

# SPEC

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SOAP, PERFUMERY  
& COSMETICS

## INGREDIENTS

Stem cells, pomegranate  
& glycolic acid

## IN-COSMETICS PREVIEW

# Sun care

Formulating notes & performance benefits

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### Rose geranium oil holds a steadfast

place in the fragrance and personal care industry. The beautiful rosy scent that differentiates this species from its cousins makes rose geranium the most highly sought after of the pelargonium genus.

The use of rose geranium is documented by the ancient Egyptians, who believed in both the sensory and therapeutic values of essential oils, particularly from flowers. Its uplifting scent was used to relieve stress and tension, balance the mood, aid menopausal problems and heal the skin. Modern aromatherapy methods continue this practice today.

The first species of pelargonium are believed to have arrived in Europe from their native South Africa at the turn of the 17th century. During the early 1800s, French researchers sought to develop new rose scented oils through hybridisation of various species, including *Pelargonium graveolens*, *Pelargonium radens* and *Pelargonium capitatum*. The resulting hybrids were sent to European colonies for cultivation, with each region's crop developing its own organoleptic characteristics and chemical composition. For example, South African rose geranium contains higher levels of guaiaadiene than other regional varieties. The pelargonium cultivar used in the southern region of Africa is genetically the same as the cultivar on the Indian Ocean island of La Réunion, with any differences in chemical characteristics being attributed to variations in growing conditions. Oil from La Réunion is often referred to as Bourbon rose geranium oil and has historically been regarded as the best variety in terms of quality.

A hairy perennial shrub, the plant thrives in dry, well drained soil and requires little rain. The plant grows up to one metre in height, bearing pink-white flowers and a waxy leaf. The entire process – from planting a seedling to harvesting the crop – lasts between three and four months. Hence farming of rose geranium is labour intensive



## Robin Learmonth outlines rose geranium's history and usage, and examines how selecting organic and ethically traded rose geranium can enhance the commercial appeal of a product in fragrance and personal care

and, at peak times, requires the cooperation of a large team.

### CLASSIC APPEAL

Distillation of the rose geranium leaves, stalks and flowers produces a dark green, oily liquid. The principal constituents responsible for the oil's characteristics include citronellol, geraniol, linalool, iso-menthone, citronellyl formate, geranyl formate and guaiaadieneger. Table 1 illustrates the particular characteristics of regional varieties of rose geranium.

A versatile ingredient, rose geranium combines well with other oils. Its sweet rosy aroma carries hints of mint, which are complemented most notably by basil, bergamot, carrot seed, cedar wood, citronella, clary sage, grapefruit, lavender, lime, neroli, orange and rosemary.

As well as its alluring scent, rose geranium is recognised for its important therapeutic benefits. These include astringent, antiseptic, tonic and anti-infectious properties.<sup>[1]</sup> On the

skin in particular, rose geranium oil is known to balance sebum production and boost skin elasticity. Further benefits include the promotion of healing and a calming effect on irritated skin. It can also offer a boost to the lymphatic system, helping clear excess water and improve circulation making it a common choice for anti-cellulite products.

These benefits make rose geranium a natural choice for an array of cosmetic and personal care products, from luxury bath essences and soaps to body lotions, lip balms, candles and eaux de toilette. It is also suitable for deodorants and shampoos.

### GREEN FINGERS

However, with supermarket shelves bursting with numerous cosmetic options, an alluring fragrance and therapeutic benefits alone will not always drive the ultimate purchasing decision. Demonstrating further added value is essential. Products with organic, fairtrade, sustainable and eco-friendly labels are sure to stand out, as are those boasting stamps of approval from organisations such as The Soil Association and the USDA. In fact, in the US alone Mintel forecasts an overall 19% growth for green products by 2013. Markets including green personal care are expected to perform especially well.<sup>[2]</sup>

### CROP CULTIVATION

Sourcing ingredients from an internationally renowned supplier of organic and fairtrade rose geranium oil like Earthoil enables cosmetic and personal care manufacturers to create that point of differentiation and benefit from a proven marketing platform, plus NOP and EEC certification.

Earthoil is a leading supplier of organic

**TABLE 1: COMPOSITION OF VARIETIES OF ROSE GERANIUM**

Compound	Egyptian	Chinese	Réunion	South Africa
Linalool	5.5	4.1	9.9	4.5
Rose oxide (cis)	1.1	1.7	0.6	1.5
Rose oxide (trans)	0.5	0.7	0.3	0.7
Iso-menthone	5.3	5.2	9.5	5.5
Citronellol	30.8	37.8	20.6	23.0
Geraniol	21.2	12.2	18.1	16.0
Citronellyl formate	5.4	9.3	7.4	10.5
Geranyl formate	3.2	2.1	5.6	6.0
Guaia-6,9-diene	0.5	5.4	5.8	7.0
10-Epi-y-eudesmol	4.4	-	-	-

Source: Earthoil Plantations



rose geranium oil and is currently involved in a number of community-based organic rose geranium projects in South Africa. The company works in collaboration with various local public and private sector organisations to support small-scale farmers throughout the country. Qualified agronomists and field officers offer advice and training to local growers who are keen to improve their crop and increase yields.

Through investment in horticultural studies and various trials, Earthoil has managed to optimise growing conditions and agronomic practices to achieve the best possible oil yields. Earthoil's crop will therefore be able to sustain the demands of growing industries, such as personal care and fragrance.

The company's major commercial rose geranium production began when a 250 acre farm was located in Rustenburg, 60 miles west of Pretoria. Here, 145 acres of rose geranium were planted using plant material genetically identical to the Bourbon rose geranium plant material from La Réunion. Now producing a strong, healthy harvest the farm has 30 full-time employees with an additional 30 at peak times during the year.

This gives families and communities involved in these projects income security plus skills and training, which can be passed on to empower future generations. This collaboration also opens avenues to international trade, providing a direct route to market for growers' produce. **cb**

**Earthoil's rose geranium projects in South Africa offer those communities involved income security in addition to skills and training**

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