you can master the art of adding milk to the soap mixture and there are many ways of doing this.

Milk can be used for the full water content of the soap recipe. If you are using the cold process method it is best to freeze the milk and allow it to thaw so that there are still ice particles in the milk before slowly adding the caustic soda. Stir the mixture well to ensure the milk fats do not react too fast with the caustic soda – if they do, lumps will form in the mixture.

Using the milk while it is defrosting will prevent burning the milk and the ammonia smell; the milky caustic solution may change to a pale yellow colour but it should not be dark orange or brown as these colours indicate burning milk – it will also smell offensive.

When using the hot process method it is best to add the milk after cooking the soap mixture.

seaweeds and mosses

All types of seaweed can be added, including kelp and spirulina, which lends a green colour to the soap, while mosses lend browns. It is best to use the powdered ingredients and to use them sparingly as they tend to give an unpleasant fishy smell. This smell can be masked by using eucalyptus, lemongrass, rosemary or vetiver essential oils or any other strong oils.

botanicals as natural plant dyes for soaps

Nature abounds in botanicals that can be used as dyes and people have been using these for centuries.

alkanet (*Alkanna tinctoria*)

This gives soaps a red/purple to blue/purple colour depending on the pH of the soap. Yellow oils will mute the final colour.

preparation

Infuse a cup (240ml) of root, which is bought dried and ready for use, in oil for a few days and use according to your preference. Strain the oil before use.

annatto (*Bixa orellana*)

This is used mainly as a dye colourant and offers a natural yellow/orange to soaps.

preparation

Infuse a cup (240ml) of annatto seed in a litre of oil and use as required. Use it by replacing a portion of the oil gram for gram; the intensity of the yellow/orange is dependent on the amount added. Powdered annatto may be added at 'trace'. The yellow will fade over time when exposed to light.

carrots (*Daucus carota*)

Carrots have strong antiseptic qualities. All parts of the plant can be used in soap making. The fresh juice and dried powdered root impart a rich orange colour to soap but tend to fade over time when exposed to light.

preparation

Juice 500g of fresh carrots and use as the full water content of the soap recipe. Add 2 tablespoons of powdered carrot to the soap mixture at 'trace' for added colour and texture.

calendula (marigold) petals (*Calendula officinalis*)

This is a well known garden flower used in cookery and medicine. The dried petals stand up to the rigours of the soap mixture and add a yellow colour to soaps.

preparation

Add 2 tablespoons of powdered petals to the soap mixture at 'trace' to add colour and texture

cayenne pepper (*Capsicum spp.*)

This is commonly thought of as a condiment but there are some interesting medicinal uses for this plant. The hot aromatic oil is a strong antiseptic and antibacterial agent that can be used for healing skin infections.

preparation

Add a tablespoon of powder to the soap mixture for a salmon-pink colour.

chocolate (*Theobroma cacao*)

The word cocoa means 'food of the gods', so called from the goodness of its seeds. Mexicans named the pounded seeds 'chocolate'. It imparts a rich brown colour to soaps and is good to use for the swirling technique.

preparation

Add a tablespoon of powdered beans to warm oils for a solid brown colour or at 'trace' to the soap mixture.

cinnamon (*Cinnamomum zeylanicum*)

The tree grows to 15m tall with very aromatic bark and leaves. Although it is commonly known as a spice it also has some useful medicinal purposes, particularly for healing skin infections.

preparation

Boil 30g of bark in a litre of clean fresh water over a low heat for an hour. Leave to cool and then strain it. Depending on the oils used cinnamon gives a beautiful, fragrant brick-red to beige colour to the soap. Store the tea in the fridge if you are not using it on the same day it was made.

Grind the dried leaves and bark to a powder to add colour, texture and fragrance. Use in small amounts.

