

ESSENTIAL OILS AND OLEORESINS MARKET INSIDER



Coiled tube condenser.

July 2015 Report

Market Insider

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News for Essential Oils

IFEAT Sri Lanka conference bookings filling fast

IFEAT expect that there will be over 1,000 delegates at the meeting (27 September to 1 October) and that they may well have to close registration early – before 10 September. If you want to go, and have not booked, do it sooner rather than later to avoid disappointment. During the conference, Wednesday is the day for field trips, and workshops, and the organisers have laid on an excellent programme. Options are: (i) a field trip to Dassanayake Walauwa cinnamon plantation followed by a visit to HDDES Extracts Pvt, a leader in production of organic and conventional essential oils, oleoresins and herbal extracts; or (ii) a field trip to Link Natural Products Pvt, who produce ayurvedic pharmaceutical and personal care products; or (iii) a medicinal plant workshop, where medicinal and essential oil plant development with regard to sustainability, information systems, standardisation, safety and efficacy evaluation, regulatory aspects and functional claims will be discussed; or (iv) a perfumery workshop – an interactive fine fragrance workshop exploring perfumery trends in terms of ingredients strategy and multi-sensory appeal, of interest to those who want to know more about what the perfume brands are looking for.

The overall theme of the conference is “Asia: Source of essential oils and medicinal plants.” There are 2 sessions that could be of particular interest to many potential participants from small production operations at origin: “Medicinal Plants in Healthcare, Food and Cosmetics” and “Social Achievements in the F&F industry”.

Source: IFEAT

Frutarom acquisitions continue

Frutarom, the flavors and fine ingredients company has acquired the US-based specialist niche flavors company Foote & Jenks for about US\$4 million. Foote & Jenks (www.footeandjenks.com) develops, manufactures, and markets flavor extracts for the pharmaceutical, food, and beverages industries, with a particular specialization in flavours for pharmaceutical products. Frutarom continues to make acquisitions, and this is the 8th acquisition it has made this year. Frutarom expects sales to climb to US\$1 billion.

Ori Yehudai, President and CEO of Frutarom Group, said: "This is an acquisition of growing and profitable flavor activity, Frutarom's most profitable core field. A major part of F&J sales is to customers in the pharma industry who demand advanced solutions for masking the aftertaste of active ingredients contained in their products, as well as high quality, and conformance with strict regulatory requirements. Frutarom already operates in this area and views it as an attractive field of endeavor for itself which also provides a good fit with the activity of its specialty fine ingredients division that includes activity in active ingredients with added health value for the pharma and nutraceutical industries. We see significant synergies between F&J activity and Frutarom's flavors activity in the US, and we intend to leverage the cross-selling possibilities that this acquisition generates both by expanding the product portfolio and by broadening the customer base."

Source: Frutarom

Major change in retail brand ownership in fragrance sector

COTY Inc. has announced agreement to merge The Procter & Gamble Company's (P&G) fine fragrance, color cosmetics, and hair color businesses into COTY. The transaction is based on a proposal by COTY valuing the P&G Beauty Business at approximately US\$12.5 billion at the time the proposal was made.

The transaction will instantly create one of the world's largest beauty companies, with pro forma combined annual revenues of more than US\$10 billion based on fiscal year 2014 performance, strengthening its leadership position in the US\$300 billion global beauty industry. Together with P&G's businesses, COTY is expected to become the global leader in fragrances and to significantly enhance its position in color cosmetics. P&G's businesses include leading fragrance brands such as Hugo Boss, Dolce & Gabbana and Gucci and the color cosmetics brands COVERGIRL and Max Factor. The transaction also gives COTY an attractive new category in the beauty industry through the addition of P&G's hair color business, led by Wella and Clairol. The transaction will significantly expand COTY's geographical footprint, providing scale in large beauty markets like Brazil and Japan, while also increasing critical mass in important geographies in which COTY currently operates, such as in North America, Europe, the Middle East and Asia.

Bart Becht, Chairman and Interim CEO of COTY, commented: "With the Beauty talent from both sides and the fantastic portfolio of world-class brands, we have the opportunity to create a highly focused, pure-play leader and challenger in Beauty which can deliver exciting opportunities and benefits for employees, licensors, customers and suppliers. There is no question that with the broader offering of leading brands, strong brand support, the development of a better pipeline of innovative products and the much broader geographical reach and scale, COTY will strengthen its competitive position and ability to capitalize on revenue and profit growth opportunities over time. Additionally, our combined operational and financial platform will allow us to drive meaningful EPS accretion and generate substantial incremental free cash flow over the long term, giving us a strong balance sheet with a conservative leverage profile. All of this has the potential to lead to accelerated value creation for COTY shareholders."

Source: Coty

UEBT supports Sustainable Cosmetics Summits

The Union for Ethical BioTrade (UEBT) is supporting the Sustainable Cosmetics Summits in Sao Paulo on 18-20th September and in Paris on 21-23rd October. Organised by Organic Monitor, the Sustainable Cosmetics Summit is a series of international summits that focuses on the leading issues the beauty industry faces concerning sustainability and ecological products. The aim of the summit is to encourage sustainability in the beauty industry by bringing together key stake-holders and debate these major issues in a high-level forum. The summit is now hosted in Latin America, North America, Asia-Pacific, as well as in Europe.

The European edition of the Sustainable Cosmetics Summit will cover major advances in green materials, sustainability metrics, ethical labels, and digital marketing. The summit comprises a 2-day conference programme, preceded by workshops on environmental impacts and green emulsifiers & surfactants. Taking place in Paris on 21-23 October, the summit will cover the practical use of sustainability metrics: how can they help brands on the green journey? An update is given on the growing array of green cosmetic ingredients, whilst another session looks the future direction of ethical labels: will proliferation continue or is some degree of harmonisation likely? The disruptive influence of mobile technology on marketing is also discussed in the context of sustainability. The Sustainable Cleaning Products will be hosted alongside the summit.