It is important to note that cinnamon tea, dried bark and leaves and essential oil tend to accelerate 'trace', which means you need to work very quickly with these materials.

coffee (*Coffea arabica*)

This is known not only as a drink but also as a powerful deodorant to get rid of unpleasant odours such as garlic, onion and motor oil. In soaps it is best to use fresh ground coffee beans.

preparation

Add 2 tablespoons of fresh powdered bean at 'trace' for colour and texture.

henna (*Lawsonia inermis*)

Henna – also called jamaica mignonette – is used both internally and locally for a number of ailments including infections of the skin such as rashes and eczema. The powdered leaves are used for dyeing the hair and the nails a reddish-yellow colour. It offers soap a sage green/brown colour.

preparation

Add a tablespoon of powdered henna to the soap mixture at 'trace' for colour and texture.

indigo (*Indigofera tinctoria*)

This is one of the oldest known natural dyes. It is well known as a source of blue dye and India exports millions of pounds worth of it annually.

preparation

Boil 100g of fresh leaves and leave to ferment for twenty-four hours. Strain and use the liquid as the full water content of the soap recipe.

madder (*Rubia tinctoria*)

This is used mainly as a colouring material and produces a rose colour in water.

preparation

Boil 30g of dried root in 500ml of clean fresh water for half an hour and leave to cool. Strain and use the liquid as the full water content of the soap recipe. Add 2 tablespoons of powdered root at 'trace' for colour and texture.

paprika (*Capsicum annum*)

This is used mainly as a spice and offers a peach colour with red speckles to soaps.

preparation

Add 2 tablespoons of powdered paprika to the soap mixture at 'trace' for colour and texture.

spinach (*Spinacia Oleracea*)

This is an annual plant, long cultivated for the sake of its succulent leaves and nutritional value. It is said to be more nourishing than other green vegetables. It is a valuable part of the diet for anaemia, not only on account of its iron, but also for its chlorophyll. In soaps it gives a lovely green colour but it fades over time.

preparation

Juice fresh leaves and add as part or the full water content of the soap recipe. Add 3 tablespoons of dried powdered leaves to soap mixture at 'trace'.

tamarind (*Tamarindus officinalis*)

Tamarinds are used mainly as an ingredient in curries and chutneys; however if the leaves are infused they give a yellow dye.

preparation

Boil 50g of leaves in 500ml of clean fresh water for ten minutes and allow the mixture to cool. Strain and use the liquid as the full water content of the soap mixture.

tea (*Camellia thea*)

Tea is not only renowned as a refreshing drink but also for its antibacterial and anti-oxidising properties. It adds a tan-to-brown colour to soaps.

preparation

Brew 10g of dried tea leaves with a litre of clean fresh boiling water and allow it to cool. Strain and use the liquid as the full water content of the soap recipe. Add a tablespoon of dried powdered tea leaves to the soap mixture at 'trace' for a brown colour and enhanced texture.

turmeric (*Curcuma longa*)

Turmeric has a rich cultural history of use as a spice and medicine. Since the recent discovery of the antioxidant phenolic compounds found in turmeric and with that its health protecting properties against free radicals, it is currently considered to be more significant than just a spice or yellow dye.

preparation

Add a tablespoon of the powdered root to the soap mixture at 'trace' for an earthy yellow colour.

reliable natural plant dyes at a glance

ingredient material	colour
alkanet root	blue to grey
annatto seed	yellow
calendula petals	yellow
chocolate	brown
cinnamon	beige
coffee	brown
gum arabic	beige to brown
indigo	blue
madder root	brick red
paprika	salmon pink
tea	beige to dark brown
turmeric	yellow

other soap colourants

natural clays

Clays can be used to add natural colours to soap. It is important to note that coloured clays are sometimes sold as a blend of oxides or ultramarine and kaolin and so it is best to get full details of the clay from the supplier before purchasing.

mineral pigments and dyes

These are synthetic materials. If you are drawn to the brilliant colours of the rainbow and everything in between then these types of cosmetic grade colourings would be the best port of call for you.

Oxides and ultramarines are suited for marbling and swirling techniques; they stand up very well in the caustic mixture and retain their colours over time.

Cosmetic grade ultramarines are more stable than oxides which sometimes bleed and leave stains, particularly when used in large amounts. Two offenders that spring to mind are red and black oxides as they tend to bleed more than others and should be measured carefully.

Food grade dyes are not suitable for cold processed soap as their colours tend to mutate and end up looking totally different to the original colour, although they fare better in the very popular, commercially produced melt-and-pour bases.

Cosmetic grade dyes that do not react to the caustic soap mixture offer very good bright colours but they tend to fade over time and can leave permanent stains if used in large amounts.

When choosing colours it is best to ascertain from your supplier their suitability for cold or hot process soap making.