The focal themes of the 4th Latin American edition of the Sustainable Cosmetics Summit are green formulations, marketing developments, and food ingredients. The summit will take place in São Paulo on 28-30th September. Like previous editions, the summit will bring together key organizations involved in the sustainable development of the regional beauty industry. With a growing number of cosmetic brands looking to the kitchen for new materials, food ingredients is a major focus. What product innovations are occurring with food ingredients? What ingredients are associated with functional actives? How do you overcome the technical issues of using agricultural materials in cosmetic formulations? Such questions will be addressed in a high-level forum. Since 2009, the Sustainable Cosmetics Summit has been covering major developments in sustainability in the cosmetics & personal care industry.

Organized by Organic Monitor, the aim of the summit is to encourage sustainability in the beauty industry by bringing together key stakeholders and debate major industry issues in a high-level forum.

Source: UEBT & Sustainable Cosmetics Summit

Clove leaf oil prices expected to remain firm

Clove leaf oil prices expected to remain firm while the spice market for cloves shows no clear direction on price, and sales of the spice remain light.

Coriander seed oil prices remain very high

Coriander seed oil prices continue to remain at record high, due to the continuing turmoil in Ukraine, an important center for seed production. With no sign of an end to the troubles it is expected that prices for coriander oil will remain high.

Givaudan 2015 half year results shows sales increase

Givaudan Group sales increased by 1.3% in the first 6 months of 2015. Fragrance sales were flat on a like-for-like basis, while flavour sales rose 2.6% on a like-for-like basis.

Source: Givaudan

Ginkgo Bioworks raises U\$45 million for expansion

Ginkgo Bioworks is a biotechnology company (a Harvard University spin-out) genetically engineering yeasts and other organisms to produce compounds for the flavours and fragrances industry. It has just raised US\$45 million in an over-subscribed funding round. The new funds will be used to expand operations into new categories such as pharmaceuticals, cosmetics and probiotics.

It is reported that Ginkgo Bioworks took the investment to help it move beyond its original production of synthetic fragrances to cosmetics, nutritional products and health and consumer products. The move puts Ginkgo Bioworks in direct competition with Silicon Valley-based synthetic biology start-up Zymergen. Both Zymergen and Ginkgo Bioworks raised a sizeable amount this year to produce myriad consumer goods using automated machinery – Zymergen recently closed a US\$44 million Series A round. Ginkgo Bioworks is currently under contract with 10 different corporate customers to produce 20 designer organisms for various products. Customers include many Fortune 500 companies, according to the start-up.

Source: Techcrunch

Product and Market Notes

Geranium oil

Geranium oil¹

Geranium oil of commerce is the essential oil distilled from the leaves of a number of species, varieties and strains of *Pelargonium*. The plant is short term perennial shrub. *Pelargoniums* hybridize so readily that it is not useful to talk of particular species. However, an important consequence of this is that planting is always from cuttings to maintain the characteristics of the planting material.

Geranium oil is widely used as an important floral component in fragrances, cosmetics and household items where fragrance is needed. It is a major component in the soap industry, and is also used in pharmacy, herbal medicine and aromatherapy. There are many clinical, scientific publications which document its antiseptic properties and beneficial influence on human wellbeing and psychological condition. Citronellol and geraniol *ex-geranium* are the major constituents of Rhodinol, an important component of the fine fragrance industry.

Pelargoniums are native to South Africa, but were brought to Europe in the 17th century, and the first cultivation for distillation of the essential oil was in France. The plant was subsequently re-exported to the French colonies in African and elsewhere, and then more widely. At some stage a very wide range of countries have established commercial production of geranium oil – France, Spain and Italy; Algeria, Morocco and Egypt in North Africa; Congo in Central Africa and Kenya in East Africa; Madagascar and Réunion in the Indian Ocean; Russia (the Black Sea coast and Crimea); India; and China. Kenya also developed commercial production, but of a different type (termed Oil of Mawah), from either a hybrid of *P. graveolens* x *P. radula*, or a variety of *P. radula* (*P. radula* var. *quercifolium*).

However, despite early commercial production being dominated by Réunion and Algeria, currently production is dominated by Egypt and China, with minor quantities available from a range of East and Southern African origins. Combined annual production for Egypt and China is currently estimated in the range 280 to 350 tonnes, against a world total in the range 350 to 400 tonnes. Over the past 5 to 6 years Egypt has substantially increased its production into the range 200 to 230 tonnes, whereas China has remained in the range 80 to 100 tonnes, India 25 to 35 tonnes, Madagascar around 5 tonnes, South African 5 to 10 tonnes, and other Central and Southern African origins providing another 10 tonnes. Morocco, Congo, Ethiopia, Uganda, Kenya have made recent attempts to re-establish production. Production in China was significantly higher in the early 2000's, in the range 80 to 230 tonnes, but production has decreased from these peaks as growers have changed to cultivation of other, more remunerative horticultural crops, and geranium has been pushed out to less developed areas. In both Egypt and China, significant commercial production of geranium oil did not start until 1970.

Geranium oil is complex in composition, and differs (is characteristic) by origin. The primary characteristics of the two major sources on the market, Egyptian and Chinese are:

	Chinese type	Egyptian type
Citronellol	32-43%	25-36%
Geraniol	5-12%	10-18%
6,9 – Guaiadiene	3-7%	</= 0.5%
10 – Epi λ Eudesmol	not detectable	3-6%

Guenther (The Essential Oils, Vol IV; pp 671-737) provides extensive analytical data that characterizes the different origins that have grown geranium in the past. Geranium is therefore an oil that is difficult to copy with synthetic materials due to its complex composition, but also one where origin can be identified from its composition and is also difficult to disguise – with the result that oils can be priced by origin (quality).

¹ The IFEAT socio-economic study of geranium published in IFEAT World July 2015 was used as the source of much of the production information in this note.

In Egypt, production is concentrated in the Beni-Suef and Fayoum in Upper Egypt (around 70 miles south of Cairo). The crop is planted in October/ November, and a single harvest of the whole aerial part is made in June, when the plant is blossoming. The plant is therefore treated as an annual crop. In other areas the crop is maintained for 2 to 3 years, and 2 harvests are taken each year, in June/July and October/November, and at each harvest only the aerial part above 3 green budding eyes on the central stem is taken to allow regeneration after harvest.

It is estimated that the current crop is around 3,500 ha. The average oil yield is around 0.15% to 0.2%, giving production of around 60-70 kg/ha geranium oil. The oil is obtained by steam distillation of the leaves. Harvested material is generally left to wilt for 1-2 days before distillation. It is estimated that around 8,000 families are involved in the production of geranium oil; and if all others involved in the whole supply chain are included (middlemen, factory workers etc), together with dependents, some 30,000 to 35,000 people are dependent on the trade.

In addition to the essential oil, small quantities of the concrete and absolute are produced. Around 500 kgs leaf material provides around 1 kg of concrete (0.2% yield). 1 kg of concrete provides around 0.6 to 0.7kg of absolute. The absolute is used in formulations where solubility in alcohol is required.

In China, production is concentrated in Yunnan Province. Initial production was centered around Kunming City, but current production is centered in Binchuan District although as farmers have gained access to a wider range of crops so the geranium cultivation has been pushed out into less developed areas in Yunnan. However, Binchuan still remains the most important center for collection. In the past, 2 harvests were taken annually, but the current practice is to harvest every month (increasing to every 2 weeks at the height of the season between March and October). Typically the plants are kept for 5 years before replanting, but in some areas replanting is done after 3 years where plant losses are high. Planting density is high, around 120,000/ha (approx. 30 cms x 30 cms).

It is estimated that the total planted crop area is around 1,000 ha. Oil yield is in the range 0.2 to 0.25%, with average production of geranium oil in the range 75-105 kg/ha. It is estimated that 5,000 to 7,000 families are involved in the production of geranium oil, rising to 25,000 to 30,000 when all people involved in the whole supply chain, and dependents are included.

GERANIUM CULTIVATION FOR OIL PRODUCTION

The following is a generalized protocol for cultivation of geranium, and should be adapted for local conditions.

Climate and Soils

The crop is not tolerant to frost. A frost free site is required, and if severe chilling is expected from winter winds, windbreaks should be established.

The crop is tolerant of a wide range of soil types, but waterlogging must not occur. Good drainage reduces the risk of fungal root infections - one of the few potential pest problems of the crop. The crop can be planted on steep slopes but precautions must be taken against erosion - after each cutting (harvest) the crop cover is removed and the soil will be exposed. Heavy rains will result in severe erosion. In such situations the crop should be planted in rows along the contours, and live barriers - i.e. lines of grass, a glyricidia or leucaena hedge etc. - should also be planted along the contours, with one hedge or grass line for every 3 to 4 meters fall. Citronella grass or vetiver make ideal barriers, as they do not seed or spread vigorously (and can also be distilled to yield their own essential oils).

Site preparation

Good initial control of creeping grasses and other perennial weeds will be beneficial for this long term crop. After ploughing the site allow grasses and other weeds to establish vigorous young growth and spray with Roundup. After all growth is dead, apply manure at 10 t/ha if available, apply basal fertilizers, recultivate and prepare seedbed. Establish erosion barriers if on significant slope.

Planting material

It is essential to use the elite Reunion clones. Reunion oils command a significant price premium. As with all material that is introduced from different climatic environment, the possibility exists that the oil quality will change in character with time. The rate and type of change will have to be assessed.

Two alternative strategies for field planting exist:

- a) Take large cuttings from well-established plants (about 30 cms/12 inches long) making a sloping cut just below a node. Remove all the leaves from the lower half of the cutting. The cutting can be planted directly in the field
- b) Take small cuttings about 4-6 inches/10-15 cms of young shoot, with 3-4 nodes and a terminal shoot. The cuttings should have a well formed crown of leaves. The cutting should be taken by making a sloping cut just below a node. The cuttings are planted in shaded nursery beds at 10 x 10 cm spacing, with at least 2 nodes below the surface, and kept well-watered over the first week. The nursery bed should be well prepared with a basal NPK fertilizer. Shade can be progressively reduced once it is clear that the cuttings have started to root, and from 21 days onwards a week seedling liquid feed can be given weekly. Plants should be ready for transplanting to the field after about 40 days from planting.

For standard large scale field establishment method (a) should be used, during periods of reasonable rains, and should give satisfactory establishment. Gap up at 1 month after planting. Where planting material is restricted and a high rate of multiplication is required, or the season is very dry, use (b).

For both methods, cuttings should be dipped in a fungicide/ rooting hormone mixture before planting. A dry mixture can be made using Captan and Seradix B-2 (rooting hormone) using 1 measure Captan to 10 measures of Seradix. Alternatively a standard solution of Benlate can be prepared (2 g per gallon), the cutting dipped in this and then dipped in the Seradix powder.

Never take cuttings from poor/diseased plants.

Rapid multiplication of initial introductions of elite planting material is by apical tip cuttings at 1000 ppm IAA under mist with bottom heat at 20-25^oC. Use modules.

Plant populations

A population of around 50000 per hectare is required. Spacings of 80 x 25 cms, 70 x 30 can be used - the latter should give more rapid ground cover and reduce early weeding. Roadways can be left for collection and carting of harvested material to the still and return of the spent plant material after distillation. Throughout the life of the crop, diseased, wilting, or dead plants should be removed and destroyed, the soil drenched with 0.5% Bordeaux mixture (5g/l), and the space replanted with new cuttings.

Fertilizer

The crop will benefit from application of manure before planting, and a basal NPK dressing. Subsequent fertilizer applications should be made after each cut, and the plant residue from the distillation process should be returned to the field as a mulch. Additional manure and other compost material can also be added after each cut. This will reduce weeding and improve fertility and yields.

Standard annual fertilizer dressings are in the range:

N	130 kg/ha
P ₂ O ₅	90 kg/ha
K ₂ O	100 kg/ha

These should be adjusted in relation to the status of the soil and level of manure application.

Weeding

Hoe after harvesting or apply herbicide. For herbicides a cover must be used on the spray nozzle to prevent spray falling on the geranium plants.

Crop Protection

Only agrochemicals that are approved for use for both the crop, the origin and the end market should be used.

The main disease problems are likely to be fusarium root rot and anthracnose leaf blight. Root rot leads to wilting and the disease plants should be removed, the soil drenched and the site replanted as outlined above. Anthracnose will be most prevalent during the wet seasons with full grown plants. Spray with Captan at 0.2 to 0.5% a.i. monthly during the wet seasons to prevent occurrence. Control of established infections will be difficult to achieve. Use a powered mistblower to achieve good penetration of the spray through the canopy.

No major insect pests are expected. If pest problems occur, spray with Dimethoate (Rogor) at 845 mls/ha in 500 litres water/ha (or more if canopy is very dense) at 2 week intervals until problem is removed. Dimethoate or other systemic insecticides should not be used within six weeks of harvesting.

Harvesting

From field planting to first cutting - approx 6 months. After the first cutting, 3 to 5 cuttings are taken a year. Frequency will depend on site fertility and rainfall/irrigation levels. Time of cutting is determined mainly by the state of growth. Detailed determination of the optimum time of cutting is dependent on a change in the scent of crushed leaves from lemon-like to rose-like. Oil is concentrated in the leaves and young shoots. Old stems contain very little or no oil. These should be cut off the plant, but removed from the young shoot material and left in the field. The plant is harvested when it has made a good level of new growth, but before a large number and weight of old stems have been produced. Economic production is unlikely if less than 3 cuts are taken a year, although final assessment depends on oil content of the plants at each cut.

At each cutting, if this is done manually, the entire canopy is removed with the exception of one complete branch which is left to continue to supply nutrients to the plant. When sufficient new leaf growth has been made to support the plants growth, the remaining branch is cut. With mechanised forage harvesting, the complete canopy is cut, and care must be taken that the cutting height is not set too low, or regrowth will be slow, and the plants may die.

The crop is effectively a long term perennial and can remain in the field for 10 or more years. Commercial life will depend on the health and vigour of the stand and the rotation requirements of the farm. 3 to 5 years may prove to be an economic and practical crop life.

Post-harvest

The cut material should be distilled the same day as it is cut. distillation is by wet steam. Oil yields should be in the range 60-70 kg/ha/yr.

Price Information

Conventional essential oils

PLEASE REMEMBER THAT THESE ARE ONLY PRICE INDICATIONS.

Price indications collected from the markets are given for a range of essential oils, below. The oils are grouped *for convenience only* into Spice Oils, Seed Oils, Citrus Oils, Herb Oils and Perfumery Oils. Prices are wholesale for quantities of 25kg or more unless otherwise stated.

Spice Oils

Product	Origin/Grade	Prices per KG (US\$)
Clove bud	Indonesian	\$23/kg 200kg lots
	Indian	\$84/kg 1 kg lots
	Madagascar	\$75/kg 1 kg lots
Clove stem	Indonesian	\$17/kg container
	India	\$50/kg
	Madagascar	\$36/kg 200 kg lots
Clove leaf	Indonesian min. 73%	\$12.00/kg, container
	Indonesian min. 80%	\$13.50/kg
	Indonesian min. 82%	\$14/kg
	Madagascar	\$17/kg
	Indonesian	\$46/kg
	Indonesia	\$18/kg container
Cinnamon bark	Sri Lankan 60/65%	n/a
Cinnamon leaf	Sri Lankan	\$70/kg 1 kg lots
	Madagascar	\$55/kg
Cassia bark	China	\$35/kg; \$70 1 kg lots
Black pepper	Sri Lankan	\$218/kg 1 kg lots
	Indian	\$150/kg; \$195 1 kg lots
Nutmeg	Indonesian (myristicin 7%)	\$38/kg
	Indonesian	\$88/kg
	Indonesian (safrole free)	\$65/kg
Ginger	Chinese	\$105/kg
	Indonesia	\$100/kg
	Indian	\$183/kg 1 kg lots
	Indonesia (red)	\$98/kg
Pimento leaf	Jamaican	\$140/kg
	Jamaican	\$90 container
Pimento berry	Jamaican	€210/kg
	Jamaican	\$154 1 tonne lots
Cardamom	Guatemala	\$185/kg container
		\$210/kg spot

Spice Seed Oils

Product	Origin/Grade	Prices per KG
Aniseed	China	\$13-16 CIF NW Europe; \$75/kg 1 kg lots
Star Anise	India	\$120/kg
Coriander seed	Russian	\$200/kg
Coriander herb	Russian	\$100/kg drum
Cumin seed	Egypt	\$285/kg 1 kg lots

Citrus Oils

Product	Origin/Grade	Prices per KG
Orange (sweet)	Brazilian	\$16/kg; \$30/kg 1 kg lots
	Italy (b/orange c/pressed)	\$33/kg
	Brazil (pera)	\$7/kg container
Orange (bitter)	Italian (c/pressed)	\$45/kg
Bergamot oil	Ivory Coast/Italy	\$80/kg; \$135/kg 1 kg lots
Lemon	Italian	\$58/kg 1 kg lots
	Italian (c/pressed)	\$35
	Argentina	\$55-\$58/kg container
	Brazil	\$55/kg
Lime (distilled)	Italian	n/a
	Mexico/Peru	\$46/kg container; \$62/kg
Lime (cold pressed)		\$25/kg
Mandarin (red)	Italy	\$80/kg
Grapefruit (pink)	Argentina	\$42/kg; \$50/kg 1 kg lots
Grapefruit (white)	France	\$40/kg

Herb Oils

Product	Origin/Grade	Prices per KG
Basil	Comores	\$125/kg
	Egypt	\$82/kg; \$150/kg 1 kg lots
Lavender	Bulgaria	\$96/kg
	French	\$250/kg
	English	\$200/kg
	Russia	\$95/kg drum
Lavandin	French Grosso	\$30/kg
Spike Lavender	Spain	\$110/kg
Mints	Indian piperita	\$63/kg
	India, mentha arvensis crude, L-menthol 72%	\$13/kg
Menthol	Indian, bold crystals	\$18/kg
	Indian, medium crystals	\$15/kg
	China	\$18/kg
Peppermint menthofuran 3%	China	\$23.50/kg
Peppermint	China	\$14/kg container
Peppermint dementholised	Indian	\$11/kg
Menthone 80/20	Indian	\$14.50/kg
Menthone 90/10	Indian	\$15.50/kg
Spearmint 60% carvone	China	\$35/kg
Chamomile (German)	German blue	\$670/kg
	Morocco (wild)	\$450/kg
	Egypt (blue)	\$1,000/kg
Chamomile (Roman)	UK	\$550/kg
Sage	Croatia	\$130/kg
Rosemary	Portugal/Spain/Tunisia	\$55
	Spain	\$68/kg drum
	France	\$78
Marjoram	Spain (wild)	\$210/kg 1 kg lots
Thyme	Spain	\$67/kg; \$85 1 kg lots

Perfumery Oils

Product	Origin/Grade	Prices per KG
Eucalyptus globulus & other high cineole types	China	\$13/kg container; \$35/kg 1 kg lots
	Australian	\$44/kg
	China	\$38/kg 1kg lots
	Madagascar	\$31/kg
Eucalyptus citriadora	China	\$49/kg 1 kg lots
	Madagascar	\$25/kg
Litsea cubeba	Spain	\$22/kg
	China	\$21/kg container
Ylang ylang	Comores: Extra S	n/a
	Comores : Première	\$225/kg
	Comores : Deuxième	\$180/kg
	Comores : Troisième	\$95/kg
	Comores: Complet	\$150/kg 1 kg lots
	Madagascar (grade II)	\$80/kg
Ylang (cananga)	Indonesia	\$57/kg 1 ton lots
Patchouli - Indonesia	Sulawesi min 26% pa	\$47/kg
	Sulawesi min 30% pa	\$54/kg
	Sulawesi min 30% pa, light	\$56/kg
	Sumatra min 30% pa	\$66/kg
	Sumatra min 32% pa	\$69/kg
	Sumatra min 34% pa	\$74/kg
	Sumatra min 30% pa, light	\$68/kg
Rose	Bulgaria	\$5,750/kg
Geranium	Egypt	\$125/kg
	Egypt	\$120/kg
	China	\$155/kg
	Madagascar	\$310/kg
Rose Geranium	Madagascar/France	\$225/kg
Niaouli (Cineole 1,8) (Malaleuca quinquenervia type I)	Madagascar	\$16/kg; \$60/kg 1 kg lots
Niaouli Viridiflora (Malaleuca viridiflora type II)	Madagascar	\$20/kg
Petitgrain	Paraguay	\$58/kg drum; \$98/kg 1 kg lots
Sandalwood	India	\$2,900/kg
	East Indies	\$2,500/kg
	Australian	\$2,025/kg
Cedarwood	USA	\$52/kg
	China	\$13/kg container; \$50/kg 1 kg lots
Frankincense	Somalia/France	\$270/kg
Citronella	Chinese	\$18/kg container; \$23/kg; \$53 1 kg lots
	Sri Lanka	\$40/kg container
	Indonesia	\$16/kg
Lemongrass	Indian	\$16/kg container; \$37/kg 1 kg lots
	Madagascar (C. giganteus)	\$55/kg
Palmarosa	Indian	\$41/kg; \$130/kg 1 kg lots
Vetiver	Indonesian	\$235/kg; \$380/kg 1 kg lots
	Indonesian	N/a rectified
	China	\$85/kg container
Tea Tree	Australia	\$44/kg; \$90/kg 1 kg lots
	Australia, lemon scented	\$140/kg

Product	Origin/Grade	Prices per KG
Guaiacwood	Paraguay	\$25/kg drum
Fennel, bitter	Spain	\$97/kg
Juniperberry	India	\$120/kg; \$260/kg 1 kg lots
Myrrh	India (extract)	\$133/kg
	India (distilled)	\$270/kg; \$395/kg 1 kg lots

Price Information

Organic essential oils

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Spice Oils

Product	Origin/Grade	Prices per KG (US\$)
Clove bud	Indian	\$150/kg
Clove leaf	Indian	\$75/kg
Cinnamon bark	Sri Lankan	\$420/kg
Cinnamon leaf	Sri Lankan	\$110/kg
Nutmeg	Indonesian	\$172/kg
Ginger		\$270/kg
	India	\$170/kg drum

Spice Seed Oils

Product	Origin/Grade	Prices per KG
Star Anise	China	\$180/kg
Cumin seed	Egypt	\$90/kg

Citrus Oils

Product	Origin/Grade	Prices per KG
Orange (sweet)	Italian (c/pressed)	\$36/kg
Orange (bitter)	Italian (c/pressed)	\$135/kg
Bergamot	Italy (c/pressed)	\$195/kg
Lemon	Italian (c/pressed)	\$60/kg
	Italian (c/pressed)	\$71/kg
	Argentina	\$75
Mandarin (red)	Italy	\$225/kg
Mandarin (green)	Italy	\$187/kg
Clementine	Italy	\$120/kg
Petitgrain (C. aurantium)	Paraguay	\$110/kg

Herb Oils

Product	Origin/Grade	Prices per KG
Basil	Egypt	\$187/kg
	India	n/a
Lavender	France	\$210/kg
Lavandin	French Grosso	\$55/kg
Mint, peppermint	USA	\$90/kg
	India	\$65/kg drum
Mint, Cornmint	India, mentha arvensis	\$52/kg
Mint, spearmint, <i>M. spicata</i>	USA	\$112/kg
Chamomile (German)	Nepal	\$780/kg
	India	\$1,250/kg
Chamomile (Roman)	Hungary	\$1,500/kg
Sage	Croatia	\$240/kg
Rosemary	Spain	\$42/kg
	Tunisia	\$25/kg
Marjoram	Spain	\$330/kg
Thyme	Hungary	\$300/kg
	India	\$65/kg
Fennel	India	130/kg

Perfumery Oils

Product	Origin/Grade	Prices per KG
Eucalyptus radiata & other high cineole types	China	\$64/kg
E. globulus	India	\$45/kg (60%)
	India	\$50/kg (80%)
E. polybractea	Australian	\$135/kg
E. smithii	South Africa	\$75/kg
Eucalyptus citriodora	Brazil	\$52/kg
	India	46/kg
Litsea cubeba	Spain	\$35/kg
Ylang ylang	Comores: I	\$225/kg
	Comores : II	\$180/kg
	Comores : III	\$210/kg
	Comores: Complet	\$330/kg
Patchouli	Indonesia	\$175/kg;
Geranium	Egypt	\$375/kg 1 kg lots
Sandalwood	Sri Lanka	\$1,950/kg 1 kg lots
Cedarwood	USA	\$63/kg
Naouli		\$97/kg
Ravinsara	Madagascar	\$275/kg 10 kg lots
Frankincense	Somalia/France	\$525/kg 1 kg lots
	India (<i>B. serrata</i>)	\$78/kg drum
Pine (<i>P. silvestris</i>)	Hungary	\$190/kg
Citronella	Sri Lanka	\$100/kg
	India	\$63/kg
Lemongrass	Nepal	\$75/kg
Palmarosa		\$80/kg
	India	\$70/kg
Vetiver	Indonesian	\$450/kg 1 kg lots
	Indian	\$350/kg

Product	Origin/Grade	Prices per KG
Tea Tree	Australia	\$90/kg;
	Australia, lemon scented	\$225/kg
Fennel, sweet	Bulgaria	\$150/kg
Juniperberry	India	\$225/kg
Myrrh	Africa	\$1,800/kg

Suppliers of Equipment

Suppliers to the African market

The distillation and extraction industry in Africa is relatively small and localised outside of the North African centers of Egypt and Morocco, and Southern Africa (South Africa, Swaziland). New entrants to the industry can find it hard to identify suppliers of equipment (stills, condensers, extractor vessels etc) in stainless steel, steam boilers, and other necessary materials (drums, jugs, filter papers etc).

The development of the industry in Africa would benefit greatly if there was greater sharing of information on the location of suppliers. New entrants would find it easier to identify necessary suppliers, and the concentration of orders on particular suppliers would encourage the development of skills and expertise – this is particularly necessary in the areas of fabrication of stainless steel vessels and condensers.

Some contacts of companies involved in the manufacture of distillation/extraction equipment or the capability to do so (primarily the capability to work with stainless steel) or supply of materials based in East Africa are given below.

The Newsletter would welcome information from Readers on other suppliers of relevant equipment and materials from all regions of Africa, so that the listing can be expanded.
Please send any information to marketinsider@intracen.org

The contacts are provided as a service only. NO RECOMMENDATION IS IMPLIED.

1. MANUFACTURE OF STAINLESS STEEL DISTILLATION EQUIPMENT:

KENYA:

ASL – Heavy Fabrication Division
Ramco Industrial Park
Mombassa Road
PO Box 18639-00500
Nairobi. Kenya
Tel: +254 20 821567/820296/820394
Fax: +254 20 820169/651893
bm@heavyfab.co.ke
Attn: Mr Ve Balamurali, General Manager

Warren Enterprises Ltd
PO Box 8251
Nairobi. Kenya
Tel: +254 20 8561 932/3/4
Fax: +254 20 8561 013
Attn: Mr S Ramaswamy, Managing Director

Morris Steel & Company
Mogadishu Road
PO Box 18310
Nairobi. Kenya
Tel: +254 20 533 627
Attn: General Manager

UGANDA:

Specialised Welding Services (previously Kasise Kleinsmedie Uganda Ltd)

Jinja Road, Plot 96
PO Box 40115
Nakawa Vocational Training Center
Kampala
Uganda
Tel: +256 (776) 405060/405070/405080
+256 (772) 227 003 (Samantha Moray)
sam.moray@sws.co.ug
Attn: Samantha Moray, General Manager
www.sws.co.ug

MADAGASCAR:

Societe Aris Trading
Lot VB 81X Ambatoroka
101-Antananarivo. Madagascar
Tel: +261 20 24 264 96
Fax: +261 20 22 290 24
aristrading@freenet.mg
Attn: Mr James Davidson

ATICOM
Lot IT 91A Itaosy
102 Antananarivo – Atsimondrano. Madagascar
Tel: +261 32 07 744 34
[morasatajoso@yahoo.fr](mailto:morasatajoso@yahoofr)
Attn: Josoa Andriamorasata

SOUTH AFRICA:

EDESA
PO Box 123
Riebeeck Kasteel 7306
Western Cape. South Africa
Tel: +27 (82) 334 3324
info@edesa.co.za
Attn: Werner Bester
Manufacture of distillation equipment and sales of used equipment.

BENCO PLANT & ENGINEERING (PTY) Ltd
159 Van Eeden Crescent, Rosslyn, Karin Park
P O Box 59. Pretoria, Gauteng. South Africa
Tel: +27 (12) 541-0398
Fax: +27 (12) 541-0399
Attn: Sloam Durbach
Manufacturer of distillation equipment and steam boilers

POWERSAVE
PO Box 699
Hilton 3245. South Africa
Tel (cell): +27 82 493 8670
Fax: +27 33 34 33 755
Attn: Greg Rowe
gregrowe@telcomsa.net
Manufacture of steam distillation plants

Henry S Komar & Associates CC
2 Hebel Road, Roodepoort, Gauteng, South Africa

Postal address: PO Box 994, Honeydew 2040, South Africa
Tel: +27 11 760 2718
Fax: +27 11 760 1079
Attn: Stan Kumar, CEO
info@komar.co.za; sales@komar.co.za
www.komar.co.za

Manufacture of stainless steel distillation and processing equipment. Also sales of secondhand equipment.

THE PROCESS TEAM CC
37 Nelson Road, Amanzimtoti
Kwa-Zulu Natal 4126. South Africa
Attn: Peter Myburg

Design and manufacture of stainless steel distillation equipment.

2. SUPPLIERS OF STEAM BOILERS

MADAGASCAR

ARTICOM
Lot IT 91A Itaosy
102 Antananarivo – Atsimondrano. Madagascar
Tel: +261 32 07 744 34
[morasatajoso@yahoo.fr](mailto:morasatajoso@yahoofr)
Attn: Josoa Andriamorasata

ARTICOM make a simple, low pressure, wood fired steam boiler.

KENYA:

Industrial Boiler Products Co. Ltd.
Kampala Road, Industrial Area
Nairobi, Kenya.
+254 733 700175
mail@industrialboilerproducts.co.ke
peter.fernandes@industrialboilerproducts.co.ke
Peter Fernandes
www.ibp.co.ke
Indian manufactured steam boilers; biomass fired.

Boiler Consortium Africa (BCA) Ltd
PO Box 60780. Nairobi. Kenya
Tel: +254 20 557837/ 536793/ 4349310
Tel: +254 722 750131/ 703511/
Fax: +254 20 735 331177
Barry Corlines
info@boilersafrica.com
www.boilersafrica.com

BCA design, manufacture and commission boilers, included wood fired steam boilers, and are agents for Riello in East Africa.

SOUTH AFRICA:

Combustion Technology South Africa

PO Box 30047. Tokai, 7966 Cape Town, South Africa
Tel: +27 21 715 3171
Fax: +27 21 715 6297
www.combustiontechnology.co.za

Combustion Technology are the exclusive Southern African distributors of Riello burners and Garioni Naval Boilers.

BENCO PLANT & ENGINEERING (PTY) Ltd
159 Van Eeden Crescent, Rosslyn, Karin Park
P O Box 59. Pretoria, Gauteng. South Africa
Tel: +27 (12) 541-0398
Fax: +27 (12) 541-0399
Attn: Sloam Durbach
Manufacturer of distillation equipment and steam boilers

CAPE BOILER
16 Natal Street, Parden Island, Cape Town, South Africa
Tel: +27 21 511 6652
Fax: +27 511 4415
Attn: Mr Nic Kellerman

INDIA:

Firetech Boilers Pvt Ltd
FIRETECH HOUSE, No.211, 2nd Cross, 38th Main,
B.T.M Layout, 2nd Stage, Bangalore 560 068. India
Tel: +91-80-6683686; Fax: +91-80-6683921
Email: firetech@vsnl.net
Manufacture of wood fired steam boilers. Indian manufacturer, but has supplied boilers to Africa.

AUSTRIA:

Binder GMBH
Mitterdorferstr. 5
8572 Barnbach
Austria
Email: office@binder-gmbh.at
Tel: +43 3142 22544-0
Fax: +43 3142 22544-16
www.binder-gmbh.at

Binder Agents in UK:
Wood Energy Ltd, Severn House, 1-4 Fountain Court, Bradley Stoke, Bristol. BS32 4LA
www.woodenergyltd.co.uk

Kohlbach Group
Grazer StraBe 23
A-9400 Wolfsberg
Austria
Email: office@kohlbach.at
Tel: +43 4352 2157-0
Fax: +43 4352 2157-290
www.kohlbach.at

USA:

Hurst Boiler & Welding Company, Inc.
100 Boilermaker Lane
Coolidge, GA 31738-0530

USA
Phone: +1 229-346-3545
Fax: +1 229-346-3874
Email: info@hurstboiler.com
www.hurstboiler.com

3. SUPPLIERS OF MATERIALS AND EQUIPMENT

(a) Forklift trucks/pallet trucks

Forktruck Solutions
16 Kiewiet Close, Okavango Park, Brackenfel 7560, Cape Town. South Africa
Postal address: PO Box 3221, Durbanville 7551. South Africa
Tel: +27 21 982 1142 and +27 21 981 2649;
Cell: +27 83 2848 557
Fax: +27 21 982 1141
Attn: Dirk van der Westhuizen
dirk@forktrucksolutions.co.za
www.forktrucksolutions.co.za

Sales and rental of new and used forklift trucks. Also pallet jacks/stackers and range of other warehouse equipment.

(b) Hoists and lifting equipment

Blue Cranes,
Crane House, 10 Mansell Road, Killarney Gardens, Minerton, Cape Town, South Africa
Postal address: PO Box 702, Melkbosstrand 7437. South Africa
Tel: +27 21 556 0498/9
Fax: +27 21 556 0486
Attn: Mr Kobus Steyn
joseph@bluecranes.co.za
www.bluecranes.co.za

Manufactures full range of hoists, beam girder cranes and lifting equipment. Sole supplier of Liftket electric chain hoists and wire rope hoist units. Repairs and spare parts supply service. Supply of associated slings, chains, blocks etc.

(c) Essential oil drums:

Greif supply a range of steel and coated drums, and are present in 45 countries around the world.

Greif Kenya Ltd
Box9036 - Unga Street
Shimanzi – Mombasa. Kenya
Tel: +254 41 2495591
Fax: +254 41 2494038
pascal.wanyonyi@greif.co.ke
Attn: Pascal Wanyonyi

Greif Nigeria Ltd
Apapa, Nigeria
Phone +234 (01) 587 0866
Fax +234 (01) 587 3084
vanleer@linkserve.com.ng
Attn: Olukunle Obadina,

Greif South Africa Ltd

Vanderbijlpark, South Africa
Phone +27 (0) 16 930 1100
Fax +27 (0) 16 930 1106
carl.williams@greif.com
Attn: Carl Williams
Website: www.greif.co.za

Greif Mozambique
Maputo, Mozambique
Phone +258 21 720153
Fax +258 21 720724
vanleer@vironn.com

Greif Egypt
Cairo, Egypt
Phone +20 2588 1110 Fax +20 2593 3889
E-mail: koracons@link.com.eg
Attn: Ayman Korra

Greif Algeria
Arzew, Algeria
Phone + 213 41473723 / + 213 41473724 Fax + 213 41473730
E-mail: Mohamed.Gherbi@Greif.com
Attn: Mohamed Gherbi

China:

Guangzhou New Jinrong Coopery Co. Ltd.

No.7 Huancui xi road
Cuishanhu new district
Kaiping
Guangdong, China
Ms. Lucinda Lux
Tel : +86 159 14338971,+86 18620468156, 0750-2889978
Fax: +86 7502889978
Email: newjinrong@163.com; paul_chew@163.com
SKYPE: xpyllj74

India:

Al-Can Exports Pvt Ltd

Sheetal Industrial Estate, Kashimira Road,
Bhayander East District,
Thane 401 105
India.
Tel: +91 22 2819 3122
Fax: +91 22 2814 2477
Email: info@alcanexports.com
Large range of aluminium flasks and bottles.

France:

Tournaire SA

70, Route de la Paoute
Le Plan.
BP 71004
06131 Grasse Cedex
France
Tel: +33 493 09 34 34
Fax: +33 493 09 34 00

Email: tournaire@tournaire.fr

Tournaire do a very wide range of aluminium bottles.

(d) Secondhand/used equipment

Secondhand equipment, particularly stills and condensers, can represent very good value. Details are given for 2 companies which have experience of shipping worldwide, and sometimes have distillation equipment in stock.

Perry Process Equipment Ltd
Station Road
Aycliffe Business Park
Newton Aycliffe
County Durham. DL5 6EQ. UK
Phone: +44 1325 315111
Fax: +44 1325 301496
info@perryprocess.co.uk

Website: www.perryprocess.co.uk

Perry Process Equipment is the European headquarters of the Perry Group of companies, which has operations around the world and is one of the worlds largest dealers in secondhand process equipment.

Centriplant Ltd
Littlemead Industrial Estate
Alfold Road
Cranleigh
Surrey. GU6 8ND
UK
Phone: +44 (01483) 271507
Fax: +44 (01483) 278183
Contact: Mark Williams markw@centriplant.co.uk
Website: www.centriplant.co.uk

Centriplant has distillation plants on an occasional basis, but always have a range of stainless steel tanks, and bottling/packing lines that could also be of interest to producers.

Events Calendar

International Conference and Exhibition on Food Processing and Technology
10-12 August 2015. London, UK
<http://foodtechnology.conferenceseries.com/>

Personal Care India Expo
19-21 August 2015. New Delhi, India
www.ubmindia.in/personalcareindiaexpo

Fi South America
25-27 August 2015. Sao Paulo, Brazil
www.figlobal.com/southamerica

Fi Asia-Thailand
9-11 September 2015. Bangkok, Thailand
www.figlobal.com/asia-thailand

Bioflavor 2015
9-11 September 2015. Frankfurt, Germany
<http://bioflavour-conference.com>

International Citrus & Beverage Conference
15-18 September 2015. Clearwater Beach, FL, USA
www.conference.ifas.ufl.edu/citrus

34th International Day Essential Oils & Extracts
23-24 September, Digne-les-Bains, France
www.appam.fr/

IFEAT 2015
27 Sept to 1 October 2015. Colombo, Sri Lanka
www.ifeat.org

Hi Japan
7-9 October 2015. Tokyo, Japan
www.figlobal.com/japan

Anuga 2015
10-14 October 2015. Cologne, Germany
www.anuga.com

Flavorcon 2015
15-15 November 2015. Atlantic City, USA
www.flavorcon.com

Fi Europe & Ni 2015
1-3 December 2015. Paris, France
www.foodingredientsglobal.com/en/europe/home

Cosme Tokyo 2016
20-22 January 2016. Tokyo, Japan
www.cosmetokyo.jp/en/ex

Cosme Tech 2016
20-22 January 2016. Tokyo, Japan
www.cosme-i.jp/en

International Spice Conference

21-24 January 2016. Goa, India
www.internationalspiceconference.com

American Spice Trade Association Annual Meeting
10-13 April 2016. Scottsdale, AZ, USA
www.astaspice.org

World Perfumery Congress 2016
13-15 June 2016. Florida, USA
<http://wpc.perfumerflavorist.com>

BiobasedWorld Tradeshow
15-16 February 2017. Cologne, Germany
www.boibasedworld.de/en/home.html